



SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 32C-16-M**

**OH
PLAN #1**

Anticollision Report

03 October, 2017





Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

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

Survey Tool Program	Date	10/3/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	15,081.64	PLAN #1 (OH)	MWD	OWSG MWD - Standard

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	6,800.00	6,676.80	640.75	576.81	10.021	CC, ES
BERG 33-15 (AB_150CC) - OH - OH	6,900.00	6,767.76	648.98	583.80	9.957	SF
BERRY 22-2(PR_75CC) - OH - OH	7,101.21	6,957.85	3,174.07	3,110.96	50.289	CC, ES
BERRY 22-2(PR_75CC) - OH - OH	9,100.00	7,142.45	4,040.92	3,941.26	40.546	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,110.92	7,080.32	3,191.54	3,127.88	50.131	CC, ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	9,200.00	7,405.38	4,113.69	4,011.32	40.182	SF
BLACKGOLD 3(AB_150CC) - OH - OH	0.00	23.86	2,756.34			
BLACKGOLD 3(AB_150CC) - OH - OH	10,200.00	7,249.39	4,128.48	4,009.07	34.574	SF
BURBACH 15-22(SI_150CC) - OH - OH	9,074.07	7,218.76	2,218.35	1,894.60	6.852	CC
BURBACH 15-22(SI_150CC) - OH - OH	9,100.00	7,218.63	2,218.50	1,894.15	6.840	ES
BURBACH 15-22(SI_150CC) - OH - OH	9,400.00	7,217.04	2,242.17	1,911.30	6.777	SF
BURBACH 15-23(SI_150CC) - OH - OH	9,451.90	7,201.77	887.22	552.64	2.652	CC, ES
BURBACH 15-23(SI_150CC) - OH - OH	9,500.00	7,201.51	888.52	553.31	2.651	SF
BURMAN 16-42(PR_75CC) - OH - OH	11,720.26	7,178.77	268.63	-137.50	0.661	Level 1, CC, ES, SF
BURMAN 16-43(PR_75CC) - OH - OH	11,734.88	7,175.70	1,769.51	1,363.01	4.353	CC
BURMAN 16-43(PR_75CC) - OH - OH	11,800.00	7,175.35	1,770.70	1,361.69	4.329	ES
BURMAN 16-43(PR_75CC) - OH - OH	12,000.00	7,174.29	1,789.26	1,373.84	4.307	SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	10,058.31	7,300.00	2,306.88	2,168.69	16.693	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,081.89	12,344.92	2,448.03	2,001.89	5.487	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	10,024.29	7,380.21	2,492.12	2,354.41	18.096	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,081.89	12,393.02	2,580.73	2,133.99	5.777	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	6,782.13	15,955.04	3,339.61	3,058.38	11.875	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,300.00	19,118.26	3,410.91	2,957.65	7.525	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,600.00	19,118.26	3,432.14	2,972.80	7.472	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	6,705.83	15,888.16	3,162.01	2,880.63	11.237	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,300.00	19,018.34	3,212.11	2,760.00	7.105	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,500.00	19,018.34	3,224.03	2,767.94	7.069	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,008.49	7,299.72	2,255.01	1,988.70	8.468	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,100.00	7,303.44	2,256.87	1,987.00	8.363	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,400.00	7,315.83	2,288.70	2,009.93	8.210	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,600.87	7,142.54	2,925.12	2,425.59	5.856	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,700.00	7,142.02	2,926.80	2,423.69	5.817	ES
FRITZLER 11-21(PR_150CC) - OH - OH	15,000.00	7,140.43	2,952.22	2,440.08	5.764	SF
FRITZLER 1-17(PR_150CC) - OH - OH	15,081.89	7,155.00	1,794.19	1,312.86	3.728	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,081.89	7,437.66	3,025.39	2,897.76	23.704	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	15,081.89	7,578.67	1,517.67	1,382.30	11.211	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,081.89	7,548.26	399.97	101.50	1.340	Level 3, 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
FRITZLER 34-17(PR_150CC) - OH - OH	15,081.89	7,222.89	2,680.65	2,486.45	13.803	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	15,081.89	7,336.34	881.62	763.82	7.484	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,081.89	7,199.51	1,793.32	1,621.51	10.438	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,081.89	7,273.81	2,651.20	2,402.79	10.673	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,081.89	7,212.84	2,264.14	1,965.01	7.569	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,303.54	7,168.26	1,985.77	1,625.71	5.515	CC
GREELEY SWD #1(XX) - OH - OH	10,400.00	7,167.75	1,988.11	1,624.45	5.467	ES
GREELEY SWD #1(XX) - OH - OH	10,600.00	7,166.70	2,007.78	1,637.47	5.422	SF
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,220.78			
HARVESTER 31-15(SI_150CC) - OH - OH	7,000.00	6,908.84	2,285.95	2,224.82	37.393	SF
HARVESTER 32-15(SI_150CC) - OH - OH	100.00	78.57	525.64	519.07	80.010	CC
HARVESTER 32-15(SI_150CC) - OH - OH	230.17	212.06	525.74	519.02	78.240	ES
HARVESTER 32-15(SI_150CC) - OH - OH	6,800.00	6,696.22	1,284.11	1,223.87	21.315	SF
HARVESTER STATE 30C-16-M - OH - PLAN #1	200.00	202.00	319.87	313.19	47.915	CC, ES
HARVESTER STATE 30C-16-M - OH - PLAN #1	15,081.89	15,216.01	2,930.94	2,434.37	5.902	SF
HARVESTER STATE 30N-16B-M - OH - PLAN #1	200.00	202.00	300.20	293.52	44.969	CC, ES
HARVESTER STATE 30N-16B-M - OH - PLAN #1	15,081.89	14,942.37	2,716.49	2,220.56	5.478	SF
HARVESTER STATE 31C-16-M - OH - PLAN #1	200.00	201.00	220.04	213.37	32.966	CC, ES
HARVESTER STATE 31C-16-M - OH - PLAN #1	15,081.89	14,993.60	1,831.05	1,335.08	3.692	SF
HARVESTER STATE 33C-16-M - OH - PLAN #1	700.00	686.54	79.05	70.35	9.086	CC, ES
HARVESTER STATE 33C-16-M - OH - PLAN #1	15,081.89	15,246.44	838.94	342.80	1.691	SF
HARVESTER STATE 34C-16-M - OH - PLAN #1	700.85	667.37	197.53	188.89	22.859	CC, ES
HARVESTER STATE 34C-16-M - OH - PLAN #1	15,081.89	15,765.99	2,101.17	1,604.71	4.232	SF
HARVESTER STATE 5C-16-M - OH - PLAN #1	200.00	201.00	179.97	173.29	26.962	CC, ES
HARVESTER STATE 5C-16-M - OH - PLAN #1	15,078.13	14,993.50	1,390.96	894.81	2.803	SF
HARVESTER STATE 12N-16B-M - OH - PLAN #1	613.48	607.82	39.81	31.59	4.845	CC
HARVESTER STATE 12N-16B-M - OH - PLAN #1	15,081.89	14,973.10	449.10	-20.80	0.956	Level 1, ES, SF
HARVESTER STATE 13C-16-M - OH - PLAN #1	700.00	675.89	138.20	129.54	15.948	CC, ES
HARVESTER STATE 13C-16-M - OH - PLAN #1	15,081.89	15,417.22	1,470.24	974.08	2.963	SF
HARVESTER STATE 33N-16C-M - OH - PLAN #1	700.00	679.08	118.43	109.76	13.650	CC, ES
HARVESTER STATE 33N-16C-M - OH - PLAN #1	15,081.89	15,256.94	1,263.23	767.78	2.550	SF
HARVESTER STATE 4C-16-M - OH - PLAN #1	200.00	202.00	280.16	276.20	70.746	CC, ES
HARVESTER STATE 4C-16-M - OH - PLAN #1	15,081.89	15,116.21	2,526.67	2,030.35	5.091	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,185.17	9,825.72	210.31	126.60	2.512	CC
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,200.00	9,827.09	211.00	123.12	2.401	ES
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,300.00	9,835.53	248.22	143.40	2.368	SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,081.24	9,843.64	462.43	373.04	5.173	CC
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,100.00	9,844.68	463.08	371.63	5.064	ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,200.00	9,848.82	487.79	387.88	4.883	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,916.40	9,699.39	883.94	785.94	9.020	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,100.00	9,794.51	926.83	821.69	8.815	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,916.13	9,901.26	1,221.82	1,119.99	11.998	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,000.00	9,911.43	1,230.13	1,126.15	11.831	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	700.00	689.80	59.62	50.91	6.844	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,081.89	14,906.04	690.64	230.76	1.502	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	607.62	604.82	19.89	11.70	2.428	CC
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,081.89	14,994.24	236.46	-214.49	0.524	Level 1, ES, SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	700.00	672.75	157.97	149.31	18.250	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,081.89	15,320.64	1,687.57	1,192.35	3.408	SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	200.00	201.00	200.01	193.34	29.965	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,081.89	14,817.75	1,636.23	1,146.69	3.342	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	200.00	201.00	119.86	113.18	17.957	CC, ES
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	15,081.89	15,009.80	729.69	233.48	1.471	Level 3, 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	200.00	200.00	20.04	13.36	3.002	CC
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,081.89	14,874.28	262.58	-123.46	0.680	Level 1, ES, SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	200.00	201.00	100.19	93.52	15.010	CC
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,081.89	14,915.59	523.30	38.09	1.078	Level 2, ES, SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	700.00	683.27	98.81	90.12	11.371	CC, ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	15,081.89	15,129.74	1,063.53	570.93	2.159	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	700.00	669.65	177.75	169.10	20.558	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	15,081.89	15,465.92	1,893.00	1,396.76	3.815	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	200.00	201.00	240.08	233.41	35.968	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,081.89	14,732.12	2,071.73	1,579.68	4.210	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	200.00	201.00	260.13	253.45	38.971	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,081.89	14,969.16	2,175.13	1,679.82	4.392	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	200.00	201.00	139.90	133.23	20.959	CC, ES
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,081.89	14,811.33	1,067.03	577.77	2.181	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	200.00	201.00	159.93	153.26	23.961	CC, ES
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,081.89	14,872.41	1,176.58	682.95	2.384	SF
HOOD 41-20(PR_150CC) - OH - OH	15,081.89	7,147.00	3,063.00	2,561.57	6.109	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,081.89	7,562.30	3,848.35	3,569.29	13.791	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,955.06	7,117.39	2,898.61	2,703.27	14.839	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,100.00	7,125.85	2,902.22	2,701.62	14.468	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,800.00	7,166.70	3,018.85	2,799.11	13.739	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	9,885.76	7,730.87	2,564.00	2,428.11	18.869	CC
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	10,000.00	7,670.46	2,565.20	2,426.18	18.453	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	11,300.00	7,180.85	2,782.83	2,609.58	16.063	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,895.57	7,588.62	2,290.44	2,155.08	16.920	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	10,000.00	7,541.36	2,291.81	2,153.39	16.557	ES
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	11,100.00	7,143.86	2,478.21	2,311.00	14.821	SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,283.93	7,151.51	3,112.79	2,656.38	6.820	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,400.00	7,150.89	3,114.95	2,654.37	6.763	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,800.00	7,148.78	3,155.28	2,682.64	6.676	SF
LOVELY 1(AB_150CC) - OH - OH	13,256.63	7,201.35	3,686.19	3,228.94	8.062	CC
LOVELY 1(AB_150CC) - OH - OH	13,400.00	7,202.11	3,688.98	3,227.68	7.997	ES
LOVELY 1(AB_150CC) - OH - OH	13,800.00	7,204.22	3,726.03	3,255.14	7.913	SF
LOVELY 14-9(AB_150CC) - OH - OH	14,753.26	7,206.26	3,629.79	3,123.01	7.162	CC
LOVELY 14-9(AB_150CC) - OH - OH	14,900.00	7,207.04	3,632.76	3,121.86	7.111	ES
LOVELY 14-9(AB_150CC) - OH - OH	15,081.89	7,208.00	3,644.64	3,129.24	7.072	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,528.06	7,233.08	3,720.70	3,351.21	10.070	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,600.00	7,232.70	3,721.40	3,349.90	10.017	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	11,300.00	7,229.00	3,799.93	3,411.30	9.778	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,743.58	7,186.65	3,698.87	3,291.70	9.084	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,800.00	7,186.35	3,699.30	3,290.53	9.050	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	12,400.00	7,183.18	3,756.66	3,333.23	8.872	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,303.66	4,452.00	3,972.09	3,698.28	14.507	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,400.00	4,452.00	3,973.25	3,696.75	14.370	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	14,500.00	4,452.00	4,148.34	3,844.77	13.665	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,081.89	7,382.50	920.82	633.10	3.200	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,081.89	7,178.00	2,692.43	2,188.29	5.341	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	225.62	260.88	2,386.19	2,379.43	352.900	CC, ES
MONTERA 10-34 (PR_75CC) - OH - OH	9,600.00	7,321.39	4,488.67	4,390.79	45.859	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	7,983.94	7,185.53	2,912.85	2,619.44	9.928	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,100.00	7,184.91	2,915.17	2,618.72	9.834	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,800.00	7,181.21	3,025.01	2,708.76	9.565	SF
SENA 15-21(PR_75CC) - OH - OH	200.00	204.00	1,781.34	1,771.70	184.887	CC

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

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	400.00	404.16	1,785.95	1,769.57	109.014	ES
SENA 15-21(PR_75CC) - OH - OH	8,500.00	7,237.80	2,515.64	2,210.19	8.236	SF
SENA 15-24(PR_75CC) - OH - OH	1,094.33	1,068.48	1,098.51	1,056.80	26.338	CC
SENA 15-24(PR_75CC) - OH - OH	8,017.74	7,226.35	1,173.82	878.24	3.971	ES
SENA 15-24(PR_75CC) - OH - OH	8,100.00	7,225.91	1,176.70	880.07	3.967	SF
SENA 15-25(PR_75CC) - OH - OH	200.00	189.00	1,650.27	1,641.07	179.492	CC
SENA 15-25(PR_75CC) - OH - OH	8,400.00	7,231.33	1,857.31	1,552.23	6.088	ES
SENA 15-25(PR_75CC) - OH - OH	8,600.00	7,230.27	1,868.90	1,560.02	6.050	SF
STATE 1(AB_150CC) - OH - OH	11,896.97	7,175.84	2,385.72	1,973.93	5.794	CC
STATE 1(AB_150CC) - OH - OH	12,000.00	7,175.29	2,387.94	1,973.56	5.763	ES
STATE 1(AB_150CC) - OH - OH	12,200.00	7,174.24	2,404.89	1,986.31	5.745	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,026.73	7,177.15	2,407.27	1,991.20	5.786	CC
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,100.00	7,176.77	2,408.38	1,990.43	5.762	ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,300.00	7,175.71	2,422.73	2,000.41	5.737	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,832.60	7,171.18	934.28	524.75	2.281	CC, ES, SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,586.17	7,153.62	1,757.22	1,257.80	3.518	CC
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,600.00	7,153.55	1,757.28	1,257.29	3.515	ES
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,800.00	7,152.49	1,770.19	1,263.90	3.496	SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,441.84	7,172.67	272.02	-190.32	0.588	Level 1, CC, ES, SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,647.78	7,178.30	890.41	606.30	3.134	CC, ES
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,700.00	7,179.12	891.94	607.33	3.134	SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,490.06	7,170.28	243.61	-122.48	0.665	Level 1, CC
STOCKOVER 16-1(PR_75CC) - OH - OH	10,500.00	7,170.23	243.81	-123.06	0.665	Level 1, ES, SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,081.89	7,324.98	2,353.28	2,191.37	14.535	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,081.89	7,169.00	1,440.31	984.34	3.159	CC, ES, SF
ULRICH PC I 17-17D(PR_75CC) - OH - OH	15,081.89	7,409.92	2,515.49	2,274.55	10.441	CC, ES, SF

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-GYRO-NS													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	37.00	3.28	3.28	166.30	-1,440.10	351.03	1,482.73					
100.00	100.00	59.98	96.98	3.28	3.28	166.30	-1,440.17	351.04	1,482.33	1,475.77	6.57	225.716		
200.00	200.00	158.44	195.44	3.34	3.31	166.31	-1,440.48	351.02	1,482.64	1,475.99	6.65	222.956		
300.00	299.98	260.77	297.77	3.44	3.40	-21.76	-1,440.79	350.81	1,481.26	1,474.42	6.84	216.492		
400.00	399.84	361.44	398.44	3.59	3.54	-21.87	-1,440.90	350.73	1,476.49	1,469.36	7.13	206.993		
500.00	499.45	460.73	497.73	3.80	3.72	-22.05	-1,441.01	350.76	1,468.52	1,461.00	7.52	195.404		
600.00	598.70	556.43	593.43	4.06	3.93	-22.32	-1,441.16	350.89	1,457.41	1,449.44	7.97	182.851		
700.00	697.49	652.36	689.35	4.38	4.17	-22.62	-1,441.64	350.99	1,443.56	1,435.06	8.50	169.884		
800.00	796.13	753.20	790.20	4.74	4.45	-22.86	-1,442.23	350.84	1,428.93	1,419.84	9.09	157.273		
900.00	894.78	854.91	891.90	5.15	4.76	-23.10	-1,442.68	350.30	1,414.08	1,404.36	9.73	145.405		
1,000.00	993.43	955.32	992.31	5.58	5.08	-23.35	-1,442.96	349.78	1,399.12	1,388.72	10.40	134.527		
1,100.00	1,092.07	1,052.56	1,089.55	6.03	5.41	-23.58	-1,443.23	349.11	1,384.12	1,373.02	11.10	124.717		
1,200.00	1,190.72	1,149.59	1,186.58	6.50	5.74	-23.82	-1,443.67	348.54	1,369.35	1,357.53	11.82	115.828		
1,300.00	1,289.36	1,248.52	1,285.50	6.98	6.09	-24.07	-1,444.15	347.88	1,354.61	1,342.03	12.57	107.723		
1,400.00	1,388.01	1,348.51	1,385.49	7.47	6.46	-24.32	-1,444.65	347.08	1,339.88	1,326.53	13.35	100.366		
1,500.00	1,486.65	1,450.26	1,487.23	7.97	6.84	-24.58	-1,444.96	346.28	1,324.99	1,310.84	14.15	93.665		
1,600.00	1,585.30	1,551.35	1,588.32	8.48	7.22	-24.86	-1,445.02	345.54	1,309.90	1,294.95	14.95	87.601		
1,700.00	1,683.94	1,649.31	1,686.27	9.00	7.60	-25.11	-1,445.08	344.48	1,294.75	1,278.99	15.76	82.146		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,800.00	1,782.59	1,745.55	1,782.51	9.52	7.97	-25.37	-1,445.28	343.57	1,279.80	1,263.23	16.57	77.213		
1,900.00	1,881.24	1,843.52	1,880.47	10.05	8.36	-25.64	-1,445.63	342.63	1,265.02	1,247.62	17.40	72.691		
2,000.00	1,979.88	1,941.70	1,978.65	10.58	8.75	-25.92	-1,445.99	341.65	1,250.26	1,232.02	18.24	68.548		
2,100.00	2,078.53	2,039.24	2,076.18	11.11	9.13	-26.19	-1,446.54	340.49	1,235.66	1,216.57	19.08	64.759		
2,200.00	2,177.17	2,137.56	2,174.49	11.64	9.53	-26.47	-1,447.06	339.45	1,221.10	1,201.17	19.93	61.266		
2,300.00	2,275.82	2,234.92	2,271.85	12.18	9.92	-26.77	-1,447.58	338.78	1,206.68	1,185.89	20.78	58.057		
2,400.00	2,374.46	2,334.99	2,371.92	12.72	10.33	-27.09	-1,448.20	337.97	1,192.34	1,170.69	21.65	55.071		
2,500.00	2,473.11	2,437.35	2,474.27	13.26	10.75	-27.41	-1,448.55	336.96	1,177.72	1,155.19	22.53	52.276		
2,600.00	2,571.76	2,536.62	2,573.53	13.80	11.15	-27.75	-1,448.68	336.23	1,163.02	1,139.62	23.40	49.698		
2,700.00	2,670.40	2,634.74	2,671.66	14.35	11.55	-28.10	-1,448.69	335.69	1,148.32	1,124.04	24.28	47.303		
2,800.00	2,769.05	2,731.22	2,768.13	14.89	11.95	-28.45	-1,448.89	335.19	1,133.84	1,108.69	25.15	45.084		
2,900.00	2,867.69	2,830.02	2,866.93	15.44	12.36	-28.82	-1,449.17	334.66	1,119.48	1,093.45	26.03	43.001		
3,000.00	2,966.34	2,928.80	2,965.72	15.99	12.77	-29.21	-1,449.37	334.23	1,105.13	1,078.20	26.92	41.050		
3,100.00	3,064.98	3,025.58	3,062.49	16.53	13.17	-29.59	-1,449.69	333.78	1,090.93	1,063.12	27.81	39.231		
3,200.00	3,163.63	3,123.47	3,160.38	17.08	13.58	-29.98	-1,450.20	333.28	1,076.94	1,048.24	28.70	37.523		
3,300.00	3,262.27	3,225.11	3,262.02	17.63	14.00	-30.42	-1,450.50	333.07	1,062.91	1,033.31	29.61	35.900		
3,400.00	3,360.92	3,329.34	3,366.24	18.18	14.44	-30.87	-1,450.42	332.55	1,048.49	1,017.97	30.52	34.351		
3,500.00	3,459.57	3,429.82	3,466.72	18.74	14.85	-31.32	-1,449.96	331.92	1,033.73	1,002.30	31.43	32.889		
3,600.00	3,558.21	3,525.48	3,562.38	19.29	15.25	-31.75	-1,449.69	331.19	1,019.15	986.82	32.33	31.521		
3,700.00	3,656.86	3,620.38	3,657.28	19.84	15.65	-32.19	-1,449.74	330.49	1,004.93	971.70	33.24	30.237		
3,800.00	3,755.50	3,713.94	3,750.84	20.39	16.04	-32.61	-1,450.33	329.74	991.27	957.14	34.14	29.037		
3,900.00	3,854.15	3,812.40	3,849.28	20.95	16.46	-33.06	-1,451.24	328.94	977.94	942.89	35.06	27.897		
4,000.00	3,952.79	3,914.03	3,950.90	21.50	16.88	-33.55	-1,451.94	328.22	964.50	928.52	35.98	26.805		
4,100.00	4,051.44	4,013.36	4,050.23	22.05	17.30	-34.04	-1,452.46	327.50	950.97	914.06	36.91	25.765		
4,200.00	4,150.08	4,112.47	4,149.34	22.61	17.72	-34.54	-1,452.97	326.70	937.47	899.63	37.84	24.776		
4,300.00	4,248.73	4,213.55	4,250.42	23.16	18.15	-35.09	-1,453.31	326.02	923.95	885.18	38.77	23.829		
4,400.00	4,347.38	4,320.30	4,357.16	23.72	18.60	-35.69	-1,452.85	325.16	909.77	870.05	39.72	22.903		
4,500.00	4,446.02	4,416.84	4,453.70	24.27	19.00	-36.26	-1,452.25	324.37	895.50	854.84	40.66	22.024		
4,600.00	4,544.67	4,518.16	4,555.01	24.83	19.43	-36.87	-1,451.66	323.40	881.31	839.70	41.61	21.182		
4,700.00	4,643.31	4,621.07	4,657.91	25.39	19.86	-37.52	-1,450.43	322.25	866.59	824.03	42.56	20.362		
4,800.00	4,741.96	4,713.35	4,750.18	25.94	20.25	-38.18	-1,449.17	322.17	852.34	808.83	43.51	19.589		
4,900.00	4,840.60	4,815.52	4,852.34	26.50	20.68	-38.90	-1,447.97	321.57	838.13	793.66	44.47	18.845		
5,000.00	4,939.25	4,904.47	4,941.28	27.05	21.06	-39.48	-1,447.83	320.39	824.54	779.11	45.43	18.151		
5,100.00	5,037.90	4,996.34	5,033.15	27.61	21.44	-40.11	-1,448.32	319.88	812.03	765.65	46.38	17.507		
5,200.00	5,136.54	5,105.29	5,142.10	28.17	21.90	-40.96	-1,448.13	320.14	799.48	752.10	47.37	16.876		
5,300.00	5,235.19	5,205.49	5,242.28	28.72	22.32	-41.83	-1,446.88	320.64	786.33	737.96	48.36	16.259		
5,400.00	5,333.83	5,302.59	5,339.37	29.28	22.73	-42.74	-1,445.39	321.48	773.32	723.96	49.36	15.668		
5,500.00	5,432.48	5,393.54	5,430.31	29.84	23.11	-43.62	-1,444.36	322.63	761.08	710.73	50.35	15.115		
5,600.00	5,531.12	5,489.83	5,526.59	30.40	23.52	-44.54	-1,444.11	323.77	749.69	698.34	51.36	14.598		
5,700.00	5,629.77	5,592.25	5,629.00	30.95	23.95	-45.51	-1,444.05	324.52	738.41	686.04	52.37	14.100		
5,800.00	5,728.41	5,688.08	5,724.83	31.51	24.35	-46.50	-1,443.52	325.61	727.20	673.81	53.39	13.621		
5,900.00	5,827.06	5,792.86	5,829.60	32.07	24.79	-47.58	-1,443.03	326.48	716.09	661.68	54.42	13.159		
6,000.00	5,925.71	5,888.23	5,924.97	32.63	25.19	-48.55	-1,442.69	326.63	704.87	649.43	55.44	12.714		
6,100.00	6,024.35	5,980.79	6,017.52	33.19	25.58	-49.57	-1,442.42	327.68	694.56	638.09	56.47	12.300		
6,200.00	6,123.00	6,074.95	6,111.66	33.74	25.98	-50.69	-1,442.38	329.63	685.32	627.81	57.51	11.917		
6,300.00	6,221.64	6,178.46	6,215.16	34.30	26.42	-51.90	-1,442.75	331.47	676.45	617.88	58.57	11.550		
6,400.00	6,320.29	6,275.93	6,312.61	34.86	26.83	-53.07	-1,442.63	332.87	667.30	607.68	59.62	11.192		
6,500.00	6,418.93	6,372.49	6,409.16	35.42	27.23	-54.31	-1,442.51	334.82	658.85	598.17	60.68	10.857		
6,600.00	6,517.58	6,465.01	6,501.65	35.98	27.63	-55.45	-1,443.23	336.50	651.21	589.48	61.73	10.549		
6,700.00	6,616.23	6,567.27	6,603.88	36.54	28.06	-56.67	-1,445.08	338.28	644.50	581.69	62.80	10.262		
6,789.07	6,703.77	6,664.82	6,701.42	37.04	28.47	-90.33	-1,446.36	338.67	641.49	577.67	63.82	10.052		
6,800.00	6,714.51	6,676.80	6,713.40	37.10	28.52	-93.22	-1,446.44	338.64	640.75	576.81	63.94	10.021	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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
6,900.00	6,810.42	6,767.76	6,804.36	37.66	28.91	-113.58	-1,447.10	338.55	648.98	583.80	65.18	9.957 SF	
7,000.00	6,901.58	6,858.97	6,895.56	38.21	29.30	-123.37	-1,448.11	338.85	671.33	604.85	66.49	10.097	
7,100.00	6,985.76	6,943.13	6,979.71	38.76	29.66	-128.82	-1,449.04	339.12	707.75	639.96	67.78	10.441	
7,200.00	7,060.88	7,018.17	7,054.76	39.32	29.98	-131.71	-1,449.87	339.36	758.05	689.05	69.00	10.986	
7,300.00	7,125.09	7,082.26	7,118.83	39.90	30.25	-132.39	-1,450.58	339.57	821.32	751.23	70.08	11.719	
7,400.00	7,176.81	7,133.80	7,170.37	40.55	30.47	-130.53	-1,451.15	339.74	895.93	824.93	70.99	12.620	
7,500.00	7,214.77	7,171.53	7,208.10	41.30	30.63	-124.91	-1,451.57	339.86	979.75	908.03	71.72	13.661	
7,600.00	7,238.02	7,194.52	7,231.09	42.22	30.73	-112.67	-1,451.82	339.93	1,070.30	998.04	72.26	14.812	
7,700.00	7,246.01	7,202.20	7,238.77	43.32	30.76	-89.24	-1,451.91	339.96	1,164.94	1,092.32	72.62	16.041	
7,800.00	7,245.50	7,201.38	7,237.95	44.65	30.76	-87.60	-1,451.90	339.96	1,261.08	1,188.20	72.88	17.304	
7,900.00	7,244.97	7,200.53	7,237.10	46.21	30.75	-87.45	-1,451.89	339.95	1,357.78	1,284.69	73.10	18.575	
8,000.00	7,244.44	7,199.68	7,236.25	47.99	30.75	-87.31	-1,451.88	339.95	1,454.93	1,381.64	73.28	19.853	
8,100.00	7,243.91	7,198.84	7,235.41	49.96	30.75	-87.16	-1,451.87	339.95	1,552.43	1,478.99	73.45	21.137	
8,200.00	7,243.39	7,197.99	7,234.56	52.10	30.74	-87.02	-1,451.86	339.95	1,650.24	1,576.65	73.59	22.424	
8,300.00	7,242.86	7,197.15	7,233.72	54.38	30.74	-86.87	-1,451.85	339.94	1,748.29	1,674.57	73.72	23.715	
8,400.00	7,242.33	7,196.30	7,232.87	56.78	30.74	-86.72	-1,451.84	339.94	1,846.55	1,772.71	73.84	25.009	
8,500.00	7,241.80	7,195.45	7,232.02	59.28	30.73	-86.58	-1,451.83	339.94	1,944.99	1,871.05	73.94	26.304	
8,600.00	7,241.27	7,194.61	7,231.18	61.88	30.73	-86.43	-1,451.82	339.94	2,043.58	1,969.54	74.04	27.602	
8,700.00	7,240.74	7,193.76	7,230.33	64.54	30.73	-86.29	-1,451.81	339.93	2,142.30	2,068.17	74.12	28.901	
8,800.00	7,240.21	7,192.92	7,229.49	67.27	30.72	-86.14	-1,451.80	339.93	2,241.13	2,166.93	74.21	30.202	
8,900.00	7,239.68	7,192.07	7,228.64	70.06	30.72	-86.00	-1,451.79	339.93	2,340.06	2,265.78	74.28	31.503	
9,000.00	7,239.16	7,191.22	7,227.79	72.89	30.71	-85.85	-1,451.78	339.92	2,439.08	2,364.73	74.35	32.804	
9,100.00	7,238.63	7,190.38	7,226.95	75.77	30.71	-85.71	-1,451.77	339.92	2,538.18	2,463.76	74.42	34.107	
9,200.00	7,238.10	7,189.53	7,226.10	78.69	30.71	-85.56	-1,451.77	339.92	2,637.34	2,562.86	74.48	35.409	
9,300.00	7,237.57	7,188.68	7,225.26	81.64	30.70	-85.42	-1,451.76	339.92	2,736.57	2,662.02	74.54	36.711	
9,400.00	7,237.04	7,187.84	7,224.41	84.62	30.70	-85.28	-1,451.75	339.91	2,835.84	2,761.24	74.60	38.014	
9,500.00	7,236.51	7,186.99	7,223.56	87.63	30.70	-85.13	-1,451.74	339.91	2,935.17	2,860.51	74.66	39.316	
9,600.00	7,235.98	7,186.15	7,222.72	90.66	30.69	-84.99	-1,451.73	339.91	3,034.54	2,959.83	74.71	40.618	
9,700.00	7,235.45	7,185.30	7,221.87	93.72	30.69	-84.84	-1,451.72	339.90	3,133.95	3,059.19	74.76	41.919	
9,800.00	7,234.93	7,184.45	7,221.03	96.79	30.69	-84.70	-1,451.71	339.90	3,233.40	3,158.59	74.81	43.220	
9,900.00	7,234.40	7,183.61	7,220.18	99.88	30.68	-84.55	-1,451.70	339.90	3,332.88	3,258.02	74.86	44.521	
10,000.00	7,233.87	7,182.76	7,219.33	102.98	30.68	-84.41	-1,451.69	339.90	3,432.39	3,357.48	74.91	45.820	
10,100.00	7,233.34	7,181.92	7,218.49	106.10	30.68	-84.26	-1,451.68	339.89	3,531.93	3,456.97	74.96	47.119	
10,200.00	7,232.81	7,181.07	7,217.64	109.23	30.67	-84.12	-1,451.67	339.89	3,631.49	3,556.48	75.00	48.417	
10,300.00	7,232.28	7,180.22	7,216.79	112.38	30.67	-83.98	-1,451.66	339.89	3,731.07	3,656.02	75.05	49.714	
10,400.00	7,231.75	7,179.38	7,215.95	115.53	30.66	-83.83	-1,451.65	339.89	3,830.68	3,755.59	75.10	51.010	
10,500.00	7,231.23	7,178.53	7,215.10	118.70	30.66	-83.69	-1,451.64	339.88	3,930.31	3,855.17	75.14	52.306	
10,600.00	7,230.70	7,177.69	7,214.26	121.87	30.66	-83.54	-1,451.63	339.88	4,029.95	3,954.77	75.19	53.600	
10,700.00	7,230.17	7,176.84	7,213.41	125.05	30.65	-83.40	-1,451.62	339.88	4,129.62	4,054.38	75.23	54.892	
10,800.00	7,229.64	7,175.99	7,212.56	128.25	30.65	-83.26	-1,451.62	339.87	4,229.29	4,154.02	75.28	56.184	
10,900.00	7,229.11	7,175.15	7,211.72	131.44	30.65	-83.11	-1,451.61	339.87	4,328.99	4,253.67	75.32	57.474	
11,000.00	7,228.58	7,174.30	7,210.87	134.65	30.64	-82.97	-1,451.60	339.87	4,428.69	4,353.33	75.36	58.763	
11,100.00	7,228.05	7,173.45	7,210.03	137.86	30.64	-82.82	-1,451.59	339.87	4,528.41	4,453.00	75.41	60.051	
11,200.00	7,227.52	7,172.61	7,209.18	141.08	30.64	-82.68	-1,451.58	339.86	4,628.14	4,552.69	75.45	61.337	
11,300.00	7,227.00	7,171.76	7,208.33	144.30	30.63	-82.54	-1,451.57	339.86	4,727.88	4,652.39	75.50	62.622	
11,400.00	7,226.47	7,170.92	7,207.49	147.52	30.63	-82.39	-1,451.56	339.86	4,827.64	4,752.09	75.54	63.905	
11,500.00	7,225.94	7,170.07	7,206.64	150.76	30.62	-82.25	-1,451.55	339.86	4,927.40	4,851.81	75.59	65.186	
11,600.00	7,225.41	7,169.22	7,205.80	153.99	30.62	-82.11	-1,451.54	339.85	5,027.17	4,951.54	75.63	66.466	
11,700.00	7,224.88	7,168.38	7,204.95	157.23	30.62	-81.96	-1,451.53	339.85	5,126.95	5,051.27	75.68	67.745	
11,800.00	7,224.35	7,167.53	7,204.10	160.48	30.61	-81.82	-1,451.52	339.85	5,226.74	5,151.02	75.73	69.021	
11,900.00	7,223.82	7,166.69	7,203.26	163.72	30.61	-81.68	-1,451.51	339.84	5,326.54	5,250.77	75.77	70.296	
12,000.00	7,223.29	7,165.84	7,202.41	166.98	30.61	-81.54	-1,451.50	339.84	5,426.34	5,350.52	75.82	71.569	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
12,100.00	7,222.77	7,164.99	7,201.57	170.23	30.60	-81.39	-1,451.49	339.84	5,526.15	5,450.29	75.87	72.840		
12,200.00	7,222.24	7,164.15	7,200.72	173.49	30.60	-81.25	-1,451.48	339.84	5,625.97	5,550.06	75.91	74.110		
12,300.00	7,221.71	7,163.30	7,199.87	176.75	30.60	-81.11	-1,451.48	339.83	5,725.80	5,649.83	75.96	75.377		
12,400.00	7,221.18	7,162.45	7,199.03	180.01	30.59	-80.97	-1,451.47	339.83	5,825.63	5,749.62	76.01	76.643		
12,500.00	7,220.65	7,161.61	7,198.18	183.28	30.59	-80.82	-1,451.46	339.83	5,925.46	5,849.40	76.06	77.906		
12,600.00	7,220.12	7,160.76	7,197.34	186.54	30.58	-80.68	-1,451.45	339.83	6,025.30	5,949.19	76.11	79.168		
12,700.00	7,219.59	7,159.92	7,196.49	189.81	30.58	-80.54	-1,451.44	339.82	6,125.15	6,048.99	76.16	80.427		
12,800.00	7,219.06	7,159.07	7,195.64	193.09	30.58	-80.40	-1,451.43	339.82	6,225.00	6,148.79	76.21	81.685		
12,900.00	7,218.54	7,158.22	7,194.80	196.36	30.57	-80.25	-1,451.42	339.82	6,324.85	6,248.60	76.26	82.940		
13,000.00	7,218.01	7,157.38	7,193.95	199.64	30.57	-80.11	-1,451.41	339.81	6,424.71	6,348.40	76.31	84.193		
13,100.00	7,217.48	7,156.53	7,193.10	202.92	30.57	-79.97	-1,451.40	339.81	6,524.58	6,448.22	76.36	85.444		
13,200.00	7,216.95	7,155.69	7,192.26	206.20	30.56	-79.83	-1,451.39	339.81	6,624.44	6,548.03	76.41	86.693		
13,300.00	7,216.42	7,154.84	7,191.41	209.48	30.56	-79.69	-1,451.38	339.81	6,724.32	6,647.85	76.47	87.939		
13,400.00	7,215.89	7,153.99	7,190.57	212.76	30.56	-79.55	-1,451.37	339.80	6,824.19	6,747.67	76.52	89.183		
13,500.00	7,215.36	7,153.15	7,189.72	216.05	30.55	-79.41	-1,451.36	339.80	6,924.07	6,847.50	76.57	90.425		
13,600.00	7,214.84	7,152.30	7,188.87	219.33	30.55	-79.26	-1,451.35	339.80	7,023.95	6,947.33	76.63	91.665		
13,700.00	7,214.31	7,151.45	7,188.03	222.62	30.55	-79.12	-1,451.34	339.80	7,123.84	7,047.16	76.68	92.902		
13,800.00	7,213.78	7,150.61	7,187.18	225.91	30.54	-78.98	-1,451.33	339.79	7,223.73	7,146.99	76.74	94.136		
13,900.00	7,213.25	7,149.76	7,186.34	229.20	30.54	-78.84	-1,451.33	339.79	7,323.62	7,246.83	76.79	95.369		
14,000.00	7,212.72	7,148.92	7,185.49	232.49	30.53	-78.70	-1,451.32	339.79	7,423.51	7,346.66	76.85	96.598		
14,100.00	7,212.19	7,148.07	7,184.64	235.79	30.53	-78.56	-1,451.31	339.78	7,523.41	7,446.50	76.91	97.826		
14,200.00	7,211.66	7,147.22	7,183.80	239.08	30.53	-78.42	-1,451.30	339.78	7,623.31	7,546.34	76.96	99.051		
14,300.00	7,211.13	7,146.38	7,182.95	242.38	30.52	-78.28	-1,451.29	339.78	7,723.21	7,646.19	77.02	100.273		
14,400.00	7,210.61	7,145.53	7,182.11	245.67	30.52	-78.14	-1,451.28	339.78	7,823.12	7,746.03	77.08	101.493		
14,500.00	7,210.08	7,144.69	7,181.26	248.97	30.52	-78.00	-1,451.27	339.77	7,923.02	7,845.88	77.14	102.710		
14,600.00	7,209.55	7,143.84	7,180.41	252.27	30.51	-77.86	-1,451.26	339.77	8,022.93	7,945.73	77.20	103.924		
14,700.00	7,209.02	7,142.99	7,179.57	255.57	30.51	-77.72	-1,451.25	339.77	8,122.84	8,045.58	77.26	105.136		
14,800.00	7,208.49	7,142.15	7,178.72	258.87	30.51	-77.58	-1,451.24	339.77	8,222.76	8,145.43	77.32	106.345		
14,900.00	7,207.96	7,141.30	7,177.88	262.17	30.50	-77.44	-1,451.23	339.76	8,322.67	8,245.29	77.38	107.552		
15,000.00	7,207.43	7,140.46	7,177.03	265.47	30.50	-77.30	-1,451.22	339.76	8,422.59	8,345.14	77.45	108.755		
15,081.89	7,207.00	7,139.76	7,176.34	268.17	30.50	-77.19	-1,451.21	339.76	8,504.41	8,426.91	77.50	109.739		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	69.00	3.28	3.28	172.55	-4,179.31	546.64	4,215.47					
100.00	100.00	30.35	99.35	3.28	3.28	172.55	-4,179.31	546.62	4,214.91	4,208.34	6.57	641.994		
200.00	200.00	125.92	194.92	3.34	3.30	172.55	-4,179.38	546.41	4,214.95	4,208.32	6.63	635.442		
300.00	299.98	216.44	285.44	3.44	3.36	-15.50	-4,179.64	546.14	4,213.51	4,206.72	6.80	619.951		
400.00	399.84	311.34	380.34	3.59	3.47	-15.54	-4,180.05	546.06	4,208.88	4,201.83	7.06	596.366		
500.00	499.45	413.48	482.48	3.80	3.63	-15.62	-4,180.48	546.10	4,200.91	4,193.49	7.42	565.913		
600.00	598.70	511.46	580.46	4.06	3.83	-15.72	-4,180.90	546.10	4,189.59	4,181.73	7.87	532.638		
700.00	697.49	613.64	682.64	4.38	4.07	-15.83	-4,181.35	545.85	4,175.05	4,166.66	8.39	497.499		
800.00	796.13	716.30	785.29	4.74	4.35	-15.89	-4,181.71	545.37	4,159.54	4,150.57	8.97	463.748		
900.00	894.78	808.22	877.21	5.15	4.62	-15.94	-4,182.13	544.67	4,144.10	4,134.53	9.57	433.255		
1,000.00	993.43	910.19	979.17	5.58	4.94	-15.98	-4,182.67	543.59	4,128.69	4,118.46	10.23	403.571		
1,100.00	1,092.07	989.39	1,058.36	6.03	5.20	-16.02	-4,183.31	542.49	4,113.51	4,102.66	10.86	378.920		
1,200.00	1,190.72	1,077.75	1,146.70	6.50	5.49	-16.05	-4,184.37	541.01	4,098.68	4,087.14	11.54	355.293		
1,300.00	1,289.36	1,172.52	1,241.45	6.98	5.83	-16.09	-4,185.69	539.33	4,084.03	4,071.77	12.26	333.131		
1,400.00	1,388.01	1,279.26	1,348.16	7.47	6.21	-16.12	-4,187.17	537.30	4,069.35	4,056.31	13.04	311.978		
1,500.00	1,486.65	1,384.84	1,453.71	7.97	6.60	-16.16	-4,188.42	535.07	4,054.46	4,040.62	13.84	292.939		
1,600.00	1,585.30	1,483.52	1,552.36	8.48	6.97	-16.19	-4,189.51	533.04	4,039.48	4,024.86	14.63	276.182		
1,700.00	1,683.94	1,575.65	1,644.47	9.00	7.32	-16.23	-4,190.58	531.23	4,024.59	4,009.19	15.40	261.358		
1,800.00	1,782.59	1,690.84	1,759.63	9.52	7.77	-16.27	-4,191.87	529.07	4,009.68	3,993.41	16.26	246.522		
1,900.00	1,881.24	1,779.49	1,848.26	10.05	8.11	-16.30	-4,192.69	527.47	3,994.57	3,977.53	17.04	234.397		
2,000.00	1,979.88	1,872.13	1,940.88	10.58	8.48	-16.34	-4,193.77	525.98	3,979.73	3,961.89	17.84	223.073		
2,100.00	2,078.53	1,964.89	2,033.63	11.11	8.85	-16.38	-4,194.98	524.39	3,965.01	3,946.37	18.65	212.650		
2,200.00	2,177.17	2,055.22	2,123.92	11.64	9.21	-16.41	-4,196.34	522.71	3,950.48	3,931.03	19.45	203.136		
2,300.00	2,275.82	2,150.40	2,219.07	12.18	9.59	-16.45	-4,197.98	520.90	3,936.15	3,915.87	20.27	194.165		
2,400.00	2,374.46	2,276.79	2,345.42	12.72	10.10	-16.50	-4,199.89	518.49	3,921.64	3,900.42	21.22	184.830		
2,500.00	2,473.11	2,430.99	2,499.60	13.26	10.73	-16.57	-4,200.34	516.05	3,905.98	3,883.71	22.27	175.426		
2,600.00	2,571.76	2,561.22	2,629.81	13.80	11.26	-16.63	-4,198.95	514.14	3,888.93	3,865.71	23.23	167.444		
2,700.00	2,670.40	2,660.80	2,729.38	14.35	11.67	-16.68	-4,197.66	512.59	3,871.71	3,847.63	24.08	160.805		
2,800.00	2,769.05	2,756.44	2,824.99	14.89	12.06	-16.73	-4,196.45	510.96	3,854.50	3,829.58	24.92	154.690		
2,900.00	2,867.69	2,852.14	2,920.67	15.44	12.46	-16.77	-4,195.35	509.24	3,837.39	3,811.63	25.76	148.960		
3,000.00	2,966.34	2,946.92	3,015.42	15.99	12.85	-16.82	-4,194.31	507.49	3,820.33	3,793.73	26.60	143.601		
3,100.00	3,064.98	3,044.48	3,112.97	16.53	13.26	-16.86	-4,193.39	505.59	3,803.40	3,775.94	27.46	138.513		
3,200.00	3,163.63	3,150.14	3,218.60	17.08	13.69	-16.91	-4,192.26	503.45	3,786.35	3,758.00	28.34	133.585		
3,300.00	3,262.27	3,245.31	3,313.74	17.63	14.09	-16.95	-4,191.12	501.61	3,769.18	3,739.99	29.19	129.108		
3,400.00	3,360.92	3,331.83	3,400.24	18.18	14.45	-16.99	-4,190.33	499.89	3,752.29	3,722.27	30.02	125.012		
3,500.00	3,459.57	3,420.93	3,489.32	18.74	14.82	-17.03	-4,189.82	497.86	3,735.69	3,704.84	30.85	121.101		
3,600.00	3,558.21	3,513.65	3,582.01	19.29	15.21	-17.06	-4,189.52	495.44	3,719.28	3,687.58	31.69	117.347		
3,700.00	3,656.86	3,605.81	3,674.13	19.84	15.60	-17.09	-4,189.38	493.05	3,703.04	3,670.50	32.54	113.797		
3,800.00	3,755.50	3,704.49	3,772.79	20.39	16.01	-17.14	-4,189.24	490.93	3,686.88	3,653.47	33.41	110.350		
3,900.00	3,854.15	3,795.30	3,863.58	20.95	16.39	-17.18	-4,189.20	489.08	3,670.83	3,636.58	34.25	107.164		
4,000.00	3,952.79	3,896.64	3,964.90	21.50	16.82	-17.22	-4,189.22	487.08	3,654.86	3,619.73	35.14	104.021		
4,100.00	4,051.44	3,997.34	4,065.58	22.05	17.24	-17.28	-4,189.13	485.36	3,638.82	3,602.81	36.02	101.034		
4,200.00	4,150.08	4,096.01	4,164.25	22.61	17.66	-17.33	-4,188.96	483.97	3,622.76	3,585.87	36.89	98.206		
4,300.00	4,248.73	4,202.56	4,270.80	23.16	18.11	-17.41	-4,188.48	483.65	3,606.60	3,568.81	37.79	95.435		
4,400.00	4,347.38	4,323.47	4,391.69	23.72	18.61	-17.52	-4,187.26	484.49	3,590.07	3,551.33	38.74	92.667		
4,500.00	4,446.02	4,444.28	4,512.48	24.27	19.11	-17.64	-4,185.06	485.34	3,572.72	3,533.03	39.69	90.014		
4,600.00	4,544.67	4,531.26	4,599.44	24.83	19.48	-17.73	-4,183.37	486.10	3,555.33	3,514.80	40.53	87.720		
4,700.00	4,643.31	4,600.01	4,668.18	25.39	19.77	-17.79	-4,182.42	486.54	3,538.49	3,497.18	41.31	85.655		
4,800.00	4,741.96	4,677.63	4,745.80	25.94	20.09	-17.86	-4,181.93	486.90	3,522.35	3,480.23	42.12	83.625		
4,900.00	4,840.60	4,768.02	4,836.19	26.50	20.47	-17.95	-4,181.95	487.36	3,506.81	3,463.84	42.97	81.604		
5,000.00	4,939.25	4,866.74	4,934.91	27.05	20.88	-18.04	-4,181.99	487.83	3,491.31	3,447.46	43.86	79.610		
5,100.00	5,037.90	4,964.66	5,032.83	27.61	21.29	-18.12	-4,182.09	488.05	3,475.83	3,431.10	44.73	77.699		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,065.48	5,133.65	28.17	21.72	-18.22	-4,182.14	488.52	3,460.36	3,414.73	45.62	75.844	
5,300.00	5,235.19	5,172.80	5,240.97	28.72	22.17	-18.32	-4,181.99	489.22	3,444.74	3,398.21	46.54	74.022	
5,400.00	5,333.83	5,304.63	5,372.78	29.28	22.72	-18.46	-4,181.02	490.21	3,428.59	3,381.06	47.53	72.141	
5,500.00	5,432.48	5,454.85	5,522.95	29.84	23.35	-18.64	-4,178.05	492.89	3,411.54	3,362.98	48.57	70.244	
5,600.00	5,531.12	5,558.36	5,626.34	30.40	23.79	-18.81	-4,174.15	496.20	3,392.87	3,343.40	49.47	68.586	
5,700.00	5,629.77	5,628.16	5,696.08	30.95	24.09	-18.91	-4,172.12	498.05	3,374.98	3,324.71	50.27	67.132	
5,800.00	5,728.41	5,700.01	5,767.90	31.51	24.39	-19.00	-4,170.73	499.43	3,357.91	3,306.82	51.08	65.735	
5,900.00	5,827.06	5,778.96	5,846.84	32.07	24.73	-19.09	-4,169.87	500.29	3,341.52	3,289.61	51.91	64.371	
6,000.00	5,925.71	5,868.74	5,936.62	32.63	25.11	-19.18	-4,169.42	500.66	3,325.59	3,272.82	52.77	63.019	
6,100.00	6,024.35	5,976.92	6,044.80	33.19	25.57	-19.29	-4,168.93	500.85	3,309.68	3,256.00	53.69	61.646	
6,200.00	6,123.00	6,074.30	6,142.18	33.74	25.98	-19.38	-4,168.30	500.76	3,293.54	3,238.96	54.57	60.351	
6,300.00	6,221.64	6,180.72	6,248.59	34.30	26.43	-19.49	-4,167.64	500.56	3,277.41	3,221.92	55.49	59.068	
6,400.00	6,320.29	6,289.05	6,356.92	34.86	26.89	-19.59	-4,166.61	500.29	3,260.96	3,204.55	56.40	57.815	
6,500.00	6,418.93	6,380.55	6,448.41	35.42	27.28	-19.68	-4,165.68	500.06	3,244.45	3,187.18	57.27	56.649	
6,600.00	6,517.58	6,475.62	6,543.48	35.98	27.68	-19.77	-4,164.93	499.75	3,228.16	3,170.01	58.15	55.512	
6,700.00	6,616.23	6,574.16	6,642.02	36.54	28.10	-19.86	-4,164.25	499.17	3,211.92	3,152.88	59.04	54.399	
6,800.00	6,714.51	6,681.90	6,749.75	37.10	28.56	-55.97	-4,163.25	499.09	3,196.69	3,136.70	59.99	53.290	
6,900.00	6,810.42	6,784.07	6,851.91	37.66	28.99	-76.20	-4,161.95	499.26	3,184.71	3,123.73	60.98	52.227	
7,000.00	6,901.58	6,874.10	6,941.93	38.21	29.38	-85.75	-4,160.81	498.98	3,176.88	3,114.88	62.00	51.237	
7,100.00	6,985.76	6,956.90	7,024.73	38.76	29.73	-91.12	-4,159.73	499.03	3,174.08	3,110.97	63.10	50.301	
7,101.21	6,986.73	6,957.85	7,025.68	38.77	29.73	-91.17	-4,159.72	499.04	3,174.07	3,110.96	63.12	50.289 CC, ES	
7,200.00	7,060.88	7,022.59	7,090.41	39.32	30.01	-94.21	-4,158.76	499.77	3,177.02	3,112.74	64.28	49.421	
7,300.00	7,125.09	7,069.28	7,137.09	39.90	30.20	-95.65	-4,158.24	500.47	3,186.58	3,120.99	65.59	48.586	
7,400.00	7,176.81	7,108.80	7,176.60	40.55	30.37	-95.87	-4,157.98	501.11	3,203.04	3,135.97	67.07	47.756	
7,500.00	7,214.77	7,145.19	7,212.98	41.30	30.53	-95.07	-4,157.79	501.71	3,226.29	3,157.53	68.76	46.922	
7,600.00	7,238.02	7,166.80	7,234.59	42.22	30.62	-93.10	-4,157.67	502.07	3,256.01	3,185.43	70.58	46.132	
7,700.00	7,246.01	7,173.12	7,240.91	43.32	30.64	-89.96	-4,157.64	502.18	3,291.60	3,219.13	72.47	45.419	
7,800.00	7,245.50	7,170.95	7,238.74	44.65	30.64	-89.74	-4,157.65	502.14	3,331.24	3,256.82	74.42	44.765	
7,900.00	7,244.97	7,168.76	7,236.55	46.21	30.63	-89.70	-4,157.66	502.11	3,373.38	3,296.94	76.43	44.135	
8,000.00	7,244.44	7,166.57	7,234.36	47.99	30.62	-89.65	-4,157.67	502.07	3,417.92	3,339.42	78.49	43.544	
8,100.00	7,243.91	7,164.37	7,232.17	49.96	30.61	-89.61	-4,157.69	502.03	3,464.77	3,384.20	80.57	43.001	
8,200.00	7,243.39	7,162.18	7,229.97	52.10	30.60	-89.57	-4,157.70	502.00	3,513.85	3,431.19	82.66	42.512	
8,300.00	7,242.86	7,159.99	7,227.78	54.38	30.59	-89.53	-4,157.71	501.96	3,565.05	3,480.33	84.72	42.081	
8,400.00	7,242.33	7,157.80	7,225.59	56.78	30.58	-89.49	-4,157.72	501.92	3,618.30	3,531.54	86.76	41.707	
8,500.00	7,241.80	7,155.60	7,223.40	59.28	30.57	-89.45	-4,157.73	501.89	3,673.49	3,584.73	88.75	41.389	
8,600.00	7,241.27	7,153.41	7,221.20	61.88	30.56	-89.41	-4,157.74	501.85	3,730.55	3,639.84	90.71	41.127	
8,700.00	7,240.74	7,151.22	7,219.01	64.54	30.55	-89.37	-4,157.76	501.81	3,789.38	3,696.77	92.61	40.917	
8,800.00	7,240.21	7,149.03	7,216.82	67.27	30.54	-89.32	-4,157.77	501.78	3,849.91	3,755.45	94.46	40.757	
8,900.00	7,239.68	7,146.83	7,214.63	70.06	30.53	-89.28	-4,157.78	501.74	3,912.06	3,815.81	96.25	40.643	
9,000.00	7,239.16	7,144.64	7,212.44	72.89	30.52	-89.24	-4,157.79	501.70	3,975.76	3,877.77	97.99	40.574	
9,100.00	7,238.63	7,142.45	7,210.24	75.77	30.51	-89.20	-4,157.80	501.67	4,040.92	3,941.26	99.66	40.546 SF	
9,200.00	7,238.10	7,140.26	7,208.05	78.69	30.50	-89.16	-4,157.81	501.63	4,107.48	4,006.21	101.28	40.556	
9,300.00	7,237.57	7,138.06	7,205.86	81.64	30.50	-89.12	-4,157.83	501.60	4,175.38	4,072.55	102.84	40.602	
9,400.00	7,237.04	7,135.87	7,203.67	84.62	30.49	-89.08	-4,157.84	501.56	4,244.55	4,140.21	104.33	40.682	
9,500.00	7,236.51	7,133.68	7,201.47	87.63	30.48	-89.03	-4,157.85	501.52	4,314.92	4,209.14	105.78	40.792	
9,600.00	7,235.98	7,131.48	7,199.28	90.66	30.47	-88.99	-4,157.86	501.49	4,386.44	4,279.28	107.16	40.932	
9,700.00	7,235.45	7,129.29	7,197.09	93.72	30.46	-88.95	-4,157.87	501.45	4,459.06	4,350.56	108.50	41.098	
9,800.00	7,234.93	7,127.10	7,194.90	96.79	30.45	-88.91	-4,157.88	501.41	4,532.72	4,422.94	109.78	41.290	
9,900.00	7,234.40	7,124.91	7,192.71	99.88	30.44	-88.87	-4,157.90	501.38	4,607.37	4,496.36	111.01	41.504	
10,000.00	7,233.87	7,122.71	7,190.51	102.98	30.43	-88.83	-4,157.91	501.34	4,682.97	4,570.78	112.19	41.741	
10,100.00	7,233.34	7,120.52	7,188.32	106.10	30.42	-88.79	-4,157.92	501.30	4,759.46	4,646.14	113.33	41.998	
10,200.00	7,232.81	7,118.33	7,186.13	109.23	30.41	-88.75	-4,157.93	501.27	4,836.81	4,722.40	114.42	42.274	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,232.28	7,116.14	7,183.94	112.38	30.40	-88.70	-4,157.94	501.23	4,914.98	4,799.52	115.46	42.568	
10,400.00	7,231.75	7,113.94	7,181.74	115.53	30.39	-88.66	-4,157.96	501.20	4,993.93	4,877.46	116.47	42.878	
10,500.00	7,231.23	7,111.75	7,179.55	118.70	30.38	-88.62	-4,157.97	501.16	5,073.62	4,956.18	117.43	43.204	
10,600.00	7,230.70	7,109.56	7,177.36	121.87	30.37	-88.58	-4,157.98	501.12	5,154.01	5,035.65	118.36	43.545	
10,700.00	7,230.17	7,107.37	7,175.17	125.05	30.37	-88.54	-4,157.99	501.09	5,235.08	5,115.83	119.25	43.899	
10,800.00	7,229.64	7,105.17	7,172.98	128.25	30.36	-88.50	-4,158.00	501.05	5,316.79	5,196.69	120.11	44.266	
10,900.00	7,229.11	7,102.98	7,170.78	131.44	30.35	-88.46	-4,158.01	501.01	5,399.12	5,278.19	120.93	44.646	
11,000.00	7,228.58	7,100.79	7,168.59	134.65	30.34	-88.42	-4,158.03	500.98	5,482.04	5,360.31	121.72	45.036	
11,100.00	7,228.05	7,101.43	7,166.40	137.86	30.34	-88.37	-4,158.04	500.94	5,565.51	5,443.01	122.50	45.433	
11,200.00	7,227.52	7,103.62	7,164.21	141.08	30.35	-88.33	-4,158.05	500.90	5,649.52	5,526.27	123.25	45.838	
11,300.00	7,227.00	7,105.82	7,162.01	144.30	30.36	-88.29	-4,158.06	500.87	5,734.05	5,610.07	123.97	46.252	
11,400.00	7,226.47	7,108.01	7,159.82	147.52	30.37	-88.25	-4,158.07	500.83	5,819.06	5,694.39	124.67	46.675	
11,500.00	7,225.94	7,110.20	7,157.63	150.76	30.38	-88.21	-4,158.08	500.79	5,904.55	5,779.20	125.35	47.106	
11,600.00	7,225.41	7,112.39	7,155.44	153.99	30.39	-88.17	-4,158.10	500.76	5,990.48	5,864.48	125.99	47.545	
11,700.00	7,224.88	7,114.59	7,153.25	157.23	30.40	-88.13	-4,158.11	500.72	6,076.84	5,950.22	126.62	47.992	
11,800.00	7,224.35	7,116.78	7,151.05	160.48	30.41	-88.09	-4,158.12	500.69	6,163.61	6,036.38	127.23	48.446	
11,900.00	7,223.82	7,118.97	7,148.86	163.72	30.41	-88.04	-4,158.13	500.65	6,250.78	6,122.97	127.81	48.907	
12,000.00	7,223.29	7,121.16	7,146.67	166.98	30.42	-88.00	-4,158.14	500.61	6,338.32	6,209.95	128.37	49.374	
12,100.00	7,222.77	7,084.45	7,152.25	170.23	30.27	-88.11	-4,158.12	500.71	6,426.24	6,297.49	128.75	49.911	
12,200.00	7,222.24	7,083.02	7,150.82	173.49	30.26	-88.08	-4,158.14	500.69	6,514.50	6,385.24	129.27	50.396	
12,300.00	7,221.71	7,081.60	7,149.40	176.75	30.26	-88.05	-4,158.15	500.66	6,603.10	6,473.34	129.76	50.887	
12,400.00	7,221.18	7,080.18	7,147.99	180.01	30.25	-88.03	-4,158.16	500.64	6,692.01	6,561.77	130.24	51.382	
12,500.00	7,220.65	7,078.77	7,146.58	183.28	30.24	-88.00	-4,158.17	500.62	6,781.23	6,650.53	130.70	51.883	
12,600.00	7,220.12	7,077.37	7,145.17	186.54	30.24	-87.97	-4,158.18	500.60	6,870.75	6,739.60	131.15	52.389	
12,700.00	7,219.59	7,075.97	7,143.77	189.81	30.23	-87.95	-4,158.19	500.57	6,960.56	6,828.97	131.58	52.899	
12,800.00	7,219.06	7,074.57	7,142.38	193.09	30.23	-87.92	-4,158.20	500.55	7,050.63	6,918.63	132.00	53.413	
12,900.00	7,218.54	7,073.19	7,140.99	196.36	30.22	-87.90	-4,158.21	500.53	7,140.98	7,008.57	132.41	53.931	
13,000.00	7,218.01	7,071.81	7,139.61	199.64	30.21	-87.87	-4,158.22	500.51	7,231.57	7,098.77	132.80	54.453	
13,100.00	7,217.48	7,070.43	7,138.24	202.92	30.21	-87.84	-4,158.23	500.49	7,322.41	7,189.22	133.19	54.979	
13,200.00	7,216.95	7,069.06	7,136.87	206.20	30.20	-87.82	-4,158.24	500.47	7,413.49	7,279.93	133.56	55.508	
13,300.00	7,216.42	7,067.69	7,135.50	209.48	30.20	-87.79	-4,158.26	500.44	7,504.79	7,370.87	133.92	56.041	
13,400.00	7,215.89	7,066.34	7,134.14	212.76	30.19	-87.77	-4,158.27	500.42	7,596.31	7,462.04	134.27	56.577	
13,500.00	7,215.36	7,064.98	7,132.79	216.05	30.19	-87.74	-4,158.28	500.40	7,688.04	7,553.44	134.60	57.116	
13,600.00	7,214.84	7,063.63	7,131.44	219.33	30.18	-87.72	-4,158.29	500.38	7,779.98	7,645.04	134.93	57.658	
13,700.00	7,214.31	7,062.29	7,130.10	222.62	30.17	-87.69	-4,158.30	500.36	7,872.11	7,736.85	135.25	58.202	
13,800.00	7,213.78	7,060.95	7,128.76	225.91	30.17	-87.67	-4,158.32	500.34	7,964.43	7,828.86	135.57	58.749	
13,900.00	7,213.25	7,059.62	7,127.43	229.20	30.16	-87.64	-4,158.33	500.32	8,056.93	7,921.06	135.87	59.299	
14,000.00	7,212.72	7,058.30	7,126.11	232.49	30.16	-87.62	-4,158.34	500.30	8,149.61	8,013.45	136.16	59.852	
14,100.00	7,212.19	7,056.98	7,124.78	235.79	30.15	-87.59	-4,158.36	500.28	8,242.46	8,106.01	136.45	60.406	
14,200.00	7,211.66	7,055.66	7,123.47	239.08	30.15	-87.57	-4,158.37	500.26	8,335.48	8,198.75	136.73	60.963	
14,300.00	7,211.13	7,054.35	7,122.16	242.38	30.14	-87.54	-4,158.38	500.24	8,428.65	8,291.65	137.00	61.522	
14,400.00	7,210.61	7,053.05	7,120.85	245.67	30.13	-87.52	-4,158.40	500.22	8,521.99	8,384.72	137.27	62.083	
14,500.00	7,210.08	7,051.75	7,119.55	248.97	30.13	-87.49	-4,158.41	500.20	8,615.46	8,477.94	137.53	62.646	
14,600.00	7,209.55	7,050.45	7,118.26	252.27	30.12	-87.47	-4,158.42	500.18	8,709.09	8,571.31	137.78	63.211	
14,700.00	7,209.02	7,049.16	7,116.97	255.57	30.12	-87.44	-4,158.44	500.16	8,802.85	8,664.83	138.03	63.777	
14,800.00	7,208.49	7,047.88	7,115.69	258.87	30.11	-87.42	-4,158.45	500.14	8,896.75	8,758.49	138.27	64.345	
14,900.00	7,207.96	7,046.60	7,114.41	262.17	30.11	-87.40	-4,158.46	500.12	8,990.78	8,852.28	138.50	64.915	
15,000.00	7,207.43	7,045.32	7,113.13	265.47	30.10	-87.37	-4,158.48	500.10	9,084.94	8,946.21	138.73	65.487	
15,081.89	7,207.00	7,044.28	7,112.09	268.17	30.10	-87.35	-4,158.49	500.09	9,162.14	9,023.23	138.91	65.956	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	21.21	-1.79	3.28	3.28	172.55	-4,179.31	546.63	4,214.91				
100.00	100.00	114.26	91.26	3.28	3.29	172.55	-4,179.45	546.53	4,215.04	4,208.47	6.58	640.948	
200.00	200.00	213.27	190.26	3.34	3.35	172.55	-4,179.70	546.42	4,215.27	4,208.58	6.69	630.006	
300.00	299.98	319.37	296.37	3.44	3.48	-15.50	-4,179.88	546.21	4,213.73	4,206.82	6.92	609.186	
400.00	399.84	419.51	396.51	3.59	3.64	-15.54	-4,180.01	545.86	4,208.78	4,201.55	7.23	581.844	
500.00	499.45	521.39	498.38	3.80	3.85	-15.61	-4,180.10	545.55	4,200.42	4,192.78	7.64	549.561	
600.00	598.70	618.98	595.98	4.06	4.09	-15.72	-4,180.20	545.19	4,188.74	4,180.62	8.12	515.821	
700.00	697.49	719.52	696.52	4.38	4.36	-15.83	-4,180.27	544.89	4,173.83	4,165.16	8.67	481.240	
800.00	796.13	814.75	791.75	4.74	4.64	-15.89	-4,180.37	544.69	4,158.11	4,148.86	9.25	449.383	
900.00	894.78	914.78	891.78	5.15	4.95	-15.94	-4,180.49	544.38	4,142.40	4,132.51	9.89	418.784	
1,000.00	993.43	1,011.88	988.88	5.58	5.27	-16.00	-4,180.63	544.10	4,126.71	4,116.16	10.56	390.887	
1,100.00	1,092.07	1,113.40	1,090.40	6.03	5.62	-16.06	-4,180.73	543.81	4,111.00	4,099.73	11.27	364.847	
1,200.00	1,190.72	1,207.49	1,184.48	6.50	5.95	-16.12	-4,180.87	543.47	4,095.31	4,083.33	11.98	341.916	
1,300.00	1,289.36	1,298.05	1,275.05	6.98	6.28	-16.17	-4,181.15	543.08	4,079.79	4,067.09	12.70	321.367	
1,400.00	1,388.01	1,398.71	1,375.70	7.47	6.65	-16.23	-4,181.55	542.59	4,064.35	4,050.88	13.47	301.838	
1,500.00	1,486.65	1,505.05	1,482.04	7.97	7.05	-16.29	-4,181.87	541.95	4,048.79	4,034.52	14.27	283.714	
1,600.00	1,585.30	1,601.58	1,578.57	8.48	7.42	-16.34	-4,182.10	541.30	4,033.18	4,018.12	15.05	267.936	
1,700.00	1,683.94	1,699.76	1,676.74	9.00	7.80	-16.40	-4,182.36	540.68	4,017.59	4,001.74	15.85	253.456	
1,800.00	1,782.59	1,794.20	1,771.18	9.52	8.17	-16.45	-4,182.68	540.04	4,002.07	3,985.43	16.64	240.439	
1,900.00	1,881.24	1,887.65	1,864.63	10.05	8.54	-16.50	-4,183.12	539.28	3,986.67	3,969.23	17.44	228.560	
2,000.00	1,979.88	1,984.99	1,961.96	10.58	8.93	-16.55	-4,183.70	538.29	3,971.37	3,953.10	18.26	217.473	
2,100.00	2,078.53	2,092.18	2,069.14	11.11	9.36	-16.61	-4,184.28	536.99	3,955.99	3,936.86	19.12	206.872	
2,200.00	2,177.17	2,196.00	2,172.95	11.64	9.77	-16.66	-4,184.65	535.66	3,940.42	3,920.44	19.98	197.250	
2,300.00	2,275.82	2,307.89	2,284.83	12.18	10.23	-16.71	-4,184.81	534.16	3,924.63	3,903.77	20.86	188.097	
2,400.00	2,374.46	2,414.94	2,391.87	12.72	10.66	-16.77	-4,184.65	532.81	3,908.58	3,886.84	21.74	179.799	
2,500.00	2,473.11	2,511.33	2,488.25	13.26	11.06	-16.82	-4,184.42	531.79	3,892.47	3,869.90	22.58	172.416	
2,600.00	2,571.76	2,612.88	2,589.80	13.80	11.47	-16.88	-4,184.11	530.90	3,876.33	3,852.89	23.44	165.403	
2,700.00	2,670.40	2,710.54	2,687.46	14.35	11.88	-16.94	-4,183.78	530.06	3,860.16	3,835.88	24.28	158.960	
2,800.00	2,769.05	2,802.20	2,779.12	14.89	12.25	-17.00	-4,183.57	529.29	3,844.11	3,819.00	25.11	153.074	
2,900.00	2,867.69	2,906.05	2,882.96	15.44	12.68	-17.06	-4,183.35	528.52	3,828.08	3,802.09	25.99	147.298	
3,000.00	2,966.34	2,988.80	2,965.71	15.99	13.03	-17.11	-4,183.28	528.04	3,812.21	3,785.42	26.79	142.301	
3,100.00	3,064.98	3,079.56	3,056.46	16.53	13.40	-17.17	-4,183.47	527.61	3,796.65	3,769.03	27.62	137.448	
3,200.00	3,163.63	3,180.20	3,157.11	17.08	13.82	-17.24	-4,183.78	527.09	3,781.19	3,752.69	28.49	132.705	
3,300.00	3,262.27	3,270.97	3,247.87	17.63	14.20	-17.30	-4,184.08	526.58	3,765.75	3,736.42	29.33	128.394	
3,400.00	3,360.92	3,360.90	3,337.80	18.18	14.58	-17.36	-4,184.63	526.03	3,750.57	3,720.41	30.16	124.336	
3,500.00	3,459.57	3,491.47	3,468.36	18.74	15.12	-17.44	-4,185.24	525.26	3,735.32	3,704.17	31.15	119.920	
3,600.00	3,558.21	3,617.74	3,594.63	19.29	15.65	-17.54	-4,184.47	525.02	3,719.03	3,686.91	32.11	115.804	
3,700.00	3,656.86	3,724.88	3,701.77	19.84	16.09	-17.62	-4,183.35	524.80	3,702.32	3,669.31	33.01	112.144	
3,800.00	3,755.50	3,827.15	3,804.02	20.39	16.52	-17.70	-4,182.01	524.61	3,685.36	3,651.46	33.90	108.721	
3,900.00	3,854.15	3,915.05	3,891.93	20.95	16.89	-17.77	-4,181.02	524.34	3,668.57	3,633.83	34.73	105.623	
4,000.00	3,952.79	4,006.34	3,983.21	21.50	17.27	-17.84	-4,180.22	523.97	3,652.01	3,616.43	35.58	102.640	
4,100.00	4,051.44	4,099.82	4,076.69	22.05	17.66	-17.91	-4,179.58	523.47	3,635.63	3,599.19	36.44	99.777	
4,200.00	4,150.08	4,181.92	4,158.78	22.61	18.01	-17.97	-4,179.27	522.96	3,619.54	3,582.28	37.26	97.153	
4,300.00	4,248.73	4,279.30	4,256.16	23.16	18.42	-18.04	-4,179.20	522.39	3,603.74	3,565.62	38.13	94.517	
4,400.00	4,347.38	4,374.43	4,351.29	23.72	18.82	-18.11	-4,179.12	521.88	3,587.96	3,548.96	38.99	92.014	
4,500.00	4,446.02	4,472.73	4,449.59	24.27	19.24	-18.18	-4,179.11	521.41	3,572.26	3,532.39	39.87	89.596	
4,600.00	4,544.67	4,573.81	4,550.66	24.83	19.66	-18.26	-4,179.05	520.97	3,556.53	3,515.78	40.76	87.259	
4,700.00	4,643.31	4,667.62	4,644.48	25.39	20.06	-18.33	-4,179.02	520.49	3,540.81	3,499.19	41.62	85.071	
4,800.00	4,741.96	4,757.42	4,734.27	25.94	20.44	-18.40	-4,179.16	520.09	3,525.31	3,482.84	42.47	83.002	
4,900.00	4,840.60	4,851.86	4,828.72	26.50	20.84	-18.48	-4,179.47	520.09	3,510.04	3,466.70	43.34	80.988	
5,000.00	4,939.25	4,950.87	4,927.73	27.05	21.26	-18.57	-4,179.80	520.11	3,494.79	3,450.57	44.22	79.025	
5,100.00	5,037.90	5,047.82	5,024.67	27.61	21.66	-18.65	-4,180.13	520.14	3,479.57	3,434.46	45.10	77.150	

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,143.85	5,120.71	28.17	22.07	-18.73	-4,180.54	520.19	3,464.43	3,418.45	45.98	75.352		
5,300.00	5,235.19	5,243.74	5,220.59	28.72	22.49	-18.82	-4,180.99	520.28	3,449.34	3,402.47	46.87	73.601		
5,400.00	5,333.83	5,345.62	5,322.47	29.28	22.92	-18.91	-4,181.38	520.19	3,434.15	3,386.39	47.76	71.902		
5,500.00	5,432.48	5,442.71	5,419.56	29.84	23.33	-19.00	-4,181.72	520.14	3,418.95	3,370.30	48.64	70.287		
5,600.00	5,531.12	5,562.71	5,539.56	30.40	23.84	-19.10	-4,182.03	520.13	3,403.71	3,354.11	49.60	68.626		
5,700.00	5,629.77	5,677.52	5,654.37	30.95	24.32	-19.22	-4,181.25	520.45	3,387.56	3,337.03	50.54	67.034		
5,800.00	5,728.41	5,763.12	5,739.97	31.51	24.68	-19.30	-4,180.71	520.57	3,371.48	3,320.09	51.38	65.616		
5,900.00	5,827.06	5,850.23	5,827.08	32.07	25.05	-19.38	-4,180.61	520.52	3,355.84	3,303.61	52.23	64.247		
6,000.00	5,925.71	5,947.36	5,924.20	32.63	25.46	-19.47	-4,180.70	520.38	3,340.42	3,287.30	53.12	62.888		
6,100.00	6,024.35	6,046.32	6,023.16	33.19	25.88	-19.56	-4,180.78	519.99	3,324.94	3,270.93	54.01	61.565		
6,200.00	6,123.00	6,143.11	6,119.95	33.74	26.30	-19.64	-4,180.96	519.52	3,309.55	3,254.66	54.89	60.294		
6,300.00	6,221.64	6,251.09	6,227.93	34.30	26.76	-19.74	-4,181.11	518.86	3,294.10	3,238.29	55.81	59.025		
6,400.00	6,320.29	6,363.69	6,340.52	34.86	27.24	-19.83	-4,180.80	517.91	3,278.20	3,221.47	56.74	57.777		
6,500.00	6,418.93	6,464.19	6,441.02	35.42	27.66	-19.91	-4,180.31	516.86	3,262.08	3,204.44	57.63	56.600		
6,600.00	6,517.58	6,569.75	6,546.57	35.98	28.11	-20.00	-4,179.75	515.74	3,245.91	3,187.36	58.54	55.444		
6,700.00	6,616.23	6,670.35	6,647.16	36.54	28.54	-20.08	-4,179.04	514.38	3,229.52	3,170.08	59.44	54.333		
6,800.00	6,714.51	6,767.16	6,743.96	37.10	28.95	-56.14	-4,178.41	512.93	3,214.31	3,153.95	60.35	53.260		
6,900.00	6,810.42	6,873.04	6,849.81	37.66	29.40	-76.32	-4,177.78	510.73	3,202.59	3,141.24	61.35	52.202		
7,000.00	6,901.58	6,975.24	6,951.97	38.21	29.84	-85.91	-4,176.95	507.82	3,194.74	3,132.34	62.41	51.194		
7,100.00	6,985.76	7,070.36	7,047.03	38.76	30.25	-91.38	-4,176.00	504.71	3,191.57	3,128.04	63.53	50.237		
7,110.92	6,994.44	7,080.32	7,056.98	38.82	30.29	-91.83	-4,175.89	504.34	3,191.54	3,127.88	63.66	50.131 CC, ES		
7,200.00	7,060.88	7,151.00	7,127.60	39.32	30.59	-94.65	-4,175.12	501.53	3,193.84	3,129.10	64.75	49.328		
7,300.00	7,125.09	7,218.05	7,194.60	39.90	30.88	-96.42	-4,174.40	498.86	3,202.35	3,136.25	66.10	48.446		
7,400.00	7,176.81	7,273.02	7,249.52	40.55	31.11	-96.97	-4,173.80	496.67	3,217.54	3,149.92	67.63	47.578		
7,500.00	7,214.77	7,314.54	7,291.01	41.30	31.29	-96.35	-4,173.35	495.01	3,239.61	3,170.28	69.33	46.730		
7,600.00	7,238.02	7,341.60	7,318.04	42.22	31.40	-94.58	-4,173.05	493.93	3,268.39	3,197.22	71.17	45.927		
7,700.00	7,246.01	7,353.53	7,329.96	43.32	31.46	-91.63	-4,172.92	493.45	3,303.38	3,230.30	73.08	45.204		
7,800.00	7,245.50	7,357.01	7,333.44	44.65	31.47	-91.51	-4,172.88	493.32	3,342.63	3,267.58	75.05	44.542		
7,900.00	7,244.97	7,360.46	7,336.89	46.21	31.49	-91.58	-4,172.85	493.18	3,384.37	3,307.28	77.09	43.902		
8,000.00	7,244.44	7,363.92	7,340.34	47.99	31.50	-91.64	-4,172.81	493.04	3,428.52	3,349.34	79.18	43.301		
8,100.00	7,243.91	7,367.37	7,343.79	49.96	31.51	-91.71	-4,172.77	492.90	3,474.99	3,393.70	81.29	42.749		
8,200.00	7,243.39	7,370.83	7,347.24	52.10	31.53	-91.77	-4,172.73	492.76	3,523.68	3,440.27	83.40	42.250		
8,300.00	7,242.86	7,374.28	7,350.70	54.38	31.54	-91.84	-4,172.70	492.63	3,574.49	3,489.00	85.50	41.808		
8,400.00	7,242.33	7,377.74	7,354.15	56.78	31.56	-91.90	-4,172.66	492.49	3,627.36	3,539.79	87.57	41.424		
8,500.00	7,241.80	7,381.19	7,357.60	59.28	31.57	-91.97	-4,172.62	492.35	3,682.17	3,592.57	89.60	41.096		
8,600.00	7,241.27	7,384.65	7,361.05	61.88	31.59	-92.03	-4,172.58	492.21	3,738.86	3,647.27	91.59	40.822		
8,700.00	7,240.74	7,388.10	7,364.50	64.54	31.60	-92.10	-4,172.55	492.08	3,797.32	3,703.80	93.53	40.601		
8,800.00	7,240.21	7,391.56	7,367.96	67.27	31.62	-92.16	-4,172.51	491.94	3,857.50	3,762.08	95.41	40.429		
8,900.00	7,239.68	7,395.01	7,371.41	70.06	31.63	-92.23	-4,172.47	491.80	3,919.29	3,822.05	97.24	40.305		
9,000.00	7,239.16	7,398.47	7,374.86	72.89	31.65	-92.29	-4,172.43	491.66	3,982.64	3,883.63	99.01	40.224		
9,100.00	7,238.63	7,401.92	7,378.31	75.77	31.66	-92.36	-4,172.40	491.52	4,047.46	3,946.74	100.72	40.183		
9,200.00	7,238.10	7,405.38	7,381.76	78.69	31.68	-92.42	-4,172.36	491.39	4,113.69	4,011.32	102.38	40.182 SF		
9,300.00	7,237.57	7,408.83	7,385.21	81.64	31.69	-92.49	-4,172.32	491.25	4,181.26	4,077.29	103.97	40.215		
9,400.00	7,237.04	7,412.29	7,388.67	84.62	31.71	-92.55	-4,172.28	491.11	4,250.11	4,144.60	105.51	40.282		
9,500.00	7,236.51	7,415.74	7,392.12	87.63	31.72	-92.61	-4,172.24	490.97	4,320.17	4,213.18	106.99	40.380		
9,600.00	7,235.98	7,419.20	7,395.57	90.66	31.74	-92.68	-4,172.21	490.83	4,391.39	4,282.98	108.41	40.507		
9,700.00	7,235.45	7,422.65	7,399.02	93.72	31.75	-92.74	-4,172.17	490.70	4,463.70	4,353.92	109.78	40.660		
9,800.00	7,234.93	7,426.11	7,402.47	96.79	31.77	-92.81	-4,172.13	490.56	4,537.07	4,425.98	111.10	40.839		
9,900.00	7,234.40	7,429.56	7,405.93	99.88	31.78	-92.87	-4,172.09	490.42	4,611.44	4,499.08	112.36	41.040		
10,000.00	7,233.87	7,400.00	7,376.39	102.98	31.65	-92.32	-4,172.42	491.60	4,686.87	4,573.40	113.47	41.305		
10,100.00	7,233.34	7,400.00	7,376.39	106.10	31.65	-92.32	-4,172.42	491.60	4,763.12	4,648.49	114.63	41.553		
10,200.00	7,232.81	7,400.00	7,376.39	109.23	31.65	-92.32	-4,172.42	491.60	4,840.23	4,724.49	115.74	41.820		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,400.00	7,376.39	112.38	31.65	-92.32	-4,172.42	491.60	4,918.17	4,801.36	116.81	42.104		
10,400.00	7,231.75	7,400.00	7,376.39	115.53	31.65	-92.32	-4,172.42	491.60	4,996.89	4,879.06	117.84	42.406		
10,500.00	7,231.23	7,400.00	7,376.39	118.70	31.65	-92.32	-4,172.42	491.60	5,076.36	4,957.54	118.82	42.722		
10,600.00	7,230.70	7,400.00	7,376.39	121.87	31.65	-92.32	-4,172.42	491.60	5,156.55	5,036.78	119.77	43.053		
10,700.00	7,230.17	7,400.00	7,376.39	125.05	31.65	-92.32	-4,172.42	491.60	5,237.42	5,116.73	120.68	43.398		
10,800.00	7,229.64	7,400.00	7,376.39	128.25	31.65	-92.32	-4,172.42	491.60	5,318.93	5,197.38	121.56	43.756		
10,900.00	7,229.11	7,400.00	7,376.39	131.44	31.65	-92.32	-4,172.42	491.60	5,401.07	5,278.67	122.40	44.125		
11,000.00	7,228.58	7,400.00	7,376.39	134.65	31.65	-92.32	-4,172.42	491.60	5,483.81	5,360.59	123.21	44.506		
11,100.00	7,228.05	7,400.00	7,376.39	137.86	31.65	-92.32	-4,172.42	491.60	5,567.11	5,443.11	124.00	44.898		
11,200.00	7,227.52	7,400.00	7,376.39	141.08	31.65	-92.32	-4,172.42	491.60	5,650.95	5,526.20	124.75	45.299		
11,300.00	7,227.00	7,400.00	7,376.39	144.30	31.65	-92.32	-4,172.42	491.60	5,735.31	5,609.84	125.47	45.710		
11,400.00	7,226.47	7,400.00	7,376.39	147.52	31.65	-92.32	-4,172.42	491.60	5,820.16	5,693.99	126.17	46.130		
11,500.00	7,225.94	7,400.00	7,376.39	150.76	31.65	-92.32	-4,172.42	491.60	5,905.49	5,778.65	126.84	46.558		
11,600.00	7,225.41	7,400.00	7,376.39	153.99	31.65	-92.32	-4,172.42	491.60	5,991.27	5,863.78	127.49	46.995		
11,700.00	7,224.88	7,400.00	7,376.39	157.23	31.65	-92.32	-4,172.42	491.60	6,077.49	5,949.38	128.11	47.438		
11,800.00	7,224.35	7,400.00	7,376.39	160.48	31.65	-92.32	-4,172.42	491.60	6,164.12	6,035.41	128.72	47.889		
11,900.00	7,223.82	7,400.00	7,376.39	163.72	31.65	-92.32	-4,172.42	491.60	6,251.16	6,121.86	129.30	48.347		
12,000.00	7,223.29	7,400.00	7,376.39	166.98	31.65	-92.32	-4,172.42	491.60	6,338.57	6,208.71	129.86	48.811		
12,100.00	7,222.77	7,400.00	7,376.39	170.23	31.65	-92.32	-4,172.42	491.60	6,426.35	6,295.95	130.40	49.281		
12,200.00	7,222.24	7,400.00	7,376.39	173.49	31.65	-92.32	-4,172.42	491.60	6,514.49	6,383.56	130.93	49.756		
12,300.00	7,221.71	7,400.00	7,376.39	176.75	31.65	-92.32	-4,172.42	491.60	6,602.96	6,471.53	131.43	50.237		
12,400.00	7,221.18	7,400.00	7,376.39	180.01	31.65	-92.32	-4,172.42	491.60	6,691.76	6,559.83	131.93	50.724		
12,500.00	7,220.65	7,400.00	7,376.39	183.28	31.65	-92.32	-4,172.42	491.60	6,780.87	6,648.47	132.40	51.215		
12,600.00	7,220.12	7,400.00	7,376.39	186.54	31.65	-92.32	-4,172.42	491.60	6,870.28	6,737.42	132.86	51.711		
12,700.00	7,219.59	7,400.00	7,376.39	189.81	31.65	-92.32	-4,172.42	491.60	6,959.97	6,826.67	133.30	52.211		
12,800.00	7,219.06	7,400.00	7,376.39	193.09	31.65	-92.32	-4,172.42	491.60	7,049.95	6,916.21	133.74	52.716		
12,900.00	7,218.54	7,400.00	7,376.39	196.36	31.65	-92.32	-4,172.42	491.60	7,140.19	7,006.04	134.15	53.224		
13,000.00	7,218.01	7,400.00	7,376.39	199.64	31.65	-92.32	-4,172.42	491.60	7,230.69	7,096.13	134.56	53.737		
13,100.00	7,217.48	7,400.00	7,376.39	202.92	31.65	-92.32	-4,172.42	491.60	7,321.43	7,186.48	134.95	54.253		
13,200.00	7,216.95	7,400.00	7,376.39	206.20	31.65	-92.32	-4,172.42	491.60	7,412.42	7,277.09	135.33	54.772		
13,300.00	7,216.42	7,400.00	7,376.39	209.48	31.65	-92.32	-4,172.42	491.60	7,503.63	7,367.93	135.70	55.295		
13,400.00	7,215.89	7,400.00	7,376.39	212.76	31.65	-92.32	-4,172.42	491.60	7,595.06	7,459.00	136.06	55.821		
13,500.00	7,215.36	7,400.00	7,376.39	216.05	31.65	-92.32	-4,172.42	491.60	7,686.71	7,550.30	136.41	56.350		
13,600.00	7,214.84	7,400.00	7,376.39	219.33	31.65	-92.32	-4,172.42	491.60	7,778.56	7,641.82	136.75	56.882		
13,700.00	7,214.31	7,400.00	7,376.39	222.62	31.65	-92.32	-4,172.42	491.60	7,870.62	7,733.54	137.08	57.417		
13,800.00	7,213.78	7,400.00	7,376.39	225.91	31.65	-92.32	-4,172.42	491.60	7,962.86	7,825.46	137.40	57.954		
13,900.00	7,213.25	7,400.00	7,376.39	229.20	31.65	-92.32	-4,172.42	491.60	8,055.29	7,917.58	137.71	58.494		
14,000.00	7,212.72	7,400.00	7,376.39	232.49	31.65	-92.32	-4,172.42	491.60	8,147.90	8,009.88	138.01	59.036		
14,100.00	7,212.19	7,400.00	7,376.39	235.79	31.65	-92.32	-4,172.42	491.60	8,240.68	8,102.37	138.31	59.581		
14,200.00	7,211.66	7,400.00	7,376.39	239.08	31.65	-92.32	-4,172.42	491.60	8,333.62	8,195.02	138.60	60.128		
14,300.00	7,211.13	7,400.00	7,376.39	242.38	31.65	-92.32	-4,172.42	491.60	8,426.73	8,287.85	138.88	60.676		
14,400.00	7,210.61	7,400.00	7,376.39	245.67	31.65	-92.32	-4,172.42	491.60	8,520.00	8,380.84	139.15	61.227		
14,500.00	7,210.08	7,400.00	7,376.39	248.97	31.65	-92.32	-4,172.42	491.60	8,613.41	8,473.99	139.42	61.780		
14,600.00	7,209.55	7,400.00	7,376.39	252.27	31.65	-92.32	-4,172.42	491.60	8,706.98	8,567.29	139.68	62.335		
14,700.00	7,209.02	7,400.00	7,376.39	255.57	31.65	-92.32	-4,172.42	491.60	8,800.68	8,660.74	139.94	62.891		
14,800.00	7,208.49	7,400.00	7,376.39	258.87	31.65	-92.32	-4,172.42	491.60	8,894.52	8,754.34	140.18	63.449		
14,900.00	7,207.96	7,400.00	7,376.39	262.17	31.65	-92.32	-4,172.42	491.60	8,988.49	8,848.07	140.43	64.009		
15,000.00	7,207.43	7,400.00	7,376.39	265.47	31.65	-92.32	-4,172.42	491.60	9,082.60	8,941.93	140.66	64.570		
15,081.89	7,207.00	7,400.00	7,376.39	268.17	31.65	-92.32	-4,172.42	491.60	9,159.75	9,018.90	140.85	65.030		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	23.86	-0.14	3.28	3.28	-24.77	2,502.80	-1,154.73	2,756.34					
100.00	100.00	121.84	97.84	3.28	3.29	-24.77	2,502.73	-1,154.93	2,756.36	2,749.78	6.58	418.958		
200.00	200.00	219.65	195.64	3.34	3.36	-24.77	2,502.89	-1,155.01	2,756.55	2,749.85	6.70	411.651		
300.00	299.98	329.21	305.21	3.44	3.49	147.20	2,502.89	-1,154.66	2,757.86	2,750.93	6.93	397.941		
400.00	399.84	420.70	396.70	3.59	3.64	147.21	2,502.98	-1,154.54	2,762.29	2,755.06	7.23	381.818		
500.00	499.45	528.88	504.87	3.80	3.87	147.24	2,502.91	-1,154.48	2,769.54	2,761.88	7.66	361.581		
600.00	598.70	635.26	611.26	4.06	4.12	147.28	2,502.75	-1,154.21	2,779.58	2,771.41	8.17	340.393		
700.00	697.49	740.26	716.25	4.38	4.41	147.37	2,502.19	-1,153.61	2,791.95	2,783.21	8.74	319.302		
800.00	796.13	836.35	812.35	4.74	4.70	147.55	2,501.90	-1,153.13	2,805.35	2,796.00	9.35	300.158		
900.00	894.78	943.68	919.67	5.15	5.04	147.76	2,501.25	-1,152.31	2,818.40	2,808.37	10.03	280.988		
1,000.00	993.43	1,034.79	1,010.77	5.58	5.34	147.92	2,500.76	-1,151.74	2,831.59	2,820.89	10.70	264.673		
1,100.00	1,092.07	1,129.48	1,105.47	6.03	5.66	148.10	2,500.47	-1,151.24	2,845.06	2,833.65	11.41	249.408		
1,200.00	1,190.72	1,231.48	1,207.46	6.50	6.03	148.28	2,500.09	-1,150.72	2,858.51	2,846.35	12.17	234.944		
1,300.00	1,289.36	1,328.70	1,304.68	6.98	6.38	148.46	2,499.66	-1,150.28	2,871.95	2,859.02	12.93	222.130		
1,400.00	1,388.01	1,422.99	1,398.96	7.47	6.73	148.63	2,499.48	-1,149.66	2,885.56	2,871.87	13.70	210.684		
1,500.00	1,486.65	1,525.06	1,501.03	7.97	7.12	148.81	2,499.28	-1,149.05	2,899.22	2,884.71	14.51	199.846		
1,600.00	1,585.30	1,629.30	1,605.28	8.48	7.51	148.99	2,498.73	-1,148.65	2,912.68	2,897.34	15.34	189.879		
1,700.00	1,683.94	1,722.79	1,698.76	9.00	7.88	149.14	2,498.03	-1,148.82	2,926.19	2,910.05	16.14	181.320		
1,800.00	1,782.59	1,816.97	1,792.94	9.52	8.24	149.29	2,497.57	-1,149.08	2,939.98	2,923.03	16.95	173.478		
1,900.00	1,881.24	1,929.38	1,905.34	10.05	8.69	149.46	2,496.64	-1,149.22	2,953.41	2,935.57	17.84	165.548		
2,000.00	1,979.88	2,018.21	1,994.17	10.58	9.04	149.59	2,495.87	-1,149.66	2,966.99	2,948.35	18.64	159.176		
2,100.00	2,078.53	2,121.18	2,097.14	11.11	9.45	149.75	2,495.09	-1,150.15	2,980.67	2,961.17	19.50	152.820		
2,200.00	2,177.17	2,226.44	2,202.39	11.64	9.88	149.90	2,494.09	-1,150.41	2,994.11	2,973.72	20.38	146.882		
2,300.00	2,275.82	2,320.16	2,296.10	12.18	10.25	150.04	2,493.21	-1,150.77	3,007.63	2,986.41	21.22	141.749		
2,400.00	2,374.46	2,420.64	2,396.58	12.72	10.66	150.18	2,492.17	-1,151.43	3,021.18	2,999.10	22.08	136.801		
2,500.00	2,473.11	2,516.47	2,492.40	13.26	11.05	150.30	2,491.13	-1,152.28	3,034.79	3,011.85	22.93	132.330		
2,600.00	2,571.76	2,611.05	2,586.97	13.80	11.44	150.43	2,490.18	-1,153.21	3,048.52	3,024.74	23.78	128.201		
2,700.00	2,670.40	2,700.27	2,676.18	14.35	11.81	150.54	2,489.55	-1,153.99	3,062.49	3,037.89	24.60	124.482		
2,800.00	2,769.05	2,786.68	2,762.59	14.89	12.16	150.66	2,489.25	-1,154.79	3,076.84	3,051.43	25.41	121.077		
2,900.00	2,867.69	2,887.36	2,863.27	15.44	12.58	150.79	2,489.08	-1,155.84	3,091.41	3,065.12	26.29	117.591		
3,000.00	2,966.34	2,986.14	2,962.03	15.99	12.98	150.91	2,488.76	-1,157.06	3,105.91	3,078.75	27.16	114.355		
3,100.00	3,064.98	3,084.35	3,060.23	16.53	13.39	151.03	2,488.32	-1,158.63	3,120.44	3,092.41	28.03	111.323		
3,200.00	3,163.63	3,176.69	3,152.56	17.08	13.77	151.14	2,487.98	-1,160.15	3,135.08	3,106.21	28.87	108.578		
3,300.00	3,262.27	3,269.03	3,244.87	17.63	14.16	151.24	2,487.71	-1,162.10	3,149.95	3,120.23	29.72	105.992		
3,400.00	3,360.92	3,364.58	3,340.40	18.18	14.56	151.33	2,487.47	-1,164.44	3,164.99	3,134.41	30.58	103.497		
3,500.00	3,459.57	3,467.73	3,443.51	18.74	14.99	151.44	2,487.21	-1,166.95	3,180.04	3,148.56	31.48	101.018		
3,600.00	3,558.21	3,564.54	3,540.30	19.29	15.39	151.54	2,486.91	-1,169.13	3,194.98	3,162.63	32.35	98.766		
3,700.00	3,656.86	3,701.45	3,677.18	19.84	15.97	151.67	2,486.03	-1,172.18	3,209.68	3,176.27	33.41	96.058		
3,800.00	3,755.50	3,814.63	3,790.31	20.39	16.44	151.78	2,484.13	-1,174.58	3,223.33	3,188.96	34.37	93.795		
3,900.00	3,854.15	3,913.93	3,889.57	20.95	16.86	151.87	2,482.29	-1,176.56	3,236.77	3,201.52	35.25	91.819		
4,000.00	3,952.79	4,012.00	3,987.60	21.50	17.27	151.96	2,480.43	-1,178.61	3,250.22	3,214.08	36.13	89.953		
4,100.00	4,051.44	4,113.38	4,088.95	22.05	17.70	152.05	2,478.45	-1,180.81	3,263.64	3,226.61	37.03	88.135		
4,200.00	4,150.08	4,214.30	4,189.82	22.61	18.12	152.14	2,476.42	-1,182.96	3,277.01	3,239.08	37.93	86.406		
4,300.00	4,248.73	4,315.33	4,290.81	23.16	18.55	152.23	2,474.34	-1,185.05	3,290.31	3,251.49	38.82	84.753		
4,400.00	4,347.38	4,413.14	4,388.57	23.72	18.96	152.31	2,472.32	-1,187.07	3,303.62	3,263.92	39.70	83.207		
4,500.00	4,446.02	4,513.97	4,489.36	24.27	19.39	152.40	2,470.19	-1,189.25	3,316.93	3,276.33	40.60	81.697		
4,600.00	4,544.67	4,614.01	4,589.35	24.83	19.81	152.48	2,468.01	-1,191.46	3,330.19	3,288.69	41.49	80.258		
4,700.00	4,643.31	4,712.96	4,688.25	25.39	20.23	152.57	2,465.88	-1,193.66	3,343.48	3,301.10	42.38	78.890		
4,800.00	4,741.96	4,829.47	4,804.70	25.94	20.73	152.66	2,462.98	-1,196.12	3,356.43	3,313.08	43.36	77.415		
4,900.00	4,840.60	4,929.06	4,904.24	26.50	21.15	152.74	2,460.28	-1,198.13	3,369.15	3,324.90	44.25	76.141		
5,000.00	4,939.25	5,021.96	4,997.09	27.05	21.54	152.82	2,457.89	-1,199.96	3,382.00	3,336.89	45.11	74.975		
5,100.00	5,037.90	5,115.73	5,090.82	27.61	21.94	152.90	2,455.67	-1,201.69	3,395.00	3,349.03	45.97	73.850		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,206.20	5,181.25	28.17	22.32	152.98	2,453.74	-1,203.34	3,408.23	3,361.41	46.82	72.797		
5,300.00	5,235.19	5,298.81	5,273.83	28.72	22.71	153.06	2,451.99	-1,204.99	3,421.67	3,374.00	47.67	71.771		
5,400.00	5,333.83	5,387.25	5,362.25	29.28	23.09	153.14	2,450.65	-1,206.25	3,435.37	3,386.86	48.51	70.820		
5,500.00	5,432.48	5,484.67	5,459.65	29.84	23.50	153.24	2,449.49	-1,207.30	3,449.27	3,399.88	49.39	69.841		
5,600.00	5,531.12	5,576.47	5,551.44	30.40	23.89	153.33	2,448.45	-1,208.40	3,463.26	3,413.02	50.24	68.937		
5,700.00	5,629.77	5,661.37	5,636.33	30.95	24.25	153.41	2,447.74	-1,209.42	3,477.56	3,426.50	51.05	68.119		
5,800.00	5,728.41	5,777.22	5,752.17	31.51	24.74	153.54	2,447.23	-1,210.05	3,492.06	3,440.03	52.02	67.124		
5,900.00	5,827.06	5,884.22	5,859.18	32.07	25.20	153.67	2,446.32	-1,209.80	3,505.91	3,452.96	52.95	66.211		
6,000.00	5,925.71	5,989.79	5,964.74	32.63	25.65	153.80	2,445.37	-1,209.31	3,519.67	3,465.80	53.87	65.336		
6,100.00	6,024.35	6,155.29	6,130.18	33.19	26.35	154.03	2,442.36	-1,206.30	3,532.01	3,476.93	55.09	64.119		
6,200.00	6,123.00	6,326.97	6,301.69	33.74	27.08	154.28	2,436.87	-1,201.24	3,542.95	3,486.64	56.31	62.918		
6,300.00	6,221.64	6,400.00	6,374.62	34.30	27.39	154.38	2,433.68	-1,199.17	3,552.86	3,495.79	57.08	62.246		
6,400.00	6,320.29	6,466.24	6,440.80	34.86	27.68	154.46	2,431.14	-1,198.01	3,563.64	3,505.84	57.81	61.645		
6,500.00	6,418.93	6,522.64	6,497.19	35.42	27.92	154.52	2,429.65	-1,197.61	3,575.75	3,517.26	58.49	61.139		
6,600.00	6,517.58	6,585.08	6,559.61	35.98	28.18	154.59	2,428.60	-1,197.47	3,588.93	3,529.75	59.19	60.639		
6,700.00	6,616.23	6,667.59	6,642.11	36.54	28.53	154.68	2,427.81	-1,197.59	3,602.92	3,542.93	59.98	60.064		
6,800.00	6,714.51	6,753.77	6,728.29	37.10	28.90	119.16	2,427.19	-1,197.98	3,615.64	3,554.82	60.82	59.450		
6,900.00	6,810.42	6,828.87	6,803.39	37.66	29.22	100.04	2,426.86	-1,198.63	3,624.19	3,562.57	61.62	58.811		
7,000.00	6,901.58	6,900.00	6,874.51	38.21	29.52	91.89	2,427.07	-1,199.57	3,628.89	3,566.45	62.44	58.120		
7,100.00	6,985.76	6,977.33	6,951.83	38.76	29.85	88.15	2,427.58	-1,200.69	3,629.67	3,566.34	63.33	57.310		
7,200.00	7,060.88	7,052.68	7,027.18	39.32	30.17	86.62	2,428.04	-1,201.67	3,626.63	3,562.33	64.30	56.401		
7,300.00	7,125.09	7,115.47	7,089.96	39.90	30.43	86.29	2,428.46	-1,202.46	3,620.56	3,555.23	65.32	55.426		
7,400.00	7,176.81	7,166.72	7,141.21	40.55	30.65	86.67	2,428.86	-1,203.01	3,612.18	3,545.73	66.45	54.360		
7,500.00	7,214.77	7,204.48	7,178.96	41.30	30.81	87.45	2,429.18	-1,203.33	3,602.24	3,534.54	67.70	53.207		
7,600.00	7,238.02	7,228.90	7,203.38	42.22	30.91	88.42	2,429.39	-1,203.54	3,591.42	3,522.33	69.09	51.979		
7,700.00	7,246.01	7,237.95	7,212.44	43.32	30.95	89.44	2,429.46	-1,203.62	3,580.27	3,509.68	70.58	50.723		
7,800.00	7,245.50	7,238.38	7,212.87	44.65	30.95	89.50	2,429.47	-1,203.62	3,570.35	3,498.16	72.19	49.456		
7,900.00	7,244.97	7,238.80	7,213.28	46.21	30.96	89.51	2,429.47	-1,203.63	3,563.21	3,489.25	73.95	48.183		
8,000.00	7,244.44	7,239.22	7,213.70	47.99	30.96	89.51	2,429.47	-1,203.63	3,558.86	3,483.02	75.84	46.927		
8,100.00	7,243.91	7,239.64	7,214.12	49.96	30.96	89.52	2,429.48	-1,203.64	3,557.32	3,479.49	77.83	45.707		
8,104.78	7,243.89	7,239.66	7,214.14	50.06	30.96	89.52	2,429.48	-1,203.64	3,557.32	3,479.39	77.93	45.648		
8,200.00	7,243.39	7,240.06	7,214.54	52.10	30.96	89.53	2,429.48	-1,203.64	3,558.59	3,478.69	79.90	44.535		
8,300.00	7,242.86	7,240.49	7,214.97	54.38	30.96	89.53	2,429.48	-1,203.64	3,562.67	3,480.62	82.04	43.424		
8,400.00	7,242.33	7,240.92	7,215.40	56.78	30.96	89.54	2,429.49	-1,203.65	3,569.54	3,485.31	84.23	42.379		
8,500.00	7,241.80	7,241.36	7,215.84	59.28	30.97	89.55	2,429.49	-1,203.65	3,579.20	3,492.76	86.44	41.404		
8,600.00	7,241.27	7,241.79	7,216.27	61.88	30.97	89.56	2,429.49	-1,203.66	3,591.62	3,502.94	88.67	40.503		
8,700.00	7,240.74	7,242.24	7,216.72	64.54	30.97	89.56	2,429.50	-1,203.66	3,606.77	3,515.86	90.91	39.676		
8,800.00	7,240.21	7,242.68	7,217.17	67.27	30.97	89.57	2,429.50	-1,203.67	3,624.61	3,531.48	93.13	38.921		
8,900.00	7,239.68	7,243.14	7,217.62	70.06	30.97	89.58	2,429.51	-1,203.67	3,645.11	3,549.78	95.33	38.237		
9,000.00	7,239.16	7,243.59	7,218.07	72.89	30.98	89.58	2,429.51	-1,203.67	3,668.23	3,570.73	97.50	37.623		
9,100.00	7,238.63	7,244.05	7,218.53	75.77	30.98	89.59	2,429.51	-1,203.68	3,693.90	3,594.27	99.63	37.075		
9,200.00	7,238.10	7,244.51	7,218.99	78.69	30.98	89.60	2,429.52	-1,203.68	3,722.09	3,620.37	101.72	36.590		
9,300.00	7,237.57	7,244.98	7,219.46	81.64	30.98	89.61	2,429.52	-1,203.69	3,752.73	3,648.97	103.76	36.166		
9,400.00	7,237.04	7,245.45	7,219.93	84.62	30.98	89.61	2,429.52	-1,203.69	3,785.77	3,680.02	105.75	35.799		
9,500.00	7,236.51	7,245.93	7,220.41	87.63	30.99	89.62	2,429.53	-1,203.70	3,821.14	3,713.46	107.68	35.486		
9,600.00	7,235.98	7,246.41	7,220.89	90.66	30.99	89.63	2,429.53	-1,203.70	3,858.77	3,749.23	109.55	35.225		
9,700.00	7,235.45	7,246.90	7,221.38	93.72	30.99	89.64	2,429.54	-1,203.71	3,898.61	3,787.26	111.35	35.012		
9,800.00	7,234.93	7,247.39	7,221.86	96.79	30.99	89.65	2,429.54	-1,203.71	3,940.58	3,827.49	113.09	34.844		
9,900.00	7,234.40	7,247.88	7,222.36	99.88	30.99	89.65	2,429.54	-1,203.72	3,984.62	3,869.85	114.77	34.718		
10,000.00	7,233.87	7,248.38	7,222.86	102.98	31.00	89.66	2,429.55	-1,203.72	4,030.67	3,914.28	116.38	34.633		
10,100.00	7,233.34	7,248.88	7,223.36	106.10	31.00	89.67	2,429.55	-1,203.73	4,078.64	3,960.71	117.93	34.586		
10,200.00	7,232.81	7,249.39	7,223.87	109.23	31.00	89.68	2,429.56	-1,203.73	4,128.48	4,009.07	119.41	34.574 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,249.90	7,224.38	112.38	31.00	89.69	2,429.56	-1,203.74	4,180.12	4,059.29	120.83	34.596		
10,400.00	7,231.75	7,250.42	7,224.90	115.53	31.00	89.69	2,429.57	-1,203.74	4,233.49	4,111.30	122.18	34.648		
10,500.00	7,231.23	7,250.94	7,225.42	118.70	31.01	89.70	2,429.57	-1,203.75	4,288.52	4,165.05	123.48	34.731		
10,600.00	7,230.70	7,251.47	7,225.95	121.87	31.01	89.71	2,429.57	-1,203.75	4,345.17	4,220.45	124.72	34.841		
10,700.00	7,230.17	7,252.00	7,226.48	125.05	31.01	89.72	2,429.58	-1,203.76	4,403.35	4,277.46	125.89	34.977		
10,800.00	7,229.64	7,252.54	7,227.02	128.25	31.01	89.73	2,429.58	-1,203.76	4,463.02	4,336.00	127.02	35.138		
10,900.00	7,229.11	7,253.09	7,227.57	131.44	31.02	89.74	2,429.59	-1,203.77	4,524.11	4,396.03	128.08	35.321		
11,000.00	7,228.58	7,253.64	7,228.12	134.65	31.02	89.75	2,429.59	-1,203.77	4,586.57	4,457.47	129.10	35.527		
11,100.00	7,228.05	7,254.19	7,228.67	137.86	31.02	89.75	2,429.60	-1,203.78	4,650.34	4,520.27	130.07	35.753		
11,200.00	7,227.52	7,254.75	7,229.23	141.08	31.02	89.76	2,429.60	-1,203.78	4,715.36	4,584.38	130.99	35.999		
11,300.00	7,227.00	7,255.32	7,229.79	144.30	31.03	89.77	2,429.61	-1,203.79	4,781.60	4,649.74	131.86	36.262		
11,400.00	7,226.47	7,255.89	7,230.37	147.52	31.03	89.78	2,429.61	-1,203.79	4,848.99	4,716.30	132.69	36.543		
11,500.00	7,225.94	7,256.46	7,230.94	150.76	31.03	89.79	2,429.61	-1,203.80	4,917.49	4,784.01	133.48	36.841		
11,600.00	7,225.41	7,257.05	7,231.53	153.99	31.03	89.80	2,429.62	-1,203.81	4,987.06	4,852.83	134.23	37.154		
11,700.00	7,224.88	7,257.64	7,232.11	157.23	31.04	89.81	2,429.62	-1,203.81	5,057.65	4,922.71	134.94	37.481		
11,800.00	7,224.35	7,258.23	7,232.71	160.48	31.04	89.82	2,429.63	-1,203.82	5,129.21	4,993.60	135.61	37.822		
11,900.00	7,223.82	7,258.83	7,233.31	163.72	31.04	89.83	2,429.63	-1,203.82	5,201.72	5,065.46	136.25	38.176		
12,000.00	7,223.29	7,259.44	7,233.92	166.98	31.04	89.84	2,429.64	-1,203.83	5,275.12	5,138.26	136.86	38.543		
12,100.00	7,222.77	7,260.05	7,234.53	170.23	31.05	89.85	2,429.64	-1,203.84	5,349.38	5,211.94	137.44	38.921		
12,200.00	7,222.24	7,260.67	7,235.15	173.49	31.05	89.86	2,429.65	-1,203.84	5,424.48	5,286.49	137.99	39.311		
12,300.00	7,221.71	7,261.30	7,235.78	176.75	31.05	89.87	2,429.65	-1,203.85	5,500.36	5,361.85	138.51	39.711		
12,400.00	7,221.18	7,261.93	7,236.41	180.01	31.05	89.88	2,429.66	-1,203.86	5,577.00	5,438.00	139.00	40.121		
12,500.00	7,220.65	7,262.57	7,237.05	183.28	31.06	89.89	2,429.66	-1,203.86	5,654.38	5,514.91	139.47	40.541		
12,600.00	7,220.12	7,263.22	7,237.70	186.54	31.06	89.90	2,429.67	-1,203.87	5,732.45	5,592.53	139.92	40.970		
12,700.00	7,219.59	7,263.87	7,238.35	189.81	31.06	89.91	2,429.67	-1,203.88	5,811.20	5,670.86	140.34	41.407		
12,800.00	7,219.06	7,264.53	7,239.01	193.09	31.06	89.92	2,429.68	-1,203.88	5,890.59	5,749.84	140.75	41.852		
12,900.00	7,218.54	7,265.20	7,239.68	196.36	31.07	89.93	2,429.69	-1,203.89	5,970.60	5,829.47	141.13	42.306		
13,000.00	7,218.01	7,265.87	7,240.35	199.64	31.07	89.94	2,429.69	-1,203.90	6,051.21	5,909.71	141.49	42.767		
13,100.00	7,217.48	7,266.56	7,241.04	202.92	31.07	89.95	2,429.70	-1,203.90	6,132.38	5,990.54	141.84	43.235		
13,200.00	7,216.95	7,267.25	7,241.72	206.20	31.08	89.97	2,429.70	-1,203.91	6,214.11	6,071.94	142.17	43.709		
13,300.00	7,216.42	7,267.94	7,242.42	209.48	31.08	89.98	2,429.71	-1,203.92	6,296.36	6,153.88	142.48	44.190		
13,400.00	7,215.89	7,268.65	7,243.13	212.76	31.08	89.99	2,429.71	-1,203.93	6,379.12	6,236.34	142.78	44.678		
13,500.00	7,215.36	7,269.36	7,243.84	216.05	31.08	90.00	2,429.72	-1,203.93	6,462.37	6,319.30	143.07	45.171		
13,600.00	7,214.84	7,270.08	7,244.56	219.33	31.09	90.01	2,429.72	-1,203.94	6,546.08	6,402.75	143.34	45.669		
13,700.00	7,214.31	7,270.81	7,245.29	222.62	31.09	90.02	2,429.73	-1,203.95	6,630.25	6,486.66	143.59	46.174		
13,800.00	7,213.78	7,271.55	7,246.03	225.91	31.09	90.03	2,429.74	-1,203.96	6,714.85	6,571.01	143.84	46.683		
13,900.00	7,213.25	7,272.30	7,246.78	229.20	31.10	90.05	2,429.74	-1,203.97	6,799.87	6,655.80	144.07	47.197		
14,000.00	7,212.72	7,273.05	7,247.53	232.49	31.10	90.06	2,429.75	-1,203.97	6,885.29	6,740.99	144.30	47.716		
14,100.00	7,212.19	7,273.82	7,248.30	235.79	31.10	90.07	2,429.75	-1,203.98	6,971.10	6,826.59	144.51	48.239		
14,200.00	7,211.66	7,274.59	7,249.07	239.08	31.11	90.08	2,429.76	-1,203.99	7,057.29	6,912.57	144.72	48.766		
14,300.00	7,211.13	7,275.37	7,249.85	242.38	31.11	90.10	2,429.77	-1,204.00	7,143.83	6,998.92	144.91	49.298		
14,400.00	7,210.61	7,276.16	7,250.64	245.67	31.11	90.11	2,429.77	-1,204.01	7,230.72	7,085.62	145.10	49.833		
14,500.00	7,210.08	7,276.96	7,251.44	248.97	31.12	90.12	2,429.78	-1,204.02	7,317.94	7,172.67	145.28	50.373		
14,600.00	7,209.55	7,277.77	7,252.25	252.27	31.12	90.13	2,429.79	-1,204.03	7,405.49	7,260.05	145.45	50.916		
14,700.00	7,209.02	7,278.59	7,253.07	255.57	31.12	90.15	2,429.79	-1,204.03	7,493.35	7,347.74	145.61	51.462		
14,800.00	7,208.49	7,279.42	7,253.90	258.87	31.13	90.16	2,429.80	-1,204.04	7,581.51	7,435.75	145.77	52.011		
14,900.00	7,207.96	7,280.26	7,254.74	262.17	31.13	90.17	2,429.81	-1,204.05	7,669.96	7,524.05	145.92	52.564		
15,000.00	7,207.43	7,281.11	7,255.59	265.47	31.13	90.19	2,429.81	-1,204.06	7,758.69	7,612.63	146.06	53.120		
15,081.89	7,207.00	7,281.82	7,256.29	268.17	31.14	90.20	2,429.82	-1,204.07	7,831.56	7,685.38	146.17	53.577		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	20.00	3.28	3.28	-63.38	1,085.00	-2,165.22	2,421.94					
100.00	100.00	80.00	100.00	3.28	3.56	-63.38	1,085.00	-2,165.22	2,421.86	2,415.01	6.85	353.577		
200.00	200.00	180.00	200.00	3.34	5.60	-63.38	1,085.00	-2,165.22	2,421.86	2,412.92	8.94	271.006		
300.00	299.98	279.98	299.98	3.44	8.67	108.60	1,085.00	-2,165.22	2,422.42	2,410.30	12.11	199.997		
400.00	399.84	379.84	399.84	3.59	11.97	108.69	1,085.00	-2,165.22	2,424.09	2,408.53	15.56	155.757		
500.00	499.45	479.45	499.45	3.80	15.35	108.83	1,085.00	-2,165.22	2,426.90	2,407.76	19.14	126.782		
600.00	598.70	578.70	598.70	4.06	18.75	109.02	1,085.00	-2,165.22	2,430.88	2,408.08	22.80	106.612		
700.00	697.49	677.49	697.49	4.38	22.15	109.30	1,085.00	-2,165.22	2,436.03	2,409.51	26.52	91.857		
800.00	796.13	776.13	796.13	4.74	25.56	109.66	1,085.00	-2,165.22	2,441.56	2,411.27	30.29	80.606		
900.00	894.78	874.78	894.78	5.15	28.98	110.01	1,085.00	-2,165.22	2,447.20	2,413.10	34.10	71.763		
1,000.00	993.43	973.43	993.43	5.58	32.40	110.37	1,085.00	-2,165.22	2,452.93	2,414.98	37.94	64.647		
1,100.00	1,092.07	1,072.07	1,092.07	6.03	35.83	110.72	1,085.00	-2,165.22	2,458.75	2,416.94	41.81	58.808		
1,200.00	1,190.72	1,170.72	1,190.72	6.50	39.26	111.08	1,085.00	-2,165.22	2,464.67	2,418.98	45.70	53.937		
1,300.00	1,289.36	1,269.36	1,289.36	6.98	42.69	111.43	1,085.00	-2,165.22	2,470.69	2,421.09	49.60	49.817		
1,400.00	1,388.01	1,368.01	1,388.01	7.47	46.13	111.78	1,085.00	-2,165.22	2,476.80	2,423.29	53.51	46.289		
1,500.00	1,486.65	1,466.65	1,486.65	7.97	49.56	112.12	1,085.00	-2,165.22	2,483.00	2,425.57	57.43	43.237		
1,600.00	1,585.30	1,565.30	1,585.30	8.48	53.00	112.47	1,085.00	-2,165.22	2,489.30	2,427.94	61.36	40.571		
1,700.00	1,683.94	1,663.94	1,683.94	9.00	56.44	112.81	1,085.00	-2,165.22	2,495.69	2,430.39	65.29	38.224		
1,800.00	1,782.59	1,762.59	1,782.59	9.52	59.88	113.15	1,085.00	-2,165.22	2,502.16	2,432.93	69.23	36.143		
1,900.00	1,881.24	1,861.24	1,881.24	10.05	63.32	113.50	1,085.00	-2,165.22	2,508.73	2,435.56	73.17	34.285		
2,000.00	1,979.88	1,959.88	1,979.88	10.58	66.75	113.83	1,085.00	-2,165.22	2,515.39	2,438.27	77.12	32.617		
2,100.00	2,078.53	2,058.53	2,078.53	11.11	70.19	114.17	1,085.00	-2,165.22	2,522.14	2,441.07	81.07	31.111		
2,200.00	2,177.17	2,157.17	2,177.17	11.64	73.63	114.51	1,085.00	-2,165.22	2,528.98	2,443.96	85.02	29.745		
2,300.00	2,275.82	2,255.82	2,275.82	12.18	77.08	114.84	1,085.00	-2,165.22	2,535.90	2,446.93	88.97	28.502		
2,400.00	2,374.46	2,354.46	2,374.46	12.72	80.52	115.17	1,085.00	-2,165.22	2,542.91	2,449.98	92.93	27.364		
2,500.00	2,473.11	2,453.11	2,473.11	13.26	83.96	115.50	1,085.00	-2,165.22	2,550.01	2,453.13	96.88	26.320		
2,600.00	2,571.76	2,551.76	2,571.76	13.80	87.40	115.83	1,085.00	-2,165.22	2,557.19	2,456.35	100.84	25.359		
2,700.00	2,670.40	2,650.40	2,670.40	14.35	90.84	116.16	1,085.00	-2,165.22	2,564.46	2,459.66	104.80	24.470		
2,800.00	2,769.05	2,749.05	2,769.05	14.89	94.28	116.48	1,085.00	-2,165.22	2,571.81	2,463.06	108.76	23.647		
2,900.00	2,867.69	2,847.69	2,867.69	15.44	97.72	116.80	1,085.00	-2,165.22	2,579.25	2,466.53	112.71	22.883		
3,000.00	2,966.34	2,946.34	2,966.34	15.99	101.16	117.12	1,085.00	-2,165.22	2,586.77	2,470.09	116.67	22.171		
3,100.00	3,064.98	3,044.98	3,064.98	16.53	104.61	117.44	1,085.00	-2,165.22	2,594.37	2,473.74	120.63	21.507		
3,200.00	3,163.63	3,143.63	3,163.63	17.08	108.05	117.76	1,085.00	-2,165.22	2,602.05	2,477.46	124.59	20.885		
3,300.00	3,262.27	3,242.27	3,262.27	17.63	111.49	118.07	1,085.00	-2,165.22	2,609.81	2,481.26	128.55	20.302		
3,400.00	3,360.92	3,340.92	3,360.92	18.18	114.93	118.39	1,085.00	-2,165.22	2,617.65	2,485.14	132.51	19.755		
3,500.00	3,459.57	3,439.57	3,459.57	18.74	118.38	118.70	1,085.00	-2,165.22	2,625.57	2,489.11	136.46	19.240		
3,600.00	3,558.21	3,538.21	3,558.21	19.29	121.82	119.01	1,085.00	-2,165.22	2,633.57	2,493.15	140.42	18.755		
3,700.00	3,656.86	3,636.86	3,656.86	19.84	125.26	119.32	1,085.00	-2,165.22	2,641.65	2,497.27	144.38	18.297		
3,800.00	3,755.50	3,735.50	3,755.50	20.39	128.70	119.62	1,085.00	-2,165.22	2,649.80	2,501.46	148.34	17.863		
3,900.00	3,854.15	3,834.15	3,854.15	20.95	132.15	119.93	1,085.00	-2,165.22	2,658.03	2,505.74	152.29	17.453		
4,000.00	3,952.79	3,932.79	3,952.79	21.50	135.59	120.23	1,085.00	-2,165.22	2,666.33	2,510.09	156.25	17.065		
4,100.00	4,051.44	4,031.44	4,051.44	22.05	139.03	120.53	1,085.00	-2,165.22	2,674.71	2,514.51	160.20	16.696		
4,200.00	4,150.08	4,130.08	4,150.08	22.61	142.47	120.83	1,085.00	-2,165.22	2,683.17	2,519.01	164.16	16.345		
4,300.00	4,248.73	4,228.73	4,248.73	23.16	145.92	121.13	1,085.00	-2,165.22	2,691.70	2,523.58	168.11	16.011		
4,400.00	4,347.38	4,327.38	4,347.38	23.72	149.36	121.42	1,085.00	-2,165.22	2,700.30	2,528.23	172.07	15.693		
4,500.00	4,446.02	4,426.02	4,446.02	24.27	152.80	121.71	1,085.00	-2,165.22	2,708.97	2,532.95	176.02	15.390		
4,600.00	4,544.67	4,524.67	4,544.67	24.83	156.25	122.01	1,085.00	-2,165.22	2,717.71	2,537.74	179.97	15.101		
4,700.00	4,643.31	4,623.31	4,643.31	25.39	159.69	122.30	1,085.00	-2,165.22	2,726.52	2,542.60	183.93	14.824		
4,800.00	4,741.96	4,721.96	4,741.96	25.94	163.13	122.58	1,085.00	-2,165.22	2,735.41	2,547.53	187.88	14.560		
4,900.00	4,840.60	4,820.60	4,840.60	26.50	166.57	122.87	1,085.00	-2,165.22	2,744.36	2,552.53	191.83	14.306		
5,000.00	4,939.25	4,919.25	4,939.25	27.05	170.02	123.15	1,085.00	-2,165.22	2,753.38	2,557.61	195.78	14.064		
5,100.00	5,037.90	5,017.90	5,037.90	27.61	173.46	123.43	1,085.00	-2,165.22	2,762.47	2,562.75	199.73	13.831		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,116.54	5,136.54	28.17	176.90	123.72	1,085.00	-2,165.22	2,771.63	2,567.95	203.68	13.608		
5,300.00	5,235.19	5,215.19	5,235.19	28.72	180.35	123.99	1,085.00	-2,165.22	2,780.85	2,573.23	207.62	13.394		
5,400.00	5,333.83	5,313.83	5,333.83	29.28	183.79	124.27	1,085.00	-2,165.22	2,790.14	2,578.57	211.57	13.188		
5,500.00	5,432.48	5,412.48	5,432.48	29.84	187.23	124.55	1,085.00	-2,165.22	2,799.50	2,583.98	215.52	12.990		
5,600.00	5,531.12	5,511.12	5,531.12	30.40	190.68	124.82	1,085.00	-2,165.22	2,808.92	2,589.45	219.46	12.799		
5,700.00	5,629.77	5,609.77	5,629.77	30.95	194.12	125.09	1,085.00	-2,165.22	2,818.40	2,594.99	223.41	12.615		
5,800.00	5,728.41	5,708.41	5,728.41	31.51	197.56	125.36	1,085.00	-2,165.22	2,827.95	2,600.59	227.35	12.439		
5,900.00	5,827.06	5,807.06	5,827.06	32.07	201.01	125.63	1,085.00	-2,165.22	2,837.56	2,606.26	231.30	12.268		
6,000.00	5,925.71	5,905.71	5,925.71	32.63	204.45	125.89	1,085.00	-2,165.22	2,847.23	2,611.99	235.24	12.104		
6,100.00	6,024.35	6,004.35	6,024.35	33.19	207.89	126.16	1,085.00	-2,165.22	2,856.96	2,617.78	239.18	11.945		
6,200.00	6,123.00	6,103.00	6,123.00	33.74	211.34	126.42	1,085.00	-2,165.22	2,866.75	2,623.63	243.12	11.791		
6,300.00	6,221.64	6,201.64	6,221.64	34.30	214.78	126.68	1,085.00	-2,165.22	2,876.61	2,629.54	247.06	11.643		
6,400.00	6,320.29	6,300.29	6,320.29	34.86	218.22	126.94	1,085.00	-2,165.22	2,886.52	2,635.52	251.00	11.500		
6,500.00	6,418.93	6,401.07	6,418.93	35.42	221.74	127.20	1,085.00	-2,165.22	2,896.49	2,641.48	255.02	11.358		
6,600.00	6,517.58	6,502.42	6,517.58	35.98	225.28	127.45	1,085.00	-2,165.22	2,906.53	2,647.47	259.05	11.220		
6,700.00	6,616.23	6,603.77	6,616.23	36.54	228.82	127.70	1,085.00	-2,165.22	2,916.61	2,653.53	263.09	11.086		
6,800.00	6,714.51	6,705.49	6,714.51	37.10	232.37	92.94	1,085.00	-2,165.22	2,923.02	2,655.87	267.15	10.941		
6,900.00	6,810.42	6,809.58	6,810.42	37.66	236.00	75.04	1,085.00	-2,165.22	2,918.87	2,647.53	271.35	10.757		
7,000.00	6,901.58	6,881.58	6,901.58	38.21	238.51	68.51	1,085.00	-2,165.22	2,904.43	2,629.98	274.46	10.582		
7,100.00	6,985.76	6,965.76	6,985.76	38.76	241.45	66.74	1,085.00	-2,165.22	2,880.45	2,602.41	278.04	10.360		
7,200.00	7,060.88	7,040.88	7,060.88	39.32	244.07	67.60	1,085.00	-2,165.22	2,847.99	2,566.63	281.36	10.122		
7,300.00	7,125.09	7,105.09	7,125.09	39.90	246.32	70.24	1,085.00	-2,165.22	2,808.38	2,523.98	284.40	9.875		
7,400.00	7,176.81	7,156.81	7,176.81	40.55	248.12	74.18	1,085.00	-2,165.22	2,763.11	2,475.98	287.13	9.623		
7,500.00	7,214.77	7,205.23	7,214.77	41.30	249.81	79.02	1,085.00	-2,165.22	2,713.78	2,423.90	289.89	9.362		
7,600.00	7,238.02	7,218.02	7,238.02	42.22	250.26	84.39	1,085.00	-2,165.22	2,662.03	2,370.47	291.56	9.130		
7,700.00	7,246.01	7,226.01	7,246.01	43.32	250.54	89.91	1,085.00	-2,165.22	2,609.42	2,316.20	293.23	8.899		
7,800.00	7,245.50	7,225.50	7,245.50	44.65	250.52	90.17	1,085.00	-2,165.22	2,558.18	2,263.44	294.75	8.679		
7,900.00	7,244.97	7,224.97	7,244.97	46.21	250.50	90.16	1,085.00	-2,165.22	2,509.88	2,213.44	296.44	8.467		
8,000.00	7,244.44	7,224.44	7,244.44	47.99	250.48	90.15	1,085.00	-2,165.22	2,464.69	2,166.39	298.29	8.263		
8,100.00	7,243.91	7,223.91	7,243.91	49.96	250.46	90.13	1,085.00	-2,165.22	2,422.78	2,122.48	300.30	8.068		
8,200.00	7,243.39	7,223.39	7,243.39	52.10	250.44	90.12	1,085.00	-2,165.22	2,384.34	2,081.89	302.44	7.884		
8,300.00	7,242.86	7,222.86	7,242.86	54.38	250.43	90.11	1,085.00	-2,165.22	2,349.52	2,044.82	304.70	7.711		
8,400.00	7,242.33	7,222.33	7,242.33	56.78	250.41	90.09	1,085.00	-2,165.22	2,318.50	2,011.43	307.07	7.550		
8,500.00	7,241.80	7,221.80	7,241.80	59.28	250.39	90.08	1,085.00	-2,165.22	2,291.43	1,981.92	309.50	7.404		
8,600.00	7,241.27	7,221.27	7,241.27	61.88	250.37	90.06	1,085.00	-2,165.22	2,268.44	1,956.45	311.99	7.271		
8,700.00	7,240.74	7,220.74	7,240.74	64.54	250.35	90.05	1,085.00	-2,165.22	2,249.67	1,935.16	314.51	7.153		
8,800.00	7,240.21	7,220.21	7,240.21	67.27	250.33	90.04	1,085.00	-2,165.22	2,235.22	1,918.19	317.03	7.050		
8,900.00	7,239.68	7,219.68	7,239.68	70.06	250.32	90.02	1,085.00	-2,165.22	2,225.17	1,905.64	319.53	6.964		
9,000.00	7,239.16	7,219.16	7,239.16	72.89	250.30	90.01	1,085.00	-2,165.22	2,219.59	1,897.61	321.98	6.894		
9,074.07	7,238.76	7,218.76	7,238.76	75.03	250.28	90.00	1,085.00	-2,165.22	2,218.35	1,894.60	323.75	6.852 CC		
9,100.00	7,238.63	7,218.63	7,238.63	75.77	250.28	90.00	1,085.00	-2,165.22	2,218.50	1,894.15	324.36	6.840 ES		
9,200.00	7,238.10	7,218.10	7,238.10	78.69	250.26	89.98	1,085.00	-2,165.22	2,221.92	1,895.28	326.64	6.802		
9,300.00	7,237.57	7,217.57	7,237.57	81.64	250.24	89.97	1,085.00	-2,165.22	2,229.83	1,901.01	328.82	6.781		
9,400.00	7,237.04	7,217.04	7,237.04	84.62	250.22	89.96	1,085.00	-2,165.22	2,242.17	1,911.30	330.87	6.777 SF		
9,500.00	7,236.51	7,216.51	7,236.51	87.63	250.20	89.94	1,085.00	-2,165.22	2,258.87	1,926.09	332.78	6.788		
9,600.00	7,235.98	7,215.98	7,235.98	90.66	250.19	89.93	1,085.00	-2,165.22	2,279.84	1,945.30	334.55	6.815		
9,700.00	7,235.45	7,215.45	7,235.45	93.72	250.17	89.91	1,085.00	-2,165.22	2,304.97	1,968.81	336.16	6.857		
9,800.00	7,234.93	7,214.93	7,234.93	96.79	250.15	89.90	1,085.00	-2,165.22	2,334.11	1,996.48	337.62	6.913		
9,900.00	7,234.40	7,214.40	7,234.40	99.88	250.13	89.89	1,085.00	-2,165.22	2,367.12	2,028.18	338.94	6.984		
10,000.00	7,233.87	7,213.87	7,233.87	102.98	250.11	89.87	1,085.00	-2,165.22	2,403.83	2,063.73	340.10	7.068		
10,100.00	7,233.34	7,213.34	7,233.34	106.10	250.09	89.86	1,085.00	-2,165.22	2,444.09	2,102.97	341.12	7.165		
10,200.00	7,232.81	7,212.81	7,232.81	109.23	250.08	89.85	1,085.00	-2,165.22	2,487.73	2,145.72	342.01	7.274		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,212.28	7,232.28	112.38	250.06	89.83	1,085.00	-2,165.22	2,534.55	2,191.79	342.77	7.394		
10,400.00	7,231.75	7,211.75	7,231.75	115.53	250.04	89.82	1,085.00	-2,165.22	2,584.40	2,241.00	343.41	7.526		
10,500.00	7,231.23	7,211.23	7,231.23	118.70	250.02	89.81	1,085.00	-2,165.22	2,637.10	2,293.17	343.94	7.667		
10,600.00	7,230.70	7,210.70	7,230.70	121.87	250.00	89.79	1,085.00	-2,165.22	2,692.49	2,348.12	344.37	7.819		
10,700.00	7,230.17	7,210.17	7,230.17	125.05	249.98	89.78	1,085.00	-2,165.22	2,750.40	2,405.69	344.71	7.979		
10,800.00	7,229.64	7,209.64	7,229.64	128.25	249.97	89.76	1,085.00	-2,165.22	2,810.67	2,465.70	344.97	8.148		
10,900.00	7,229.11	7,209.11	7,229.11	131.44	249.95	89.75	1,085.00	-2,165.22	2,873.16	2,528.01	345.15	8.324		
11,000.00	7,228.58	7,208.58	7,228.58	134.65	249.93	89.74	1,085.00	-2,165.22	2,937.72	2,592.45	345.27	8.508		
11,100.00	7,228.05	7,208.05	7,228.05	137.86	249.91	89.72	1,085.00	-2,165.22	3,004.23	2,658.89	345.34	8.699		
11,200.00	7,227.52	7,207.52	7,227.52	141.08	249.89	89.71	1,085.00	-2,165.22	3,072.55	2,727.20	345.35	8.897		
11,300.00	7,227.00	7,207.00	7,227.00	144.30	249.87	89.70	1,085.00	-2,165.22	3,142.57	2,797.25	345.32	9.101		
11,400.00	7,226.47	7,206.47	7,226.47	147.52	249.85	89.68	1,085.00	-2,165.22	3,214.17	2,868.92	345.25	9.310		
11,500.00	7,225.94	7,205.94	7,225.94	150.76	249.84	89.67	1,085.00	-2,165.22	3,287.26	2,942.11	345.15	9.524		
11,600.00	7,225.41	7,205.41	7,225.41	153.99	249.82	89.66	1,085.00	-2,165.22	3,361.73	3,016.72	345.02	9.744		
11,700.00	7,224.88	7,204.88	7,224.88	157.23	249.80	89.64	1,085.00	-2,165.22	3,437.50	3,092.64	344.86	9.968		
11,800.00	7,224.35	7,204.35	7,224.35	160.48	249.78	89.63	1,085.00	-2,165.22	3,514.48	3,169.80	344.69	10.196		
11,900.00	7,223.82	7,203.82	7,223.82	163.72	249.76	89.61	1,085.00	-2,165.22	3,592.60	3,248.10	344.49	10.429		
12,000.00	7,223.29	7,203.29	7,223.29	166.98	249.74	89.60	1,085.00	-2,165.22	3,671.78	3,327.49	344.29	10.665		
12,100.00	7,222.77	7,202.77	7,222.77	170.23	249.73	89.59	1,085.00	-2,165.22	3,751.95	3,407.88	344.07	10.905		
12,200.00	7,222.24	7,202.24	7,222.24	173.49	249.71	89.57	1,085.00	-2,165.22	3,833.05	3,489.21	343.84	11.148		
12,300.00	7,221.71	7,201.71	7,221.71	176.75	249.69	89.56	1,085.00	-2,165.22	3,915.03	3,571.42	343.61	11.394		
12,400.00	7,221.18	7,201.18	7,221.18	180.01	249.67	89.55	1,085.00	-2,165.22	3,997.83	3,654.46	343.37	11.643		
12,500.00	7,220.65	7,200.65	7,220.65	183.28	249.65	89.53	1,085.00	-2,165.22	4,081.39	3,738.27	343.12	11.895		
12,600.00	7,220.12	7,200.12	7,220.12	186.54	249.63	89.52	1,085.00	-2,165.22	4,165.69	3,822.81	342.87	12.149		
12,700.00	7,219.59	7,200.41	7,219.59	189.81	249.64	89.50	1,085.00	-2,165.22	4,250.66	3,908.01	342.65	12.405		
12,800.00	7,219.06	7,200.94	7,219.06	193.09	249.66	89.49	1,085.00	-2,165.22	4,336.27	3,993.84	342.44	12.663		
12,900.00	7,218.54	7,201.46	7,218.54	196.36	249.68	89.48	1,085.00	-2,165.22	4,422.49	4,080.27	342.22	12.923		
13,000.00	7,218.01	7,201.99	7,218.01	199.64	249.70	89.46	1,085.00	-2,165.22	4,509.28	4,167.27	342.01	13.185		
13,100.00	7,217.48	7,202.52	7,217.48	202.92	249.72	89.45	1,085.00	-2,165.22	4,596.60	4,254.81	341.80	13.448		
13,200.00	7,216.95	7,203.05	7,216.95	206.20	249.74	89.44	1,085.00	-2,165.22	4,684.44	4,342.85	341.59	13.714		
13,300.00	7,216.42	7,203.58	7,216.42	209.48	249.75	89.42	1,085.00	-2,165.22	4,772.75	4,431.36	341.38	13.981		
13,400.00	7,215.89	7,204.11	7,215.89	212.76	249.77	89.41	1,085.00	-2,165.22	4,861.51	4,520.33	341.18	14.249		
13,500.00	7,215.36	7,204.64	7,215.36	216.05	249.79	89.40	1,085.00	-2,165.22	4,950.70	4,609.72	340.98	14.519		
13,600.00	7,214.84	7,205.17	7,214.84	219.33	249.81	89.38	1,085.00	-2,165.22	5,040.30	4,699.52	340.78	14.791		
13,700.00	7,214.31	7,205.69	7,214.31	222.62	249.83	89.37	1,085.00	-2,165.22	5,130.28	4,789.70	340.58	15.063		
13,800.00	7,213.78	7,206.22	7,213.78	225.91	249.85	89.35	1,085.00	-2,165.22	5,220.62	4,880.23	340.39	15.337		
13,900.00	7,213.25	7,206.75	7,213.25	229.20	249.86	89.34	1,085.00	-2,165.22	5,311.32	4,971.11	340.21	15.612		
14,000.00	7,212.72	7,207.28	7,212.72	232.49	249.88	89.33	1,085.00	-2,165.22	5,402.34	5,062.31	340.02	15.888		
14,100.00	7,212.19	7,207.81	7,212.19	235.79	249.90	89.31	1,085.00	-2,165.22	5,493.67	5,153.82	339.84	16.165		
14,200.00	7,211.66	7,208.34	7,211.66	239.08	249.92	89.30	1,085.00	-2,165.22	5,585.30	5,245.63	339.67	16.443		
14,300.00	7,211.13	7,208.87	7,211.13	242.38	249.94	89.29	1,085.00	-2,165.22	5,677.21	5,337.71	339.50	16.722		
14,400.00	7,210.61	7,209.39	7,210.61	245.67	249.96	89.27	1,085.00	-2,165.22	5,769.39	5,430.06	339.33	17.002		
14,500.00	7,210.08	7,209.92	7,210.08	248.97	249.97	89.26	1,085.00	-2,165.22	5,861.83	5,522.66	339.17	17.283		
14,600.00	7,209.55	7,189.55	7,209.55	252.27	249.26	89.25	1,085.00	-2,165.22	5,954.51	5,616.23	338.28	17.602		
14,700.00	7,209.02	7,189.02	7,209.02	255.57	249.25	89.23	1,085.00	-2,165.22	6,047.42	5,709.33	338.09	17.887		
14,800.00	7,208.49	7,188.49	7,208.49	258.87	249.23	89.22	1,085.00	-2,165.22	6,140.56	5,802.65	337.91	18.172		
14,900.00	7,207.96	7,187.96	7,207.96	262.17	249.21	89.20	1,085.00	-2,165.22	6,233.91	5,896.18	337.73	18.459		
15,000.00	7,207.43	7,187.43	7,207.43	265.47	249.19	89.19	1,085.00	-2,165.22	6,327.46	5,989.92	337.55	18.745		
15,081.89	7,207.00	7,187.00	7,207.00	268.17	249.17	89.18	1,085.00	-2,165.22	6,404.22	6,066.81	337.41	18.981		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-95.59	-248.33	-2,535.27	2,547.64					
100.00	100.00	65.00	100.00	3.28	3.47	-95.59	-248.33	-2,535.27	2,547.40	2,540.65	6.76	377.091		
200.00	200.00	165.00	200.00	3.34	5.18	-95.59	-248.33	-2,535.27	2,547.40	2,538.88	8.52	298.948		
300.00	299.98	264.98	299.98	3.44	8.19	76.41	-248.33	-2,535.27	2,546.99	2,535.36	11.63	219.004		
400.00	399.84	364.84	399.84	3.59	11.47	76.55	-248.33	-2,535.27	2,545.77	2,530.71	15.06	169.037		
500.00	499.45	464.45	499.45	3.80	14.84	76.78	-248.33	-2,535.27	2,543.75	2,525.12	18.63	136.532		
600.00	598.70	563.70	598.70	4.06	18.23	77.10	-248.33	-2,535.27	2,540.97	2,518.69	22.29	114.012		
700.00	697.49	662.49	697.49	4.38	21.63	77.48	-248.33	-2,535.27	2,537.52	2,511.52	26.01	97.575		
800.00	796.13	761.13	796.13	4.74	25.04	77.84	-248.33	-2,535.27	2,533.97	2,504.19	29.78	85.091		
900.00	894.78	859.78	894.78	5.15	28.46	78.20	-248.33	-2,535.27	2,530.52	2,496.93	33.60	75.321		
1,000.00	993.43	958.43	993.43	5.58	31.88	78.56	-248.33	-2,535.27	2,527.18	2,489.73	37.45	67.487		
1,100.00	1,092.07	1,057.07	1,092.07	6.03	35.31	78.92	-248.33	-2,535.27	2,523.93	2,482.61	41.32	61.078		
1,200.00	1,190.72	1,155.72	1,190.72	6.50	38.74	79.28	-248.33	-2,535.27	2,520.79	2,475.57	45.22	55.746		
1,300.00	1,289.36	1,254.36	1,289.36	6.98	42.17	79.64	-248.33	-2,535.27	2,517.75	2,468.62	49.13	51.245		
1,400.00	1,388.01	1,353.01	1,388.01	7.47	45.61	80.00	-248.33	-2,535.27	2,514.81	2,461.75	53.06	47.398		
1,500.00	1,486.65	1,451.65	1,486.65	7.97	49.04	80.37	-248.33	-2,535.27	2,511.98	2,454.98	56.99	44.074		
1,600.00	1,585.30	1,550.30	1,585.30	8.48	52.48	80.73	-248.33	-2,535.27	2,509.25	2,448.31	60.94	41.176		
1,700.00	1,683.94	1,648.94	1,683.94	9.00	55.92	81.10	-248.33	-2,535.27	2,506.62	2,441.73	64.89	38.628		
1,800.00	1,782.59	1,747.59	1,782.59	9.52	59.35	81.46	-248.33	-2,535.27	2,504.10	2,435.25	68.85	36.370		
1,900.00	1,881.24	1,846.24	1,881.24	10.05	62.79	81.83	-248.33	-2,535.27	2,501.69	2,428.87	72.81	34.357		
2,000.00	1,979.88	1,944.88	1,979.88	10.58	66.23	82.20	-248.33	-2,535.27	2,499.38	2,422.60	76.78	32.551		
2,100.00	2,078.53	2,043.53	2,078.53	11.11	69.67	82.56	-248.33	-2,535.27	2,497.18	2,416.42	80.76	30.923		
2,200.00	2,177.17	2,142.17	2,177.17	11.64	73.11	82.93	-248.33	-2,535.27	2,495.08	2,410.35	84.73	29.447		
2,300.00	2,275.82	2,240.82	2,275.82	12.18	76.55	83.30	-248.33	-2,535.27	2,493.09	2,404.38	88.71	28.104		
2,400.00	2,374.46	2,339.46	2,374.46	12.72	79.99	83.67	-248.33	-2,535.27	2,491.20	2,398.51	92.69	26.876		
2,500.00	2,473.11	2,438.11	2,473.11	13.26	83.43	84.04	-248.33	-2,535.27	2,489.42	2,392.75	96.67	25.751		
2,600.00	2,571.76	2,536.76	2,571.76	13.80	86.87	84.41	-248.33	-2,535.27	2,487.75	2,387.09	100.66	24.715		
2,700.00	2,670.40	2,635.40	2,670.40	14.35	90.32	84.78	-248.33	-2,535.27	2,486.18	2,381.54	104.65	23.758		
2,800.00	2,769.05	2,734.05	2,769.05	14.89	93.76	85.16	-248.33	-2,535.27	2,484.73	2,376.09	108.63	22.872		
2,900.00	2,867.69	2,832.69	2,867.69	15.44	97.20	85.53	-248.33	-2,535.27	2,483.38	2,370.75	112.62	22.050		
3,000.00	2,966.34	2,931.34	2,966.34	15.99	100.64	85.90	-248.33	-2,535.27	2,482.13	2,365.52	116.62	21.285		
3,100.00	3,064.98	3,029.98	3,064.98	16.53	104.08	86.27	-248.33	-2,535.27	2,481.00	2,360.39	120.61	20.571		
3,200.00	3,163.63	3,128.63	3,163.63	17.08	107.53	86.65	-248.33	-2,535.27	2,479.97	2,355.37	124.60	19.903		
3,300.00	3,262.27	3,227.27	3,262.27	17.63	110.97	87.02	-248.33	-2,535.27	2,479.05	2,350.46	128.59	19.278		
3,400.00	3,360.92	3,325.92	3,360.92	18.18	114.41	87.39	-248.33	-2,535.27	2,478.24	2,345.65	132.59	18.691		
3,500.00	3,459.57	3,424.57	3,459.57	18.74	117.85	87.77	-248.33	-2,535.27	2,477.54	2,340.96	136.58	18.139		
3,600.00	3,558.21	3,523.21	3,558.21	19.29	121.29	88.14	-248.33	-2,535.27	2,476.95	2,336.37	140.58	17.620		
3,700.00	3,656.86	3,621.86	3,656.86	19.84	124.74	88.51	-248.33	-2,535.27	2,476.46	2,331.89	144.57	17.129		
3,800.00	3,755.50	3,720.50	3,755.50	20.39	128.18	88.89	-248.33	-2,535.27	2,476.08	2,327.51	148.57	16.666		
3,900.00	3,854.15	3,819.15	3,854.15	20.95	131.62	89.26	-248.33	-2,535.27	2,475.82	2,323.25	152.57	16.228		
4,000.00	3,952.79	3,917.79	3,952.79	21.50	135.06	89.64	-248.33	-2,535.27	2,475.66	2,319.09	156.56	15.812		
4,096.64	4,048.13	4,013.13	4,048.13	22.04	138.39	90.00	-248.33	-2,535.27	2,475.61	2,315.18	160.43	15.431		
4,100.00	4,051.44	4,016.44	4,051.44	22.05	138.51	90.01	-248.33	-2,535.27	2,475.61	2,315.05	160.56	15.418		
4,200.00	4,150.08	4,115.08	4,150.08	22.61	141.95	90.39	-248.33	-2,535.27	2,475.66	2,311.11	164.56	15.044		
4,300.00	4,248.73	4,213.73	4,248.73	23.16	145.39	90.76	-248.33	-2,535.27	2,475.83	2,307.28	168.56	14.688		
4,400.00	4,347.38	4,312.38	4,347.38	23.72	148.84	91.14	-248.33	-2,535.27	2,476.11	2,303.55	172.55	14.350		
4,500.00	4,446.02	4,411.02	4,446.02	24.27	152.28	91.51	-248.33	-2,535.27	2,476.49	2,299.94	176.55	14.027		
4,600.00	4,544.67	4,509.67	4,544.67	24.83	155.72	91.88	-248.33	-2,535.27	2,476.98	2,296.44	180.55	13.719		
4,700.00	4,643.31	4,608.31	4,643.31	25.39	159.16	92.26	-248.33	-2,535.27	2,477.58	2,293.04	184.54	13.425		
4,800.00	4,741.96	4,706.96	4,741.96	25.94	162.61	92.63	-248.33	-2,535.27	2,478.29	2,289.75	188.54	13.145		
4,900.00	4,840.60	4,805.60	4,840.60	26.50	166.05	93.01	-248.33	-2,535.27	2,479.11	2,286.57	192.54	12.876		
5,000.00	4,939.25	4,904.25	4,939.25	27.05	169.49	93.38	-248.33	-2,535.27	2,480.04	2,283.50	196.53	12.619		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.00	5,037.90	5,002.90	5,037.90	27.61	172.94	93.75	-248.33	-2,535.27	2,481.07	2,280.54	200.53	12.373	
5,200.00	5,136.54	5,101.54	5,136.54	28.17	176.38	94.12	-248.33	-2,535.27	2,482.21	2,277.69	204.52	12.136	
5,300.00	5,235.19	5,200.19	5,235.19	28.72	179.82	94.50	-248.33	-2,535.27	2,483.46	2,274.94	208.52	11.910	
5,400.00	5,333.83	5,301.17	5,333.83	29.28	183.35	94.87	-248.33	-2,535.27	2,484.82	2,272.22	212.60	11.688	
5,500.00	5,432.48	5,402.52	5,432.48	29.84	186.89	95.24	-248.33	-2,535.27	2,486.29	2,269.60	216.69	11.474	
5,600.00	5,531.12	5,503.88	5,531.12	30.40	190.42	95.61	-248.33	-2,535.27	2,487.86	2,267.08	220.77	11.269	
5,700.00	5,629.77	5,605.23	5,629.77	30.95	193.96	95.98	-248.33	-2,535.27	2,489.54	2,264.67	224.86	11.071	
5,800.00	5,728.41	5,706.59	5,728.41	31.51	197.50	96.35	-248.33	-2,535.27	2,491.32	2,262.37	228.95	10.882	
5,900.00	5,827.06	5,807.94	5,827.06	32.07	201.04	96.72	-248.33	-2,535.27	2,493.22	2,260.18	233.04	10.699	
6,000.00	5,925.71	5,909.29	5,925.71	32.63	204.57	97.09	-248.33	-2,535.27	2,495.21	2,258.09	237.12	10.523	
6,100.00	6,024.35	5,989.35	6,024.35	33.19	207.37	97.46	-248.33	-2,535.27	2,497.32	2,256.85	240.47	10.385	
6,200.00	6,123.00	6,088.00	6,123.00	33.74	210.81	97.83	-248.33	-2,535.27	2,499.53	2,255.08	244.46	10.225	
6,300.00	6,221.64	6,186.64	6,221.64	34.30	214.26	98.19	-248.33	-2,535.27	2,501.85	2,253.40	248.45	10.070	
6,400.00	6,320.29	6,285.29	6,320.29	34.86	217.70	98.56	-248.33	-2,535.27	2,504.27	2,251.84	252.43	9.920	
6,500.00	6,418.93	6,383.93	6,418.93	35.42	221.14	98.93	-248.33	-2,535.27	2,506.80	2,250.37	256.42	9.776	
6,600.00	6,517.58	6,482.58	6,517.58	35.98	224.59	99.29	-248.33	-2,535.27	2,509.43	2,249.02	260.41	9.636	
6,700.00	6,616.23	6,581.23	6,616.23	36.54	228.03	99.66	-248.33	-2,535.27	2,512.16	2,247.77	264.40	9.501	
6,800.00	6,714.51	6,679.51	6,714.51	37.10	231.46	65.35	-248.33	-2,535.27	2,509.86	2,241.48	268.38	9.352	
6,900.00	6,810.42	6,775.42	6,810.42	37.66	234.81	47.67	-248.33	-2,535.27	2,493.14	2,220.83	272.30	9.156	
7,000.00	6,901.58	6,866.58	6,901.58	38.21	237.99	41.10	-248.33	-2,535.27	2,462.30	2,186.23	276.07	8.919	
7,100.00	6,985.76	6,950.76	6,985.76	38.76	240.93	39.22	-248.33	-2,535.27	2,418.25	2,138.65	279.60	8.649	
7,200.00	7,060.88	7,025.88	7,060.88	39.32	243.55	40.18	-248.33	-2,535.27	2,362.23	2,079.40	282.82	8.352	
7,300.00	7,125.09	7,109.91	7,125.09	39.90	246.48	43.60	-248.33	-2,535.27	2,295.75	2,009.37	286.38	8.017	
7,400.00	7,176.81	7,141.81	7,176.81	40.55	247.60	49.78	-248.33	-2,535.27	2,220.62	1,932.47	288.14	7.707	
7,500.00	7,214.77	7,179.77	7,214.77	41.30	248.92	59.39	-248.33	-2,535.27	2,138.80	1,848.64	290.16	7.371	
7,600.00	7,238.02	7,203.02	7,238.02	42.22	249.73	72.97	-248.33	-2,535.27	2,052.44	1,760.72	291.72	7.036	
7,700.00	7,246.01	7,211.01	7,246.01	43.32	250.01	89.71	-248.33	-2,535.27	1,963.73	1,670.92	292.81	6.706	
7,800.00	7,245.50	7,210.50	7,245.50	44.65	250.00	90.56	-248.33	-2,535.27	1,875.06	1,581.36	293.70	6.384	
7,900.00	7,244.97	7,209.97	7,244.97	46.21	249.98	90.53	-248.33	-2,535.27	1,787.59	1,492.86	294.73	6.065	
8,000.00	7,244.44	7,209.44	7,244.44	47.99	249.96	90.50	-248.33	-2,535.27	1,701.50	1,405.58	295.92	5.750	
8,100.00	7,243.91	7,208.91	7,243.91	49.96	249.94	90.46	-248.33	-2,535.27	1,617.02	1,319.71	297.30	5.439	
8,200.00	7,243.39	7,208.39	7,243.39	52.10	249.92	90.43	-248.33	-2,535.27	1,534.40	1,235.50	298.90	5.134	
8,300.00	7,242.86	7,207.86	7,242.86	54.38	249.90	90.39	-248.33	-2,535.27	1,453.96	1,153.23	300.73	4.835	
8,400.00	7,242.33	7,207.33	7,242.33	56.78	249.88	90.36	-248.33	-2,535.27	1,376.09	1,073.26	302.83	4.544	
8,500.00	7,241.80	7,206.80	7,241.80	59.28	249.87	90.33	-248.33	-2,535.27	1,301.25	996.03	305.22	4.263	
8,600.00	7,241.27	7,206.27	7,241.27	61.88	249.85	90.29	-248.33	-2,535.27	1,229.99	922.09	307.90	3.995	
8,700.00	7,240.74	7,205.74	7,240.74	64.54	249.83	90.26	-248.33	-2,535.27	1,162.97	852.08	310.89	3.741	
8,800.00	7,240.21	7,205.21	7,240.21	67.27	249.81	90.22	-248.33	-2,535.27	1,100.96	786.80	314.16	3.504	
8,900.00	7,239.68	7,204.68	7,239.68	70.06	249.79	90.19	-248.33	-2,535.27	1,044.86	727.20	317.66	3.289	
9,000.00	7,239.16	7,204.16	7,239.16	72.89	249.77	90.15	-248.33	-2,535.27	995.67	674.38	321.30	3.099	
9,100.00	7,238.63	7,203.63	7,238.63	75.77	249.76	90.12	-248.33	-2,535.27	954.46	629.54	324.91	2.938	
9,200.00	7,238.10	7,203.10	7,238.10	78.69	249.74	90.09	-248.33	-2,535.27	922.28	593.96	328.33	2.809	
9,300.00	7,237.57	7,202.57	7,237.57	81.64	249.72	90.05	-248.33	-2,535.27	900.13	568.81	331.31	2.717	
9,400.00	7,237.04	7,202.04	7,237.04	84.62	249.70	90.02	-248.33	-2,535.27	888.73	555.07	333.66	2.664	
9,451.90	7,236.77	7,201.77	7,236.77	86.18	249.69	90.00	-248.33	-2,535.27	887.22	552.64	334.57	2.652 CC, ES	
9,500.00	7,236.51	7,201.51	7,236.51	87.63	249.68	89.98	-248.33	-2,535.27	888.52	553.31	335.21	2.651 SF	
9,600.00	7,235.98	7,200.98	7,235.98	90.66	249.66	89.95	-248.33	-2,535.27	899.49	563.61	335.88	2.678	
9,700.00	7,235.45	7,200.45	7,235.45	93.72	249.64	89.92	-248.33	-2,535.27	921.25	585.53	335.72	2.744	
9,800.00	7,234.93	7,200.07	7,234.93	96.79	249.63	89.88	-248.33	-2,535.27	953.06	618.22	334.83	2.846	
9,900.00	7,234.40	7,200.60	7,234.40	99.88	249.65	89.85	-248.33	-2,535.27	993.95	660.52	333.43	2.981	
10,000.00	7,233.87	7,201.13	7,233.87	102.98	249.67	89.81	-248.33	-2,535.27	1,042.86	711.22	331.64	3.145	
10,100.00	7,233.34	7,201.66	7,233.34	106.10	249.69	89.78	-248.33	-2,535.27	1,098.71	769.08	329.64	3.333	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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		
10,200.00	7,232.81	7,202.19	7,232.81	109.23	249.70	89.74	-248.33	-2,535.27	1,160.51	832.98	327.53	3.543		
10,300.00	7,232.28	7,202.72	7,232.28	112.38	249.72	89.71	-248.33	-2,535.27	1,227.35	901.92	325.43	3.771		
10,400.00	7,231.75	7,203.25	7,231.75	115.53	249.74	89.68	-248.33	-2,535.27	1,298.47	975.08	323.39	4.015		
10,500.00	7,231.23	7,203.78	7,231.23	118.70	249.76	89.64	-248.33	-2,535.27	1,373.18	1,051.74	321.44	4.272		
10,600.00	7,230.70	7,204.30	7,230.70	121.87	249.78	89.61	-248.33	-2,535.27	1,450.94	1,131.32	319.62	4.540		
10,700.00	7,230.17	7,204.83	7,230.17	125.05	249.80	89.57	-248.33	-2,535.27	1,531.29	1,213.36	317.93	4.816		
10,800.00	7,229.64	7,205.36	7,229.64	128.25	249.82	89.54	-248.33	-2,535.27	1,613.84	1,297.47	316.36	5.101		
10,900.00	7,229.11	7,205.89	7,229.11	131.44	249.83	89.51	-248.33	-2,535.27	1,698.26	1,383.33	314.93	5.393		
11,000.00	7,228.58	7,206.42	7,228.58	134.65	249.85	89.47	-248.33	-2,535.27	1,784.29	1,470.68	313.61	5.690		
11,100.00	7,228.05	7,206.95	7,228.05	137.86	249.87	89.44	-248.33	-2,535.27	1,871.71	1,559.31	312.40	5.991		
11,200.00	7,227.52	7,207.48	7,227.52	141.08	249.89	89.40	-248.33	-2,535.27	1,960.33	1,649.04	311.30	6.297		
11,300.00	7,227.00	7,208.00	7,227.00	144.30	249.91	89.37	-248.33	-2,535.27	2,050.00	1,739.72	310.29	6.607		
11,400.00	7,226.47	7,208.53	7,226.47	147.52	249.93	89.33	-248.33	-2,535.27	2,140.59	1,831.23	309.36	6.919		
11,500.00	7,225.94	7,209.06	7,225.94	150.76	249.94	89.30	-248.33	-2,535.27	2,231.98	1,923.46	308.52	7.235		
11,600.00	7,225.41	7,209.59	7,225.41	153.99	249.96	89.27	-248.33	-2,535.27	2,324.08	2,016.34	307.74	7.552		
11,700.00	7,224.88	7,189.88	7,224.88	157.23	249.28	89.23	-248.33	-2,535.27	2,416.80	2,110.48	306.32	7.890		
11,800.00	7,224.35	7,189.35	7,224.35	160.48	249.26	89.20	-248.33	-2,535.27	2,510.09	2,204.46	305.63	8.213		
11,900.00	7,223.82	7,188.82	7,223.82	163.72	249.24	89.16	-248.33	-2,535.27	2,603.87	2,298.88	304.99	8.537		
12,000.00	7,223.29	7,188.29	7,223.29	166.98	249.22	89.13	-248.33	-2,535.27	2,698.10	2,393.70	304.41	8.864		
12,100.00	7,222.77	7,187.77	7,222.77	170.23	249.20	89.10	-248.33	-2,535.27	2,792.73	2,488.87	303.86	9.191		
12,200.00	7,222.24	7,187.24	7,222.24	173.49	249.18	89.06	-248.33	-2,535.27	2,887.73	2,584.37	303.36	9.519		
12,300.00	7,221.71	7,186.71	7,221.71	176.75	249.16	89.03	-248.33	-2,535.27	2,983.05	2,680.16	302.89	9.849		
12,400.00	7,221.18	7,186.18	7,221.18	180.01	249.15	88.99	-248.33	-2,535.27	3,078.67	2,776.21	302.45	10.179		
12,500.00	7,220.65	7,185.65	7,220.65	183.28	249.13	88.96	-248.33	-2,535.27	3,174.55	2,872.51	302.05	10.510		
12,600.00	7,220.12	7,185.12	7,220.12	186.54	249.11	88.93	-248.33	-2,535.27	3,270.69	2,969.02	301.67	10.842		
12,700.00	7,219.59	7,184.59	7,219.59	189.81	249.09	88.89	-248.33	-2,535.27	3,367.04	3,065.73	301.32	11.174		
12,800.00	7,219.06	7,184.06	7,219.06	193.09	249.07	88.86	-248.33	-2,535.27	3,463.61	3,162.62	300.99	11.507		
12,900.00	7,218.54	7,183.54	7,218.54	196.36	249.05	88.82	-248.33	-2,535.27	3,560.36	3,259.68	300.68	11.841		
13,000.00	7,218.01	7,183.01	7,218.01	199.64	249.04	88.79	-248.33	-2,535.27	3,657.29	3,356.89	300.40	12.175		
13,100.00	7,217.48	7,182.48	7,217.48	202.92	249.02	88.75	-248.33	-2,535.27	3,754.38	3,454.25	300.13	12.509		
13,200.00	7,216.95	7,181.95	7,216.95	206.20	249.00	88.72	-248.33	-2,535.27	3,851.62	3,551.74	299.88	12.844		
13,300.00	7,216.42	7,181.42	7,216.42	209.48	248.98	88.69	-248.33	-2,535.27	3,949.00	3,649.35	299.65	13.179		
13,400.00	7,215.89	7,180.89	7,215.89	212.76	248.96	88.65	-248.33	-2,535.27	4,046.50	3,747.07	299.43	13.514		
13,500.00	7,215.36	7,180.36	7,215.36	216.05	248.94	88.62	-248.33	-2,535.27	4,144.13	3,844.90	299.22	13.850		
13,600.00	7,214.84	7,179.84	7,214.84	219.33	248.92	88.58	-248.33	-2,535.27	4,241.86	3,942.83	299.03	14.185		
13,700.00	7,214.31	7,179.31	7,214.31	222.62	248.91	88.55	-248.33	-2,535.27	4,339.70	4,040.85	298.85	14.521		
13,800.00	7,213.78	7,178.78	7,213.78	225.91	248.89	88.52	-248.33	-2,535.27	4,437.63	4,138.95	298.68	14.857		
13,900.00	7,213.25	7,178.25	7,213.25	229.20	248.87	88.48	-248.33	-2,535.27	4,535.65	4,237.13	298.52	15.194		
14,000.00	7,212.72	7,177.72	7,212.72	232.49	248.85	88.45	-248.33	-2,535.27	4,633.76	4,335.39	298.38	15.530		
14,100.00	7,212.19	7,177.19	7,212.19	235.79	248.83	88.41	-248.33	-2,535.27	4,731.95	4,433.71	298.24	15.866		
14,200.00	7,211.66	7,176.66	7,211.66	239.08	248.81	88.38	-248.33	-2,535.27	4,830.21	4,532.10	298.11	16.203		
14,300.00	7,211.13	7,176.13	7,211.13	242.38	248.80	88.35	-248.33	-2,535.27	4,928.54	4,630.56	297.99	16.539		
14,400.00	7,210.61	7,175.61	7,210.61	245.67	248.78	88.31	-248.33	-2,535.27	5,026.94	4,729.07	297.87	16.876		
14,500.00	7,210.08	7,175.08	7,210.08	248.97	248.76	88.28	-248.33	-2,535.27	5,125.40	4,827.63	297.77	17.213		
14,600.00	7,209.55	7,174.55	7,209.55	252.27	248.74	88.24	-248.33	-2,535.27	5,223.92	4,926.25	297.67	17.549		
14,700.00	7,209.02	7,174.02	7,209.02	255.57	248.72	88.21	-248.33	-2,535.27	5,322.49	5,024.91	297.58	17.886		
14,800.00	7,208.49	7,173.49	7,208.49	258.87	248.70	88.17	-248.33	-2,535.27	5,421.11	5,123.63	297.49	18.223		
14,900.00	7,207.96	7,172.96	7,207.96	262.17	248.68	88.14	-248.33	-2,535.27	5,519.79	5,222.38	297.41	18.560		
15,000.00	7,207.43	7,172.43	7,207.43	265.47	248.67	88.11	-248.33	-2,535.27	5,618.51	5,321.18	297.33	18.896		
15,081.89	7,207.00	7,172.00	7,207.00	268.17	248.65	88.08	-248.33	-2,535.27	5,699.38	5,402.11	297.28	19.172		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	46.00	3.28	3.28	-106.46	-1,417.41	-4,796.80	5,002.04					
100.00	100.00	54.00	100.00	3.28	3.41	-106.46	-1,417.41	-4,796.80	5,001.83	4,995.13	6.70	746.824		
200.00	200.00	154.00	200.00	3.34	4.89	-106.46	-1,417.41	-4,796.80	5,001.83	4,993.60	8.23	607.765		
300.00	299.98	253.98	299.98	3.44	7.84	65.53	-1,417.41	-4,796.80	5,001.11	4,989.83	11.28	443.377		
400.00	399.84	353.84	399.84	3.59	11.10	65.62	-1,417.41	-4,796.80	4,998.94	4,984.25	14.69	340.221		
500.00	499.45	453.45	499.45	3.80	14.46	65.78	-1,417.41	-4,796.80	4,995.34	4,977.08	18.26	273.620		
600.00	598.70	552.70	598.70	4.06	17.85	66.00	-1,417.41	-4,796.80	4,990.33	4,968.42	21.91	227.800		
700.00	697.49	651.49	697.49	4.38	21.25	66.24	-1,417.41	-4,796.80	4,983.99	4,958.37	25.62	194.544		
800.00	796.13	750.13	796.13	4.74	24.66	66.41	-1,417.41	-4,796.80	4,977.33	4,947.95	29.38	169.394		
900.00	894.78	848.78	894.78	5.15	28.08	66.58	-1,417.41	-4,796.80	4,970.71	4,937.52	33.19	149.766		
1,000.00	993.43	947.43	993.43	5.58	31.50	66.75	-1,417.41	-4,796.80	4,964.14	4,927.11	37.03	134.060		
1,100.00	1,092.07	1,046.07	1,092.07	6.03	34.93	66.93	-1,417.41	-4,796.80	4,957.62	4,916.72	40.89	121.230		
1,200.00	1,190.72	1,144.72	1,190.72	6.50	38.36	67.10	-1,417.41	-4,796.80	4,951.14	4,906.36	44.78	110.568		
1,300.00	1,289.36	1,243.36	1,289.36	6.98	41.79	67.27	-1,417.41	-4,796.80	4,944.70	4,896.02	48.68	101.576		
1,400.00	1,388.01	1,342.01	1,388.01	7.47	45.22	67.45	-1,417.41	-4,796.80	4,938.31	4,885.72	52.59	93.895		
1,500.00	1,486.65	1,440.65	1,486.65	7.97	48.66	67.62	-1,417.41	-4,796.80	4,931.97	4,875.45	56.52	87.263		
1,600.00	1,585.30	1,539.30	1,585.30	8.48	52.09	67.79	-1,417.41	-4,796.80	4,925.68	4,865.22	60.45	81.481		
1,700.00	1,683.94	1,637.94	1,683.94	9.00	55.53	67.97	-1,417.41	-4,796.80	4,919.43	4,855.04	64.39	76.397		
1,800.00	1,782.59	1,736.59	1,782.59	9.52	58.97	68.14	-1,417.41	-4,796.80	4,913.23	4,844.89	68.34	71.894		
1,900.00	1,881.24	1,835.24	1,881.24	10.05	62.41	68.32	-1,417.41	-4,796.80	4,907.07	4,834.78	72.29	67.878		
2,000.00	1,979.88	1,933.88	1,979.88	10.58	65.85	68.50	-1,417.41	-4,796.80	4,900.96	4,824.71	76.25	64.275		
2,100.00	2,078.53	2,032.53	2,078.53	11.11	69.29	68.67	-1,417.41	-4,796.80	4,894.90	4,814.69	80.21	61.025		
2,200.00	2,177.17	2,131.17	2,177.17	11.64	72.73	68.85	-1,417.41	-4,796.80	4,888.89	4,804.72	84.18	58.080		
2,300.00	2,275.82	2,229.82	2,275.82	12.18	76.17	69.03	-1,417.41	-4,796.80	4,882.93	4,794.78	88.14	55.398		
2,400.00	2,374.46	2,328.46	2,374.46	12.72	79.61	69.20	-1,417.41	-4,796.80	4,877.01	4,784.90	92.11	52.945		
2,500.00	2,473.11	2,427.11	2,473.11	13.26	83.05	69.38	-1,417.41	-4,796.80	4,871.14	4,775.05	96.09	50.695		
2,600.00	2,571.76	2,525.76	2,571.76	13.80	86.49	69.56	-1,417.41	-4,796.80	4,865.32	4,765.26	100.06	48.623		
2,700.00	2,670.40	2,624.40	2,670.40	14.35	89.93	69.74	-1,417.41	-4,796.80	4,859.55	4,755.51	104.04	46.709		
2,800.00	2,769.05	2,723.05	2,769.05	14.89	93.37	69.92	-1,417.41	-4,796.80	4,853.82	4,745.80	108.02	44.935		
2,900.00	2,867.69	2,821.69	2,867.69	15.44	96.82	70.10	-1,417.41	-4,796.80	4,848.15	4,736.15	112.00	43.287		
3,000.00	2,966.34	2,920.34	2,966.34	15.99	100.26	70.28	-1,417.41	-4,796.80	4,842.52	4,726.54	115.98	41.752		
3,100.00	3,064.98	3,018.98	3,064.98	16.53	103.70	70.46	-1,417.41	-4,796.80	4,836.94	4,716.98	119.97	40.319		
3,200.00	3,163.63	3,117.63	3,163.63	17.08	107.14	70.64	-1,417.41	-4,796.80	4,831.42	4,707.47	123.95	38.979		
3,300.00	3,262.27	3,216.27	3,262.27	17.63	110.58	70.82	-1,417.41	-4,796.80	4,825.94	4,698.00	127.94	37.721		
3,400.00	3,360.92	3,314.92	3,360.92	18.18	114.03	71.01	-1,417.41	-4,796.80	4,820.51	4,688.58	131.92	36.540		
3,500.00	3,459.57	3,413.57	3,459.57	18.74	117.47	71.19	-1,417.41	-4,796.80	4,815.13	4,679.22	135.91	35.428		
3,600.00	3,558.21	3,512.21	3,558.21	19.29	120.91	71.37	-1,417.41	-4,796.80	4,809.80	4,669.90	139.90	34.380		
3,700.00	3,656.86	3,610.86	3,656.86	19.84	124.35	71.55	-1,417.41	-4,796.80	4,804.52	4,660.63	143.89	33.390		
3,800.00	3,755.50	3,709.50	3,755.50	20.39	127.80	71.74	-1,417.41	-4,796.80	4,799.29	4,651.41	147.88	32.453		
3,900.00	3,854.15	3,808.15	3,854.15	20.95	131.24	71.92	-1,417.41	-4,796.80	4,794.11	4,642.24	151.88	31.566		
4,000.00	3,952.79	3,906.79	3,952.79	21.50	134.68	72.11	-1,417.41	-4,796.80	4,788.99	4,633.12	155.87	30.724		
4,100.00	4,051.44	4,005.44	4,051.44	22.05	138.12	72.29	-1,417.41	-4,796.80	4,783.91	4,624.05	159.86	29.925		
4,200.00	4,150.08	4,104.08	4,150.08	22.61	141.57	72.47	-1,417.41	-4,796.80	4,778.88	4,615.02	163.86	29.165		
4,300.00	4,248.73	4,202.73	4,248.73	23.16	145.01	72.66	-1,417.41	-4,796.80	4,773.91	4,606.05	167.85	28.441		
4,400.00	4,347.38	4,301.38	4,347.38	23.72	148.45	72.85	-1,417.41	-4,796.80	4,768.98	4,597.13	171.85	27.751		
4,500.00	4,446.02	4,400.02	4,446.02	24.27	151.89	73.03	-1,417.41	-4,796.80	4,764.11	4,588.26	175.85	27.093		
4,600.00	4,544.67	4,501.33	4,544.67	24.83	155.43	73.22	-1,417.41	-4,796.80	4,759.29	4,579.35	179.94	26.450		
4,700.00	4,643.31	4,602.69	4,643.31	25.39	158.97	73.41	-1,417.41	-4,796.80	4,754.52	4,570.49	184.03	25.836		
4,800.00	4,741.96	4,704.04	4,741.96	25.94	162.51	73.59	-1,417.41	-4,796.80	4,749.80	4,561.68	188.12	25.249		
4,900.00	4,840.60	4,805.40	4,840.60	26.50	166.04	73.78	-1,417.41	-4,796.80	4,745.14	4,552.92	192.21	24.687		
5,000.00	4,939.25	4,906.75	4,939.25	27.05	169.58	73.97	-1,417.41	-4,796.80	4,740.52	4,544.22	196.31	24.148		
5,100.00	5,037.90	5,008.10	5,037.90	27.61	173.12	74.16	-1,417.41	-4,796.80	4,735.96	4,535.56	200.40	23.632		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,109.46	5,136.54	28.17	176.66	74.35	-1,417.41	-4,796.80	4,731.45	4,526.96	204.50	23.137		
5,300.00	5,235.19	5,189.19	5,235.19	28.72	179.44	74.53	-1,417.41	-4,796.80	4,727.00	4,519.16	207.84	22.744		
5,400.00	5,333.83	5,287.83	5,333.83	29.28	182.88	74.72	-1,417.41	-4,796.80	4,722.59	4,510.76	211.84	22.293		
5,500.00	5,432.48	5,386.48	5,432.48	29.84	186.33	74.91	-1,417.41	-4,796.80	4,718.24	4,502.40	215.84	21.860		
5,600.00	5,531.12	5,485.12	5,531.12	30.40	189.77	75.10	-1,417.41	-4,796.80	4,713.95	4,494.10	219.84	21.442		
5,700.00	5,629.77	5,583.77	5,629.77	30.95	193.21	75.29	-1,417.41	-4,796.80	4,709.70	4,485.86	223.85	21.040		
5,800.00	5,728.41	5,682.41	5,728.41	31.51	196.66	75.48	-1,417.41	-4,796.80	4,705.51	4,477.66	227.85	20.652		
5,900.00	5,827.06	5,781.06	5,827.06	32.07	200.10	75.68	-1,417.41	-4,796.80	4,701.38	4,469.52	231.85	20.278		
6,000.00	5,925.71	5,879.71	5,925.71	32.63	203.54	75.87	-1,417.41	-4,796.80	4,697.29	4,461.44	235.85	19.916		
6,100.00	6,024.35	5,978.35	6,024.35	33.19	206.99	76.06	-1,417.41	-4,796.80	4,693.26	4,453.40	239.86	19.567		
6,200.00	6,123.00	6,077.00	6,123.00	33.74	210.43	76.25	-1,417.41	-4,796.80	4,689.29	4,445.42	243.86	19.229		
6,300.00	6,221.64	6,175.64	6,221.64	34.30	213.87	76.44	-1,417.41	-4,796.80	4,685.36	4,437.50	247.87	18.903		
6,400.00	6,320.29	6,274.29	6,320.29	34.86	217.32	76.64	-1,417.41	-4,796.80	4,681.50	4,429.62	251.87	18.587		
6,500.00	6,418.93	6,372.93	6,418.93	35.42	220.76	76.83	-1,417.41	-4,796.80	4,677.68	4,421.81	255.88	18.281		
6,600.00	6,517.58	6,471.58	6,517.58	35.98	224.20	77.02	-1,417.41	-4,796.80	4,673.92	4,414.04	259.88	17.985		
6,700.00	6,616.23	6,570.23	6,616.23	36.54	227.65	77.22	-1,417.41	-4,796.80	4,670.22	4,406.33	263.89	17.698		
6,800.00	6,714.51	6,668.51	6,714.51	37.10	231.08	42.56	-1,417.41	-4,796.80	4,661.19	4,393.31	267.87	17.401		
6,900.00	6,810.42	6,764.42	6,810.42	37.66	234.42	23.88	-1,417.41	-4,796.80	4,637.01	4,365.27	271.74	17.064		
7,000.00	6,901.58	6,855.58	6,901.58	38.21	237.61	15.55	-1,417.41	-4,796.80	4,598.04	4,322.65	275.39	16.696		
7,100.00	6,985.76	6,939.76	6,985.76	38.76	240.54	10.92	-1,417.41	-4,796.80	4,545.24	4,266.49	278.75	16.306		
7,200.00	7,060.88	7,014.88	7,060.88	39.32	243.17	7.81	-1,417.41	-4,796.80	4,479.87	4,198.15	281.72	15.902		
7,300.00	7,125.09	7,079.09	7,125.09	39.90	245.41	5.23	-1,417.41	-4,796.80	4,403.55	4,119.31	284.24	15.493		
7,400.00	7,176.81	7,130.81	7,176.81	40.55	247.21	2.41	-1,417.41	-4,796.80	4,318.13	4,031.90	286.23	15.086		
7,500.00	7,214.77	7,168.77	7,214.77	41.30	248.54	-2.02	-1,417.41	-4,796.80	4,225.73	3,938.06	287.67	14.690		
7,600.00	7,238.02	7,207.98	7,238.02	42.22	249.91	-13.78	-1,417.41	-4,796.80	4,128.61	3,839.54	289.07	14.282		
7,700.00	7,246.01	7,200.01	7,246.01	43.32	249.63	-87.79	-1,417.41	-4,796.80	4,029.16	3,740.42	288.75	13.954		
7,800.00	7,245.50	7,200.50	7,245.50	44.65	249.65	-94.41	-1,417.41	-4,796.80	3,929.39	3,640.71	288.69	13.611		
7,900.00	7,244.97	7,201.03	7,244.97	46.21	249.66	-94.30	-1,417.41	-4,796.80	3,829.63	3,541.01	288.62	13.269		
8,000.00	7,244.44	7,201.56	7,244.44	47.99	249.68	-94.19	-1,417.41	-4,796.80	3,729.89	3,441.33	288.56	12.926		
8,100.00	7,243.91	7,202.09	7,243.91	49.96	249.70	-94.08	-1,417.41	-4,796.80	3,630.16	3,341.66	288.49	12.583		
8,200.00	7,243.39	7,202.61	7,243.39	52.10	249.72	-93.96	-1,417.41	-4,796.80	3,530.44	3,242.02	288.43	12.240		
8,300.00	7,242.86	7,203.14	7,242.86	54.38	249.74	-93.85	-1,417.41	-4,796.80	3,430.74	3,142.39	288.35	11.898		
8,400.00	7,242.33	7,203.67	7,242.33	56.78	249.76	-93.74	-1,417.41	-4,796.80	3,331.06	3,042.78	288.28	11.555		
8,500.00	7,241.80	7,204.20	7,241.80	59.28	249.78	-93.63	-1,417.41	-4,796.80	3,231.40	2,943.19	288.21	11.212		
8,600.00	7,241.27	7,204.73	7,241.27	61.88	249.79	-93.51	-1,417.41	-4,796.80	3,131.75	2,843.62	288.13	10.869		
8,700.00	7,240.74	7,205.26	7,240.74	64.54	249.81	-93.40	-1,417.41	-4,796.80	3,032.14	2,744.08	288.05	10.526		
8,800.00	7,240.21	7,205.79	7,240.21	67.27	249.83	-93.29	-1,417.41	-4,796.80	2,932.54	2,644.57	287.97	10.183		
8,900.00	7,239.68	7,206.32	7,239.68	70.06	249.85	-93.18	-1,417.41	-4,796.80	2,832.98	2,545.09	287.89	9.840		
9,000.00	7,239.16	7,206.84	7,239.16	72.89	249.87	-93.06	-1,417.41	-4,796.80	2,733.45	2,445.64	287.81	9.497		
9,100.00	7,238.63	7,207.37	7,238.63	75.77	249.89	-92.95	-1,417.41	-4,796.80	2,633.95	2,346.22	287.73	9.154		
9,200.00	7,238.10	7,207.90	7,238.10	78.69	249.90	-92.84	-1,417.41	-4,796.80	2,534.50	2,246.84	287.65	8.811		
9,300.00	7,237.57	7,208.43	7,237.57	81.64	249.92	-92.73	-1,417.41	-4,796.80	2,435.08	2,147.51	287.57	8.468		
9,400.00	7,237.04	7,208.96	7,237.04	84.62	249.94	-92.61	-1,417.41	-4,796.80	2,335.72	2,048.22	287.50	8.124		
9,500.00	7,236.51	7,209.49	7,236.51	87.63	249.96	-92.50	-1,417.41	-4,796.80	2,236.42	1,948.98	287.43	7.781		
9,600.00	7,235.98	7,189.98	7,235.98	90.66	249.28	-92.39	-1,417.41	-4,796.80	2,137.18	1,850.50	286.68	7.455		
9,700.00	7,235.45	7,189.45	7,235.45	93.72	249.26	-92.28	-1,417.41	-4,796.80	2,038.01	1,751.41	286.60	7.111		
9,800.00	7,234.93	7,188.93	7,234.93	96.79	249.24	-92.16	-1,417.41	-4,796.80	1,938.93	1,652.39	286.54	6.767		
9,900.00	7,234.40	7,188.40	7,234.40	99.88	249.22	-92.05	-1,417.41	-4,796.80	1,839.95	1,553.44	286.51	6.422		
10,000.00	7,233.87	7,187.87	7,233.87	102.98	249.21	-91.94	-1,417.41	-4,796.80	1,741.08	1,454.56	286.52	6.077		
10,100.00	7,233.34	7,187.34	7,233.34	106.10	249.19	-91.83	-1,417.41	-4,796.80	1,642.35	1,355.77	286.58	5.731		
10,200.00	7,232.81	7,186.81	7,232.81	109.23	249.17	-91.71	-1,417.41	-4,796.80	1,543.79	1,257.07	286.71	5.384		
10,300.00	7,232.28	7,186.28	7,232.28	112.38	249.15	-91.60	-1,417.41	-4,796.80	1,445.42	1,158.47	286.95	5.037		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,185.75	7,231.75	115.53	249.13	-91.49	-1,417.41	-4,796.80	1,347.29	1,059.96	287.33	4.689		
10,500.00	7,231.23	7,185.23	7,231.23	118.70	249.11	-91.38	-1,417.41	-4,796.80	1,249.46	961.55	287.91	4.340		
10,600.00	7,230.70	7,184.70	7,230.70	121.87	249.09	-91.26	-1,417.41	-4,796.80	1,152.00	863.23	288.77	3.989		
10,700.00	7,230.17	7,184.17	7,230.17	125.05	249.08	-91.15	-1,417.41	-4,796.80	1,055.01	764.99	290.02	3.638		
10,800.00	7,229.64	7,183.64	7,229.64	128.25	249.06	-91.04	-1,417.41	-4,796.80	958.65	666.83	291.82	3.285		
10,900.00	7,229.11	7,183.11	7,229.11	131.44	249.04	-90.92	-1,417.41	-4,796.80	863.11	568.70	294.41	2.932		
11,000.00	7,228.58	7,182.58	7,228.58	134.65	249.02	-90.81	-1,417.41	-4,796.80	768.71	470.59	298.12	2.578		
11,100.00	7,228.05	7,182.05	7,228.05	137.86	249.00	-90.70	-1,417.41	-4,796.80	675.92	372.47	303.45	2.227		
11,200.00	7,227.52	7,181.52	7,227.52	141.08	248.98	-90.59	-1,417.41	-4,796.80	585.51	274.42	311.09	1.882		
11,300.00	7,227.00	7,181.00	7,227.00	144.30	248.97	-90.47	-1,417.41	-4,796.80	498.77	176.71	322.06	1.549		
11,400.00	7,226.47	7,180.47	7,226.47	147.52	248.95	-90.36	-1,417.41	-4,796.80	418.00	80.35	337.65	1.238	Level 2	
11,500.00	7,225.94	7,179.94	7,225.94	150.76	248.93	-90.25	-1,417.41	-4,796.80	347.38	-11.51	358.90	0.968	Level 1	
11,600.00	7,225.41	7,179.41	7,225.41	153.99	248.91	-90.14	-1,417.41	-4,796.80	294.32	-89.78	384.10	0.766	Level 1	
11,700.00	7,224.88	7,178.88	7,224.88	157.23	248.89	-90.02	-1,417.41	-4,796.80	269.39	-134.62	404.01	0.667	Level 1	
11,720.26	7,224.77	7,178.77	7,224.77	157.89	248.89	-90.00	-1,417.41	-4,796.80	268.63	-137.50	406.13	0.661	Level 1, CC, ES, SF	
11,800.00	7,224.35	7,178.35	7,224.35	160.48	248.87	-89.91	-1,417.41	-4,796.80	280.22	-126.21	406.43	0.689	Level 1	
11,900.00	7,223.82	7,177.82	7,223.82	163.72	248.85	-89.80	-1,417.41	-4,796.80	323.22	-70.48	393.70	0.821	Level 1	
12,000.00	7,223.29	7,177.29	7,223.29	166.98	248.84	-89.68	-1,417.41	-4,796.80	387.84	10.74	377.10	1.028	Level 2	
12,100.00	7,222.77	7,176.77	7,222.77	170.23	248.82	-89.57	-1,417.41	-4,796.80	465.15	102.62	362.53	1.283	Level 3	
12,200.00	7,222.24	7,176.24	7,222.24	173.49	248.80	-89.46	-1,417.41	-4,796.80	549.83	198.77	351.05	1.566		
12,300.00	7,221.71	7,175.71	7,221.71	176.75	248.78	-89.35	-1,417.41	-4,796.80	638.95	296.72	342.23	1.867		
12,400.00	7,221.18	7,175.18	7,221.18	180.01	248.76	-89.23	-1,417.41	-4,796.80	730.89	395.48	335.41	2.179		
12,500.00	7,220.65	7,174.65	7,220.65	183.28	248.74	-89.12	-1,417.41	-4,796.80	824.71	494.65	330.06	2.499		
12,600.00	7,220.12	7,174.12	7,220.12	186.54	248.73	-89.01	-1,417.41	-4,796.80	919.83	594.04	325.79	2.823		
12,700.00	7,219.59	7,173.59	7,219.59	189.81	248.71	-88.90	-1,417.41	-4,796.80	1,015.89	693.55	322.34	3.152		
12,800.00	7,219.06	7,173.06	7,219.06	193.09	248.69	-88.78	-1,417.41	-4,796.80	1,112.65	793.15	319.50	3.482		
12,900.00	7,218.54	7,172.54	7,218.54	196.36	248.67	-88.67	-1,417.41	-4,796.80	1,209.93	892.79	317.13	3.815		
13,000.00	7,218.01	7,172.01	7,218.01	199.64	248.65	-88.56	-1,417.41	-4,796.80	1,307.62	992.48	315.14	4.149		
13,100.00	7,217.48	7,171.48	7,217.48	202.92	248.63	-88.44	-1,417.41	-4,796.80	1,405.63	1,092.19	313.44	4.484		
13,200.00	7,216.95	7,170.95	7,216.95	206.20	248.61	-88.33	-1,417.41	-4,796.80	1,503.91	1,191.93	311.98	4.820		
13,300.00	7,216.42	7,170.42	7,216.42	209.48	248.60	-88.22	-1,417.41	-4,796.80	1,602.40	1,291.68	310.72	5.157		
13,400.00	7,215.89	7,169.89	7,215.89	212.76	248.58	-88.11	-1,417.41	-4,796.80	1,701.07	1,391.45	309.62	5.494		
13,500.00	7,215.36	7,169.36	7,215.36	216.05	248.56	-87.99	-1,417.41	-4,796.80	1,799.88	1,491.23	308.65	5.831		
13,600.00	7,214.84	7,168.84	7,214.84	219.33	248.54	-87.88	-1,417.41	-4,796.80	1,898.82	1,591.03	307.79	6.169		
13,700.00	7,214.31	7,168.31	7,214.31	222.62	248.52	-87.77	-1,417.41	-4,796.80	1,997.86	1,690.83	307.03	6.507		
13,800.00	7,213.78	7,167.78	7,213.78	225.91	248.50	-87.66	-1,417.41	-4,796.80	2,096.99	1,790.64	306.35	6.845		
13,900.00	7,213.25	7,167.25	7,213.25	229.20	248.49	-87.54	-1,417.41	-4,796.80	2,196.21	1,890.47	305.74	7.183		
14,000.00	7,212.72	7,166.72	7,212.72	232.49	248.47	-87.43	-1,417.41	-4,796.80	2,295.49	1,990.29	305.19	7.521		
14,100.00	7,212.19	7,166.19	7,212.19	235.79	248.45	-87.32	-1,417.41	-4,796.80	2,394.83	2,090.13	304.70	7.860		
14,200.00	7,211.66	7,165.66	7,211.66	239.08	248.43	-87.21	-1,417.41	-4,796.80	2,494.22	2,189.97	304.25	8.198		
14,300.00	7,211.13	7,165.13	7,211.13	242.38	248.41	-87.09	-1,417.41	-4,796.80	2,593.66	2,289.82	303.84	8.536		
14,400.00	7,210.61	7,164.61	7,210.61	245.67	248.39	-86.98	-1,417.41	-4,796.80	2,693.14	2,389.67	303.47	8.875		
14,500.00	7,210.08	7,164.08	7,210.08	248.97	248.37	-86.87	-1,417.41	-4,796.80	2,792.66	2,489.53	303.13	9.213		
14,600.00	7,209.55	7,163.55	7,209.55	252.27	248.36	-86.76	-1,417.41	-4,796.80	2,892.21	2,589.39	302.82	9.551		
14,700.00	7,209.02	7,163.02	7,209.02	255.57	248.34	-86.64	-1,417.41	-4,796.80	2,991.79	2,689.26	302.53	9.889		
14,800.00	7,208.49	7,162.49	7,208.49	258.87	248.32	-86.53	-1,417.41	-4,796.80	3,091.40	2,789.12	302.27	10.227		
14,900.00	7,207.96	7,161.96	7,207.96	262.17	248.30	-86.42	-1,417.41	-4,796.80	3,191.03	2,889.00	302.03	10.565		
15,000.00	7,207.43	7,161.43	7,207.43	265.47	248.28	-86.31	-1,417.41	-4,796.80	3,290.68	2,988.87	301.81	10.903		
15,081.89	7,207.00	7,161.00	7,207.00	268.17	248.27	-86.21	-1,417.41	-4,796.80	3,372.30	3,070.66	301.64	11.180		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	49.00	3.28	3.28	-121.29	-2,918.34	-4,802.65	5,620.02					
100.00	100.00	51.00	100.00	3.28	3.40	-121.29	-2,918.34	-4,802.65	5,619.80	5,613.12	6.68	840.862		
200.00	200.00	151.00	200.00	3.34	4.82	-121.29	-2,918.34	-4,802.65	5,619.80	5,611.65	8.15	689.320		
300.00	299.98	250.98	299.98	3.44	7.75	50.70	-2,918.34	-4,802.65	5,618.70	5,607.51	11.18	502.354		
400.00	399.84	350.84	399.84	3.59	11.00	50.80	-2,918.34	-4,802.65	5,615.38	5,600.79	14.59	384.783		
500.00	499.45	450.45	499.45	3.80	14.36	50.95	-2,918.34	-4,802.65	5,609.87	5,591.72	18.15	309.019		
600.00	598.70	549.70	598.70	4.06	17.75	51.17	-2,918.34	-4,802.65	5,602.18	5,580.38	21.80	256.999		
700.00	697.49	648.49	697.49	4.38	21.15	51.40	-2,918.34	-4,802.65	5,592.41	5,566.91	25.50	219.300		
800.00	796.13	747.13	796.13	4.74	24.56	51.53	-2,918.34	-4,802.65	5,582.10	5,552.85	29.25	190.848		
900.00	894.78	845.78	894.78	5.15	27.97	51.66	-2,918.34	-4,802.65	5,571.83	5,538.79	33.04	168.654		
1,000.00	993.43	944.43	993.43	5.58	31.40	51.79	-2,918.34	-4,802.65	5,561.58	5,524.73	36.86	150.899		
1,100.00	1,092.07	1,043.07	1,092.07	6.03	34.82	51.92	-2,918.34	-4,802.65	5,551.37	5,510.67	40.70	136.398		
1,200.00	1,190.72	1,141.72	1,190.72	6.50	38.25	52.06	-2,918.34	-4,802.65	5,541.18	5,496.62	44.56	124.345		
1,300.00	1,289.36	1,240.36	1,289.36	6.98	41.68	52.19	-2,918.34	-4,802.65	5,531.03	5,482.58	48.44	114.180		
1,400.00	1,388.01	1,339.01	1,388.01	7.47	45.12	52.32	-2,918.34	-4,802.65	5,520.90	5,468.57	52.33	105.496		
1,500.00	1,486.65	1,437.65	1,486.65	7.97	48.55	52.46	-2,918.34	-4,802.65	5,510.80	5,454.57	56.23	97.997		
1,600.00	1,585.30	1,536.30	1,585.30	8.48	51.99	52.59	-2,918.34	-4,802.65	5,500.74	5,440.59	60.14	91.458		
1,700.00	1,683.94	1,634.94	1,683.94	9.00	55.43	52.73	-2,918.34	-4,802.65	5,490.70	5,426.64	64.06	85.708		
1,800.00	1,782.59	1,733.59	1,782.59	9.52	58.87	52.86	-2,918.34	-4,802.65	5,480.70	5,412.71	67.99	80.614		
1,900.00	1,881.24	1,832.24	1,881.24	10.05	62.30	53.00	-2,918.34	-4,802.65	5,470.73	5,398.81	71.92	76.071		
2,000.00	1,979.88	1,930.88	1,979.88	10.58	65.74	53.13	-2,918.34	-4,802.65	5,460.78	5,384.93	75.85	71.994		
2,100.00	2,078.53	2,029.53	2,078.53	11.11	69.18	53.27	-2,918.34	-4,802.65	5,450.87	5,371.08	79.79	68.316		
2,200.00	2,177.17	2,128.17	2,177.17	11.64	72.62	53.41	-2,918.34	-4,802.65	5,440.99	5,357.26	83.73	64.982		
2,300.00	2,275.82	2,226.82	2,275.82	12.18	76.06	53.54	-2,918.34	-4,802.65	5,431.14	5,343.47	87.68	61.946		
2,400.00	2,374.46	2,325.46	2,374.46	12.72	79.50	53.68	-2,918.34	-4,802.65	5,421.33	5,329.70	91.62	59.170		
2,500.00	2,473.11	2,424.11	2,473.11	13.26	82.95	53.82	-2,918.34	-4,802.65	5,411.54	5,315.97	95.57	56.622		
2,600.00	2,571.76	2,522.76	2,571.76	13.80	86.39	53.96	-2,918.34	-4,802.65	5,401.79	5,302.26	99.53	54.275		
2,700.00	2,670.40	2,621.40	2,670.40	14.35	89.83	54.10	-2,918.34	-4,802.65	5,392.07	5,288.59	103.48	52.107		
2,800.00	2,769.05	2,720.05	2,769.05	14.89	93.27	54.24	-2,918.34	-4,802.65	5,382.38	5,274.94	107.44	50.097		
2,900.00	2,867.69	2,818.69	2,867.69	15.44	96.71	54.38	-2,918.34	-4,802.65	5,372.73	5,261.33	111.40	48.230		
3,000.00	2,966.34	2,917.34	2,966.34	15.99	100.15	54.52	-2,918.34	-4,802.65	5,363.11	5,247.75	115.36	46.491		
3,100.00	3,064.98	3,015.98	3,064.98	16.53	103.59	54.66	-2,918.34	-4,802.65	5,353.52	5,234.20	119.32	44.867		
3,200.00	3,163.63	3,114.63	3,163.63	17.08	107.04	54.81	-2,918.34	-4,802.65	5,343.96	5,220.68	123.28	43.347		
3,300.00	3,262.27	3,213.27	3,262.27	17.63	110.48	54.95	-2,918.34	-4,802.65	5,334.44	5,207.19	127.25	41.922		
3,400.00	3,360.92	3,311.92	3,360.92	18.18	113.92	55.09	-2,918.34	-4,802.65	5,324.95	5,193.73	131.21	40.582		
3,500.00	3,459.57	3,410.57	3,459.57	18.74	117.36	55.24	-2,918.34	-4,802.65	5,315.49	5,180.31	135.18	39.321		
3,600.00	3,558.21	3,509.21	3,558.21	19.29	120.81	55.38	-2,918.34	-4,802.65	5,306.07	5,166.92	139.15	38.132		
3,700.00	3,656.86	3,607.86	3,656.86	19.84	124.25	55.52	-2,918.34	-4,802.65	5,296.68	5,153.56	143.12	37.009		
3,800.00	3,755.50	3,706.50	3,755.50	20.39	127.69	55.67	-2,918.34	-4,802.65	5,287.33	5,140.24	147.09	35.947		
3,900.00	3,854.15	3,805.15	3,854.15	20.95	131.13	55.82	-2,918.34	-4,802.65	5,278.01	5,126.95	151.06	34.940		
4,000.00	3,952.79	3,903.79	3,952.79	21.50	134.58	55.96	-2,918.34	-4,802.65	5,268.73	5,113.69	155.03	33.985		
4,100.00	4,051.44	4,002.44	4,051.44	22.05	138.02	56.11	-2,918.34	-4,802.65	5,259.48	5,100.47	159.01	33.077		
4,200.00	4,150.08	4,101.08	4,150.08	22.61	141.46	56.26	-2,918.34	-4,802.65	5,250.26	5,087.28	162.98	32.214		
4,300.00	4,248.73	4,200.27	4,248.73	23.16	144.92	56.40	-2,918.34	-4,802.65	5,241.08	5,074.11	166.97	31.388		
4,400.00	4,347.38	4,301.62	4,347.38	23.72	148.46	56.55	-2,918.34	-4,802.65	5,231.94	5,060.89	171.05	30.588		
4,500.00	4,446.02	4,402.98	4,446.02	24.27	152.00	56.70	-2,918.34	-4,802.65	5,222.83	5,047.71	175.12	29.825		
4,600.00	4,544.67	4,504.33	4,544.67	24.83	155.54	56.85	-2,918.34	-4,802.65	5,213.75	5,034.57	179.19	29.096		
4,700.00	4,643.31	4,605.69	4,643.31	25.39	159.07	57.00	-2,918.34	-4,802.65	5,204.72	5,021.45	183.26	28.400		
4,800.00	4,741.96	4,707.04	4,741.96	25.94	162.61	57.15	-2,918.34	-4,802.65	5,195.72	5,008.38	187.34	27.735		
4,900.00	4,840.60	4,808.40	4,840.60	26.50	166.15	57.30	-2,918.34	-4,802.65	5,186.75	4,995.34	191.41	27.098		
5,000.00	4,939.25	4,909.75	4,939.25	27.05	169.69	57.45	-2,918.34	-4,802.65	5,177.82	4,982.34	195.49	26.487		
5,100.00	5,037.90	4,988.90	5,037.90	27.61	172.45	57.60	-2,918.34	-4,802.65	5,168.93	4,970.14	198.79	26.002		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,087.54	5,136.54	28.17	175.89	57.76	-2,918.34	-4,802.65	5,160.07	4,957.31	202.77	25.448		
5,300.00	5,235.19	5,186.19	5,235.19	28.72	179.33	57.91	-2,918.34	-4,802.65	5,151.26	4,944.50	206.75	24.915		
5,400.00	5,333.83	5,284.83	5,333.83	29.28	182.78	58.06	-2,918.34	-4,802.65	5,142.48	4,931.74	210.73	24.403		
5,500.00	5,432.48	5,383.48	5,432.48	29.84	186.22	58.22	-2,918.34	-4,802.65	5,133.73	4,919.01	214.72	23.909		
5,600.00	5,531.12	5,482.12	5,531.12	30.40	189.66	58.37	-2,918.34	-4,802.65	5,125.03	4,906.32	218.70	23.434		
5,700.00	5,629.77	5,580.77	5,629.77	30.95	193.11	58.52	-2,918.34	-4,802.65	5,116.36	4,893.67	222.69	22.975		
5,800.00	5,728.41	5,679.41	5,728.41	31.51	196.55	58.68	-2,918.34	-4,802.65	5,107.73	4,881.05	226.68	22.533		
5,900.00	5,827.06	5,778.06	5,827.06	32.07	199.99	58.84	-2,918.34	-4,802.65	5,099.13	4,868.47	230.66	22.106		
6,000.00	5,925.71	5,876.71	5,925.71	32.63	203.44	58.99	-2,918.34	-4,802.65	5,090.58	4,855.93	234.65	21.694		
6,100.00	6,024.35	5,975.35	6,024.35	33.19	206.88	59.15	-2,918.34	-4,802.65	5,082.07	4,843.43	238.64	21.296		
6,200.00	6,123.00	6,074.00	6,123.00	33.74	210.32	59.31	-2,918.34	-4,802.65	5,073.59	4,830.96	242.63	20.911		
6,300.00	6,221.64	6,172.64	6,221.64	34.30	213.77	59.46	-2,918.34	-4,802.65	5,065.15	4,818.54	246.62	20.539		
6,400.00	6,320.29	6,271.29	6,320.29	34.86	217.21	59.62	-2,918.34	-4,802.65	5,056.75	4,806.15	250.61	20.178		
6,500.00	6,418.93	6,369.93	6,418.93	35.42	220.65	59.78	-2,918.34	-4,802.65	5,048.39	4,793.80	254.60	19.829		
6,600.00	6,517.58	6,468.58	6,517.58	35.98	224.10	59.94	-2,918.34	-4,802.65	5,040.07	4,781.49	258.59	19.491		
6,700.00	6,616.23	6,567.23	6,616.23	36.54	227.54	60.10	-2,918.34	-4,802.65	5,031.79	4,769.22	262.58	19.163		
6,800.00	6,714.51	6,665.51	6,714.51	37.10	230.97	25.06	-2,918.34	-4,802.65	5,018.55	4,752.02	266.54	18.829		
6,900.00	6,810.42	6,761.42	6,810.42	37.66	234.32	5.47	-2,918.34	-4,802.65	4,991.29	4,720.96	270.33	18.464		
7,000.00	6,901.58	6,852.58	6,901.58	38.21	237.50	-4.35	-2,918.34	-4,802.65	4,950.45	4,676.57	273.87	18.076		
7,100.00	6,985.76	6,936.76	6,985.76	38.76	240.44	-11.22	-2,918.34	-4,802.65	4,897.03	4,619.95	277.07	17.674		
7,200.00	7,060.88	7,011.88	7,060.88	39.32	243.06	-17.66	-2,918.34	-4,802.65	4,832.37	4,552.51	279.86	17.267		
7,300.00	7,125.09	7,076.09	7,125.09	39.90	245.30	-25.15	-2,918.34	-4,802.65	4,758.12	4,475.96	282.16	16.863		
7,400.00	7,176.81	7,127.81	7,176.81	40.55	247.11	-35.14	-2,918.34	-4,802.65	4,676.16	4,392.24	283.92	16.470		
7,500.00	7,214.77	7,165.77	7,214.77	41.30	248.43	-49.30	-2,918.34	-4,802.65	4,588.60	4,303.49	285.11	16.094		
7,600.00	7,238.02	7,189.02	7,238.02	42.22	249.25	-68.43	-2,918.34	-4,802.65	4,497.70	4,211.97	285.74	15.741		
7,700.00	7,246.01	7,202.99	7,246.01	43.32	249.73	-89.67	-2,918.34	-4,802.65	4,405.79	4,119.79	286.00	15.405		
7,800.00	7,245.50	7,203.50	7,245.50	44.65	249.75	-90.67	-2,918.34	-4,802.65	4,314.40	4,028.58	285.81	15.095		
7,900.00	7,244.97	7,204.03	7,244.97	46.21	249.77	-90.66	-2,918.34	-4,802.65	4,223.39	3,937.70	285.69	14.783		
8,000.00	7,244.44	7,204.56	7,244.44	47.99	249.79	-90.64	-2,918.34	-4,802.65	4,132.81	3,847.16	285.65	14.468		
8,100.00	7,243.91	7,205.09	7,243.91	49.96	249.81	-90.62	-2,918.34	-4,802.65	4,042.67	3,756.97	285.69	14.150		
8,200.00	7,243.39	7,205.61	7,243.39	52.10	249.82	-90.61	-2,918.34	-4,802.65	3,953.00	3,667.17	285.83	13.830		
8,300.00	7,242.86	7,206.14	7,242.86	54.38	249.84	-90.59	-2,918.34	-4,802.65	3,863.84	3,577.75	286.08	13.506		
8,400.00	7,242.33	7,206.67	7,242.33	56.78	249.86	-90.57	-2,918.34	-4,802.65	3,775.22	3,488.76	286.46	13.179		
8,500.00	7,241.80	7,207.20	7,241.80	59.28	249.88	-90.55	-2,918.34	-4,802.65	3,687.18	3,400.22	286.97	12.849		
8,600.00	7,241.27	7,207.73	7,241.27	61.88	249.90	-90.54	-2,918.34	-4,802.65	3,599.77	3,312.15	287.63	12.515		
8,700.00	7,240.74	7,208.26	7,240.74	64.54	249.92	-90.52	-2,918.34	-4,802.65	3,513.03	3,224.58	288.45	12.179		
8,800.00	7,240.21	7,208.79	7,240.21	67.27	249.94	-90.50	-2,918.34	-4,802.65	3,427.02	3,137.57	289.45	11.840		
8,900.00	7,239.68	7,209.32	7,239.68	70.06	249.95	-90.49	-2,918.34	-4,802.65	3,341.78	3,051.15	290.63	11.498		
9,000.00	7,239.16	7,209.84	7,239.16	72.89	249.97	-90.47	-2,918.34	-4,802.65	3,257.38	2,965.36	292.02	11.155		
9,100.00	7,238.63	7,189.63	7,238.63	75.77	249.27	-90.45	-2,918.34	-4,802.65	3,173.89	2,881.00	292.89	10.837		
9,200.00	7,238.10	7,189.10	7,238.10	78.69	249.25	-90.43	-2,918.34	-4,802.65	3,091.37	2,796.71	294.66	10.491		
9,300.00	7,237.57	7,188.57	7,237.57	81.64	249.23	-90.42	-2,918.34	-4,802.65	3,009.92	2,713.26	296.66	10.146		
9,400.00	7,237.04	7,188.04	7,237.04	84.62	249.21	-90.40	-2,918.34	-4,802.65	2,929.62	2,630.72	298.90	9.801		
9,500.00	7,236.51	7,187.51	7,236.51	87.63	249.19	-90.38	-2,918.34	-4,802.65	2,850.56	2,549.18	301.38	9.458		
9,600.00	7,235.98	7,186.98	7,235.98	90.66	249.17	-90.37	-2,918.34	-4,802.65	2,772.86	2,468.75	304.11	9.118		
9,700.00	7,235.45	7,186.45	7,235.45	93.72	249.16	-90.35	-2,918.34	-4,802.65	2,696.62	2,389.53	307.10	8.781		
9,800.00	7,234.93	7,185.93	7,234.93	96.79	249.14	-90.33	-2,918.34	-4,802.65	2,621.99	2,311.65	310.34	8.449		
9,900.00	7,234.40	7,185.40	7,234.40	99.88	249.12	-90.31	-2,918.34	-4,802.65	2,549.09	2,235.24	313.85	8.122		
10,000.00	7,233.87	7,184.87	7,233.87	102.98	249.10	-90.30	-2,918.34	-4,802.65	2,478.08	2,160.46	317.62	7.802		
10,100.00	7,233.34	7,184.34	7,233.34	106.10	249.08	-90.28	-2,918.34	-4,802.65	2,409.13	2,087.48	321.65	7.490		
10,200.00	7,232.81	7,183.81	7,232.81	109.23	249.06	-90.26	-2,918.34	-4,802.65	2,342.42	2,016.48	325.95	7.186		
10,300.00	7,232.28	7,183.28	7,232.28	112.38	249.04	-90.25	-2,918.34	-4,802.65	2,278.15	1,947.65	330.50	6.893		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,182.75	7,231.75	115.53	249.03	-90.23	-2,918.34	-4,802.65	2,216.53	1,881.22	335.31	6.610		
10,500.00	7,231.23	7,182.23	7,231.23	118.70	249.01	-90.21	-2,918.34	-4,802.65	2,157.79	1,817.44	340.35	6.340		
10,600.00	7,230.70	7,181.70	7,230.70	121.87	248.99	-90.19	-2,918.34	-4,802.65	2,102.16	1,756.56	345.60	6.083		
10,700.00	7,230.17	7,181.17	7,230.17	125.05	248.97	-90.18	-2,918.34	-4,802.65	2,049.90	1,698.86	351.04	5.839		
10,800.00	7,229.64	7,180.64	7,229.64	128.25	248.95	-90.16	-2,918.34	-4,802.65	2,001.28	1,644.64	356.65	5.611		
10,900.00	7,229.11	7,180.11	7,229.11	131.44	248.93	-90.14	-2,918.34	-4,802.65	1,956.57	1,594.21	362.36	5.399		
11,000.00	7,228.58	7,179.58	7,228.58	134.65	248.92	-90.13	-2,918.34	-4,802.65	1,916.03	1,547.89	368.15	5.205		
11,100.00	7,228.05	7,179.05	7,228.05	137.86	248.90	-90.11	-2,918.34	-4,802.65	1,879.95	1,506.01	373.94	5.027		
11,200.00	7,227.52	7,178.52	7,227.52	141.08	248.88	-90.09	-2,918.34	-4,802.65	1,848.58	1,468.90	379.68	4.869		
11,300.00	7,227.00	7,178.00	7,227.00	144.30	248.86	-90.07	-2,918.34	-4,802.65	1,822.16	1,436.87	385.29	4.729		
11,400.00	7,226.47	7,177.47	7,226.47	147.52	248.84	-90.06	-2,918.34	-4,802.65	1,800.92	1,410.20	390.71	4.609		
11,500.00	7,225.94	7,176.94	7,225.94	150.76	248.82	-90.04	-2,918.34	-4,802.65	1,785.03	1,389.17	395.86	4.509		
11,600.00	7,225.41	7,176.41	7,225.41	153.99	248.81	-90.02	-2,918.34	-4,802.65	1,774.64	1,373.98	400.66	4.429		
11,700.00	7,224.88	7,175.88	7,224.88	157.23	248.79	-90.01	-2,918.34	-4,802.65	1,769.85	1,364.78	405.07	4.369		
11,734.88	7,224.70	7,175.70	7,224.70	158.36	248.78	-90.00	-2,918.34	-4,802.65	1,769.51	1,363.01	406.50	4.353 CC		
11,800.00	7,224.35	7,175.35	7,224.35	160.48	248.77	-89.99	-2,918.34	-4,802.65	1,770.70	1,361.69	409.02	4.329 ES		
11,900.00	7,223.82	7,174.82	7,223.82	163.72	248.75	-89.97	-2,918.34	-4,802.65	1,777.19	1,364.72	412.47	4.309		
12,000.00	7,223.29	7,174.29	7,223.29	166.98	248.73	-89.95	-2,918.34	-4,802.65	1,789.26	1,373.84	415.41	4.307 SF		
12,100.00	7,222.77	7,173.77	7,222.77	170.23	248.71	-89.94	-2,918.34	-4,802.65	1,806.78	1,388.95	417.83	4.324		
12,200.00	7,222.24	7,173.24	7,222.24	173.49	248.69	-89.92	-2,918.34	-4,802.65	1,829.61	1,409.89	419.72	4.359		
12,300.00	7,221.71	7,172.71	7,221.71	176.75	248.68	-89.90	-2,918.34	-4,802.65	1,857.55	1,436.43	421.12	4.411		
12,400.00	7,221.18	7,172.18	7,221.18	180.01	248.66	-89.89	-2,918.34	-4,802.65	1,890.38	1,468.33	422.05	4.479		
12,500.00	7,220.65	7,171.65	7,220.65	183.28	248.64	-89.87	-2,918.34	-4,802.65	1,927.83	1,505.29	422.55	4.562		
12,600.00	7,220.12	7,171.12	7,220.12	186.54	248.62	-89.85	-2,918.34	-4,802.65	1,969.66	1,547.01	422.65	4.660		
12,700.00	7,219.59	7,170.59	7,219.59	189.81	248.60	-89.83	-2,918.34	-4,802.65	2,015.58	1,593.17	422.42	4.772		
12,800.00	7,219.06	7,170.06	7,219.06	193.09	248.58	-89.82	-2,918.34	-4,802.65	2,065.33	1,643.44	421.89	4.895		
12,900.00	7,218.54	7,169.54	7,218.54	196.36	248.57	-89.80	-2,918.34	-4,802.65	2,118.64	1,697.53	421.11	5.031		
13,000.00	7,218.01	7,169.01	7,218.01	199.64	248.55	-89.78	-2,918.34	-4,802.65	2,175.23	1,755.11	420.12	5.178		
13,100.00	7,217.48	7,168.48	7,217.48	202.92	248.53	-89.77	-2,918.34	-4,802.65	2,234.87	1,815.92	418.96	5.334		
13,200.00	7,216.95	7,167.95	7,216.95	206.20	248.51	-89.75	-2,918.34	-4,802.65	2,297.32	1,879.66	417.66	5.500		
13,300.00	7,216.42	7,167.42	7,216.42	209.48	248.49	-89.73	-2,918.34	-4,802.65	2,362.35	1,946.09	416.26	5.675		
13,400.00	7,215.89	7,166.89	7,215.89	212.76	248.47	-89.71	-2,918.34	-4,802.65	2,429.75	2,014.98	414.78	5.858		
13,500.00	7,215.36	7,166.36	7,215.36	216.05	248.45	-89.70	-2,918.34	-4,802.65	2,499.34	2,086.10	413.24	6.048		
13,600.00	7,214.84	7,165.84	7,214.84	219.33	248.44	-89.68	-2,918.34	-4,802.65	2,570.94	2,159.27	411.67	6.245		
13,700.00	7,214.31	7,165.31	7,214.31	222.62	248.42	-89.66	-2,918.34	-4,802.65	2,644.38	2,234.30	410.08	6.449		
13,800.00	7,213.78	7,164.78	7,213.78	225.91	248.40	-89.65	-2,918.34	-4,802.65	2,719.51	2,311.04	408.48	6.658		
13,900.00	7,213.25	7,164.25	7,213.25	229.20	248.38	-89.63	-2,918.34	-4,802.65	2,796.20	2,389.32	406.88	6.872		
14,000.00	7,212.72	7,163.72	7,212.72	232.49	248.36	-89.61	-2,918.34	-4,802.65	2,874.33	2,469.03	405.30	7.092		
14,100.00	7,212.19	7,163.19	7,212.19	235.79	248.34	-89.60	-2,918.34	-4,802.65	2,953.77	2,550.04	403.73	7.316		
14,200.00	7,211.66	7,162.66	7,211.66	239.08	248.33	-89.58	-2,918.34	-4,802.65	3,034.43	2,632.24	402.20	7.545		
14,300.00	7,211.13	7,162.13	7,211.13	242.38	248.31	-89.56	-2,918.34	-4,802.65	3,116.22	2,715.53	400.69	7.777		
14,400.00	7,210.61	7,161.61	7,210.61	245.67	248.29	-89.54	-2,918.34	-4,802.65	3,199.03	2,799.82	399.21	8.013		
14,500.00	7,210.08	7,161.08	7,210.08	248.97	248.27	-89.53	-2,918.34	-4,802.65	3,282.81	2,885.03	397.77	8.253		
14,600.00	7,209.55	7,160.55	7,209.55	252.27	248.25	-89.51	-2,918.34	-4,802.65	3,367.47	2,971.09	396.37	8.496		
14,700.00	7,209.02	7,160.02	7,209.02	255.57	248.23	-89.49	-2,918.34	-4,802.65	3,452.95	3,057.94	395.01	8.741		
14,800.00	7,208.49	7,159.49	7,208.49	258.87	248.21	-89.48	-2,918.34	-4,802.65	3,539.19	3,145.51	393.68	8.990		
14,900.00	7,207.96	7,158.96	7,207.96	262.17	248.20	-89.46	-2,918.34	-4,802.65	3,626.13	3,233.74	392.39	9.241		
15,000.00	7,207.43	7,158.43	7,207.43	265.47	248.18	-89.44	-2,918.34	-4,802.65	3,713.74	3,322.60	391.14	9.495		
15,081.89	7,207.00	7,158.00	7,207.00	268.17	248.16	-89.43	-2,918.34	-4,802.65	3,785.93	3,395.79	390.15	9.704		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	67.00	3.28	3.28	-141.38	-4,089.46	-3,267.29	5,234.83					
100.00	100.00	901.80	935.03	3.28	5.15	-141.55	-4,041.45	-3,208.71	5,227.47	5,219.00	8.47	617.485		
200.00	200.00	996.86	1,032.37	3.34	5.55	-141.59	-4,031.24	-3,196.25	5,211.50	5,202.65	8.84	589.445		
300.00	299.98	1,095.29	1,129.47	3.44	5.99	30.52	-4,021.05	-3,183.81	5,194.04	5,184.74	9.30	558.683		
400.00	399.84	1,193.18	1,226.04	3.59	6.44	30.72	-4,010.91	-3,171.44	5,173.64	5,163.82	9.81	527.206		
500.00	499.45	1,290.40	1,321.97	3.80	6.90	30.98	-4,000.84	-3,159.16	5,150.30	5,139.92	10.38	496.046		
600.00	598.70	1,386.86	1,417.12	4.06	7.36	31.30	-3,990.86	-3,146.97	5,124.07	5,113.07	11.00	465.871		
700.00	697.49	1,482.45	1,511.44	4.38	7.83	31.57	-3,980.96	-3,134.90	5,095.09	5,083.43	11.66	436.978		
800.00	796.13	1,577.80	1,605.50	4.74	8.30	31.63	-3,971.09	-3,122.85	5,065.37	5,053.03	12.34	410.468		
900.00	894.78	1,673.15	1,699.57	5.15	8.78	31.69	-3,961.22	-3,110.80	5,035.66	5,022.60	13.05	385.745		
1,000.00	993.43	1,768.50	1,793.64	5.58	9.27	31.75	-3,951.34	-3,098.76	5,005.95	4,992.15	13.80	362.859		
1,100.00	1,092.07	1,863.85	1,887.71	6.03	9.76	31.82	-3,941.47	-3,086.71	4,976.25	4,961.68	14.56	341.770		
1,200.00	1,190.72	1,959.20	1,981.78	6.50	10.25	31.88	-3,931.60	-3,074.67	4,946.55	4,931.20	15.34	322.384		
1,300.00	1,289.36	2,054.55	2,075.85	6.98	10.74	31.94	-3,921.73	-3,062.62	4,916.86	4,900.71	16.14	304.580		
1,400.00	1,388.01	2,149.90	2,169.92	7.47	11.24	32.00	-3,911.86	-3,050.57	4,887.17	4,870.21	16.96	288.229		
1,500.00	1,486.65	2,245.25	2,263.99	7.97	11.74	32.07	-3,901.98	-3,038.53	4,857.49	4,839.71	17.78	273.200		
1,600.00	1,585.30	2,340.60	2,358.05	8.48	12.24	32.13	-3,892.11	-3,026.48	4,827.81	4,809.20	18.61	259.367		
1,700.00	1,683.94	2,435.95	2,452.12	9.00	12.75	32.20	-3,882.24	-3,014.44	4,798.14	4,778.69	19.46	246.616		
1,800.00	1,782.59	2,531.30	2,546.19	9.52	13.25	32.27	-3,872.37	-3,002.39	4,768.48	4,748.17	20.31	234.840		
1,900.00	1,881.24	2,626.64	2,640.26	10.05	13.76	32.34	-3,862.49	-2,990.34	4,738.82	4,717.66	21.16	223.944		
2,000.00	1,979.88	2,728.02	2,734.33	10.58	14.30	32.40	-3,852.62	-2,978.30	4,709.17	4,687.12	22.05	213.580		
2,100.00	2,078.53	2,817.34	2,828.40	11.11	14.78	32.47	-3,842.75	-2,966.25	4,679.53	4,656.64	22.89	204.458		
2,200.00	2,177.17	2,912.69	2,922.47	11.64	15.29	32.54	-3,832.88	-2,954.20	4,649.89	4,626.13	23.76	195.723		
2,300.00	2,275.82	3,008.04	3,016.53	12.18	15.80	32.62	-3,823.01	-2,942.16	4,620.26	4,595.62	24.63	187.576		
2,400.00	2,374.46	3,103.39	3,110.60	12.72	16.31	32.69	-3,813.13	-2,930.11	4,590.63	4,565.12	25.51	179.964		
2,500.00	2,473.11	3,201.26	3,204.67	13.26	16.84	32.76	-3,803.26	-2,918.07	4,561.01	4,534.61	26.40	172.764		
2,600.00	2,571.76	3,294.09	3,298.74	13.80	17.34	32.83	-3,793.39	-2,906.02	4,531.40	4,504.13	27.27	166.157		
2,700.00	2,670.40	3,389.44	3,392.81	14.35	17.85	32.91	-3,783.52	-2,893.97	4,501.79	4,473.64	28.16	159.881		
2,800.00	2,769.05	3,484.79	3,486.88	14.89	18.36	32.99	-3,773.65	-2,881.93	4,472.20	4,443.15	29.04	153.975		
2,900.00	2,867.69	3,580.14	3,580.95	15.44	18.88	33.06	-3,763.77	-2,869.88	4,442.61	4,412.67	29.93	148.410		
3,000.00	2,966.34	3,675.49	3,675.02	15.99	19.39	33.14	-3,753.90	-2,857.83	4,413.02	4,382.20	30.83	143.157		
3,100.00	3,064.98	3,770.84	3,769.08	16.53	19.91	33.22	-3,744.03	-2,845.79	4,383.45	4,351.73	31.72	138.192		
3,200.00	3,163.63	3,866.19	3,863.15	17.08	20.43	33.30	-3,734.16	-2,833.74	4,353.88	4,321.27	32.62	133.493		
3,300.00	3,262.27	3,961.53	3,957.22	17.63	20.94	33.38	-3,724.28	-2,821.70	4,324.32	4,290.81	33.51	129.039		
3,400.00	3,360.92	4,056.88	4,051.29	18.18	21.46	33.46	-3,714.41	-2,809.65	4,294.77	4,260.36	34.41	124.812		
3,500.00	3,459.57	4,152.23	4,145.36	18.74	21.98	33.55	-3,704.54	-2,797.60	4,265.23	4,229.92	35.31	120.796		
3,600.00	3,558.21	4,247.58	4,239.43	19.29	22.50	33.63	-3,694.67	-2,785.56	4,235.69	4,199.48	36.21	116.976		
3,700.00	3,656.86	4,342.93	4,333.50	19.84	23.01	33.72	-3,684.80	-2,773.51	4,206.16	4,169.05	37.11	113.338		
3,800.00	3,755.50	4,438.28	4,427.57	20.39	23.53	33.81	-3,674.92	-2,761.46	4,176.65	4,138.63	38.01	109.869		
3,900.00	3,854.15	4,533.63	4,521.63	20.95	24.05	33.89	-3,665.05	-2,749.42	4,147.14	4,108.22	38.92	106.559		
4,000.00	3,952.79	4,628.98	4,615.70	21.50	24.57	33.98	-3,655.18	-2,737.37	4,117.64	4,077.82	39.82	103.396		
4,100.00	4,051.44	4,725.69	4,709.77	22.05	25.10	34.07	-3,645.31	-2,725.33	4,088.15	4,047.41	40.74	100.356		
4,200.00	4,150.08	4,819.68	4,803.84	22.61	25.61	34.17	-3,635.44	-2,713.28	4,058.67	4,017.03	41.64	97.477		
4,300.00	4,248.73	4,915.03	4,897.91	23.16	26.13	34.26	-3,625.56	-2,701.23	4,029.20	3,986.65	42.55	94.704		
4,400.00	4,347.38	5,010.38	4,991.98	23.72	26.65	34.35	-3,615.69	-2,689.19	3,999.74	3,956.28	43.45	92.045		
4,500.00	4,446.02	5,105.73	5,086.05	24.27	27.17	34.45	-3,605.82	-2,677.14	3,970.29	3,925.92	44.36	89.494		
4,600.00	4,544.67	5,201.08	5,180.11	24.83	27.69	34.55	-3,595.95	-2,665.10	3,940.85	3,895.57	45.27	87.044		
4,700.00	4,643.31	5,296.43	5,274.18	25.39	28.21	34.65	-3,586.08	-2,653.05	3,911.42	3,865.23	46.19	84.689		
4,800.00	4,741.96	5,391.77	5,368.25	25.94	28.73	34.75	-3,576.20	-2,641.00	3,882.00	3,834.90	47.10	82.424		
4,900.00	4,840.60	5,487.12	5,462.32	26.50	29.25	34.85	-3,566.33	-2,628.96	3,852.59	3,804.58	48.01	80.244		
5,000.00	4,939.25	5,582.47	5,556.39	27.05	29.77	34.95	-3,556.46	-2,616.91	3,823.20	3,774.27	48.92	78.145		
5,100.00	5,037.90	5,677.82	5,650.46	27.61	30.29	35.06	-3,546.59	-2,604.86	3,793.81	3,743.97	49.84	76.121		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,773.17	5,744.53	28.17	30.81	35.17	-3,536.71	-2,592.82	3,764.44	3,713.69	50.75	74.170		
5,300.00	5,235.19	5,868.52	5,838.60	28.72	31.33	35.28	-3,526.84	-2,580.77	3,735.08	3,683.41	51.67	72.286		
5,400.00	5,333.83	5,963.87	5,932.66	29.28	31.85	35.39	-3,516.97	-2,568.73	3,705.74	3,653.15	52.59	70.468		
5,500.00	5,432.48	6,059.22	6,026.73	29.84	32.37	35.50	-3,507.10	-2,556.68	3,676.40	3,622.90	53.51	68.711		
5,600.00	5,531.12	6,154.57	6,120.80	30.40	32.89	35.61	-3,497.23	-2,544.63	3,647.08	3,592.66	54.42	67.013		
5,700.00	5,629.77	6,249.92	6,214.87	30.95	33.41	35.73	-3,487.35	-2,532.59	3,617.77	3,562.43	55.34	65.370		
5,800.00	5,728.41	6,277.73	6,242.34	31.51	33.56	35.77	-3,484.48	-2,529.31	3,589.28	3,533.19	56.09	63.993		
5,900.00	5,827.06	6,300.00	6,264.41	32.07	33.68	35.81	-3,482.18	-2,527.49	3,562.83	3,506.02	56.81	62.720		
6,000.00	5,925.71	6,325.01	6,289.27	32.63	33.79	35.86	-3,479.62	-2,526.36	3,538.51	3,481.00	57.51	61.528		
6,100.00	6,024.35	6,336.96	6,301.15	33.19	33.84	35.89	-3,478.40	-2,526.18	3,516.24	3,458.09	58.15	60.466		
6,200.00	6,123.00	6,350.00	6,314.12	33.74	33.90	35.93	-3,477.08	-2,526.23	3,496.22	3,437.45	58.77	59.489		
6,300.00	6,221.64	6,376.74	6,340.71	34.30	33.99	36.01	-3,474.39	-2,527.16	3,478.34	3,418.93	59.41	58.549		
6,400.00	6,320.29	6,400.00	6,363.79	34.86	34.08	36.10	-3,472.08	-2,528.89	3,462.74	3,402.73	60.01	57.700		
6,500.00	6,418.93	6,425.01	6,388.52	35.42	34.16	36.20	-3,469.62	-2,531.69	3,449.46	3,388.86	60.60	56.926		
6,600.00	6,517.58	6,436.08	6,399.42	35.98	34.19	36.25	-3,468.54	-2,533.24	3,438.38	3,377.30	61.09	56.287		
6,700.00	6,616.23	6,450.00	6,413.10	36.54	34.23	36.31	-3,467.20	-2,535.46	3,429.72	3,368.16	61.55	55.719		
6,800.00	6,714.51	6,475.13	6,437.65	37.10	34.29	1.07	-3,464.80	-2,540.23	3,419.57	3,357.56	62.01	55.144		
6,900.00	6,810.42	6,500.00	6,461.76	37.66	34.34	-18.78	-3,462.47	-2,545.90	3,401.12	3,338.78	62.34	54.554		
7,000.00	6,901.58	6,514.33	6,475.54	38.21	34.37	-28.82	-3,461.15	-2,549.60	3,374.44	3,311.95	62.49	53.997		
7,100.00	6,985.76	6,525.01	6,485.76	38.76	34.39	-35.66	-3,460.17	-2,552.55	3,340.14	3,277.63	62.51	53.430		
7,200.00	7,060.88	6,550.00	6,509.46	39.32	34.44	-41.54	-3,457.93	-2,560.14	3,298.72	3,236.17	62.55	52.735		
7,300.00	7,125.09	6,570.07	6,528.26	39.90	34.47	-47.33	-3,456.17	-2,566.90	3,251.18	3,188.64	62.53	51.990		
7,400.00	7,176.81	6,600.00	6,555.91	40.55	34.51	-53.53	-3,453.60	-2,578.09	3,198.61	3,135.99	62.62	51.078		
7,500.00	7,214.77	6,600.00	6,555.91	41.30	34.51	-59.89	-3,453.60	-2,578.09	3,141.84	3,079.21	62.63	50.164		
7,600.00	7,238.02	6,615.72	6,570.21	42.22	34.52	-66.81	-3,452.29	-2,584.49	3,082.58	3,019.64	62.93	48.982		
7,700.00	7,246.01	6,625.01	6,578.58	43.32	34.53	-73.80	-3,451.52	-2,588.44	3,022.20	2,958.74	63.45	47.629		
7,800.00	7,245.50	6,637.65	6,589.88	44.65	34.54	-74.39	-3,450.50	-2,594.00	2,962.70	2,898.41	64.29	46.082		
7,900.00	7,244.97	6,650.00	6,600.82	46.21	34.55	-74.64	-3,449.51	-2,599.65	2,905.26	2,839.82	65.44	44.397		
8,000.00	7,244.44	6,650.00	6,600.82	47.99	34.55	-74.64	-3,449.51	-2,599.65	2,850.06	2,783.21	66.85	42.633		
8,100.00	7,243.91	6,673.76	6,621.55	49.96	34.57	-75.11	-3,447.66	-2,611.13	2,796.98	2,728.30	68.68	40.726		
8,200.00	7,243.39	6,700.00	6,643.92	52.10	34.58	-75.62	-3,445.69	-2,624.68	2,746.46	2,675.65	70.81	38.789		
8,300.00	7,242.86	6,700.00	6,643.92	54.38	34.58	-75.62	-3,445.69	-2,624.68	2,698.22	2,625.07	73.15	36.887		
8,400.00	7,242.33	6,725.01	6,664.72	56.78	34.59	-76.09	-3,443.88	-2,638.46	2,652.68	2,576.86	75.82	34.985		
8,500.00	7,241.80	6,736.43	6,674.03	59.28	34.59	-76.31	-3,443.08	-2,645.02	2,609.78	2,531.06	78.72	33.151		
8,600.00	7,241.27	6,750.00	6,684.94	61.88	34.59	-76.56	-3,442.15	-2,653.03	2,569.68	2,487.83	81.85	31.393		
8,700.00	7,240.74	6,776.15	6,705.48	64.54	34.59	-77.03	-3,440.42	-2,669.12	2,532.40	2,447.21	85.19	29.726		
8,800.00	7,240.21	6,800.00	6,723.63	67.27	34.59	-77.46	-3,438.92	-2,684.52	2,498.04	2,409.35	88.69	28.166		
8,900.00	7,239.68	6,825.01	6,742.03	70.06	34.59	-77.89	-3,437.43	-2,701.39	2,466.63	2,374.30	92.34	26.714		
9,000.00	7,239.16	6,850.00	6,759.75	72.89	34.59	-78.31	-3,436.02	-2,718.95	2,438.20	2,342.11	96.10	25.372		
9,100.00	7,238.63	6,878.93	6,779.39	75.77	34.58	-78.77	-3,434.50	-2,740.14	2,412.77	2,312.82	99.95	24.140		
9,200.00	7,238.10	6,910.63	6,799.78	78.69	34.58	-79.26	-3,432.98	-2,764.36	2,390.30	2,286.44	103.86	23.014		
9,300.00	7,237.57	6,950.00	6,823.40	81.64	34.57	-79.82	-3,431.28	-2,795.80	2,370.76	2,262.96	107.81	21.991		
9,400.00	7,237.04	6,982.54	6,841.43	84.62	34.58	-80.26	-3,430.06	-2,822.85	2,354.06	2,242.25	111.81	21.055		
9,500.00	7,236.51	7,025.01	6,862.87	87.63	34.60	-80.78	-3,428.71	-2,859.49	2,340.12	2,224.33	115.79	20.209		
9,600.00	7,235.98	7,066.52	6,881.42	90.66	34.64	-81.23	-3,427.67	-2,896.59	2,328.81	2,209.01	119.80	19.438		
9,700.00	7,235.45	7,112.99	6,899.29	93.72	34.71	-81.67	-3,426.82	-2,939.47	2,320.00	2,196.20	123.80	18.739		
9,800.00	7,234.93	7,162.20	6,914.78	96.79	34.85	-82.05	-3,426.31	-2,986.17	2,313.55	2,185.74	127.82	18.101		
9,900.00	7,234.40	7,213.76	6,927.10	99.88	35.07	-82.36	-3,426.19	-3,036.22	2,309.32	2,177.49	131.83	17.518		
10,000.00	7,233.87	7,267.11	6,935.58	102.98	35.39	-82.57	-3,426.53	-3,088.87	2,307.19	2,171.34	135.85	16.983		
10,058.31	7,233.56	7,300.00	6,938.60	104.80	35.64	-82.65	-3,426.97	-3,121.61	2,306.88	2,168.69	138.19	16.693 CC		
10,100.00	7,233.34	7,325.01	6,939.77	106.10	35.85	-82.69	-3,427.42	-3,146.60	2,307.08	2,167.20	139.88	16.493		
10,200.00	7,232.81	7,402.13	6,939.77	109.23	36.65	-82.70	-3,429.18	-3,223.69	2,308.60	2,164.55	144.05	16.026		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,502.11	6,939.35	112.38	37.99	-82.71	-3,431.51	-3,323.64	2,310.32	2,161.73	148.59	15.549		
10,400.00	7,231.75	7,602.10	6,938.94	115.53	39.62	-82.72	-3,433.83	-3,423.60	2,312.03	2,158.67	153.36	15.076		
10,500.00	7,231.23	7,702.08	6,938.52	118.70	41.46	-82.73	-3,436.16	-3,523.56	2,313.74	2,155.40	158.35	14.612		
10,600.00	7,230.70	7,802.07	6,938.10	121.87	43.49	-82.73	-3,438.48	-3,623.52	2,315.46	2,151.94	163.52	14.160		
10,700.00	7,230.17	7,902.05	6,937.69	125.05	45.67	-82.74	-3,440.81	-3,723.47	2,317.17	2,148.31	168.86	13.723		
10,800.00	7,229.64	8,002.04	6,937.27	128.25	47.98	-82.75	-3,443.13	-3,823.43	2,318.88	2,144.55	174.33	13.302		
10,900.00	7,229.11	8,102.02	6,936.85	131.44	50.41	-82.76	-3,445.45	-3,923.39	2,320.59	2,140.67	179.93	12.898		
11,000.00	7,228.58	8,202.01	6,936.43	134.65	52.93	-82.77	-3,447.78	-4,023.34	2,322.31	2,136.68	185.63	12.511		
11,100.00	7,228.05	8,301.99	6,936.02	137.86	55.54	-82.77	-3,450.10	-4,123.30	2,324.02	2,132.60	191.42	12.141		
11,200.00	7,227.52	8,401.98	6,935.60	141.08	58.22	-82.78	-3,452.43	-4,223.26	2,325.73	2,128.45	197.29	11.789		
11,300.00	7,227.00	8,501.96	6,935.18	144.30	60.96	-82.79	-3,454.75	-4,323.21	2,327.45	2,124.22	203.22	11.453		
11,400.00	7,226.47	8,601.95	6,934.77	147.52	63.76	-82.80	-3,457.08	-4,423.17	2,329.16	2,119.94	209.22	11.132		
11,500.00	7,225.94	8,701.93	6,934.35	150.76	66.61	-82.81	-3,459.40	-4,523.13	2,330.87	2,115.60	215.27	10.827		
11,600.00	7,225.41	8,801.92	6,933.93	153.99	69.50	-82.82	-3,461.73	-4,623.08	2,332.59	2,111.22	221.37	10.537		
11,700.00	7,224.88	8,901.90	6,933.51	157.23	72.42	-82.82	-3,464.05	-4,723.04	2,334.30	2,106.79	227.51	10.260		
11,800.00	7,224.35	9,001.89	6,933.10	160.48	75.38	-82.83	-3,466.38	-4,823.00	2,336.01	2,102.33	233.69	9.996		
11,900.00	7,223.82	9,101.87	6,932.68	163.72	78.36	-82.84	-3,468.70	-4,922.95	2,337.73	2,097.83	239.89	9.745		
12,000.00	7,223.29	9,201.86	6,932.26	166.98	81.38	-82.85	-3,471.03	-5,022.91	2,339.44	2,093.31	246.13	9.505		
12,100.00	7,222.77	9,301.84	6,931.85	170.23	84.41	-82.86	-3,473.35	-5,122.87	2,341.16	2,088.76	252.39	9.276		
12,200.00	7,222.24	9,401.83	6,931.43	173.49	87.47	-82.86	-3,475.68	-5,222.83	2,342.87	2,084.19	258.68	9.057		
12,300.00	7,221.71	9,501.81	6,931.01	176.75	90.55	-82.87	-3,478.00	-5,322.78	2,344.58	2,079.59	264.99	8.848		
12,400.00	7,221.18	9,601.79	6,930.59	180.01	93.64	-82.88	-3,480.33	-5,422.74	2,346.30	2,074.98	271.32	8.648		
12,500.00	7,220.65	9,701.78	6,930.18	183.28	96.75	-82.89	-3,482.65	-5,522.70	2,348.01	2,070.35	277.66	8.456		
12,600.00	7,220.12	9,801.76	6,929.76	186.54	99.87	-82.90	-3,484.98	-5,622.65	2,349.72	2,065.70	284.02	8.273		
12,700.00	7,219.59	9,901.75	6,929.34	189.81	103.00	-82.90	-3,487.30	-5,722.61	2,351.44	2,061.04	290.40	8.097		
12,800.00	7,219.06	10,001.73	6,928.93	193.09	106.15	-82.91	-3,489.63	-5,822.57	2,353.15	2,056.37	296.79	7.929		
12,900.00	7,218.54	10,101.72	6,928.51	196.36	109.31	-82.92	-3,491.95	-5,922.52	2,354.87	2,051.68	303.19	7.767		
13,000.00	7,218.01	10,201.70	6,928.09	199.64	112.47	-82.93	-3,494.28	-6,022.48	2,356.58	2,046.98	309.60	7.612		
13,100.00	7,217.48	10,301.69	6,927.68	202.92	115.65	-82.93	-3,496.60	-6,122.44	2,358.29	2,042.27	316.02	7.462		
13,200.00	7,216.95	10,401.67	6,927.26	206.20	118.83	-82.94	-3,498.93	-6,222.39	2,360.01	2,037.55	322.45	7.319		
13,300.00	7,216.42	10,484.32	6,926.91	209.48	121.47	-82.95	-3,500.90	-6,305.02	2,361.84	2,033.46	328.38	7.192		
13,400.00	7,215.89	10,533.65	6,926.71	212.76	123.04	-82.96	-3,503.03	-6,354.29	2,365.44	2,032.24	333.20	7.099		
13,500.00	7,215.36	10,633.54	6,926.29	216.05	126.22	-82.97	-3,508.25	-6,454.05	2,370.03	2,030.39	339.65	6.978		
13,600.00	7,214.84	10,725.53	6,925.91	219.33	129.16	-82.99	-3,513.05	-6,545.92	2,374.63	2,028.81	345.83	6.867		
13,700.00	7,214.31	10,773.71	6,925.71	222.62	130.69	-83.00	-3,516.17	-6,594.00	2,380.56	2,030.12	350.43	6.793		
13,800.00	7,213.78	10,818.21	6,925.52	225.91	132.10	-83.01	-3,520.13	-6,638.32	2,388.80	2,034.07	354.73	6.734		
13,900.00	7,213.25	10,862.51	6,925.33	229.20	133.50	-83.02	-3,525.10	-6,682.34	2,399.34	2,040.53	358.82	6.687		
14,000.00	7,212.72	10,906.58	6,925.15	232.49	134.88	-83.04	-3,531.05	-6,725.99	2,412.16	2,049.46	362.70	6.651		
14,100.00	7,212.19	10,950.35	6,924.97	235.79	136.25	-83.06	-3,537.96	-6,769.22	2,427.25	2,060.87	366.38	6.625		
14,200.00	7,211.66	10,995.83	6,924.78	239.08	137.65	-83.09	-3,546.18	-6,813.95	2,444.57	2,074.62	369.95	6.608		
14,300.00	7,211.13	11,563.05	6,922.41	242.38	155.69	-83.24	-3,599.58	-7,377.15	2,452.78	2,057.68	395.10	6.208		
14,400.00	7,210.61	11,663.04	6,921.99	245.67	158.95	-83.24	-3,599.57	-7,477.15	2,452.17	2,050.56	401.61	6.106		
14,500.00	7,210.08	11,763.04	6,921.57	248.97	162.21	-83.24	-3,599.55	-7,577.14	2,451.56	2,043.43	408.13	6.007		
14,600.00	7,209.55	11,863.04	6,921.16	252.27	165.47	-83.24	-3,599.54	-7,677.14	2,450.96	2,036.30	414.66	5.911		
14,700.00	7,209.02	11,963.04	6,920.74	255.57	168.74	-83.25	-3,599.53	-7,777.14	2,450.35	2,029.16	421.19	5.818		
14,800.00	7,208.49	12,063.04	6,920.32	258.87	172.01	-83.25	-3,599.51	-7,877.13	2,449.74	2,022.03	427.72	5.727		
14,900.00	7,207.96	12,163.04	6,919.91	262.17	175.28	-83.25	-3,599.50	-7,977.13	2,449.14	2,014.89	434.25	5.640		
15,000.00	7,207.43	12,263.03	6,919.49	265.47	178.55	-83.25	-3,599.49	-8,077.13	2,448.53	2,007.74	440.79	5.555		
15,081.89	7,207.00	12,344.92	6,919.15	268.17	181.23	-83.25	-3,599.48	-8,159.02	2,448.03	2,001.89	446.15	5.487 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	67.00	3.28	0.00	-141.51	-4,109.50	-3,267.30	5,250.49					
100.00	100.00	58.00	100.00	3.28	0.07	-141.51	-4,109.50	-3,267.30	5,250.07	5,246.71	3.36	1,563.811		
200.00	200.00	883.21	921.94	3.34	3.75	-141.72	-4,081.24	-3,220.48	5,248.74	5,241.58	7.15	733.651		
300.00	299.98	981.94	1,019.60	3.44	4.25	30.34	-4,073.76	-3,208.07	5,233.49	5,225.79	7.70	679.905		
400.00	399.84	1,080.23	1,116.83	3.59	4.76	30.50	-4,066.30	-3,195.72	5,215.28	5,206.99	8.29	629.051		
500.00	499.45	1,177.96	1,213.50	3.80	5.26	30.72	-4,058.89	-3,183.44	5,194.12	5,185.19	8.93	581.674		
600.00	598.70	1,275.01	1,309.50	4.06	5.76	30.98	-4,051.54	-3,171.25	5,170.04	5,160.43	9.61	538.045		
700.00	697.49	1,371.29	1,404.73	4.38	6.27	31.22	-4,044.23	-3,159.15	5,143.18	5,132.85	10.33	498.016		
800.00	796.13	1,467.35	1,499.75	4.74	6.77	31.26	-4,036.95	-3,147.08	5,115.57	5,104.51	11.06	462.461		
900.00	894.78	1,563.40	1,594.77	5.15	7.27	31.30	-4,029.67	-3,135.01	5,087.97	5,076.15	11.82	430.284		
1,000.00	993.43	1,659.46	1,689.79	5.58	7.77	31.34	-4,022.38	-3,122.94	5,060.37	5,047.76	12.61	401.256		
1,100.00	1,092.07	1,755.52	1,784.80	6.03	8.28	31.38	-4,015.10	-3,110.87	5,032.77	5,019.35	13.42	375.095		
1,200.00	1,190.72	1,851.58	1,879.82	6.50	8.78	31.42	-4,007.82	-3,098.80	5,005.17	4,990.93	14.24	351.506		
1,300.00	1,289.36	1,947.63	1,974.84	6.98	9.29	31.46	-4,000.53	-3,086.73	4,977.58	4,962.50	15.07	330.202		
1,400.00	1,388.01	2,043.69	2,069.86	7.47	9.79	31.50	-3,993.25	-3,074.66	4,949.99	4,934.07	15.92	310.921		
1,500.00	1,486.65	2,139.75	2,164.87	7.97	10.30	31.54	-3,985.96	-3,062.59	4,922.40	4,905.62	16.78	293.426		
1,600.00	1,585.30	2,235.81	2,259.89	8.48	10.81	31.58	-3,978.68	-3,050.52	4,894.81	4,877.17	17.64	277.507		
1,700.00	1,683.94	2,331.86	2,354.91	9.00	11.31	31.62	-3,971.40	-3,038.45	4,867.22	4,848.72	18.51	262.979		
1,800.00	1,782.59	2,427.92	2,449.93	9.52	11.82	31.67	-3,964.11	-3,026.39	4,839.64	4,820.26	19.38	249.684		
1,900.00	1,881.24	2,526.03	2,544.95	10.05	12.34	31.71	-3,956.83	-3,014.32	4,812.06	4,791.79	20.27	237.368		
2,000.00	1,979.88	2,629.97	2,639.96	10.58	12.89	31.75	-3,949.55	-3,002.25	4,784.48	4,763.29	21.19	225.754		
2,100.00	2,078.53	2,716.10	2,734.98	11.11	13.34	31.80	-3,942.26	-2,990.18	4,756.91	4,734.87	22.03	215.882		
2,200.00	2,177.17	2,812.15	2,830.00	11.64	13.85	31.84	-3,934.98	-2,978.11	4,729.33	4,706.41	22.93	206.291		
2,300.00	2,275.82	2,908.21	2,925.02	12.18	14.36	31.89	-3,927.69	-2,966.04	4,701.77	4,677.95	23.82	197.394		
2,400.00	2,374.46	3,004.27	3,020.03	12.72	14.87	31.93	-3,920.41	-2,953.97	4,674.20	4,649.48	24.72	189.121		
2,500.00	2,473.11	3,100.33	3,115.05	13.26	15.38	31.98	-3,913.13	-2,941.90	4,646.63	4,621.02	25.61	181.413		
2,600.00	2,571.76	3,196.38	3,210.07	13.80	15.88	32.03	-3,905.84	-2,929.83	4,619.07	4,592.56	26.51	174.213		
2,700.00	2,670.40	3,292.44	3,305.09	14.35	16.39	32.07	-3,898.56	-2,917.76	4,591.51	4,564.10	27.42	167.476		
2,800.00	2,769.05	3,388.50	3,400.10	14.89	16.90	32.12	-3,891.27	-2,905.69	4,563.96	4,535.64	28.32	161.159		
2,900.00	2,867.69	3,484.56	3,495.12	15.44	17.41	32.17	-3,883.99	-2,893.62	4,536.41	4,507.18	29.22	155.225		
3,000.00	2,966.34	3,580.62	3,590.14	15.99	17.92	32.22	-3,876.71	-2,881.55	4,508.86	4,478.73	30.13	149.641		
3,100.00	3,064.98	3,676.67	3,685.16	16.53	18.43	32.27	-3,869.42	-2,869.48	4,481.31	4,450.27	31.04	144.378		
3,200.00	3,163.63	3,772.73	3,780.18	17.08	18.93	32.32	-3,862.14	-2,857.41	4,453.77	4,421.82	31.95	139.409		
3,300.00	3,262.27	3,868.79	3,875.19	17.63	19.44	32.37	-3,854.86	-2,845.34	4,426.23	4,393.37	32.86	134.711		
3,400.00	3,360.92	3,964.85	3,970.21	18.18	19.95	32.42	-3,847.57	-2,833.27	4,398.69	4,364.92	33.77	130.263		
3,500.00	3,459.57	4,060.90	4,065.23	18.74	20.46	32.47	-3,840.29	-2,821.20	4,371.16	4,336.48	34.68	126.045		
3,600.00	3,558.21	4,156.96	4,160.25	19.29	20.97	32.53	-3,833.00	-2,809.13	4,343.63	4,308.04	35.59	122.041		
3,700.00	3,656.86	4,253.02	4,255.26	19.84	21.48	32.58	-3,825.72	-2,797.06	4,316.10	4,279.60	36.50	118.234		
3,800.00	3,755.50	4,349.08	4,350.28	20.39	21.99	32.64	-3,818.44	-2,784.99	4,288.58	4,251.16	37.42	114.611		
3,900.00	3,854.15	4,445.14	4,445.30	20.95	22.50	32.69	-3,811.15	-2,772.92	4,261.06	4,222.73	38.33	111.159		
4,000.00	3,952.79	4,541.19	4,540.32	21.50	23.00	32.75	-3,803.87	-2,760.86	4,233.54	4,194.29	39.25	107.866		
4,100.00	4,051.44	4,637.25	4,635.33	22.05	23.51	32.80	-3,796.59	-2,748.79	4,206.03	4,165.87	40.16	104.721		
4,200.00	4,150.08	4,733.31	4,730.35	22.61	24.02	32.86	-3,789.30	-2,736.72	4,178.52	4,137.44	41.08	101.716		
4,300.00	4,248.73	4,829.37	4,825.37	23.16	24.53	32.92	-3,782.02	-2,724.65	4,151.02	4,109.02	42.00	98.840		
4,400.00	4,347.38	4,925.42	4,920.39	23.72	25.04	32.98	-3,774.73	-2,712.58	4,123.52	4,080.60	42.91	96.087		
4,500.00	4,446.02	5,021.48	5,015.40	24.27	25.55	33.04	-3,767.45	-2,700.51	4,096.02	4,052.19	43.83	93.447		
4,600.00	4,544.67	5,117.53	5,110.42	24.83	26.06	33.10	-3,760.17	-2,688.44	4,068.53	4,023.71	44.75	90.774		
4,700.00	4,643.31	5,213.60	5,205.44	25.39	26.57	33.16	-3,752.88	-2,676.37	4,041.04	3,995.37	45.67	88.484		
4,800.00	4,741.96	5,309.65	5,300.46	25.94	27.08	33.22	-3,745.60	-2,664.30	4,013.56	3,966.97	46.59	86.148		
4,900.00	4,840.60	5,405.71	5,395.48	26.50	27.59	33.28	-3,738.31	-2,652.23	3,986.08	3,938.57	47.51	83.902		
5,000.00	4,939.25	5,501.77	5,490.49	27.05	28.10	33.35	-3,731.03	-2,640.16	3,958.61	3,910.18	48.43	81.741		
5,100.00	5,037.90	5,602.17	5,585.51	27.61	28.63	33.41	-3,723.75	-2,628.09	3,931.14	3,881.77	49.37	79.626		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,693.89	5,680.53	28.17	29.11	33.48	-3,716.46	-2,616.02	3,903.67	3,853.40	50.27	77.653		
5,300.00	5,235.19	5,789.94	5,775.55	28.72	29.62	33.54	-3,709.18	-2,603.95	3,876.21	3,825.02	51.19	75.719		
5,400.00	5,333.83	5,886.00	5,870.56	29.28	30.13	33.61	-3,701.90	-2,591.88	3,848.76	3,796.64	52.11	73.853		
5,500.00	5,432.48	5,982.06	5,965.58	29.84	30.64	33.68	-3,694.61	-2,579.81	3,821.31	3,768.27	53.04	72.051		
5,600.00	5,531.12	6,078.12	6,060.60	30.40	31.15	33.75	-3,687.33	-2,567.74	3,793.86	3,739.90	53.96	70.310		
5,700.00	5,629.77	6,174.17	6,155.62	30.95	31.66	33.82	-3,680.04	-2,555.67	3,766.42	3,711.54	54.88	68.628		
5,800.00	5,728.41	6,270.23	6,250.63	31.51	32.17	33.89	-3,672.76	-2,543.60	3,738.99	3,683.18	55.81	67.001		
5,900.00	5,827.06	6,366.29	6,345.65	32.07	32.68	33.96	-3,665.48	-2,531.53	3,711.56	3,654.83	56.73	65.426		
6,000.00	5,925.71	6,400.00	6,379.05	32.63	32.85	33.99	-3,662.93	-2,527.79	3,684.99	3,627.51	57.48	64.107		
6,100.00	6,024.35	6,412.65	6,391.63	33.19	32.91	34.01	-3,661.98	-2,526.82	3,660.37	3,602.21	58.16	62.938		
6,200.00	6,123.00	6,425.01	6,403.94	33.74	32.97	34.03	-3,661.05	-2,526.11	3,637.87	3,579.06	58.81	61.858		
6,300.00	6,221.64	6,450.00	6,428.85	34.30	33.08	34.08	-3,659.20	-2,525.42	3,617.39	3,557.92	59.48	60.820		
6,400.00	6,320.29	6,472.60	6,451.38	34.86	33.16	34.13	-3,657.55	-2,525.63	3,599.07	3,538.96	60.11	59.876		
6,500.00	6,418.93	6,500.00	6,478.68	35.42	33.26	34.21	-3,655.57	-2,526.97	3,582.94	3,522.20	60.74	58.992		
6,600.00	6,517.58	6,512.64	6,491.24	35.98	33.30	34.25	-3,654.66	-2,527.98	3,568.92	3,507.64	61.28	58.240		
6,700.00	6,616.23	6,525.01	6,503.52	36.54	33.34	34.29	-3,653.79	-2,529.22	3,557.19	3,495.40	61.79	57.569		
6,800.00	6,714.51	6,550.00	6,528.24	37.10	33.41	-1.17	-3,652.04	-2,532.44	3,543.98	3,481.69	62.29	56.894		
6,900.00	6,810.42	6,572.40	6,550.27	37.66	33.46	-21.28	-3,650.50	-2,536.15	3,522.83	3,460.17	62.66	56.223		
7,000.00	6,901.58	6,600.00	6,577.23	38.21	33.53	-31.59	-3,648.64	-2,541.78	3,493.97	3,431.03	62.94	55.515		
7,100.00	6,985.76	6,611.37	6,588.25	38.76	33.55	-38.73	-3,647.89	-2,544.45	3,457.85	3,394.81	63.04	54.852		
7,200.00	7,060.88	6,625.01	6,601.42	39.32	33.58	-44.85	-3,647.00	-2,547.90	3,415.35	3,352.26	63.08	54.139		
7,300.00	7,125.09	6,650.00	6,625.34	39.90	33.63	-50.91	-3,645.40	-2,554.96	3,367.29	3,304.11	63.17	53.302		
7,400.00	7,176.81	6,650.00	6,625.34	40.55	33.63	-56.96	-3,645.40	-2,554.96	3,314.91	3,251.73	63.18	52.466		
7,500.00	7,214.77	6,678.62	6,652.37	41.30	33.67	-63.65	-3,643.62	-2,564.18	3,259.05	3,195.58	63.47	51.350		
7,600.00	7,238.02	6,700.00	6,672.28	42.22	33.70	-70.52	-3,642.33	-2,571.87	3,201.52	3,137.61	63.92	50.089		
7,700.00	7,246.01	6,700.00	6,672.28	43.32	33.70	-77.00	-3,642.33	-2,571.87	3,143.53	3,079.01	64.53	48.715		
7,800.00	7,245.50	6,711.25	6,682.65	44.65	33.71	-77.54	-3,641.67	-2,576.18	3,086.92	3,021.42	65.50	47.130		
7,900.00	7,244.97	6,725.01	6,695.23	46.21	33.73	-77.81	-3,640.87	-2,581.70	3,032.42	2,965.63	66.79	45.399		
8,000.00	7,244.44	6,725.01	6,695.23	47.99	33.73	-77.81	-3,640.87	-2,581.70	2,980.17	2,911.80	68.37	43.591		
8,100.00	7,243.91	6,750.00	6,717.75	49.96	33.75	-78.30	-3,639.45	-2,592.42	2,930.20	2,859.88	70.32	41.668		
8,200.00	7,243.39	6,750.00	6,717.75	52.10	33.75	-78.30	-3,639.45	-2,592.42	2,882.66	2,810.15	72.51	39.753		
8,300.00	7,242.86	6,770.11	6,735.57	54.38	33.77	-78.68	-3,638.36	-2,601.68	2,837.62	2,762.60	75.03	37.822		
8,400.00	7,242.33	6,800.00	6,761.49	56.78	33.79	-79.25	-3,636.79	-2,616.48	2,795.34	2,717.55	77.79	35.935		
8,500.00	7,241.80	6,800.00	6,761.49	59.28	33.79	-79.25	-3,636.79	-2,616.48	2,755.52	2,674.75	80.76	34.119		
8,600.00	7,241.27	6,825.01	6,782.63	61.88	33.81	-79.72	-3,635.54	-2,629.79	2,718.61	2,634.66	83.94	32.386		
8,700.00	7,240.74	6,838.66	6,793.94	64.54	33.81	-79.96	-3,634.88	-2,637.40	2,684.51	2,597.20	87.31	30.748		
8,800.00	7,240.21	6,850.00	6,803.21	67.27	33.82	-80.17	-3,634.35	-2,643.90	2,653.38	2,562.56	90.82	29.215		
8,900.00	7,239.68	6,883.78	6,830.13	70.06	33.83	-80.77	-3,632.83	-2,664.25	2,625.08	2,530.65	94.43	27.798		
9,000.00	7,239.16	6,909.90	6,850.18	72.89	33.84	-81.21	-3,631.74	-2,680.94	2,599.78	2,501.64	98.15	26.488		
9,100.00	7,238.63	6,938.77	6,871.54	75.77	33.85	-81.69	-3,630.61	-2,700.34	2,577.43	2,475.50	101.93	25.287		
9,200.00	7,238.10	6,970.74	6,894.13	78.69	33.86	-82.20	-3,629.47	-2,722.92	2,557.97	2,452.22	105.75	24.188		
9,300.00	7,237.57	7,006.12	6,917.79	81.64	33.88	-82.73	-3,628.34	-2,749.20	2,541.34	2,431.75	109.59	23.189		
9,400.00	7,237.04	7,045.24	6,942.21	84.62	33.91	-83.29	-3,627.24	-2,779.73	2,527.45	2,414.01	113.45	22.279		
9,500.00	7,236.51	7,088.39	6,966.92	87.63	33.97	-83.85	-3,626.24	-2,815.08	2,516.16	2,398.86	117.30	21.451		
9,600.00	7,235.98	7,135.75	6,991.22	90.66	34.05	-84.40	-3,625.39	-2,855.71	2,507.29	2,386.15	121.15	20.696		
9,700.00	7,235.45	7,187.38	7,014.21	93.72	34.19	-84.93	-3,624.76	-2,901.92	2,500.67	2,375.66	125.00	20.005		
9,800.00	7,234.93	7,243.10	7,034.75	96.79	34.41	-85.41	-3,624.44	-2,953.70	2,496.07	2,367.20	128.87	19.369		
9,900.00	7,234.40	7,300.00	7,050.98	99.88	34.72	-85.79	-3,624.51	-3,008.21	2,493.30	2,360.52	132.78	18.778		
10,000.00	7,233.87	7,364.75	7,063.47	102.98	35.20	-86.08	-3,625.06	-3,071.72	2,492.17	2,355.42	136.75	18.225		
10,024.29	7,233.74	7,380.21	7,065.49	103.74	35.33	-86.13	-3,625.26	-3,087.03	2,492.12	2,354.41	137.72	18.096 CC		
10,100.00	7,233.34	7,428.89	7,069.43	106.10	35.78	-86.23	-3,626.09	-3,135.54	2,492.54	2,351.78	140.76	17.708		
10,200.00	7,232.81	7,511.90	7,069.70	109.23	36.69	-86.24	-3,627.99	-3,218.52	2,494.15	2,349.19	144.96	17.206		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.28	7,611.89	7,069.09	112.38	38.05	-86.25	-3,630.35	-3,318.48	2,495.92	2,346.42	149.51	16.694		
10,400.00	7,231.75	7,711.87	7,068.49	115.53	39.67	-86.25	-3,632.71	-3,418.43	2,497.70	2,343.40	154.29	16.188		
10,500.00	7,231.23	7,811.86	7,067.89	118.70	41.49	-86.25	-3,635.06	-3,518.39	2,499.47	2,340.17	159.30	15.691		
10,600.00	7,230.70	7,911.84	7,067.29	121.87	43.50	-86.25	-3,637.42	-3,618.34	2,501.24	2,336.76	164.48	15.207		
10,700.00	7,230.17	8,011.82	7,066.69	125.05	45.67	-86.25	-3,639.78	-3,718.30	2,503.02	2,333.18	169.83	14.738		
10,800.00	7,229.64	8,111.81	7,066.08	128.25	47.96	-86.25	-3,642.13	-3,818.25	2,504.79	2,329.47	175.32	14.287		
10,900.00	7,229.11	8,211.79	7,065.48	131.44	50.37	-86.25	-3,644.49	-3,918.20	2,506.56	2,325.63	180.93	13.853		
11,000.00	7,228.58	8,311.78	7,064.88	134.65	52.88	-86.25	-3,646.84	-4,018.16	2,508.34	2,321.68	186.65	13.438		
11,100.00	7,228.05	8,411.76	7,064.28	137.86	55.48	-86.25	-3,649.20	-4,118.11	2,510.11	2,317.65	192.46	13.042		
11,200.00	7,227.52	8,511.75	7,063.68	141.08	58.15	-86.25	-3,651.56	-4,218.07	2,511.88	2,313.53	198.35	12.664		
11,300.00	7,227.00	8,611.73	7,063.07	144.30	60.88	-86.25	-3,653.91	-4,318.02	2,513.66	2,309.35	204.31	12.303		
11,400.00	7,226.47	8,711.71	7,062.47	147.52	63.67	-86.26	-3,656.27	-4,417.98	2,515.43	2,305.10	210.33	11.959		
11,500.00	7,225.94	8,811.70	7,061.87	150.76	66.51	-86.26	-3,658.63	-4,517.93	2,517.20	2,300.80	216.41	11.632		
11,600.00	7,225.41	8,911.68	7,061.27	153.99	69.40	-86.26	-3,660.98	-4,617.89	2,518.98	2,296.45	222.53	11.320		
11,700.00	7,224.88	9,011.67	7,060.67	157.23	72.32	-86.26	-3,663.34	-4,717.84	2,520.75	2,292.06	228.69	11.023		
11,800.00	7,224.35	9,111.65	7,060.06	160.48	75.27	-86.26	-3,665.69	-4,817.80	2,522.52	2,287.64	234.89	10.739		
11,900.00	7,223.82	9,211.64	7,059.46	163.72	78.25	-86.26	-3,668.05	-4,917.75	2,524.30	2,283.18	241.12	10.469		
12,000.00	7,223.29	9,311.62	7,058.86	166.98	81.26	-86.26	-3,670.41	-5,017.71	2,526.07	2,278.69	247.38	10.211		
12,100.00	7,222.77	9,411.60	7,058.26	170.23	84.30	-86.26	-3,672.76	-5,117.66	2,527.84	2,274.18	253.67	9.965		
12,200.00	7,222.24	9,511.59	7,057.66	173.49	87.35	-86.26	-3,675.12	-5,217.62	2,529.62	2,269.64	259.98	9.730		
12,300.00	7,221.71	9,611.57	7,057.05	176.75	90.42	-86.26	-3,677.48	-5,317.57	2,531.39	2,265.08	266.31	9.505		
12,400.00	7,221.18	9,711.56	7,056.45	180.01	93.51	-86.27	-3,679.83	-5,417.52	2,533.17	2,260.50	272.67	9.290		
12,500.00	7,220.65	9,811.54	7,055.85	183.28	96.62	-86.27	-3,682.19	-5,517.48	2,534.94	2,255.90	279.04	9.085		
12,600.00	7,220.12	9,911.53	7,055.25	186.54	99.74	-86.27	-3,684.54	-5,617.43	2,536.71	2,251.29	285.42	8.888		
12,700.00	7,219.59	10,011.51	7,054.65	189.81	102.87	-86.27	-3,686.90	-5,717.39	2,538.49	2,246.66	291.83	8.699		
12,800.00	7,219.06	10,111.49	7,054.04	193.09	106.02	-86.27	-3,689.26	-5,817.34	2,540.26	2,242.02	298.24	8.518		
12,900.00	7,218.54	10,211.48	7,053.44	196.36	109.18	-86.27	-3,691.61	-5,917.30	2,542.03	2,237.37	304.67	8.344		
13,000.00	7,218.01	10,311.46	7,052.84	199.64	112.34	-86.27	-3,693.97	-6,017.25	2,543.81	2,232.70	311.11	8.177		
13,100.00	7,217.48	10,411.45	7,052.24	202.92	115.52	-86.27	-3,696.33	-6,117.21	2,545.58	2,228.02	317.56	8.016		
13,200.00	7,216.95	10,511.43	7,051.64	206.20	118.70	-86.27	-3,698.68	-6,217.16	2,547.35	2,223.34	324.01	7.862		
13,300.00	7,216.42	10,611.42	7,051.03	209.48	121.89	-86.27	-3,701.04	-6,317.12	2,549.13	2,218.64	330.48	7.713		
13,400.00	7,215.89	10,711.40	7,050.43	212.76	125.09	-86.27	-3,703.39	-6,417.07	2,550.90	2,213.94	336.96	7.570		
13,500.00	7,215.36	10,811.38	7,049.83	216.05	128.29	-86.28	-3,705.75	-6,517.03	2,552.67	2,209.23	343.44	7.433		
13,600.00	7,214.84	10,911.37	7,049.23	219.33	131.50	-86.28	-3,708.11	-6,616.98	2,554.45	2,204.51	349.93	7.300		
13,700.00	7,214.31	11,011.35	7,048.63	222.62	134.72	-86.28	-3,710.46	-6,716.94	2,556.22	2,199.79	356.43	7.172		
13,800.00	7,213.78	11,111.34	7,048.02	225.91	137.94	-86.28	-3,712.82	-6,816.89	2,557.99	2,195.06	362.94	7.048		
13,900.00	7,213.25	11,211.32	7,047.42	229.20	141.16	-86.28	-3,715.18	-6,916.85	2,559.77	2,190.32	369.45	6.929		
14,000.00	7,212.72	11,311.30	7,046.82	232.49	144.40	-86.28	-3,717.53	-7,016.80	2,561.54	2,185.58	375.96	6.813		
14,100.00	7,212.19	11,411.29	7,046.22	235.79	147.63	-86.28	-3,719.89	-7,116.75	2,563.31	2,180.83	382.49	6.702		
14,200.00	7,211.66	11,511.27	7,045.61	239.08	150.87	-86.28	-3,722.24	-7,216.71	2,565.09	2,176.08	389.01	6.594		
14,300.00	7,211.13	11,611.26	7,045.01	242.38	154.11	-86.28	-3,724.60	-7,316.66	2,566.86	2,171.32	395.54	6.489		
14,400.00	7,210.61	11,711.24	7,044.41	245.67	157.36	-86.28	-3,726.96	-7,416.62	2,568.63	2,166.56	402.08	6.388		
14,500.00	7,210.08	11,811.23	7,043.81	248.97	160.61	-86.29	-3,729.31	-7,516.57	2,570.41	2,161.79	408.62	6.290		
14,600.00	7,209.55	11,911.21	7,043.21	252.27	163.86	-86.29	-3,731.67	-7,616.53	2,572.18	2,157.02	415.16	6.196		
14,700.00	7,209.02	12,011.19	7,042.60	255.57	167.11	-86.29	-3,734.03	-7,716.48	2,573.95	2,152.25	421.71	6.104		
14,800.00	7,208.49	12,111.18	7,042.00	258.87	170.37	-86.29	-3,736.38	-7,816.44	2,575.73	2,147.47	428.26	6.014		
14,900.00	7,207.96	12,211.16	7,041.40	262.17	173.63	-86.29	-3,738.74	-7,916.39	2,577.50	2,142.69	434.81	5.928		
15,000.00	7,207.43	12,311.15	7,040.80	265.47	176.90	-86.29	-3,741.10	-8,016.35	2,579.27	2,137.91	441.37	5.844		
15,081.89	7,207.00	12,393.02	7,040.31	268.17	179.57	-86.29	-3,743.02	-8,098.20	2,580.73	2,133.99	446.74	5.777 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,809.55	7,242.40	3.28	248.35	0.55	2,263.64	21.76	7,587.95					
100.00	100.00	15,809.30	7,242.40	3.28	248.34	0.54	2,263.64	21.52	7,492.56	7,371.55	121.01	61.916		
200.00	200.00	15,809.06	7,242.40	3.34	248.34	0.54	2,263.64	21.27	7,397.29	7,275.82	121.48	60.894		
300.00	299.98	15,808.57	7,242.41	3.44	248.32	173.21	2,263.64	20.79	7,302.71	7,180.72	121.99	59.862		
400.00	399.84	15,807.61	7,242.41	3.59	248.29	173.77	2,263.64	19.82	7,209.48	7,086.89	122.59	58.812		
500.00	499.45	15,806.16	7,242.41	3.80	248.25	174.23	2,263.64	18.37	7,117.77	6,994.50	123.27	57.742		
600.00	598.70	15,804.24	7,242.42	4.06	248.20	174.59	2,263.65	16.45	7,027.74	6,903.70	124.05	56.653		
700.00	697.49	15,801.85	7,242.42	4.38	248.13	174.80	2,263.65	14.06	6,939.53	6,814.60	124.93	55.549		
800.00	796.13	15,800.72	7,242.43	4.74	248.10	174.76	2,263.66	11.56	6,852.06	6,726.16	125.90	54.423		
900.00	894.78	15,803.22	7,242.43	5.15	248.17	174.72	2,263.66	9.05	6,764.95	6,637.97	126.98	53.277		
1,000.00	993.43	15,805.73	7,242.44	5.58	248.24	174.68	2,263.66	6.54	6,678.19	6,550.09	128.10	52.131		
1,100.00	1,092.07	15,808.24	7,242.45	6.03	248.31	174.63	2,263.67	4.04	6,591.81	6,462.53	129.28	50.987		
1,200.00	1,190.72	15,810.74	7,242.45	6.50	248.38	174.59	2,263.67	1.53	6,505.82	6,375.30	130.52	49.846		
1,300.00	1,289.36	15,813.25	7,242.46	6.98	248.45	174.55	2,263.68	-0.97	6,420.23	6,288.42	131.81	48.707		
1,400.00	1,388.01	15,815.76	7,242.46	7.47	248.52	174.50	2,263.68	-3.48	6,335.06	6,201.89	133.17	47.572		
1,500.00	1,486.65	15,818.26	7,242.47	7.97	248.60	174.46	2,263.69	-5.99	6,250.34	6,115.75	134.59	46.441		
1,600.00	1,585.30	15,820.77	7,242.48	8.48	248.67	174.42	2,263.69	-8.49	6,166.06	6,030.00	136.07	45.316		
1,700.00	1,683.94	15,823.27	7,242.48	9.00	248.74	174.38	2,263.70	-11.00	6,082.27	5,944.65	137.61	44.198		
1,800.00	1,782.59	15,825.78	7,242.49	9.52	248.81	174.33	2,263.70	-13.51	5,998.97	5,859.74	139.23	43.087		
1,900.00	1,881.24	15,828.29	7,242.50	10.05	248.88	174.29	2,263.71	-16.01	5,916.18	5,775.27	140.91	41.985		
2,000.00	1,979.88	15,830.79	7,242.50	10.58	248.95	174.25	2,263.71	-18.52	5,833.94	5,691.27	142.66	40.893		
2,100.00	2,078.53	15,833.30	7,242.51	11.11	249.02	174.20	2,263.71	-21.02	5,752.25	5,607.76	144.49	39.811		
2,200.00	2,177.17	15,835.81	7,242.51	11.64	249.09	174.16	2,263.72	-23.53	5,671.15	5,524.77	146.39	38.741		
2,300.00	2,275.82	15,838.31	7,242.52	12.18	249.16	174.12	2,263.72	-26.04	5,590.67	5,442.31	148.36	37.684		
2,400.00	2,374.46	15,840.82	7,242.53	12.72	249.23	174.08	2,263.73	-28.54	5,510.82	5,360.42	150.40	36.641		
2,500.00	2,473.11	15,843.32	7,242.53	13.26	249.30	174.03	2,263.73	-31.05	5,431.63	5,279.11	152.52	35.613		
2,600.00	2,571.76	15,845.83	7,242.54	13.80	249.38	173.99	2,263.74	-33.56	5,353.15	5,198.43	154.71	34.600		
2,700.00	2,670.40	15,848.34	7,242.54	14.35	249.45	173.95	2,263.74	-36.06	5,275.39	5,118.40	156.99	33.604		
2,800.00	2,769.05	15,850.84	7,242.55	14.89	249.52	173.90	2,263.75	-38.57	5,198.38	5,039.05	159.33	32.626		
2,900.00	2,867.69	15,853.35	7,242.56	15.44	249.59	173.86	2,263.75	-41.07	5,122.18	4,960.42	161.76	31.666		
3,000.00	2,966.34	15,855.86	7,242.56	15.99	249.66	173.82	2,263.75	-43.58	5,046.80	4,882.54	164.26	30.724		
3,100.00	3,064.98	15,858.36	7,242.57	16.53	249.73	173.77	2,263.76	-46.09	4,972.28	4,805.44	166.84	29.803		
3,200.00	3,163.63	15,860.87	7,242.58	17.08	249.80	173.73	2,263.76	-48.59	4,898.68	4,729.18	169.50	28.901		
3,300.00	3,262.27	15,863.38	7,242.58	17.63	249.87	173.69	2,263.77	-51.10	4,826.02	4,653.79	172.23	28.020		
3,400.00	3,360.92	15,865.88	7,242.59	18.18	249.94	173.65	2,263.77	-53.61	4,754.36	4,579.31	175.05	27.161		
3,500.00	3,459.57	15,868.39	7,242.59	18.74	250.01	173.60	2,263.78	-56.11	4,683.73	4,505.80	177.93	26.323		
3,600.00	3,558.21	15,870.89	7,242.60	19.29	250.08	173.56	2,263.78	-58.62	4,614.19	4,433.29	180.90	25.507		
3,700.00	3,656.86	15,873.40	7,242.61	19.84	250.16	173.52	2,263.79	-61.13	4,545.78	4,361.84	183.94	24.714		
3,800.00	3,755.50	15,875.91	7,242.61	20.39	250.23	173.47	2,263.79	-63.63	4,478.56	4,291.51	187.05	23.943		
3,900.00	3,854.15	15,878.41	7,242.62	20.95	250.30	173.43	2,263.80	-66.14	4,412.58	4,222.35	190.23	23.196		
4,000.00	3,952.79	15,880.92	7,242.62	21.50	250.37	173.39	2,263.80	-68.64	4,347.90	4,154.41	193.48	22.472		
4,100.00	4,051.44	15,883.43	7,242.63	22.05	250.44	173.34	2,263.80	-71.15	4,284.57	4,087.77	196.80	21.771		
4,200.00	4,150.08	15,885.93	7,242.64	22.61	250.51	173.30	2,263.81	-73.66	4,222.66	4,022.48	200.18	21.094		
4,300.00	4,248.73	15,888.44	7,242.64	23.16	250.58	173.26	2,263.81	-76.16	4,162.23	3,958.62	203.62	20.441		
4,400.00	4,347.38	15,909.12	7,242.65	23.72	251.17	173.22	2,263.82	-78.67	4,103.35	3,895.86	207.49	19.776		
4,500.00	4,446.02	15,906.61	7,242.65	24.27	251.09	173.17	2,263.82	-81.18	4,046.08	3,835.16	210.93	19.182		
4,600.00	4,544.67	15,904.11	7,242.66	24.83	251.02	173.13	2,263.83	-83.68	3,990.50	3,776.10	214.40	18.612		
4,700.00	4,643.31	15,901.60	7,242.67	25.39	250.95	173.09	2,263.83	-86.19	3,936.66	3,718.76	217.91	18.066		
4,800.00	4,741.96	15,900.97	7,242.67	25.94	250.94	173.04	2,263.84	-88.69	3,884.66	3,663.18	221.48	17.540		
4,900.00	4,840.60	15,903.48	7,242.68	26.50	251.01	173.00	2,263.84	-91.20	3,834.56	3,609.42	225.13	17.032		
5,000.00	4,939.25	15,905.98	7,242.69	27.05	251.08	172.96	2,263.84	-93.71	3,786.43	3,557.63	228.80	16.549		
5,100.00	5,037.90	15,908.49	7,242.69	27.61	251.15	172.92	2,263.85	-96.21	3,740.35	3,507.90	232.46	16.090		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	15,910.99	7,242.70	28.17	251.22	172.87	2,263.85	-98.72	3,696.41	3,460.30	236.11	15.656		
5,300.00	5,235.19	15,913.50	7,242.70	28.72	251.29	172.83	2,263.86	-101.23	3,654.67	3,414.95	239.73	15.245		
5,400.00	5,333.83	15,916.01	7,242.71	29.28	251.36	172.79	2,263.86	-103.73	3,615.22	3,371.91	243.31	14.859		
5,500.00	5,432.48	15,918.51	7,242.72	29.84	251.43	172.74	2,263.87	-106.24	3,578.12	3,331.29	246.84	14.496		
5,600.00	5,531.12	15,921.02	7,242.72	30.40	251.50	172.70	2,263.87	-108.74	3,543.46	3,293.16	250.30	14.157		
5,700.00	5,629.77	15,923.53	7,242.73	30.95	251.57	172.66	2,263.88	-111.25	3,511.30	3,257.63	253.68	13.842		
5,800.00	5,728.41	15,926.03	7,242.73	31.51	251.64	172.61	2,263.88	-113.76	3,481.72	3,224.76	256.96	13.550		
5,900.00	5,827.06	15,928.54	7,242.74	32.07	251.71	172.57	2,263.89	-116.26	3,454.78	3,194.65	260.13	13.281		
6,000.00	5,925.71	15,931.04	7,242.75	32.63	251.79	172.53	2,263.89	-118.77	3,430.54	3,167.36	263.18	13.035		
6,100.00	6,024.35	15,933.55	7,242.75	33.19	251.86	172.49	2,263.89	-121.28	3,409.06	3,142.98	266.08	12.812		
6,200.00	6,123.00	15,936.06	7,242.76	33.74	251.93	172.44	2,263.90	-123.78	3,390.39	3,121.57	268.83	12.612		
6,300.00	6,221.64	15,938.56	7,242.76	34.30	252.00	172.40	2,263.90	-126.29	3,374.58	3,103.18	271.40	12.434		
6,400.00	6,320.29	15,941.07	7,242.77	34.86	252.07	172.36	2,263.91	-128.79	3,361.68	3,087.88	273.80	12.278		
6,500.00	6,418.93	15,943.58	7,242.78	35.42	252.14	172.31	2,263.91	-131.30	3,351.70	3,075.70	276.00	12.144		
6,600.00	6,517.58	15,946.08	7,242.78	35.98	252.21	172.27	2,263.92	-133.81	3,344.69	3,066.68	278.00	12.031		
6,700.00	6,616.23	15,948.59	7,242.79	36.54	252.28	172.23	2,263.92	-136.31	3,340.65	3,060.86	279.79	11.940		
6,782.13	6,696.98	15,955.04	7,242.81	37.00	252.46	142.01	2,263.93	-142.76	3,339.61	3,058.38	281.23	11.875 CC		
6,800.00	6,714.51	15,956.50	7,242.81	37.10	252.51	137.36	2,263.94	-144.22	3,339.65	3,058.13	281.52	11.863		
6,900.00	6,810.42	15,979.67	7,242.87	37.66	253.16	118.11	2,263.98	-167.39	3,341.67	3,058.22	283.45	11.789		
7,000.00	6,901.58	16,017.76	7,242.96	38.21	254.24	108.88	2,264.05	-205.48	3,346.34	3,060.76	285.58	11.718		
7,100.00	6,985.76	16,069.82	7,243.09	38.76	255.71	103.19	2,264.14	-257.54	3,353.06	3,065.13	287.93	11.645		
7,200.00	7,060.88	16,134.58	7,243.24	39.32	257.55	99.08	2,264.25	-322.30	3,361.03	3,070.49	290.54	11.568		
7,300.00	7,125.09	16,210.44	7,243.43	39.90	259.69	95.87	2,264.39	-398.16	3,369.36	3,075.90	293.47	11.481		
7,400.00	7,176.81	16,304.54	7,243.64	40.55	262.36	93.38	2,264.54	-483.25	3,377.18	3,080.16	297.02	11.370		
7,500.00	7,214.77	16,387.76	7,243.86	41.30	264.71	91.56	2,264.71	-575.48	3,383.67	3,083.22	300.45	11.262		
7,600.00	7,238.02	16,484.86	7,244.10	42.22	267.46	90.41	2,264.88	-672.58	3,388.20	3,083.67	304.53	11.126		
7,700.00	7,246.01	16,584.43	7,244.34	43.32	270.28	89.97	2,265.06	-772.15	3,390.35	3,081.44	308.92	10.975		
7,800.00	7,245.50	16,684.43	7,244.59	44.65	273.12	89.98	2,265.24	-872.15	3,391.12	3,077.58	313.54	10.816		
7,900.00	7,244.97	16,784.42	7,244.83	46.21	275.95	90.00	2,265.42	-972.14	3,391.88	3,073.53	318.35	10.655		
8,000.00	7,244.44	16,884.41	7,245.08	47.99	278.79	90.01	2,265.60	-1,072.13	3,392.65	3,069.32	323.32	10.493		
8,100.00	7,243.91	16,984.41	7,245.32	49.96	281.62	90.02	2,265.78	-1,172.13	3,393.41	3,064.97	328.44	10.332		
8,200.00	7,243.39	17,084.40	7,245.56	52.10	284.46	90.03	2,265.96	-1,272.12	3,394.18	3,060.50	333.67	10.172		
8,300.00	7,242.86	17,184.40	7,245.81	54.38	287.29	90.05	2,266.14	-1,372.12	3,394.94	3,055.93	339.01	10.014		
8,400.00	7,242.33	17,284.39	7,246.05	56.78	290.13	90.06	2,266.32	-1,472.11	3,395.71	3,051.26	344.44	9.859		
8,500.00	7,241.80	17,384.39	7,246.30	59.28	292.97	90.07	2,266.50	-1,572.10	3,396.47	3,046.52	349.95	9.706		
8,600.00	7,241.27	17,484.38	7,246.54	61.88	295.80	90.09	2,266.68	-1,672.10	3,397.24	3,041.71	355.52	9.556		
8,700.00	7,240.74	17,584.37	7,246.79	64.54	298.64	90.10	2,266.86	-1,772.09	3,398.00	3,036.84	361.16	9.409		
8,800.00	7,240.21	17,684.37	7,247.03	67.27	301.48	90.11	2,267.04	-1,872.08	3,398.77	3,031.93	366.84	9.265		
8,900.00	7,239.68	17,784.36	7,247.28	70.06	304.32	90.13	2,267.22	-1,972.08	3,399.53	3,026.96	372.57	9.125		
9,000.00	7,239.16	17,884.36	7,247.52	72.89	307.16	90.14	2,267.40	-2,072.07	3,400.30	3,021.96	378.34	8.988		
9,100.00	7,238.63	17,984.35	7,247.76	75.77	310.00	90.15	2,267.57	-2,172.06	3,401.06	3,016.92	384.14	8.854		
9,200.00	7,238.10	18,084.34	7,248.01	78.69	312.84	90.16	2,267.75	-2,272.06	3,401.83	3,011.86	389.97	8.723		
9,300.00	7,237.57	18,184.34	7,248.25	81.64	315.68	90.18	2,267.93	-2,372.05	3,402.60	3,006.76	395.83	8.596		
9,400.00	7,237.04	18,284.33	7,248.50	84.62	318.52	90.19	2,268.11	-2,472.05	3,403.36	3,001.64	401.72	8.472		
9,500.00	7,236.51	18,384.33	7,248.74	87.63	321.36	90.20	2,268.29	-2,572.04	3,404.13	2,996.50	407.62	8.351		
9,600.00	7,235.98	18,484.32	7,248.99	90.66	324.20	90.22	2,268.47	-2,672.03	3,404.89	2,991.35	413.55	8.233		
9,700.00	7,235.45	18,584.31	7,249.23	93.72	327.04	90.23	2,268.65	-2,772.03	3,405.66	2,986.17	419.49	8.119		
9,800.00	7,234.93	18,684.31	7,249.47	96.79	329.88	90.24	2,268.83	-2,872.02	3,406.43	2,980.98	425.45	8.007		
9,900.00	7,234.40	18,784.30	7,249.72	99.88	332.73	90.26	2,269.01	-2,972.01	3,407.20	2,975.77	431.43	7.897		
10,000.00	7,233.87	18,884.30	7,249.96	102.98	335.57	90.27	2,269.19	-3,072.01	3,407.96	2,970.55	437.41	7.791		
10,100.00	7,233.34	18,984.29	7,250.21	106.10	338.41	90.28	2,269.37	-3,172.00	3,408.73	2,965.32	443.41	7.687		
10,200.00	7,232.81	19,084.28	7,250.45	109.23	341.25	90.29	2,269.55	-3,271.99	3,409.50	2,960.07	449.42	7.586		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.28	19,118.26	7,250.53	112.38	342.22	90.30	2,269.61	-3,305.97	3,410.91	2,957.65	453.26	7.525 ES		
10,400.00	7,231.75	19,118.26	7,250.53	115.53	342.22	90.30	2,269.61	-3,305.97	3,415.07	2,959.41	455.66	7.495		
10,500.00	7,231.23	19,118.26	7,250.53	118.70	342.22	90.30	2,269.61	-3,305.97	3,422.16	2,964.47	457.69	7.477		
10,600.00	7,230.70	19,118.26	7,250.53	121.87	342.22	90.30	2,269.61	-3,305.97	3,432.14	2,972.80	459.34	7.472 SF		
10,700.00	7,230.17	19,118.26	7,250.53	125.05	342.22	90.30	2,269.61	-3,305.97	3,445.00	2,984.38	460.62	7.479		
10,800.00	7,229.64	19,118.26	7,250.53	128.25	342.22	90.30	2,269.61	-3,305.97	3,460.71	2,999.18	461.52	7.498		
10,900.00	7,229.11	19,118.26	7,250.53	131.44	342.22	90.30	2,269.61	-3,305.97	3,479.21	3,017.15	462.07	7.530		
11,000.00	7,228.58	19,118.26	7,250.53	134.65	342.22	90.30	2,269.61	-3,305.97	3,500.48	3,038.23	462.25	7.573		
11,100.00	7,228.05	19,118.26	7,250.53	137.86	342.22	90.30	2,269.61	-3,305.97	3,524.46	3,062.36	462.10	7.627		
11,200.00	7,227.52	19,118.26	7,250.53	141.08	342.22	90.30	2,269.61	-3,305.97	3,551.09	3,089.47	461.62	7.693		
11,300.00	7,227.00	19,118.26	7,250.53	144.30	342.22	90.30	2,269.61	-3,305.97	3,580.32	3,119.50	460.82	7.769		
11,400.00	7,226.47	19,118.26	7,250.53	147.52	342.22	90.30	2,269.61	-3,305.97	3,612.08	3,152.35	459.73	7.857		
11,500.00	7,225.94	19,118.26	7,250.53	150.76	342.22	90.30	2,269.61	-3,305.97	3,646.31	3,187.95	458.36	7.955		
11,600.00	7,225.41	19,118.26	7,250.53	153.99	342.22	90.30	2,269.61	-3,305.97	3,682.94	3,226.21	456.73	8.064		
11,700.00	7,224.88	19,118.26	7,250.53	157.23	342.22	90.30	2,269.61	-3,305.97	3,721.89	3,267.03	454.85	8.183		
11,800.00	7,224.35	19,118.26	7,250.53	160.48	342.22	90.30	2,269.61	-3,305.97	3,763.10	3,310.34	452.76	8.311		
11,900.00	7,223.82	19,118.26	7,250.53	163.72	342.22	90.30	2,269.61	-3,305.97	3,806.49	3,356.02	450.47	8.450		
12,000.00	7,223.29	19,118.26	7,250.53	166.98	342.22	90.30	2,269.61	-3,305.97	3,851.98	3,404.00	447.99	8.598		
12,100.00	7,222.77	19,118.26	7,250.53	170.23	342.22	90.30	2,269.61	-3,305.97	3,899.52	3,454.17	445.34	8.756		
12,200.00	7,222.24	19,118.26	7,250.53	173.49	342.22	90.30	2,269.61	-3,305.97	3,949.01	3,506.45	442.55	8.923		
12,300.00	7,221.71	19,118.26	7,250.53	176.75	342.22	90.30	2,269.61	-3,305.97	4,000.39	3,560.75	439.63	9.099		
12,400.00	7,221.18	19,118.26	7,250.53	180.01	342.22	90.30	2,269.61	-3,305.97	4,053.58	3,616.98	436.60	9.284		
12,500.00	7,220.65	19,118.26	7,250.53	183.28	342.22	90.30	2,269.61	-3,305.97	4,108.53	3,675.05	433.47	9.478		
12,600.00	7,220.12	19,118.26	7,250.53	186.54	342.22	90.30	2,269.61	-3,305.97	4,165.14	3,734.89	430.26	9.681		
12,700.00	7,219.59	19,118.26	7,250.53	189.81	342.22	90.30	2,269.61	-3,305.97	4,223.37	3,796.39	426.98	9.891		
12,800.00	7,219.06	19,118.26	7,250.53	193.09	342.22	90.30	2,269.61	-3,305.97	4,283.14	3,859.50	423.64	10.110		
12,900.00	7,218.54	19,118.26	7,250.53	196.36	342.22	90.30	2,269.61	-3,305.97	4,344.39	3,924.13	420.26	10.337		
13,000.00	7,218.01	19,118.26	7,250.53	199.64	342.22	90.30	2,269.61	-3,305.97	4,407.06	3,990.22	416.85	10.572		
13,100.00	7,217.48	19,118.26	7,250.53	202.92	342.22	90.30	2,269.61	-3,305.97	4,471.09	4,057.68	413.41	10.815		
13,200.00	7,216.95	19,118.26	7,250.53	206.20	342.22	90.30	2,269.61	-3,305.97	4,536.42	4,126.46	409.96	11.066		
13,300.00	7,216.42	19,118.26	7,250.53	209.48	342.22	90.30	2,269.61	-3,305.97	4,602.99	4,196.49	406.50	11.323		
13,400.00	7,215.89	19,118.26	7,250.53	212.76	342.22	90.30	2,269.61	-3,305.97	4,670.76	4,267.71	403.05	11.589		
13,500.00	7,215.36	19,118.26	7,250.53	216.05	342.22	90.30	2,269.61	-3,305.97	4,739.66	4,340.06	399.60	11.861		
13,600.00	7,214.84	19,118.26	7,250.53	219.33	342.22	90.30	2,269.61	-3,305.97	4,809.66	4,413.49	396.17	12.140		
13,700.00	7,214.31	19,118.26	7,250.53	222.62	342.22	90.30	2,269.61	-3,305.97	4,880.71	4,487.95	392.76	12.427		
13,800.00	7,213.78	19,118.26	7,250.53	225.91	342.22	90.30	2,269.61	-3,305.97	4,952.75	4,563.38	389.37	12.720		
13,900.00	7,213.25	19,118.26	7,250.53	229.20	342.22	90.30	2,269.61	-3,305.97	5,025.75	4,639.74	386.01	13.020		
14,000.00	7,212.72	19,118.26	7,250.53	232.49	342.22	90.30	2,269.61	-3,305.97	5,099.67	4,716.98	382.69	13.326		
14,100.00	7,212.19	19,118.26	7,250.53	235.79	342.22	90.30	2,269.61	-3,305.97	5,174.46	4,795.06	379.40	13.638		
14,200.00	7,211.66	19,118.26	7,250.53	239.08	342.22	90.30	2,269.61	-3,305.97	5,250.09	4,873.94	376.15	13.957		
14,300.00	7,211.13	19,118.26	7,250.53	242.38	342.22	90.30	2,269.61	-3,305.97	5,326.53	4,953.59	372.94	14.282		
14,400.00	7,210.61	19,118.26	7,250.53	245.67	342.22	90.30	2,269.61	-3,305.97	5,403.74	5,033.96	369.78	14.613		
14,500.00	7,210.08	19,118.26	7,250.53	248.97	342.22	90.30	2,269.61	-3,305.97	5,481.68	5,115.02	366.66	14.950		
14,600.00	7,209.55	19,118.26	7,250.53	252.27	342.22	90.30	2,269.61	-3,305.97	5,560.33	5,196.75	363.58	15.293		
14,700.00	7,209.02	19,118.26	7,250.53	255.57	342.22	90.30	2,269.61	-3,305.97	5,639.65	5,279.10	360.55	15.642		
14,800.00	7,208.49	19,118.26	7,250.53	258.87	342.22	90.30	2,269.61	-3,305.97	5,719.63	5,362.05	357.57	15.996		
14,900.00	7,207.96	19,118.26	7,250.53	262.17	342.22	90.30	2,269.61	-3,305.97	5,800.22	5,445.58	354.64	16.355		
15,000.00	7,207.43	19,118.26	7,250.53	265.47	342.22	90.30	2,269.61	-3,305.97	5,881.41	5,529.65	351.76	16.720		
15,081.89	7,207.00	19,118.26	7,250.53	268.17	342.22	90.30	2,269.61	-3,305.97	5,948.33	5,598.89	349.44	17.023		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,717.66	7,134.45	3.28	248.07	-0.11	2,103.35	-4.12	7,438.05					
100.00	100.00	15,717.91	7,134.45	3.28	248.08	-0.12	2,103.35	-4.37	7,342.18	7,223.25	118.94	61.732		
200.00	200.00	15,718.15	7,134.46	3.34	248.08	-0.13	2,103.35	-4.61	7,246.43	7,127.05	119.38	60.703		
300.00	299.98	15,718.66	7,134.46	3.44	248.10	172.65	2,103.34	-5.12	7,151.32	7,031.45	119.87	59.660		
400.00	399.84	15,719.69	7,134.46	3.59	248.13	173.29	2,103.33	-6.15	7,057.50	6,937.05	120.45	58.592		
500.00	499.45	15,721.24	7,134.46	3.80	248.17	173.80	2,103.31	-7.70	6,965.12	6,843.98	121.14	57.497		
600.00	598.70	15,723.31	7,134.47	4.06	248.23	174.21	2,103.29	-9.77	6,874.37	6,752.44	121.93	56.378		
700.00	697.49	15,725.88	7,134.47	4.38	248.30	174.45	2,103.27	-12.34	6,785.36	6,662.52	122.84	55.238		
800.00	796.13	15,728.58	7,134.48	4.74	248.38	174.40	2,103.24	-15.04	6,697.08	6,573.24	123.83	54.082		
900.00	894.78	15,731.28	7,134.49	5.15	248.45	174.35	2,103.21	-17.74	6,609.13	6,484.25	124.88	52.926		
1,000.00	993.43	15,733.98	7,134.49	5.58	248.53	174.30	2,103.18	-20.44	6,521.52	6,395.55	125.97	51.770		
1,100.00	1,092.07	15,736.68	7,134.50	6.03	248.61	174.25	2,103.16	-23.14	6,434.28	6,307.16	127.12	50.616		
1,200.00	1,190.72	15,739.38	7,134.51	6.50	248.68	174.20	2,103.13	-25.84	6,347.41	6,219.08	128.33	49.463		
1,300.00	1,289.36	15,742.09	7,134.51	6.98	248.76	174.15	2,103.10	-28.54	6,260.93	6,131.33	129.59	48.312		
1,400.00	1,388.01	15,744.79	7,134.52	7.47	248.83	174.10	2,103.07	-31.25	6,174.86	6,043.94	130.92	47.165		
1,500.00	1,486.65	15,747.49	7,134.53	7.97	248.91	174.06	2,103.05	-33.95	6,089.21	5,956.90	132.31	46.022		
1,600.00	1,585.30	15,750.19	7,134.53	8.48	248.99	174.01	2,103.02	-36.65	6,004.00	5,870.24	133.77	44.884		
1,700.00	1,683.94	15,752.89	7,134.54	9.00	249.06	173.96	2,102.99	-39.35	5,919.26	5,783.97	135.29	43.752		
1,800.00	1,782.59	15,755.60	7,134.55	9.52	249.14	173.91	2,102.96	-42.05	5,835.00	5,698.11	136.89	42.626		
1,900.00	1,881.24	15,758.30	7,134.55	10.05	249.22	173.86	2,102.93	-44.75	5,751.24	5,612.69	138.55	41.509		
2,000.00	1,979.88	15,761.00	7,134.56	10.58	249.29	173.81	2,102.91	-47.46	5,668.01	5,527.72	140.29	40.401		
2,100.00	2,078.53	15,763.70	7,134.57	11.11	249.37	173.76	2,102.88	-50.16	5,585.32	5,443.22	142.11	39.304		
2,200.00	2,177.17	15,766.40	7,134.57	11.64	249.45	173.71	2,102.85	-52.86	5,503.21	5,359.22	144.00	38.218		
2,300.00	2,275.82	15,769.10	7,134.58	12.18	249.52	173.66	2,102.82	-55.56	5,421.70	5,275.74	145.96	37.145		
2,400.00	2,374.46	15,771.81	7,134.59	12.72	249.60	173.62	2,102.80	-58.26	5,340.82	5,192.81	148.01	36.085		
2,500.00	2,473.11	15,774.51	7,134.59	13.26	249.67	173.57	2,102.77	-60.96	5,260.59	5,110.46	150.13	35.040		
2,600.00	2,571.76	15,777.21	7,134.60	13.80	249.75	173.52	2,102.74	-63.67	5,181.05	5,028.71	152.34	34.010		
2,700.00	2,670.40	15,779.91	7,134.61	14.35	249.83	173.47	2,102.71	-66.37	5,102.23	4,947.60	154.63	32.997		
2,800.00	2,769.05	15,782.61	7,134.61	14.89	249.90	173.42	2,102.69	-69.07	5,024.15	4,867.16	157.00	32.002		
2,900.00	2,867.69	15,785.31	7,134.62	15.44	249.98	173.37	2,102.66	-71.77	4,946.87	4,787.42	159.45	31.025		
3,000.00	2,966.34	15,788.02	7,134.63	15.99	250.06	173.32	2,102.63	-74.47	4,870.41	4,708.43	161.99	30.067		
3,100.00	3,064.98	15,809.35	7,134.63	16.53	250.66	173.27	2,102.60	-77.17	4,794.82	4,629.90	164.92	29.073		
3,200.00	3,163.63	15,806.64	7,134.64	17.08	250.58	173.22	2,102.57	-79.88	4,720.14	4,552.59	167.54	28.173		
3,300.00	3,262.27	15,803.94	7,134.65	17.63	250.51	173.18	2,102.55	-82.58	4,646.40	4,476.16	170.24	27.293		
3,400.00	3,360.92	15,801.24	7,134.65	18.18	250.43	173.13	2,102.52	-85.28	4,573.66	4,400.63	173.03	26.433		
3,500.00	3,459.57	15,801.53	7,134.66	18.74	250.44	173.08	2,102.49	-87.98	4,501.97	4,326.02	175.95	25.587		
3,600.00	3,558.21	15,804.23	7,134.67	19.29	250.51	173.03	2,102.46	-90.68	4,431.37	4,252.37	178.99	24.757		
3,700.00	3,656.86	15,806.93	7,134.67	19.84	250.59	172.98	2,102.44	-93.38	4,361.92	4,179.79	182.12	23.951		
3,800.00	3,755.50	15,809.63	7,134.68	20.39	250.67	172.93	2,102.41	-96.08	4,293.67	4,108.34	185.33	23.167		
3,900.00	3,854.15	15,812.33	7,134.69	20.95	250.74	172.88	2,102.38	-98.79	4,226.68	4,038.06	188.62	22.408		
4,000.00	3,952.79	15,815.03	7,134.69	21.50	250.82	172.83	2,102.35	-101.49	4,161.02	3,969.03	191.99	21.673		
4,100.00	4,051.44	15,817.74	7,134.70	22.05	250.90	172.78	2,102.33	-104.19	4,096.75	3,901.31	195.43	20.962		
4,200.00	4,150.08	15,820.44	7,134.71	22.61	250.97	172.74	2,102.30	-106.89	4,033.93	3,834.98	198.95	20.276		
4,300.00	4,248.73	15,823.14	7,134.71	23.16	251.05	172.69	2,102.27	-109.59	3,972.63	3,770.10	202.53	19.615		
4,400.00	4,347.38	15,825.84	7,134.72	23.72	251.12	172.64	2,102.24	-112.29	3,912.92	3,706.75	206.17	18.979		
4,500.00	4,446.02	15,828.54	7,134.72	24.27	251.20	172.59	2,102.21	-115.00	3,854.88	3,645.02	209.87	18.368		
4,600.00	4,544.67	15,831.24	7,134.73	24.83	251.28	172.54	2,102.19	-117.70	3,798.59	3,584.98	213.61	17.783		
4,700.00	4,643.31	15,833.95	7,134.74	25.39	251.35	172.49	2,102.16	-120.40	3,744.12	3,526.73	217.40	17.223		
4,800.00	4,741.96	15,836.65	7,134.74	25.94	251.43	172.44	2,102.13	-123.10	3,691.56	3,470.34	221.21	16.688		
4,900.00	4,840.60	15,839.35	7,134.75	26.50	251.51	172.39	2,102.10	-125.80	3,640.98	3,415.92	225.05	16.178		
5,000.00	4,939.25	15,842.05	7,134.76	27.05	251.58	172.34	2,102.08	-128.50	3,592.47	3,363.57	228.90	15.695		
5,100.00	5,037.90	15,844.75	7,134.76	27.61	251.66	172.30	2,102.05	-131.21	3,546.11	3,313.37	232.74	15.236		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	15,847.45	7,134.77	28.17	251.74	172.25	2,102.02	-133.91	3,502.00	3,265.42	236.58	14.803		
5,300.00	5,235.19	15,850.16	7,134.78	28.72	251.81	172.20	2,101.99	-136.61	3,460.21	3,219.83	240.38	14.395		
5,400.00	5,333.83	15,852.86	7,134.78	29.28	251.89	172.15	2,101.97	-139.31	3,420.83	3,176.70	244.13	14.012		
5,500.00	5,432.48	15,855.56	7,134.79	29.84	251.96	172.10	2,101.94	-142.01	3,383.95	3,136.12	247.83	13.654		
5,600.00	5,531.12	15,858.26	7,134.80	30.40	252.04	172.05	2,101.91	-144.71	3,349.65	3,098.20	251.45	13.321		
5,700.00	5,629.77	15,860.96	7,134.80	30.95	252.12	172.00	2,101.88	-147.42	3,318.00	3,063.03	254.97	13.013		
5,800.00	5,728.41	15,863.67	7,134.81	31.51	252.19	171.95	2,101.85	-150.12	3,289.09	3,030.71	258.38	12.730		
5,900.00	5,827.06	15,866.37	7,134.82	32.07	252.27	171.90	2,101.83	-152.82	3,262.99	3,001.33	261.66	12.470		
6,000.00	5,925.71	15,869.07	7,134.82	32.63	252.35	171.86	2,101.80	-155.52	3,239.76	2,974.97	264.79	12.235		
6,100.00	6,024.35	15,871.77	7,134.83	33.19	252.42	171.81	2,101.77	-158.22	3,219.47	2,951.71	267.76	12.024		
6,200.00	6,123.00	15,874.47	7,134.84	33.74	252.50	171.76	2,101.74	-160.92	3,202.17	2,931.63	270.55	11.836		
6,300.00	6,221.64	15,877.17	7,134.84	34.30	252.57	171.71	2,101.72	-163.62	3,187.92	2,914.78	273.14	11.671		
6,400.00	6,320.29	15,879.88	7,134.85	34.86	252.65	171.66	2,101.69	-166.33	3,176.75	2,901.23	275.52	11.530		
6,500.00	6,418.93	15,882.58	7,134.86	35.42	252.73	171.61	2,101.66	-169.03	3,168.69	2,891.01	277.68	11.411		
6,600.00	6,517.58	15,885.28	7,134.86	35.98	252.80	171.56	2,101.63	-171.73	3,163.78	2,884.17	279.61	11.315		
6,700.00	6,616.23	15,887.98	7,134.87	36.54	252.88	171.51	2,101.61	-174.43	3,162.02	2,880.73	281.29	11.241		
6,705.83	6,621.98	15,888.16	7,134.87	36.57	252.89	168.93	2,101.60	-174.61	3,162.01	2,880.63	281.38	11.237	CC	
6,800.00	6,714.51	15,896.09	7,134.89	37.10	253.11	136.46	2,101.52	-182.54	3,163.39	2,880.50	282.88	11.183		
6,900.00	6,810.42	15,919.45	7,134.95	37.66	253.77	116.97	2,101.28	-205.90	3,167.69	2,883.03	284.66	11.128		
7,000.00	6,901.58	15,957.72	7,135.04	38.21	254.85	107.52	2,100.89	-244.16	3,174.48	2,887.86	286.62	11.076		
7,100.00	6,985.76	16,009.95	7,135.17	38.76	256.33	101.62	2,100.36	-296.39	3,183.06	2,894.26	288.80	11.022		
7,200.00	7,060.88	16,074.86	7,135.33	39.32	258.16	97.32	2,099.69	-361.30	3,192.54	2,901.31	291.24	10.962		
7,300.00	7,125.09	16,150.85	7,135.51	39.90	260.31	93.98	2,098.91	-437.28	3,201.98	2,907.98	294.01	10.891		
7,400.00	7,176.81	16,236.04	7,135.72	40.55	262.72	91.40	2,098.04	-522.47	3,210.44	2,913.27	297.17	10.803		
7,500.00	7,214.77	16,328.35	7,135.95	41.30	265.33	89.54	2,097.09	-614.78	3,217.06	2,916.30	300.76	10.696		
7,600.00	7,238.02	16,425.50	7,136.18	42.22	268.08	88.41	2,096.10	-711.92	3,221.18	2,916.41	304.77	10.569		
7,700.00	7,246.01	16,525.09	7,136.43	43.32	270.90	88.05	2,095.08	-811.51	3,222.40	2,913.25	309.15	10.423		
7,800.00	7,245.50	16,625.09	7,136.67	44.65	273.73	88.07	2,094.05	-911.50	3,221.94	2,908.16	313.78	10.268		
7,900.00	7,244.97	16,725.08	7,136.92	46.21	276.56	88.08	2,093.03	-1,011.49	3,221.47	2,902.88	318.59	10.112		
8,000.00	7,244.44	16,825.08	7,137.16	47.99	279.39	88.09	2,092.00	-1,111.48	3,221.00	2,897.43	323.57	9.954		
8,100.00	7,243.91	16,925.08	7,137.40	49.96	282.22	88.11	2,090.98	-1,211.47	3,220.54	2,891.85	328.69	9.798		
8,200.00	7,243.39	17,025.07	7,137.65	52.10	285.05	88.12	2,089.95	-1,311.46	3,220.07	2,886.14	333.93	9.643		
8,300.00	7,242.86	17,125.07	7,137.89	54.38	287.89	88.13	2,088.93	-1,411.45	3,219.61	2,880.33	339.27	9.490		
8,400.00	7,242.33	17,225.06	7,138.14	56.78	290.72	88.15	2,087.90	-1,511.44	3,219.14	2,874.43	344.71	9.339		
8,500.00	7,241.80	17,325.06	7,138.38	59.28	293.55	88.16	2,086.88	-1,611.43	3,218.68	2,868.46	350.22	9.191		
8,600.00	7,241.27	17,425.06	7,138.63	61.88	296.39	88.17	2,085.85	-1,711.42	3,218.21	2,862.42	355.79	9.045		
8,700.00	7,240.74	17,525.05	7,138.87	64.54	299.22	88.19	2,084.83	-1,811.41	3,217.75	2,856.32	361.43	8.903		
8,800.00	7,240.21	17,625.05	7,139.11	67.27	302.06	88.20	2,083.80	-1,911.40	3,217.28	2,850.17	367.11	8.764		
8,900.00	7,239.68	17,725.04	7,139.36	70.06	304.89	88.21	2,082.78	-2,011.39	3,216.82	2,843.98	372.84	8.628		
9,000.00	7,239.16	17,825.04	7,139.60	72.89	307.73	88.23	2,081.76	-2,111.38	3,216.35	2,837.74	378.61	8.495		
9,100.00	7,238.63	17,925.04	7,139.85	75.77	310.56	88.24	2,080.73	-2,211.37	3,215.89	2,831.48	384.41	8.366		
9,200.00	7,238.10	18,025.03	7,140.09	78.69	313.40	88.25	2,079.71	-2,311.36	3,215.43	2,825.18	390.25	8.239		
9,300.00	7,237.57	18,125.03	7,140.34	81.64	316.24	88.27	2,078.68	-2,411.35	3,214.96	2,818.85	396.11	8.116		
9,400.00	7,237.04	18,225.02	7,140.58	84.62	319.07	88.28	2,077.66	-2,511.34	3,214.50	2,812.50	401.99	7.996		
9,500.00	7,236.51	18,325.02	7,140.82	87.63	321.91	88.30	2,076.63	-2,611.33	3,214.03	2,806.13	407.90	7.879		
9,600.00	7,235.98	18,425.02	7,141.07	90.66	324.75	88.31	2,075.61	-2,711.33	3,213.57	2,799.75	413.83	7.766		
9,700.00	7,235.45	18,525.01	7,141.31	93.72	327.59	88.32	2,074.58	-2,811.32	3,213.11	2,793.34	419.77	7.654		
9,800.00	7,234.93	18,625.01	7,141.56	96.79	330.43	88.34	2,073.56	-2,911.31	3,212.65	2,786.92	425.73	7.546		
9,900.00	7,234.40	18,725.00	7,141.80	99.88	333.27	88.35	2,072.53	-3,011.30	3,212.18	2,780.48	431.70	7.441		
10,000.00	7,233.87	18,825.00	7,142.05	102.98	336.11	88.36	2,071.51	-3,111.29	3,211.72	2,774.03	437.69	7.338		
10,100.00	7,233.34	18,925.00	7,142.29	106.10	338.94	88.38	2,070.48	-3,211.28	3,211.26	2,767.57	443.69	7.238		
10,200.00	7,232.81	19,018.34	7,142.52	109.23	341.60	88.39	2,069.53	-3,304.61	3,210.80	2,761.31	449.49	7.143		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,208.18	7,232.77	19,018.34	7,142.52	109.49	341.60	88.39	2,069.53	-3,304.61	3,210.79	2,761.07	449.72	7.140		
10,300.00	7,232.28	19,018.34	7,142.52	112.38	341.60	88.39	2,069.53	-3,304.61	3,212.11	2,760.00	452.11	7.105 ES		
10,400.00	7,231.75	19,018.34	7,142.52	115.53	341.60	88.39	2,069.53	-3,304.61	3,216.52	2,762.21	454.31	7.080		
10,500.00	7,231.23	19,018.34	7,142.52	118.70	341.60	88.39	2,069.53	-3,304.61	3,224.03	2,767.94	456.09	7.069 SF		
10,600.00	7,230.70	19,018.34	7,142.52	121.87	341.60	88.39	2,069.53	-3,304.61	3,234.61	2,777.17	457.44	7.071		
10,700.00	7,230.17	19,018.34	7,142.52	125.05	341.60	88.39	2,069.53	-3,304.61	3,248.24	2,789.86	458.38	7.086		
10,800.00	7,229.64	19,018.34	7,142.52	128.25	341.60	88.39	2,069.53	-3,304.61	3,264.88	2,805.97	458.91	7.114		
10,900.00	7,229.11	19,018.34	7,142.52	131.44	341.60	88.39	2,069.53	-3,304.61	3,284.48	2,825.44	459.04	7.155		
11,000.00	7,228.58	19,018.34	7,142.52	134.65	341.60	88.39	2,069.53	-3,304.61	3,306.99	2,848.21	458.78	7.208		
11,100.00	7,228.05	19,018.34	7,142.52	137.86	341.60	88.39	2,069.53	-3,304.61	3,332.35	2,874.20	458.15	7.274		
11,200.00	7,227.52	19,018.34	7,142.52	141.08	341.60	88.39	2,069.53	-3,304.61	3,360.49	2,903.33	457.16	7.351		
11,300.00	7,227.00	19,018.34	7,142.52	144.30	341.60	88.39	2,069.53	-3,304.61	3,391.35	2,935.51	455.84	7.440		
11,400.00	7,226.47	19,018.34	7,142.52	147.52	341.60	88.39	2,069.53	-3,304.61	3,424.85	2,970.65	454.21	7.540		
11,500.00	7,225.94	19,018.34	7,142.52	150.76	341.60	88.39	2,069.53	-3,304.61	3,460.92	3,008.64	452.29	7.652		
11,600.00	7,225.41	19,018.34	7,142.52	153.99	341.60	88.39	2,069.53	-3,304.61	3,499.48	3,049.38	450.10	7.775		
11,700.00	7,224.88	19,018.34	7,142.52	157.23	341.60	88.39	2,069.53	-3,304.61	3,540.44	3,092.78	447.66	7.909		
11,800.00	7,224.35	19,018.34	7,142.52	160.48	341.60	88.39	2,069.53	-3,304.61	3,583.73	3,138.71	445.01	8.053		
11,900.00	7,223.82	19,018.34	7,142.52	163.72	341.60	88.39	2,069.53	-3,304.61	3,629.25	3,187.09	442.16	8.208		
12,000.00	7,223.29	19,018.34	7,142.52	166.98	341.60	88.39	2,069.53	-3,304.61	3,676.93	3,237.80	439.13	8.373		
12,100.00	7,222.77	19,018.34	7,142.52	170.23	341.60	88.39	2,069.53	-3,304.61	3,726.68	3,290.74	435.95	8.548		
12,200.00	7,222.24	19,018.34	7,142.52	173.49	341.60	88.39	2,069.53	-3,304.61	3,778.43	3,345.80	432.63	8.734		
12,300.00	7,221.71	19,018.34	7,142.52	176.75	341.60	88.39	2,069.53	-3,304.61	3,832.09	3,402.89	429.20	8.928		
12,400.00	7,221.18	19,018.34	7,142.52	180.01	341.60	88.39	2,069.53	-3,304.61	3,887.58	3,461.91	425.67	9.133		
12,500.00	7,220.65	19,018.34	7,142.52	183.28	341.60	88.39	2,069.53	-3,304.61	3,944.82	3,522.76	422.06	9.346		
12,600.00	7,220.12	19,018.34	7,142.52	186.54	341.60	88.39	2,069.53	-3,304.61	4,003.75	3,585.35	418.39	9.569		
12,700.00	7,219.59	19,018.34	7,142.52	189.81	341.60	88.39	2,069.53	-3,304.61	4,064.28	3,649.60	414.67	9.801		
12,800.00	7,219.06	19,018.34	7,142.52	193.09	341.60	88.39	2,069.53	-3,304.61	4,126.35	3,715.43	410.92	10.042		
12,900.00	7,218.54	19,018.34	7,142.52	196.36	341.60	88.39	2,069.53	-3,304.61	4,189.88	3,782.74	407.14	10.291		
13,000.00	7,218.01	19,018.34	7,142.52	199.64	341.60	88.39	2,069.53	-3,304.61	4,254.82	3,851.46	403.35	10.549		
13,100.00	7,217.48	19,018.34	7,142.52	202.92	341.60	88.39	2,069.53	-3,304.61	4,321.09	3,921.53	399.56	10.815		
13,200.00	7,216.95	19,018.34	7,142.52	206.20	341.60	88.39	2,069.53	-3,304.61	4,388.64	3,992.87	395.77	11.089		
13,300.00	7,216.42	19,018.34	7,142.52	209.48	341.60	88.39	2,069.53	-3,304.61	4,457.41	4,065.42	392.00	11.371		
13,400.00	7,215.89	19,018.34	7,142.52	212.76	341.60	88.39	2,069.53	-3,304.61	4,527.35	4,139.10	388.25	11.661		
13,500.00	7,215.36	19,018.34	7,142.52	216.05	341.60	88.39	2,069.53	-3,304.61	4,598.40	4,213.87	384.53	11.959		
13,600.00	7,214.84	19,018.34	7,142.52	219.33	341.60	88.39	2,069.53	-3,304.61	4,670.51	4,289.67	380.84	12.264		
13,700.00	7,214.31	19,018.34	7,142.52	222.62	341.60	88.39	2,069.53	-3,304.61	4,743.63	4,366.44	377.19	12.576		
13,800.00	7,213.78	19,018.34	7,142.52	225.91	341.60	88.39	2,069.53	-3,304.61	4,817.71	4,444.14	373.58	12.896		
13,900.00	7,213.25	19,018.34	7,142.52	229.20	341.60	88.39	2,069.53	-3,304.61	4,892.72	4,522.71	370.01	13.223		
14,000.00	7,212.72	19,018.34	7,142.52	232.49	341.60	88.39	2,069.53	-3,304.61	4,968.61	4,602.11	366.50	13.557		
14,100.00	7,212.19	19,018.34	7,142.52	235.79	341.60	88.39	2,069.53	-3,304.61	5,045.34	4,682.31	363.03	13.898		
14,200.00	7,211.66	19,018.34	7,142.52	239.08	341.60	88.39	2,069.53	-3,304.61	5,122.87	4,763.25	359.62	14.245		
14,300.00	7,211.13	19,018.34	7,142.52	242.38	341.60	88.39	2,069.53	-3,304.61	5,201.17	4,844.91	356.27	14.599		
14,400.00	7,210.61	19,018.34	7,142.52	245.67	341.60	88.39	2,069.53	-3,304.61	5,280.20	4,927.24	352.97	14.960		
14,500.00	7,210.08	19,018.34	7,142.52	248.97	341.60	88.39	2,069.53	-3,304.61	5,359.94	5,010.21	349.72	15.326		
14,600.00	7,209.55	19,018.34	7,142.52	252.27	341.60	88.39	2,069.53	-3,304.61	5,440.34	5,093.80	346.54	15.699		
14,700.00	7,209.02	19,018.34	7,142.52	255.57	341.60	88.39	2,069.53	-3,304.61	5,521.38	5,177.97	343.41	16.078		
14,800.00	7,208.49	19,018.34	7,142.52	258.87	341.60	88.39	2,069.53	-3,304.61	5,603.04	5,262.70	340.34	16.463		
14,900.00	7,207.96	19,018.34	7,142.52	262.17	341.60	88.39	2,069.53	-3,304.61	5,685.28	5,347.95	337.33	16.854		
15,000.00	7,207.43	19,018.34	7,142.52	265.47	341.60	88.39	2,069.53	-3,304.61	5,768.08	5,433.71	334.37	17.251		
15,081.89	7,207.00	19,018.34	7,142.52	268.17	341.60	88.39	2,069.53	-3,304.61	5,836.29	5,504.29	332.00	17.579		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,495.96	1,543.42	3.28	8.04	-117.63	-3,936.23	-7,519.18	8,626.36					
100.00	100.00	1,584.00	1,630.02	3.28	8.51	-117.59	-3,924.29	-7,508.77	8,609.45	8,598.35	11.10	775.832		
200.00	200.00	1,584.00	1,630.02	3.34	8.51	-117.59	-3,924.29	-7,508.77	8,592.24	8,581.12	11.12	773.008		
300.00	299.98	1,622.08	1,667.53	3.44	8.71	54.67	-3,919.18	-7,504.65	8,575.12	8,563.76	11.36	754.956		
400.00	399.84	1,715.86	1,759.83	3.59	9.19	55.06	-3,905.93	-7,494.56	8,556.04	8,544.13	11.90	718.713		
500.00	499.45	1,773.00	1,816.12	3.80	9.49	55.47	-3,898.23	-7,488.55	8,535.49	8,523.15	12.34	691.805		
600.00	598.70	1,873.98	1,915.70	4.06	10.01	55.96	-3,885.48	-7,477.71	8,513.26	8,500.24	13.02	653.962		
700.00	697.49	1,923.57	1,964.62	4.38	10.27	56.32	-3,879.22	-7,472.50	8,489.41	8,475.89	13.52	627.893		
800.00	796.13	2,149.25	2,187.11	4.74	11.45	56.64	-3,850.44	-7,448.08	8,465.09	8,450.24	14.85	569.928		
900.00	894.78	900.00	2,430.09	5.15	4.96	56.97	-3,818.69	-7,416.41	8,438.85	8,428.86	9.99	844.411		
1,000.00	993.43	2,515.54	2,547.03	5.58	13.48	57.14	-3,802.65	-7,399.74	8,411.28	8,394.04	17.24	487.888		
1,100.00	1,092.07	2,570.46	2,600.94	6.03	13.79	57.22	-3,795.49	-7,392.15	8,384.12	8,366.23	17.89	468.649		
1,200.00	1,190.72	2,893.04	2,916.60	6.50	15.68	57.69	-3,748.87	-7,345.00	8,355.16	8,335.38	19.79	422.230		
1,300.00	1,289.36	2,938.44	2,960.94	6.98	15.96	57.75	-3,741.98	-7,338.11	8,326.02	8,305.59	20.44	407.430		
1,400.00	1,388.01	1,400.00	3,064.13	7.47	7.14	57.91	-3,726.92	-7,322.27	8,297.48	8,283.58	13.90	596.806		
1,500.00	1,486.65	3,144.70	3,162.63	7.97	17.19	58.05	-3,712.97	-7,306.22	8,268.35	8,246.06	22.29	370.931		
1,600.00	1,585.30	3,200.00	3,216.79	8.48	17.52	58.13	-3,705.69	-7,297.72	8,239.86	8,216.85	23.02	358.001		
1,700.00	1,683.94	3,291.27	3,306.21	9.00	18.05	58.26	-3,693.76	-7,283.90	8,211.81	8,187.90	23.91	343.452		
1,800.00	1,782.59	3,352.45	3,366.13	9.52	18.41	58.34	-3,685.67	-7,274.51	8,183.59	8,158.91	24.68	331.615		
1,900.00	1,881.24	3,391.00	3,403.90	10.05	18.64	58.40	-3,680.63	-7,268.72	8,155.87	8,130.51	25.35	321.685		
2,000.00	1,979.88	3,423.87	3,436.15	10.58	18.82	58.45	-3,676.35	-7,264.04	8,128.87	8,102.86	26.01	312.528		
2,100.00	2,078.53	3,448.55	3,460.41	11.11	18.96	58.48	-3,673.14	-7,260.79	8,102.75	8,076.12	26.64	304.204		
2,200.00	2,177.17	3,486.00	3,497.27	11.64	19.18	58.54	-3,668.28	-7,256.30	8,077.53	8,050.21	27.32	295.629		
2,300.00	2,275.82	2,300.00	3,582.31	12.18	12.63	58.67	-3,656.74	-7,246.25	8,052.68	8,030.36	22.32	360.754		
2,400.00	2,374.46	3,614.27	3,623.50	12.72	19.89	58.74	-3,650.99	-7,241.49	8,028.09	7,999.14	28.95	277.304		
2,500.00	2,473.11	3,639.27	3,648.12	13.26	20.02	58.78	-3,647.48	-7,238.96	8,004.38	7,974.79	29.60	270.456		
2,600.00	2,571.76	4,087.00	4,087.10	13.80	22.60	59.58	-3,575.60	-7,189.08	7,978.86	7,946.68	32.17	247.987		
2,700.00	2,670.40	2,700.00	4,209.31	14.35	14.45	59.77	-3,558.78	-7,170.78	7,951.63	7,925.48	26.15	304.089		
2,800.00	2,769.05	4,286.21	4,282.23	14.89	23.78	59.89	-3,548.81	-7,159.29	7,923.83	7,889.70	34.14	232.108		
2,900.00	2,867.69	4,343.00	4,337.99	15.44	24.11	59.98	-3,541.50	-7,151.34	7,897.17	7,862.23	34.94	226.021		
3,000.00	2,966.34	4,343.00	4,337.99	15.99	24.11	59.98	-3,541.50	-7,151.34	7,870.87	7,835.37	35.50	221.709		
3,100.00	3,064.98	4,426.13	4,419.70	16.53	24.59	60.11	-3,530.71	-7,140.57	7,845.44	7,809.02	36.42	215.413		
3,200.00	3,163.63	4,479.59	4,472.24	17.08	24.89	60.19	-3,523.50	-7,133.77	7,820.15	7,782.94	37.22	210.128		
3,300.00	3,262.27	4,534.00	4,525.77	17.63	25.20	60.28	-3,516.31	-7,127.22	7,795.53	7,757.51	38.02	205.046		
3,400.00	3,360.92	4,590.05	4,580.99	18.18	25.51	60.37	-3,509.27	-7,120.61	7,771.44	7,732.61	38.83	200.162		
3,500.00	3,459.57	4,629.00	4,619.39	18.74	25.72	60.43	-3,504.72	-7,115.96	7,747.80	7,708.24	39.56	195.843		
3,600.00	3,558.21	4,670.79	4,660.64	19.29	25.94	60.50	-3,500.09	-7,111.18	7,724.88	7,684.58	40.31	191.654		
3,700.00	3,656.86	4,724.00	4,713.28	19.84	26.23	60.58	-3,494.48	-7,105.78	7,703.00	7,661.90	41.10	187.416		
3,800.00	3,755.50	4,756.90	4,745.87	20.39	26.39	60.63	-3,491.16	-7,102.62	7,681.71	7,639.90	41.81	183.736		
3,900.00	3,854.15	4,819.00	4,807.35	20.95	26.71	60.72	-3,485.13	-7,096.33	7,660.64	7,618.00	42.64	179.662		
4,000.00	3,952.79	4,880.01	4,867.80	21.50	27.02	60.81	-3,479.51	-7,090.33	7,640.05	7,596.58	43.46	175.782		
4,100.00	4,051.44	4,915.00	4,902.51	22.05	27.19	60.86	-3,476.42	-7,087.22	7,620.36	7,576.18	44.18	172.487		
4,200.00	4,150.08	4,964.92	4,952.08	22.61	27.43	60.93	-3,472.12	-7,083.12	7,601.40	7,556.45	44.96	169.085		
4,300.00	4,248.73	5,013.25	5,000.10	23.16	27.66	61.01	-3,468.04	-7,079.45	7,583.10	7,537.37	45.73	165.836		
4,400.00	4,347.38	5,061.68	5,048.24	23.72	27.89	61.08	-3,464.04	-7,076.07	7,565.46	7,518.96	46.50	162.707		
4,500.00	4,446.02	5,104.00	5,090.34	24.27	28.09	61.14	-3,460.61	-7,073.35	7,548.48	7,501.24	47.24	159.782		
4,600.00	4,544.67	5,104.00	5,090.34	24.83	28.09	61.14	-3,460.61	-7,073.35	7,532.56	7,484.76	47.80	157.572		
4,700.00	4,643.31	5,189.68	5,175.66	25.39	28.47	61.27	-3,454.38	-7,068.57	7,516.76	7,468.04	48.72	154.274		
4,800.00	4,741.96	5,230.22	5,216.07	25.94	28.64	61.32	-3,451.89	-7,066.63	7,502.07	7,452.62	49.45	151.702		
4,900.00	4,840.60	5,294.00	5,279.71	26.50	28.92	61.41	-3,448.57	-7,064.02	7,488.24	7,437.96	50.28	148.931		
5,000.00	4,939.25	5,294.00	5,279.71	27.05	28.92	61.41	-3,448.57	-7,064.02	7,475.07	7,424.24	50.83	147.054		
5,100.00	5,037.90	5,382.60	5,368.17	27.61	29.27	61.53	-3,444.74	-7,060.97	7,462.39	7,410.64	51.75	144.199		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,444.54	5,430.04	28.17	29.52	61.61	-3,442.41	-7,059.09	7,450.29	7,397.74	52.56	141.754		
5,300.00	5,235.19	5,506.62	5,492.06	28.72	29.76	61.69	-3,440.35	-7,057.42	7,438.70	7,385.34	53.36	139.393		
5,400.00	5,333.83	5,579.00	5,564.40	29.28	30.05	61.78	-3,438.32	-7,055.74	7,427.63	7,373.42	54.22	137.003		
5,500.00	5,432.48	5,631.28	5,616.65	29.84	30.24	61.85	-3,437.06	-7,054.72	7,417.05	7,362.07	54.97	134.918		
5,600.00	5,531.12	5,693.86	5,679.21	30.40	30.48	61.92	-3,435.76	-7,053.71	7,406.98	7,351.21	55.78	132.800		
5,700.00	5,629.77	5,756.53	5,741.87	30.95	30.71	62.00	-3,434.66	-7,052.94	7,397.42	7,340.84	56.58	130.751		
5,800.00	5,728.41	5,819.30	5,804.63	31.51	30.94	62.08	-3,433.79	-7,052.41	7,388.36	7,330.99	57.38	128.770		
5,900.00	5,827.06	5,885.35	5,870.67	32.07	31.18	62.15	-3,433.09	-7,052.12	7,379.81	7,321.62	58.19	126.829		
6,000.00	5,925.71	5,959.31	5,944.62	32.63	31.44	62.24	-3,432.39	-7,052.04	7,371.65	7,312.62	59.02	124.891		
6,100.00	6,024.35	6,033.28	6,018.60	33.19	31.70	62.33	-3,431.73	-7,052.21	7,363.85	7,303.99	59.86	123.013		
6,200.00	6,123.00	6,107.28	6,092.60	33.74	31.96	62.42	-3,431.11	-7,052.63	7,356.41	7,295.71	60.70	121.194		
6,300.00	6,221.64	6,196.16	6,181.47	34.30	32.27	62.53	-3,430.39	-7,053.40	7,349.29	7,287.69	61.60	119.308		
6,400.00	6,320.29	6,306.44	6,291.74	34.86	32.66	62.67	-3,429.34	-7,054.32	7,342.13	7,279.54	62.59	117.308		
6,500.00	6,418.93	6,416.65	6,401.94	35.42	33.04	62.80	-3,428.11	-7,055.12	7,334.85	7,271.27	63.58	115.368		
6,600.00	6,517.58	6,507.65	6,492.93	35.98	33.37	62.92	-3,426.97	-7,055.77	7,327.55	7,263.06	64.49	113.619		
6,700.00	6,616.23	6,594.30	6,579.57	36.54	33.68	63.03	-3,425.84	-7,056.55	7,320.44	7,255.05	65.39	111.951		
6,800.00	6,714.51	6,680.67	6,665.93	37.10	33.99	63.15	-3,424.65	-7,057.50	7,308.41	7,242.15	66.26	110.292		
6,900.00	6,810.42	6,755.53	6,740.77	37.66	34.25	63.26	-3,423.60	-7,058.47	7,282.25	7,215.24	67.02	108.664		
7,000.00	6,901.58	6,817.83	6,803.05	38.21	34.47	63.37	-3,422.84	-7,059.49	7,242.52	7,174.89	67.63	107.088		
7,100.00	6,985.76	6,875.79	6,861.00	38.76	34.67	63.47	-3,422.25	-7,060.64	7,190.15	7,122.01	68.14	105.520		
7,200.00	7,060.88	6,928.05	6,913.25	39.32	34.86	63.57	-3,421.81	-7,061.85	7,126.36	7,057.83	68.53	103.989		
7,300.00	7,125.09	6,973.33	6,958.51	39.90	35.01	63.67	-3,421.49	-7,063.02	7,052.63	6,983.84	68.79	102.519		
7,400.00	7,176.81	7,010.73	6,995.89	40.55	35.14	63.77	-3,421.29	-7,064.08	6,970.73	6,901.80	68.93	101.129		
7,500.00	7,214.77	7,052.40	7,037.55	41.30	35.29	63.87	-3,421.00	-7,065.32	6,882.56	6,813.56	69.00	99.746		
7,600.00	7,238.02	7,079.32	7,064.45	42.22	35.39	63.97	-3,420.72	-7,066.15	6,790.29	6,721.35	68.94	98.496		
7,700.00	7,246.01	7,090.74	7,075.86	43.32	35.43	64.07	-3,420.59	-7,066.51	6,696.25	6,627.48	68.77	97.376		
7,800.00	7,245.50	7,093.47	7,078.59	44.65	35.44	64.17	-3,420.55	-7,066.60	6,602.22	6,533.66	68.56	96.301		
7,900.00	7,244.97	7,096.20	7,081.32	46.21	35.45	64.27	-3,420.52	-7,066.68	6,508.36	6,439.97	68.39	95.168		
8,000.00	7,244.44	7,098.94	7,084.06	47.99	35.46	64.37	-3,420.48	-7,066.77	6,414.69	6,346.43	68.26	93.974		
8,100.00	7,243.91	7,101.70	7,086.82	49.96	35.46	64.47	-3,420.45	-7,066.86	6,321.21	6,253.03	68.18	92.714		
8,200.00	7,243.39	7,104.48	7,089.59	52.10	35.47	64.57	-3,420.41	-7,066.95	6,227.94	6,159.78	68.15	91.384		
8,300.00	7,242.86	7,107.27	7,092.39	54.38	35.48	64.67	-3,420.37	-7,067.04	6,134.87	6,066.69	68.18	89.981		
8,400.00	7,242.33	7,110.08	7,095.19	56.78	35.49	64.77	-3,420.33	-7,067.13	6,042.02	5,973.75	68.27	88.502		
8,500.00	7,241.80	7,112.91	7,098.02	59.28	35.50	64.87	-3,420.29	-7,067.22	5,949.41	5,880.98	68.43	86.945		
8,600.00	7,241.27	7,115.75	7,100.86	61.88	35.51	64.97	-3,420.25	-7,067.31	5,857.04	5,788.38	68.66	85.309		
8,700.00	7,240.74	7,118.61	7,103.72	64.54	35.52	65.07	-3,420.21	-7,067.40	5,764.92	5,695.95	68.96	83.593		
8,800.00	7,240.21	7,121.49	7,106.60	67.27	35.53	65.17	-3,420.16	-7,067.49	5,673.06	5,603.71	69.35	81.799		
8,900.00	7,239.68	7,124.38	7,109.49	70.06	35.54	65.27	-3,420.12	-7,067.59	5,581.48	5,511.65	69.83	79.927		
9,000.00	7,239.16	7,127.30	7,112.40	72.89	35.55	65.37	-3,420.07	-7,067.68	5,490.20	5,419.80	70.40	77.983		
9,100.00	7,238.63	7,130.23	7,115.33	75.77	35.57	65.47	-3,420.03	-7,067.78	5,399.22	5,328.15	71.07	75.969		
9,200.00	7,238.10	7,133.18	7,118.27	78.69	35.58	65.57	-3,419.98	-7,067.88	5,308.57	5,236.73	71.84	73.892		
9,300.00	7,237.57	7,136.14	7,121.24	81.64	35.59	65.67	-3,419.93	-7,067.97	5,218.26	5,145.54	72.72	71.759		
9,400.00	7,237.04	7,139.13	7,124.22	84.62	35.60	65.77	-3,419.88	-7,068.07	5,128.30	5,054.59	73.71	69.576		
9,500.00	7,236.51	7,142.13	7,127.22	87.63	35.61	65.87	-3,419.83	-7,068.17	5,038.72	4,963.91	74.81	67.353		
9,600.00	7,235.98	7,145.15	7,130.24	90.66	35.62	65.97	-3,419.78	-7,068.27	4,949.54	4,873.51	76.03	65.099		
9,700.00	7,235.45	7,148.19	7,133.28	93.72	35.63	66.07	-3,419.72	-7,068.37	4,860.78	4,783.41	77.37	62.822		
9,800.00	7,234.93	7,151.25	7,136.33	96.79	35.64	66.17	-3,419.67	-7,068.47	4,772.46	4,693.62	78.84	60.532		
9,900.00	7,234.40	7,154.32	7,139.41	99.88	35.65	66.27	-3,419.61	-7,068.58	4,684.61	4,604.17	80.44	58.239		
10,000.00	7,233.87	7,157.42	7,142.50	102.98	35.66	66.37	-3,419.56	-7,068.68	4,597.25	4,515.09	82.16	55.952		
10,100.00	7,233.34	7,160.54	7,145.62	106.10	35.67	66.47	-3,419.50	-7,068.78	4,510.42	4,426.39	84.03	53.679		
10,200.00	7,232.81	7,163.67	7,148.75	109.23	35.68	66.57	-3,419.44	-7,068.89	4,424.14	4,338.12	86.03	51.428		
10,300.00	7,232.28	7,166.83	7,151.90	112.38	35.69	66.67	-3,419.38	-7,069.00	4,338.45	4,250.28	88.17	49.208		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,170.00	7,155.08	115.53	35.71	-88.54	-3,419.32	-7,069.10	4,253.38	4,162.93	90.45	47.025		
10,500.00	7,231.23	7,173.20	7,158.27	118.70	35.72	-88.62	-3,419.25	-7,069.21	4,168.97	4,076.09	92.88	44.885		
10,600.00	7,230.70	7,176.41	7,161.48	121.87	35.73	-88.70	-3,419.19	-7,069.32	4,085.26	3,989.80	95.46	42.794		
10,700.00	7,230.17	7,179.65	7,164.72	125.05	35.74	-88.78	-3,419.12	-7,069.43	4,002.30	3,904.10	98.20	40.756		
10,800.00	7,229.64	7,182.91	7,167.97	128.25	35.75	-88.86	-3,419.05	-7,069.54	3,920.13	3,819.04	101.10	38.776		
10,900.00	7,229.11	7,186.19	7,171.24	131.44	35.76	-88.95	-3,418.98	-7,069.65	3,838.81	3,734.65	104.15	36.857		
11,000.00	7,228.58	7,189.48	7,174.54	134.65	35.77	-89.03	-3,418.91	-7,069.77	3,758.38	3,651.00	107.38	35.001		
11,100.00	7,228.05	7,192.81	7,177.86	137.86	35.79	-89.12	-3,418.84	-7,069.88	3,678.91	3,568.14	110.77	33.211		
11,200.00	7,227.52	7,196.15	7,181.20	141.08	35.80	-89.20	-3,418.77	-7,070.00	3,600.46	3,486.12	114.34	31.488		
11,300.00	7,227.00	7,199.51	7,184.56	144.30	35.81	-89.29	-3,418.69	-7,070.11	3,523.11	3,405.01	118.09	29.833		
11,400.00	7,226.47	7,202.90	7,187.94	147.52	35.82	-89.37	-3,418.62	-7,070.23	3,446.91	3,324.88	122.03	28.247		
11,500.00	7,225.94	7,206.30	7,191.35	150.76	35.83	-89.46	-3,418.54	-7,070.35	3,371.95	3,245.81	126.14	26.731		
11,600.00	7,225.41	7,209.73	7,194.77	153.99	35.85	-89.55	-3,418.46	-7,070.47	3,298.32	3,167.87	130.45	25.284		
11,700.00	7,224.88	7,213.19	7,198.22	157.23	35.86	-89.63	-3,418.38	-7,070.59	3,226.11	3,091.16	134.95	23.906		
11,800.00	7,224.35	7,216.66	7,201.69	160.48	35.87	-89.72	-3,418.30	-7,070.71	3,155.41	3,015.77	139.64	22.597		
11,900.00	7,223.82	7,220.16	7,205.19	163.72	35.88	-89.81	-3,418.21	-7,070.84	3,086.33	2,941.80	144.52	21.355		
12,000.00	7,223.29	7,223.68	7,208.71	166.98	35.89	-89.90	-3,418.12	-7,070.96	3,018.97	2,869.37	149.60	20.180		
12,100.00	7,222.77	7,227.23	7,212.25	170.23	35.91	-89.99	-3,418.04	-7,071.09	2,953.47	2,798.59	154.87	19.070		
12,200.00	7,222.24	7,230.79	7,215.81	173.49	35.92	-90.08	-3,417.95	-7,071.21	2,889.93	2,729.60	160.33	18.025		
12,300.00	7,221.71	7,234.39	7,219.40	176.75	35.93	-90.17	-3,417.85	-7,071.34	2,828.50	2,662.54	165.97	17.043		
12,400.00	7,221.18	7,238.00	7,223.02	180.01	35.94	-90.26	-3,417.76	-7,071.47	2,769.32	2,597.55	171.77	16.122		
12,500.00	7,220.65	7,241.65	7,226.65	183.28	35.96	-90.35	-3,417.67	-7,071.60	2,712.53	2,534.79	177.74	15.262		
12,600.00	7,220.12	7,245.31	7,230.32	186.54	35.97	-90.45	-3,417.57	-7,071.73	2,658.28	2,474.44	183.84	14.460		
12,700.00	7,219.59	7,249.00	7,234.00	189.81	35.98	-90.54	-3,417.47	-7,071.87	2,606.74	2,416.67	190.07	13.715		
12,800.00	7,219.06	7,252.72	7,237.72	193.09	36.00	-90.64	-3,417.37	-7,072.00	2,558.07	2,361.67	196.40	13.025		
12,900.00	7,218.54	7,256.46	7,241.45	196.36	36.01	-90.73	-3,417.27	-7,072.14	2,512.43	2,309.63	202.79	12.389		
13,000.00	7,218.01	7,260.23	7,245.22	199.64	36.02	-90.83	-3,417.16	-7,072.27	2,469.99	2,260.76	209.23	11.805		
13,100.00	7,217.48	7,264.02	7,249.01	202.92	36.04	-90.92	-3,417.05	-7,072.41	2,430.92	2,215.26	215.66	11.272		
13,200.00	7,216.95	7,267.84	7,252.82	206.20	36.05	-91.02	-3,416.94	-7,072.55	2,395.39	2,173.34	222.05	10.788		
13,300.00	7,216.42	7,271.69	7,256.66	209.48	36.06	-91.12	-3,416.83	-7,072.69	2,363.56	2,135.20	228.36	10.350		
13,400.00	7,215.89	7,275.56	7,260.53	212.76	36.08	-91.22	-3,416.72	-7,072.84	2,335.57	2,101.04	234.52	9.959		
13,500.00	7,215.36	7,279.46	7,264.43	216.05	36.09	-91.31	-3,416.60	-7,072.98	2,311.56	2,071.05	240.51	9.611		
13,600.00	7,214.84	7,283.39	7,268.35	219.33	36.10	-91.41	-3,416.49	-7,073.13	2,291.67	2,045.41	246.26	9.306		
13,700.00	7,214.31	7,287.34	7,272.30	222.62	36.12	-91.52	-3,416.37	-7,073.27	2,275.99	2,024.27	251.72	9.042		
13,800.00	7,213.78	7,291.33	7,276.28	225.91	36.13	-91.62	-3,416.24	-7,073.42	2,264.62	2,007.76	256.85	8.817		
13,900.00	7,213.25	7,295.34	7,280.29	229.20	36.15	-91.72	-3,416.12	-7,073.57	2,257.62	1,996.01	261.61	8.630		
14,000.00	7,212.72	7,299.38	7,284.32	232.49	36.16	-91.82	-3,415.99	-7,073.72	2,255.03	1,989.07	265.96	8.479		
14,008.49	7,212.68	7,299.72	7,284.67	232.77	36.16	-91.83	-3,415.98	-7,073.74	2,255.01	1,988.70	266.31	8.468 CC		
14,100.00	7,212.19	7,303.44	7,288.39	235.79	36.18	-91.92	-3,415.86	-7,073.88	2,256.87	1,987.00	269.87	8.363 ES		
14,200.00	7,211.66	7,307.54	7,292.48	239.08	36.19	-92.03	-3,415.73	-7,074.03	2,263.12	1,989.81	273.32	8.280		
14,300.00	7,211.13	7,311.67	7,296.60	242.38	36.20	-92.13	-3,415.60	-7,074.19	2,273.75	1,997.47	276.28	8.230		
14,400.00	7,210.61	7,315.83	7,300.75	245.67	36.22	-92.24	-3,415.46	-7,074.34	2,288.70	2,009.93	278.77	8.210 SF		
14,500.00	7,210.08	7,320.01	7,304.93	248.97	36.23	-92.34	-3,415.32	-7,074.50	2,307.89	2,027.11	280.78	8.220		
14,600.00	7,209.55	7,324.23	7,309.15	252.27	36.25	-92.45	-3,415.18	-7,074.66	2,331.20	2,048.89	282.32	8.257		
14,700.00	7,209.02	7,328.48	7,313.39	255.57	36.26	-92.56	-3,415.03	-7,074.83	2,358.52	2,075.12	283.41	8.322		
14,800.00	7,208.49	7,332.76	7,317.66	258.87	36.28	-92.67	-3,414.88	-7,074.99	2,389.72	2,105.64	284.07	8.412		
14,900.00	7,207.96	7,337.07	7,321.97	262.17	36.29	-92.78	-3,414.73	-7,075.16	2,424.63	2,140.29	284.34	8.527		
15,000.00	7,207.43	7,341.41	7,326.30	265.47	36.31	-92.89	-3,414.58	-7,075.33	2,463.10	2,178.86	284.24	8.666		
15,081.89	7,207.00	7,344.99	7,329.88	268.17	36.32	-92.98	-3,414.45	-7,075.47	2,497.14	2,213.23	283.91	8.796		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	67.00	3.28	3.28	-118.10	-4,090.69	-7,661.80	8,685.70					
100.00	100.00	33.00	100.00	3.28	3.33	-118.10	-4,090.69	-7,661.80	8,685.44	8,678.82	6.61	1,313.008		
200.00	200.00	133.00	200.00	3.34	4.38	-118.10	-4,090.69	-7,661.80	8,685.44	8,677.72	7.71	1,125.995		
300.00	299.98	232.98	299.98	3.44	7.18	53.89	-4,090.69	-7,661.80	8,684.41	8,673.79	10.62	817.712		
400.00	399.84	332.84	399.84	3.59	10.40	53.96	-4,090.69	-7,661.80	8,681.32	8,667.33	14.00	620.299		
500.00	499.45	432.45	499.45	3.80	13.75	54.09	-4,090.69	-7,661.80	8,676.19	8,658.65	17.54	494.569		
600.00	598.70	531.70	598.70	4.06	17.13	54.28	-4,090.69	-7,661.80	8,669.02	8,647.84	21.18	409.255		
700.00	697.49	630.49	697.49	4.38	20.53	54.46	-4,090.69	-7,661.80	8,659.92	8,635.04	24.88	348.015		
800.00	796.13	729.13	796.13	4.74	23.93	54.55	-4,090.69	-7,661.80	8,650.31	8,621.68	28.63	302.109		
900.00	894.78	827.78	894.78	5.15	27.35	54.64	-4,090.69	-7,661.80	8,640.72	8,608.30	32.42	266.493		
1,000.00	993.43	926.43	993.43	5.58	30.77	54.73	-4,090.69	-7,661.80	8,631.15	8,594.91	36.25	238.125		
1,100.00	1,092.07	1,025.07	1,092.07	6.03	34.20	54.81	-4,090.69	-7,661.80	8,621.60	8,581.51	40.09	215.037		
1,200.00	1,190.72	1,123.72	1,190.72	6.50	37.63	54.90	-4,090.69	-7,661.80	8,612.08	8,568.12	43.96	195.906		
1,300.00	1,289.36	1,222.36	1,289.36	6.98	41.06	54.99	-4,090.69	-7,661.80	8,602.57	8,554.73	47.84	179.809		
1,400.00	1,388.01	1,321.01	1,388.01	7.47	44.49	55.08	-4,090.69	-7,661.80	8,593.09	8,541.35	51.74	166.089		
1,500.00	1,486.65	1,419.65	1,486.65	7.97	47.93	55.17	-4,090.69	-7,661.80	8,583.62	8,527.98	55.64	154.261		
1,600.00	1,585.30	1,518.30	1,585.30	8.48	51.36	55.26	-4,090.69	-7,661.80	8,574.18	8,514.62	59.56	143.964		
1,700.00	1,683.94	1,616.94	1,683.94	9.00	54.80	55.35	-4,090.69	-7,661.80	8,564.75	8,501.27	63.48	134.922		
1,800.00	1,782.59	1,715.59	1,782.59	9.52	58.24	55.44	-4,090.69	-7,661.80	8,555.35	8,487.95	67.41	126.921		
1,900.00	1,881.24	1,814.24	1,881.24	10.05	61.68	55.53	-4,090.69	-7,661.80	8,545.97	8,474.63	71.34	119.793		
2,000.00	1,979.88	1,912.88	1,979.88	10.58	65.12	55.62	-4,090.69	-7,661.80	8,536.61	8,461.33	75.28	113.403		
2,100.00	2,078.53	2,011.53	2,078.53	11.11	68.56	55.71	-4,090.69	-7,661.80	8,527.27	8,448.06	79.22	107.643		
2,200.00	2,177.17	2,110.17	2,177.17	11.64	72.00	55.80	-4,090.69	-7,661.80	8,517.96	8,434.79	83.16	102.425		
2,300.00	2,275.82	2,208.82	2,275.82	12.18	75.44	55.89	-4,090.69	-7,661.80	8,508.66	8,421.55	87.11	97.677		
2,400.00	2,374.46	2,307.46	2,374.46	12.72	78.88	55.98	-4,090.69	-7,661.80	8,499.39	8,408.33	91.06	93.337		
2,500.00	2,473.11	2,406.11	2,473.11	13.26	82.32	56.07	-4,090.69	-7,661.80	8,490.13	8,395.12	95.01	89.357		
2,600.00	2,571.76	2,504.76	2,571.76	13.80	85.76	56.16	-4,090.69	-7,661.80	8,480.90	8,381.94	98.97	85.693		
2,700.00	2,670.40	2,603.40	2,670.40	14.35	89.20	56.25	-4,090.69	-7,661.80	8,471.69	8,368.77	102.93	82.309		
2,800.00	2,769.05	2,702.05	2,769.05	14.89	92.64	56.34	-4,090.69	-7,661.80	8,462.51	8,355.62	106.88	79.175		
2,900.00	2,867.69	2,800.69	2,867.69	15.44	96.08	56.44	-4,090.69	-7,661.80	8,453.34	8,342.50	110.84	76.263		
3,000.00	2,966.34	2,900.66	2,966.34	15.99	99.57	56.53	-4,090.69	-7,661.80	8,444.20	8,329.35	114.85	73.522		
3,100.00	3,064.98	3,002.02	3,064.98	16.53	103.11	56.62	-4,090.69	-7,661.80	8,435.08	8,316.17	118.91	70.937		
3,200.00	3,163.63	3,103.37	3,163.63	17.08	106.64	56.71	-4,090.69	-7,661.80	8,425.98	8,303.01	122.97	68.521		
3,300.00	3,262.27	3,204.73	3,262.27	17.63	110.18	56.80	-4,090.69	-7,661.80	8,416.90	8,289.87	127.03	66.260		
3,400.00	3,360.92	3,306.08	3,360.92	18.18	113.72	56.90	-4,090.69	-7,661.80	8,407.84	8,276.75	131.09	64.138		
3,500.00	3,459.57	3,407.43	3,459.57	18.74	117.25	56.99	-4,090.69	-7,661.80	8,398.81	8,263.66	135.15	62.143		
3,600.00	3,558.21	3,508.79	3,558.21	19.29	120.79	57.08	-4,090.69	-7,661.80	8,389.80	8,250.59	139.22	60.265		
3,700.00	3,656.86	3,589.86	3,656.86	19.84	123.62	57.18	-4,090.69	-7,661.80	8,380.81	8,238.24	142.57	58.783		
3,800.00	3,755.50	3,688.50	3,755.50	20.39	127.06	57.27	-4,090.69	-7,661.80	8,371.85	8,225.30	146.54	57.129		
3,900.00	3,854.15	3,787.15	3,854.15	20.95	130.51	57.36	-4,090.69	-7,661.80	8,362.90	8,212.39	150.51	55.563		
4,000.00	3,952.79	3,885.79	3,952.79	21.50	133.95	57.46	-4,090.69	-7,661.80	8,353.98	8,199.50	154.49	54.076		
4,100.00	4,051.44	3,984.44	4,051.44	22.05	137.39	57.55	-4,090.69	-7,661.80	8,345.09	8,186.63	158.46	52.664		
4,200.00	4,150.08	4,083.08	4,150.08	22.61	140.83	57.64	-4,090.69	-7,661.80	8,336.21	8,173.78	162.43	51.321		
4,300.00	4,248.73	4,181.73	4,248.73	23.16	144.28	57.74	-4,090.69	-7,661.80	8,327.36	8,160.95	166.41	50.042		
4,400.00	4,347.38	4,280.38	4,347.38	23.72	147.72	57.83	-4,090.69	-7,661.80	8,318.53	8,148.15	170.38	48.823		
4,500.00	4,446.02	4,379.02	4,446.02	24.27	151.16	57.93	-4,090.69	-7,661.80	8,309.72	8,135.37	174.36	47.659		
4,600.00	4,544.67	4,477.67	4,544.67	24.83	154.60	58.02	-4,090.69	-7,661.80	8,300.94	8,122.61	178.33	46.548		
4,700.00	4,643.31	4,576.31	4,643.31	25.39	158.05	58.12	-4,090.69	-7,661.80	8,292.18	8,109.87	182.31	45.484		
4,800.00	4,741.96	4,674.96	4,741.96	25.94	161.49	58.21	-4,090.69	-7,661.80	8,283.44	8,097.16	186.29	44.466		
4,900.00	4,840.60	4,773.60	4,840.60	26.50	164.93	58.31	-4,090.69	-7,661.80	8,274.73	8,084.47	190.26	43.491		
5,000.00	4,939.25	4,872.25	4,939.25	27.05	168.38	58.41	-4,090.69	-7,661.80	8,266.04	8,071.80	194.24	42.555		
5,100.00	5,037.90	4,970.90	5,037.90	27.61	171.82	58.50	-4,090.69	-7,661.80	8,257.37	8,059.15	198.22	41.657		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,069.54	5,136.54	28.17	175.26	58.60	-4,090.69	-7,661.80	8,248.73	8,046.53	202.20	40.795		
5,300.00	5,235.19	5,168.19	5,235.19	28.72	178.71	58.69	-4,090.69	-7,661.80	8,240.11	8,033.93	206.18	39.965		
5,400.00	5,333.83	5,266.83	5,333.83	29.28	182.15	58.79	-4,090.69	-7,661.80	8,231.51	8,021.35	210.16	39.168		
5,500.00	5,432.48	5,365.48	5,432.48	29.84	185.59	58.89	-4,090.69	-7,661.80	8,222.94	8,008.80	214.14	38.399		
5,600.00	5,531.12	5,464.12	5,531.12	30.40	189.04	58.98	-4,090.69	-7,661.80	8,214.39	7,996.27	218.12	37.659		
5,700.00	5,629.77	5,562.77	5,629.77	30.95	192.48	59.08	-4,090.69	-7,661.80	8,205.87	7,983.76	222.11	36.946		
5,800.00	5,728.41	5,661.41	5,728.41	31.51	195.92	59.18	-4,090.69	-7,661.80	8,197.37	7,971.28	226.09	36.257		
5,900.00	5,827.06	5,760.06	5,827.06	32.07	199.37	59.28	-4,090.69	-7,661.80	8,188.89	7,958.82	230.07	35.593		
6,000.00	5,925.71	5,858.71	5,925.71	32.63	202.81	59.37	-4,090.69	-7,661.80	8,180.44	7,946.39	234.05	34.951		
6,100.00	6,024.35	5,957.35	6,024.35	33.19	206.25	59.47	-4,090.69	-7,661.80	8,172.01	7,933.97	238.04	34.331		
6,200.00	6,123.00	6,056.00	6,123.00	33.74	209.70	59.57	-4,090.69	-7,661.80	8,163.61	7,921.59	242.02	33.731		
6,300.00	6,221.64	6,154.64	6,221.64	34.30	213.14	59.67	-4,090.69	-7,661.80	8,155.23	7,909.22	246.01	33.151		
6,400.00	6,320.29	6,253.29	6,320.29	34.86	216.58	59.77	-4,090.69	-7,661.80	8,146.87	7,896.88	249.99	32.589		
6,500.00	6,418.93	6,351.93	6,418.93	35.42	220.03	59.87	-4,090.69	-7,661.80	8,138.54	7,884.56	253.98	32.045		
6,600.00	6,517.58	6,450.58	6,517.58	35.98	223.47	59.97	-4,090.69	-7,661.80	8,130.23	7,872.27	257.96	31.517		
6,700.00	6,616.23	6,549.23	6,616.23	36.54	226.91	60.06	-4,090.69	-7,661.80	8,121.95	7,860.00	261.95	31.006		
6,800.00	6,714.51	6,647.51	6,714.51	37.10	230.34	24.97	-4,090.69	-7,661.80	8,108.70	7,842.80	265.90	30.495		
6,900.00	6,810.42	6,743.42	6,810.42	37.66	233.69	5.35	-4,090.69	-7,661.80	8,081.42	7,811.73	269.69	29.965		
7,000.00	6,901.58	6,834.58	6,901.58	38.21	236.87	-4.48	-4,090.69	-7,661.80	8,040.58	7,767.35	273.23	29.428		
7,100.00	6,985.76	6,918.76	6,985.76	38.76	239.81	-11.34	-4,090.69	-7,661.80	7,987.17	7,710.74	276.44	28.893		
7,200.00	7,060.88	7,006.12	7,060.88	39.32	242.86	-17.71	-4,090.69	-7,661.80	7,922.53	7,642.88	279.65	28.330		
7,300.00	7,125.09	7,058.09	7,125.09	39.90	244.67	-25.07	-4,090.69	-7,661.80	7,848.27	7,566.74	281.53	27.877		
7,400.00	7,176.81	7,109.81	7,176.81	40.55	246.48	-34.86	-4,090.69	-7,661.80	7,766.27	7,482.96	283.31	27.412		
7,500.00	7,214.77	7,147.77	7,214.77	41.30	247.81	-48.79	-4,090.69	-7,661.80	7,678.59	7,394.06	284.53	26.987		
7,600.00	7,238.02	7,171.02	7,238.02	42.22	248.62	-67.92	-4,090.69	-7,661.80	7,587.44	7,302.27	285.17	26.607		
7,700.00	7,246.01	7,179.01	7,246.01	43.32	248.90	-89.66	-4,090.69	-7,661.80	7,495.13	7,209.88	285.25	26.276		
7,800.00	7,245.50	7,178.50	7,245.50	44.65	248.88	-90.70	-4,090.69	-7,661.80	7,403.16	7,118.12	285.05	25.972		
7,900.00	7,244.97	7,177.97	7,244.97	46.21	248.86	-90.69	-4,090.69	-7,661.80	7,311.41	7,026.51	284.90	25.663		
8,000.00	7,244.44	7,177.44	7,244.44	47.99	248.84	-90.68	-4,090.69	-7,661.80	7,219.87	6,935.06	284.81	25.350		
8,100.00	7,243.91	7,176.91	7,243.91	49.96	248.82	-90.67	-4,090.69	-7,661.80	7,128.56	6,843.78	284.79	25.031		
8,200.00	7,243.39	7,176.39	7,243.39	52.10	248.80	-90.66	-4,090.69	-7,661.80	7,037.49	6,752.66	284.83	24.707		
8,300.00	7,242.86	7,175.86	7,242.86	54.38	248.79	-90.65	-4,090.69	-7,661.80	6,946.67	6,661.71	284.96	24.378		
8,400.00	7,242.33	7,175.33	7,242.33	56.78	248.77	-90.64	-4,090.69	-7,661.80	6,856.09	6,570.94	285.16	24.043		
8,500.00	7,241.80	7,174.80	7,241.80	59.28	248.75	-90.63	-4,090.69	-7,661.80	6,765.79	6,480.34	285.44	23.703		
8,600.00	7,241.27	7,174.27	7,241.27	61.88	248.73	-90.62	-4,090.69	-7,661.80	6,675.76	6,389.94	285.82	23.357		
8,700.00	7,240.74	7,173.74	7,240.74	64.54	248.71	-90.61	-4,090.69	-7,661.80	6,586.02	6,299.73	286.29	23.005		
8,800.00	7,240.21	7,173.21	7,240.21	67.27	248.69	-90.60	-4,090.69	-7,661.80	6,496.57	6,209.72	286.86	22.648		
8,900.00	7,239.68	7,172.68	7,239.68	70.06	248.68	-90.59	-4,090.69	-7,661.80	6,407.44	6,119.92	287.52	22.285		
9,000.00	7,239.16	7,172.16	7,239.16	72.89	248.66	-90.58	-4,090.69	-7,661.80	6,318.64	6,030.34	288.29	21.917		
9,100.00	7,238.63	7,171.63	7,238.63	75.77	248.64	-90.57	-4,090.69	-7,661.80	6,230.17	5,941.00	289.17	21.545		
9,200.00	7,238.10	7,171.10	7,238.10	78.69	248.62	-90.56	-4,090.69	-7,661.80	6,142.06	5,851.90	290.15	21.168		
9,300.00	7,237.57	7,170.57	7,237.57	81.64	248.60	-90.55	-4,090.69	-7,661.80	6,054.32	5,763.07	291.25	20.787		
9,400.00	7,237.04	7,170.04	7,237.04	84.62	248.58	-90.54	-4,090.69	-7,661.80	5,966.96	5,674.50	292.46	20.403		
9,500.00	7,236.51	7,169.51	7,236.51	87.63	248.56	-90.53	-4,090.69	-7,661.80	5,880.00	5,586.23	293.78	20.015		
9,600.00	7,235.98	7,168.98	7,235.98	90.66	248.55	-90.52	-4,090.69	-7,661.80	5,793.47	5,498.26	295.21	19.625		
9,700.00	7,235.45	7,168.45	7,235.45	93.72	248.53	-90.51	-4,090.69	-7,661.80	5,707.38	5,410.62	296.76	19.232		
9,800.00	7,234.93	7,167.93	7,234.93	96.79	248.51	-90.50	-4,090.69	-7,661.80	5,621.75	5,323.32	298.42	18.838		
9,900.00	7,234.40	7,167.40	7,234.40	99.88	248.49	-90.49	-4,090.69	-7,661.80	5,536.59	5,236.39	300.20	18.443		
10,000.00	7,233.87	7,166.87	7,233.87	102.98	248.47	-90.48	-4,090.69	-7,661.80	5,451.95	5,149.85	302.10	18.047		
10,100.00	7,233.34	7,166.34	7,233.34	106.10	248.45	-90.47	-4,090.69	-7,661.80	5,367.83	5,063.72	304.11	17.651		
10,200.00	7,232.81	7,165.81	7,232.81	109.23	248.44	-90.46	-4,090.69	-7,661.80	5,284.26	4,978.02	306.24	17.255		
10,300.00	7,232.28	7,165.28	7,232.28	112.38	248.42	-90.45	-4,090.69	-7,661.80	5,201.28	4,892.79	308.49	16.860		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,164.75	7,231.75	115.53	248.40	-90.44	-4,090.69	-7,661.80	5,118.90	4,808.04	310.86	16.467		
10,500.00	7,231.23	7,164.23	7,231.23	118.70	248.38	-90.42	-4,090.69	-7,661.80	5,037.16	4,723.81	313.35	16.075		
10,600.00	7,230.70	7,163.70	7,230.70	121.87	248.36	-90.41	-4,090.69	-7,661.80	4,956.09	4,640.13	315.96	15.686		
10,700.00	7,230.17	7,163.17	7,230.17	125.05	248.34	-90.40	-4,090.69	-7,661.80	4,875.72	4,557.03	318.70	15.299		
10,800.00	7,229.64	7,162.64	7,229.64	128.25	248.32	-90.39	-4,090.69	-7,661.80	4,796.09	4,474.54	321.56	14.915		
10,900.00	7,229.11	7,162.11	7,229.11	131.44	248.31	-90.38	-4,090.69	-7,661.80	4,717.24	4,392.70	324.54	14.535		
11,000.00	7,228.58	7,161.58	7,228.58	134.65	248.29	-90.37	-4,090.69	-7,661.80	4,639.20	4,311.55	327.65	14.159		
11,100.00	7,228.05	7,161.05	7,228.05	137.86	248.27	-90.36	-4,090.69	-7,661.80	4,562.02	4,231.13	330.89	13.787		
11,200.00	7,227.52	7,160.52	7,227.52	141.08	248.25	-90.35	-4,090.69	-7,661.80	4,485.75	4,151.48	334.26	13.420		
11,300.00	7,227.00	7,160.00	7,227.00	144.30	248.23	-90.34	-4,090.69	-7,661.80	4,410.41	4,072.65	337.76	13.058		
11,400.00	7,226.47	7,159.47	7,226.47	147.52	248.21	-90.33	-4,090.69	-7,661.80	4,336.08	3,994.69	341.39	12.701		
11,500.00	7,225.94	7,158.94	7,225.94	150.76	248.20	-90.32	-4,090.69	-7,661.80	4,262.80	3,917.64	345.16	12.350		
11,600.00	7,225.41	7,158.41	7,225.41	153.99	248.18	-90.31	-4,090.69	-7,661.80	4,190.62	3,841.56	349.06	12.005		
11,700.00	7,224.88	7,157.88	7,224.88	157.23	248.16	-90.30	-4,090.69	-7,661.80	4,119.60	3,766.51	353.09	11.667		
11,800.00	7,224.35	7,157.35	7,224.35	160.48	248.14	-90.29	-4,090.69	-7,661.80	4,049.81	3,692.55	357.26	11.336		
11,900.00	7,223.82	7,156.82	7,223.82	163.72	248.12	-90.28	-4,090.69	-7,661.80	3,981.31	3,619.74	361.57	11.011		
12,000.00	7,223.29	7,156.29	7,223.29	166.98	248.10	-90.27	-4,090.69	-7,661.80	3,914.16	3,548.15	366.01	10.694		
12,100.00	7,222.77	7,155.77	7,222.77	170.23	248.08	-90.26	-4,090.69	-7,661.80	3,848.44	3,477.86	370.58	10.385		
12,200.00	7,222.24	7,155.24	7,222.24	173.49	248.07	-90.25	-4,090.69	-7,661.80	3,784.22	3,408.95	375.28	10.084		
12,300.00	7,221.71	7,154.71	7,221.71	176.75	248.05	-90.24	-4,090.69	-7,661.80	3,721.58	3,341.48	380.10	9.791		
12,400.00	7,221.18	7,154.18	7,221.18	180.01	248.03	-90.23	-4,090.69	-7,661.80	3,660.60	3,275.55	385.06	9.507		
12,500.00	7,220.65	7,153.65	7,220.65	183.28	248.01	-90.22	-4,090.69	-7,661.80	3,601.37	3,211.24	390.12	9.231		
12,600.00	7,220.12	7,153.12	7,220.12	186.54	247.99	-90.21	-4,090.69	-7,661.80	3,543.97	3,148.66	395.30	8.965		
12,700.00	7,219.59	7,152.59	7,219.59	189.81	247.97	-90.20	-4,090.69	-7,661.80	3,488.48	3,087.90	400.59	8.708		
12,800.00	7,219.06	7,152.06	7,219.06	193.09	247.96	-90.19	-4,090.69	-7,661.80	3,435.02	3,029.05	405.97	8.461		
12,900.00	7,218.54	7,151.54	7,218.54	196.36	247.94	-90.18	-4,090.69	-7,661.80	3,383.67	2,972.23	411.43	8.224		
13,000.00	7,218.01	7,151.01	7,218.01	199.64	247.92	-90.17	-4,090.69	-7,661.80	3,334.52	2,917.55	416.97	7.997		
13,100.00	7,217.48	7,150.48	7,217.48	202.92	247.90	-90.16	-4,090.69	-7,661.80	3,287.68	2,865.12	422.57	7.780		
13,200.00	7,216.95	7,149.95	7,216.95	206.20	247.88	-90.15	-4,090.69	-7,661.80	3,243.26	2,815.05	428.20	7.574		
13,300.00	7,216.42	7,149.42	7,216.42	209.48	247.86	-90.13	-4,090.69	-7,661.80	3,201.33	2,767.47	433.87	7.379		
13,400.00	7,215.89	7,148.89	7,215.89	212.76	247.84	-90.12	-4,090.69	-7,661.80	3,162.02	2,722.49	439.53	7.194		
13,500.00	7,215.36	7,148.36	7,215.36	216.05	247.83	-90.11	-4,090.69	-7,661.80	3,125.41	2,680.23	445.19	7.020		
13,600.00	7,214.84	7,147.84	7,214.84	219.33	247.81	-90.10	-4,090.69	-7,661.80	3,091.61	2,640.81	450.80	6.858		
13,700.00	7,214.31	7,147.31	7,214.31	222.62	247.79	-90.09	-4,090.69	-7,661.80	3,060.70	2,604.34	456.35	6.707		
13,800.00	7,213.78	7,146.78	7,213.78	225.91	247.77	-90.08	-4,090.69	-7,661.80	3,032.77	2,570.95	461.82	6.567		
13,900.00	7,213.25	7,146.25	7,213.25	229.20	247.75	-90.07	-4,090.69	-7,661.80	3,007.91	2,540.73	467.18	6.438		
14,000.00	7,212.72	7,145.72	7,212.72	232.49	247.73	-90.06	-4,090.69	-7,661.80	2,986.20	2,513.80	472.40	6.321		
14,100.00	7,212.19	7,145.19	7,212.19	235.79	247.72	-90.05	-4,090.69	-7,661.80	2,967.69	2,490.23	477.46	6.216		
14,200.00	7,211.66	7,144.66	7,211.66	239.08	247.70	-90.04	-4,090.69	-7,661.80	2,952.46	2,470.13	482.33	6.121		
14,300.00	7,211.13	7,144.13	7,211.13	242.38	247.68	-90.03	-4,090.69	-7,661.80	2,940.55	2,453.56	486.99	6.038		
14,400.00	7,210.61	7,143.61	7,210.61	245.67	247.66	-90.02	-4,090.69	-7,661.80	2,932.01	2,440.59	491.42	5.966		
14,500.00	7,210.08	7,143.08	7,210.08	248.97	247.64	-90.01	-4,090.69	-7,661.80	2,926.86	2,431.27	495.59	5.906		
14,600.00	7,209.55	7,142.55	7,209.55	252.27	247.62	-90.00	-4,090.69	-7,661.80	2,925.12	2,425.63	499.49	5.856		
14,600.87	7,209.54	7,142.54	7,209.54	252.30	247.62	-90.00	-4,090.69	-7,661.80	2,925.12	2,425.59	499.53	5.856 CC		
14,700.00	7,209.02	7,142.02	7,209.02	255.57	247.60	-89.99	-4,090.69	-7,661.80	2,926.80	2,423.69	503.11	5.817 ES		
14,800.00	7,208.49	7,141.49	7,208.49	258.87	247.59	-89.98	-4,090.69	-7,661.80	2,931.89	2,425.46	506.43	5.789		
14,900.00	7,207.96	7,140.96	7,207.96	262.17	247.57	-89.97	-4,090.69	-7,661.80	2,940.38	2,430.93	509.45	5.772		
15,000.00	7,207.43	7,140.43	7,207.43	265.47	247.55	-89.96	-4,090.69	-7,661.80	2,952.22	2,440.08	512.15	5.764 SF		
15,081.89	7,207.00	7,140.00	7,207.00	268.17	247.53	-89.95	-4,090.69	-7,661.80	2,964.41	2,450.28	514.13	5.766		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	52.00	3.28	3.28	-107.19	-2,773.28	-8,962.11	9,381.54					
100.00	100.00	48.00	100.00	3.28	3.39	-107.19	-2,773.28	-8,962.11	9,381.40	9,374.73	6.67	1,406.497		
200.00	200.00	148.00	200.00	3.34	4.74	-107.19	-2,773.28	-8,962.11	9,381.40	9,373.32	8.08	1,161.562		
300.00	299.98	247.98	299.98	3.44	7.65	64.79	-2,773.28	-8,962.11	9,380.65	9,369.56	11.09	845.878		
400.00	399.84	347.84	399.84	3.59	10.90	64.86	-2,773.28	-8,962.11	9,378.42	9,363.93	14.49	647.088		
500.00	499.45	447.45	499.45	3.80	14.26	64.97	-2,773.28	-8,962.11	9,374.72	9,356.66	18.05	519.301		
600.00	598.70	546.70	598.70	4.06	17.65	65.13	-2,773.28	-8,962.11	9,369.54	9,347.84	21.70	431.766		
700.00	697.49	645.49	697.49	4.38	21.05	65.30	-2,773.28	-8,962.11	9,362.98	9,337.57	25.41	368.459		
800.00	796.13	744.13	796.13	4.74	24.45	65.39	-2,773.28	-8,962.11	9,356.06	9,326.89	29.17	320.701		
900.00	894.78	842.78	894.78	5.15	27.87	65.48	-2,773.28	-8,962.11	9,349.17	9,316.19	32.98	283.490		
1,000.00	993.43	941.43	993.43	5.58	31.29	65.57	-2,773.28	-8,962.11	9,342.29	9,305.48	36.82	253.754		
1,100.00	1,092.07	1,040.07	1,092.07	6.03	34.72	65.66	-2,773.28	-8,962.11	9,335.45	9,294.77	40.68	229.490		
1,200.00	1,190.72	1,138.72	1,190.72	6.50	38.15	65.76	-2,773.28	-8,962.11	9,328.62	9,284.06	44.56	209.341		
1,300.00	1,289.36	1,237.36	1,289.36	6.98	41.58	65.85	-2,773.28	-8,962.11	9,321.82	9,273.36	48.46	192.359		
1,400.00	1,388.01	1,336.01	1,388.01	7.47	45.01	65.94	-2,773.28	-8,962.11	9,315.05	9,262.67	52.37	177.863		
1,500.00	1,486.65	1,434.65	1,486.65	7.97	48.45	66.03	-2,773.28	-8,962.11	9,308.29	9,252.00	56.29	165.352		
1,600.00	1,585.30	1,533.30	1,585.30	8.48	51.89	66.12	-2,773.28	-8,962.11	9,301.57	9,241.34	60.22	154.449		
1,700.00	1,683.94	1,631.94	1,683.94	9.00	55.32	66.21	-2,773.28	-8,962.11	9,294.86	9,230.70	64.16	144.865		
1,800.00	1,782.59	1,730.59	1,782.59	9.52	58.76	66.30	-2,773.28	-8,962.11	9,288.18	9,220.08	68.11	136.378		
1,900.00	1,881.24	1,829.24	1,881.24	10.05	62.20	66.39	-2,773.28	-8,962.11	9,281.53	9,209.47	72.05	128.812		
2,000.00	1,979.88	1,927.88	1,979.88	10.58	65.64	66.49	-2,773.28	-8,962.11	9,274.89	9,198.89	76.01	122.025		
2,100.00	2,078.53	2,026.53	2,078.53	11.11	69.08	66.58	-2,773.28	-8,962.11	9,268.29	9,188.32	79.97	115.903		
2,200.00	2,177.17	2,125.17	2,177.17	11.64	72.52	66.67	-2,773.28	-8,962.11	9,261.70	9,177.78	83.93	110.355		
2,300.00	2,275.82	2,223.82	2,275.82	12.18	75.96	66.76	-2,773.28	-8,962.11	9,255.14	9,167.25	87.89	105.304		
2,400.00	2,374.46	2,322.46	2,374.46	12.72	79.40	66.85	-2,773.28	-8,962.11	9,248.61	9,156.75	91.86	100.686		
2,500.00	2,473.11	2,421.11	2,473.11	13.26	82.84	66.95	-2,773.28	-8,962.11	9,242.10	9,146.28	95.82	96.448		
2,600.00	2,571.76	2,519.76	2,571.76	13.80	86.28	67.04	-2,773.28	-8,962.11	9,235.62	9,135.82	99.80	92.546		
2,700.00	2,670.40	2,618.40	2,670.40	14.35	89.72	67.13	-2,773.28	-8,962.11	9,229.15	9,125.39	103.77	88.941		
2,800.00	2,769.05	2,717.05	2,769.05	14.89	93.16	67.22	-2,773.28	-8,962.11	9,222.72	9,114.98	107.74	85.600		
2,900.00	2,867.69	2,815.69	2,867.69	15.44	96.61	67.32	-2,773.28	-8,962.11	9,216.31	9,104.59	111.72	82.497		
3,000.00	2,966.34	2,914.34	2,966.34	15.99	100.05	67.41	-2,773.28	-8,962.11	9,209.92	9,094.23	115.69	79.605		
3,100.00	3,064.98	3,012.98	3,064.98	16.53	103.49	67.50	-2,773.28	-8,962.11	9,203.56	9,083.89	119.67	76.906		
3,200.00	3,163.63	3,111.63	3,163.63	17.08	106.93	67.60	-2,773.28	-8,962.11	9,197.22	9,073.57	123.65	74.380		
3,300.00	3,262.27	3,210.27	3,262.27	17.63	110.37	67.69	-2,773.28	-8,962.11	9,190.91	9,063.28	127.63	72.010		
3,400.00	3,360.92	3,308.92	3,360.92	18.18	113.82	67.78	-2,773.28	-8,962.11	9,184.62	9,053.01	131.61	69.784		
3,500.00	3,459.57	3,407.57	3,459.57	18.74	117.26	67.88	-2,773.28	-8,962.11	9,178.36	9,042.76	135.60	67.688		
3,600.00	3,558.21	3,506.21	3,558.21	19.29	120.70	67.97	-2,773.28	-8,962.11	9,172.13	9,032.54	139.58	65.712		
3,700.00	3,656.86	3,604.86	3,656.86	19.84	124.14	68.07	-2,773.28	-8,962.11	9,165.91	9,022.35	143.56	63.845		
3,800.00	3,755.50	3,703.50	3,755.50	20.39	127.59	68.16	-2,773.28	-8,962.11	9,159.73	9,012.18	147.55	62.079		
3,900.00	3,854.15	3,802.15	3,854.15	20.95	131.03	68.25	-2,773.28	-8,962.11	9,153.57	9,002.03	151.54	60.405		
4,000.00	3,952.79	3,900.79	3,952.79	21.50	134.47	68.35	-2,773.28	-8,962.11	9,147.43	8,991.91	155.52	58.818		
4,100.00	4,051.44	4,000.56	4,051.44	22.05	137.95	68.44	-2,773.28	-8,962.11	9,141.32	8,981.77	159.55	57.295		
4,200.00	4,150.08	4,101.92	4,150.08	22.61	141.49	68.54	-2,773.28	-8,962.11	9,135.23	8,971.60	163.63	55.828		
4,300.00	4,248.73	4,203.27	4,248.73	23.16	145.03	68.63	-2,773.28	-8,962.11	9,129.17	8,961.46	167.71	54.433		
4,400.00	4,347.38	4,304.62	4,347.38	23.72	148.57	68.73	-2,773.28	-8,962.11	9,123.14	8,951.34	171.80	53.104		
4,500.00	4,446.02	4,405.98	4,446.02	24.27	152.10	68.82	-2,773.28	-8,962.11	9,117.13	8,941.25	175.88	51.837		
4,600.00	4,544.67	4,507.33	4,544.67	24.83	155.64	68.92	-2,773.28	-8,962.11	9,111.15	8,931.18	179.96	50.627		
4,700.00	4,643.31	4,608.69	4,643.31	25.39	159.18	69.01	-2,773.28	-8,962.11	9,105.19	8,921.14	184.05	49.471		
4,800.00	4,741.96	4,689.96	4,741.96	25.94	162.01	69.11	-2,773.28	-8,962.11	9,099.26	8,911.82	187.43	48.546		
4,900.00	4,840.60	4,788.60	4,840.60	26.50	165.46	69.20	-2,773.28	-8,962.11	9,093.35	8,901.92	191.43	47.503		
5,000.00	4,939.25	4,887.25	4,939.25	27.05	168.90	69.30	-2,773.28	-8,962.11	9,087.47	8,892.05	195.42	46.503		
5,100.00	5,037.90	4,985.90	5,037.90	27.61	172.34	69.39	-2,773.28	-8,962.11	9,081.61	8,882.20	199.41	45.542		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,084.54	5,136.54	28.17	175.79	69.49	-2,773.28	-8,962.11	9,075.78	8,872.38	203.40	44.620		
5,300.00	5,235.19	5,183.19	5,235.19	28.72	179.23	69.59	-2,773.28	-8,962.11	9,069.98	8,862.59	207.40	43.733		
5,400.00	5,333.83	5,281.83	5,333.83	29.28	182.67	69.68	-2,773.28	-8,962.11	9,064.20	8,852.82	211.39	42.879		
5,500.00	5,432.48	5,380.48	5,432.48	29.84	186.12	69.78	-2,773.28	-8,962.11	9,058.45	8,843.07	215.38	42.058		
5,600.00	5,531.12	5,479.12	5,531.12	30.40	189.56	69.87	-2,773.28	-8,962.11	9,052.73	8,833.35	219.38	41.266		
5,700.00	5,629.77	5,577.77	5,629.77	30.95	193.00	69.97	-2,773.28	-8,962.11	9,047.03	8,823.66	223.37	40.502		
5,800.00	5,728.41	5,676.41	5,728.41	31.51	196.45	70.07	-2,773.28	-8,962.11	9,041.36	8,813.99	227.37	39.766		
5,900.00	5,827.06	5,775.06	5,827.06	32.07	199.89	70.16	-2,773.28	-8,962.11	9,035.71	8,804.35	231.36	39.055		
6,000.00	5,925.71	5,873.71	5,925.71	32.63	203.33	70.26	-2,773.28	-8,962.11	9,030.09	8,794.73	235.36	38.368		
6,100.00	6,024.35	5,972.35	6,024.35	33.19	206.78	70.36	-2,773.28	-8,962.11	9,024.50	8,785.14	239.35	37.704		
6,200.00	6,123.00	6,071.00	6,123.00	33.74	210.22	70.45	-2,773.28	-8,962.11	9,018.93	8,775.58	243.35	37.062		
6,300.00	6,221.64	6,169.64	6,221.64	34.30	213.66	70.55	-2,773.28	-8,962.11	9,013.39	8,766.04	247.35	36.441		
6,400.00	6,320.29	6,268.29	6,320.29	34.86	217.11	70.65	-2,773.28	-8,962.11	9,007.87	8,756.53	251.34	35.839		
6,500.00	6,418.93	6,366.93	6,418.93	35.42	220.55	70.75	-2,773.28	-8,962.11	9,002.38	8,747.04	255.34	35.257		
6,600.00	6,517.58	6,465.58	6,517.58	35.98	223.99	70.84	-2,773.28	-8,962.11	8,996.92	8,737.58	259.34	34.692		
6,700.00	6,616.23	6,564.23	6,616.23	36.54	227.44	70.94	-2,773.28	-8,962.11	8,991.49	8,728.15	263.33	34.145		
6,800.00	6,714.51	6,662.51	6,714.51	37.10	230.87	36.08	-2,773.28	-8,962.11	8,980.78	8,713.47	267.31	33.597		
6,900.00	6,810.42	6,758.42	6,810.42	37.66	234.21	17.01	-2,773.28	-8,962.11	8,955.17	8,684.03	271.14	33.028		
7,000.00	6,901.58	6,849.58	6,901.58	38.21	237.40	8.06	-2,773.28	-8,962.11	8,915.06	8,640.31	274.75	32.448		
7,100.00	6,985.76	6,933.76	6,985.76	38.76	240.34	2.53	-2,773.28	-8,962.11	8,861.42	8,583.37	278.04	31.871		
7,200.00	7,060.88	7,008.88	7,060.88	39.32	242.96	-1.96	-2,773.28	-8,962.11	8,795.56	8,514.63	280.94	31.308		
7,300.00	7,125.09	7,073.09	7,125.09	39.90	245.20	-6.68	-2,773.28	-8,962.11	8,719.12	8,435.76	283.36	30.771		
7,400.00	7,176.81	7,124.81	7,176.81	40.55	247.00	-13.04	-2,773.28	-8,962.11	8,633.98	8,348.72	285.26	30.268		
7,500.00	7,214.77	7,162.77	7,214.77	41.30	248.33	-23.85	-2,773.28	-8,962.11	8,542.23	8,255.65	286.58	29.807		
7,600.00	7,238.02	7,186.02	7,238.02	42.22	249.14	-46.49	-2,773.28	-8,962.11	8,446.17	8,158.86	287.31	29.397		
7,700.00	7,246.01	7,205.99	7,246.01	43.32	249.84	-89.25	-2,773.28	-8,962.11	8,348.16	8,060.30	287.86	29.001		
7,800.00	7,245.50	7,206.50	7,245.50	44.65	249.86	-91.53	-2,773.28	-8,962.11	8,250.04	7,962.33	287.71	28.675		
7,900.00	7,244.97	7,207.03	7,244.97	46.21	249.87	-91.51	-2,773.28	-8,962.11	8,151.96	7,864.40	287.56	28.348		
8,000.00	7,244.44	7,207.56	7,244.44	47.99	249.89	-91.49	-2,773.28	-8,962.11	8,053.93	7,766.50	287.43	28.021		
8,100.00	7,243.91	7,208.09	7,243.91	49.96	249.91	-91.48	-2,773.28	-8,962.11	7,955.95	7,668.65	287.30	27.692		
8,200.00	7,243.39	7,208.61	7,243.39	52.10	249.93	-91.46	-2,773.28	-8,962.11	7,858.02	7,570.83	287.19	27.361		
8,300.00	7,242.86	7,209.14	7,242.86	54.38	249.95	-91.44	-2,773.28	-8,962.11	7,760.14	7,473.05	287.10	27.030		
8,400.00	7,242.33	7,209.67	7,242.33	56.78	249.97	-91.42	-2,773.28	-8,962.11	7,662.32	7,375.31	287.01	26.697		
8,500.00	7,241.80	7,189.80	7,241.80	59.28	249.27	-91.40	-2,773.28	-8,962.11	7,564.56	7,278.32	286.23	26.428		
8,600.00	7,241.27	7,189.27	7,241.27	61.88	249.25	-91.38	-2,773.28	-8,962.11	7,466.85	7,180.71	286.15	26.095		
8,700.00	7,240.74	7,188.74	7,240.74	64.54	249.24	-91.36	-2,773.28	-8,962.11	7,369.21	7,083.13	286.08	25.759		
8,800.00	7,240.21	7,188.21	7,240.21	67.27	249.22	-91.34	-2,773.28	-8,962.11	7,271.63	6,985.60	286.03	25.423		
8,900.00	7,239.68	7,187.68	7,239.68	70.06	249.20	-91.32	-2,773.28	-8,962.11	7,174.11	6,888.11	286.01	25.084		
9,000.00	7,239.16	7,187.16	7,239.16	72.89	249.18	-91.30	-2,773.28	-8,962.11	7,076.67	6,790.66	286.01	24.743		
9,100.00	7,238.63	7,186.63	7,238.63	75.77	249.16	-91.29	-2,773.28	-8,962.11	6,979.30	6,693.27	286.03	24.400		
9,200.00	7,238.10	7,186.10	7,238.10	78.69	249.14	-91.27	-2,773.28	-8,962.11	6,882.00	6,595.92	286.08	24.056		
9,300.00	7,237.57	7,185.57	7,237.57	81.64	249.12	-91.25	-2,773.28	-8,962.11	6,784.78	6,498.61	286.17	23.709		
9,400.00	7,237.04	7,185.04	7,237.04	84.62	249.11	-91.23	-2,773.28	-8,962.11	6,687.65	6,401.36	286.29	23.360		
9,500.00	7,236.51	7,184.51	7,236.51	87.63	249.09	-91.21	-2,773.28	-8,962.11	6,590.60	6,304.16	286.44	23.009		
9,600.00	7,235.98	7,183.98	7,235.98	90.66	249.07	-91.19	-2,773.28	-8,962.11	6,493.63	6,207.01	286.63	22.655		
9,700.00	7,235.45	7,183.45	7,235.45	93.72	249.05	-91.17	-2,773.28	-8,962.11	6,396.77	6,109.91	286.86	22.300		
9,800.00	7,234.93	7,182.93	7,234.93	96.79	249.03	-91.15	-2,773.28	-8,962.11	6,300.00	6,012.87	287.13	21.941		
9,900.00	7,234.40	7,182.40	7,234.40	99.88	249.01	-91.13	-2,773.28	-8,962.11	6,203.33	5,915.89	287.44	21.581		
10,000.00	7,233.87	7,181.87	7,233.87	102.98	249.00	-91.12	-2,773.28	-8,962.11	6,106.77	5,818.96	287.81	21.218		
10,100.00	7,233.34	7,181.34	7,233.34	106.10	248.98	-91.10	-2,773.28	-8,962.11	6,010.32	5,722.10	288.23	20.853		
10,200.00	7,232.81	7,180.81	7,232.81	109.23	248.96	-91.08	-2,773.28	-8,962.11	5,913.99	5,625.30	288.70	20.485		
10,300.00	7,232.28	7,180.28	7,232.28	112.38	248.94	-91.06	-2,773.28	-8,962.11	5,817.79	5,528.56	289.22	20.115		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,179.75	7,231.75	115.53	248.92	-91.04	-2,773.28	-8,962.11	5,721.71	5,431.90	289.81	19.743		
10,500.00	7,231.23	7,179.23	7,231.23	118.70	248.90	-91.02	-2,773.28	-8,962.11	5,625.77	5,335.31	290.46	19.368		
10,600.00	7,230.70	7,178.70	7,230.70	121.87	248.88	-91.00	-2,773.28	-8,962.11	5,529.98	5,238.80	291.18	18.992		
10,700.00	7,230.17	7,178.17	7,230.17	125.05	248.87	-90.98	-2,773.28	-8,962.11	5,434.33	5,142.36	291.97	18.613		
10,800.00	7,229.64	7,177.64	7,229.64	128.25	248.85	-90.96	-2,773.28	-8,962.11	5,338.85	5,046.02	292.83	18.232		
10,900.00	7,229.11	7,177.11	7,229.11	131.44	248.83	-90.95	-2,773.28	-8,962.11	5,243.53	4,949.76	293.77	17.849		
11,000.00	7,228.58	7,176.58	7,228.58	134.65	248.81	-90.93	-2,773.28	-8,962.11	5,148.39	4,853.61	294.79	17.465		
11,100.00	7,228.05	7,176.05	7,228.05	137.86	248.79	-90.91	-2,773.28	-8,962.11	5,053.44	4,757.55	295.89	17.079		
11,200.00	7,227.52	7,175.52	7,227.52	141.08	248.77	-90.89	-2,773.28	-8,962.11	4,958.69	4,661.61	297.08	16.691		
11,300.00	7,227.00	7,175.00	7,227.00	144.30	248.76	-90.87	-2,773.28	-8,962.11	4,864.15	4,565.79	298.36	16.303		
11,400.00	7,226.47	7,174.47	7,226.47	147.52	248.74	-90.85	-2,773.28	-8,962.11	4,769.83	4,470.09	299.74	15.913		
11,500.00	7,225.94	7,173.94	7,225.94	150.76	248.72	-90.83	-2,773.28	-8,962.11	4,675.75	4,374.53	301.22	15.523		
11,600.00	7,225.41	7,173.41	7,225.41	153.99	248.70	-90.81	-2,773.28	-8,962.11	4,581.91	4,279.11	302.81	15.132		
11,700.00	7,224.88	7,172.88	7,224.88	157.23	248.68	-90.79	-2,773.28	-8,962.11	4,488.35	4,183.85	304.50	14.740		
11,800.00	7,224.35	7,172.35	7,224.35	160.48	248.66	-90.77	-2,773.28	-8,962.11	4,395.06	4,088.76	306.31	14.349		
11,900.00	7,223.82	7,171.82	7,223.82	163.72	248.64	-90.76	-2,773.28	-8,962.11	4,302.08	3,993.85	308.23	13.957		
12,000.00	7,223.29	7,171.29	7,223.29	166.98	248.63	-90.74	-2,773.28	-8,962.11	4,209.42	3,899.14	310.29	13.566		
12,100.00	7,222.77	7,170.77	7,222.77	170.23	248.61	-90.72	-2,773.28	-8,962.11	4,117.11	3,804.63	312.47	13.176		
12,200.00	7,222.24	7,170.24	7,222.24	173.49	248.59	-90.70	-2,773.28	-8,962.11	4,025.16	3,710.36	314.80	12.787		
12,300.00	7,221.71	7,169.71	7,221.71	176.75	248.57	-90.68	-2,773.28	-8,962.11	3,933.60	3,616.34	317.26	12.399		
12,400.00	7,221.18	7,169.18	7,221.18	180.01	248.55	-90.66	-2,773.28	-8,962.11	3,842.47	3,522.58	319.88	12.012		
12,500.00	7,220.65	7,168.65	7,220.65	183.28	248.53	-90.64	-2,773.28	-8,962.11	3,751.78	3,429.12	322.66	11.628		
12,600.00	7,220.12	7,168.12	7,220.12	186.54	248.52	-90.62	-2,773.28	-8,962.11	3,661.58	3,335.97	325.61	11.245		
12,700.00	7,219.59	7,167.59	7,219.59	189.81	248.50	-90.60	-2,773.28	-8,962.11	3,571.91	3,243.17	328.74	10.865		
12,800.00	7,219.06	7,167.06	7,219.06	193.09	248.48	-90.59	-2,773.28	-8,962.11	3,482.79	3,150.74	332.05	10.489		
12,900.00	7,218.54	7,166.54	7,218.54	196.36	248.46	-90.57	-2,773.28	-8,962.11	3,394.28	3,058.72	335.56	10.115		
13,000.00	7,218.01	7,166.01	7,218.01	199.64	248.44	-90.55	-2,773.28	-8,962.11	3,306.43	2,967.15	339.28	9.745		
13,100.00	7,217.48	7,165.48	7,217.48	202.92	248.42	-90.53	-2,773.28	-8,962.11	3,219.28	2,876.06	343.22	9.380		
13,200.00	7,216.95	7,164.95	7,216.95	206.20	248.41	-90.51	-2,773.28	-8,962.11	3,132.91	2,785.52	347.39	9.018		
13,300.00	7,216.42	7,164.42	7,216.42	209.48	248.39	-90.49	-2,773.28	-8,962.11	3,047.36	2,695.56	351.80	8.662		
13,400.00	7,215.89	7,163.89	7,215.89	212.76	248.37	-90.47	-2,773.28	-8,962.11	2,962.73	2,606.25	356.47	8.311		
13,500.00	7,215.36	7,163.36	7,215.36	216.05	248.35	-90.45	-2,773.28	-8,962.11	2,879.07	2,517.66	361.42	7.966		
13,600.00	7,214.84	7,162.84	7,214.84	219.33	248.33	-90.43	-2,773.28	-8,962.11	2,796.49	2,429.85	366.64	7.627		
13,700.00	7,214.31	7,162.31	7,214.31	222.62	248.31	-90.42	-2,773.28	-8,962.11	2,715.09	2,342.91	372.17	7.295		
13,800.00	7,213.78	7,161.78	7,213.78	225.91	248.29	-90.40	-2,773.28	-8,962.11	2,634.96	2,256.95	378.01	6.971		
13,900.00	7,213.25	7,161.25	7,213.25	229.20	248.28	-90.38	-2,773.28	-8,962.11	2,556.23	2,172.06	384.17	6.654		
14,000.00	7,212.72	7,160.72	7,212.72	232.49	248.26	-90.36	-2,773.28	-8,962.11	2,479.04	2,088.37	390.67	6.346		
14,100.00	7,212.19	7,160.19	7,212.19	235.79	248.24	-90.34	-2,773.28	-8,962.11	2,403.53	2,006.01	397.52	6.046		
14,200.00	7,211.66	7,159.66	7,211.66	239.08	248.22	-90.32	-2,773.28	-8,962.11	2,329.86	1,925.15	404.71	5.757		
14,300.00	7,211.13	7,159.13	7,211.13	242.38	248.20	-90.30	-2,773.28	-8,962.11	2,258.22	1,845.96	412.26	5.478		
14,400.00	7,210.61	7,158.61	7,210.61	245.67	248.18	-90.28	-2,773.28	-8,962.11	2,188.81	1,768.64	420.17	5.209		
14,500.00	7,210.08	7,158.08	7,210.08	248.97	248.17	-90.26	-2,773.28	-8,962.11	2,121.84	1,693.43	428.41	4.953		
14,600.00	7,209.55	7,157.55	7,209.55	252.27	248.15	-90.24	-2,773.28	-8,962.11	2,057.55	1,620.58	436.97	4.709		
14,700.00	7,209.02	7,157.02	7,209.02	255.57	248.13	-90.23	-2,773.28	-8,962.11	1,996.20	1,550.38	445.82	4.478		
14,800.00	7,208.49	7,156.49	7,208.49	258.87	248.11	-90.21	-2,773.28	-8,962.11	1,938.07	1,483.15	454.93	4.260		
14,900.00	7,207.96	7,155.96	7,207.96	262.17	248.09	-90.19	-2,773.28	-8,962.11	1,883.46	1,419.25	464.21	4.057		
15,000.00	7,207.43	7,155.43	7,207.43	265.47	248.07	-90.17	-2,773.28	-8,962.11	1,832.69	1,359.07	473.61	3.870		
15,081.89	7,207.00	7,155.00	7,207.00	268.17	248.06	-90.15	-2,773.28	-8,962.11	1,794.19	1,312.86	481.33	3.728 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-106.94	-2,740.13	-8,994.37	9,402.56					
100.00	100.00	29.40	64.40	3.28	3.28	-106.94	-2,740.19	-8,994.41	9,402.62	9,396.06	6.57	1,432.166		
200.00	200.00	74.63	109.63	3.34	3.28	-106.95	-2,740.54	-8,994.62	9,403.29	9,396.67	6.62	1,420.285		
300.00	299.98	121.00	155.99	3.44	3.29	65.01	-2,741.21	-8,995.02	9,403.81	9,397.08	6.73	1,397.591		
400.00	399.84	165.12	200.10	3.59	3.31	65.02	-2,741.98	-8,995.64	9,403.43	9,396.53	6.90	1,362.899		
500.00	499.45	208.00	242.97	3.80	3.34	65.06	-2,742.66	-8,996.51	9,402.16	9,395.03	7.13	1,317.936		
600.00	598.70	208.00	242.97	4.06	3.34	65.10	-2,742.66	-8,996.51	9,400.27	9,392.88	7.39	1,271.239		
700.00	697.49	256.69	291.62	4.38	3.39	65.17	-2,743.27	-8,998.10	9,397.50	9,389.75	7.75	1,212.010		
800.00	796.13	300.00	334.88	4.74	3.44	65.21	-2,743.56	-9,000.30	9,395.39	9,387.23	8.16	1,150.955		
900.00	894.78	300.00	334.88	5.15	3.44	65.21	-2,743.56	-9,000.30	9,393.93	9,385.38	8.56	1,097.794		
1,000.00	993.43	300.00	334.88	5.58	3.44	65.21	-2,743.56	-9,000.30	9,393.54	9,384.56	8.98	1,046.252		
1,020.62	1,013.76	333.82	368.62	5.67	3.49	65.25	-2,743.58	-9,002.52	9,393.34	9,384.23	9.11	1,030.808		
1,020.62	1,013.76	333.82	368.62	5.67	3.49	65.25	-2,743.58	-9,002.52	9,393.34	9,384.23	9.11	1,030.808		
1,100.00	1,092.07	353.34	388.09	6.03	3.52	65.27	-2,743.49	-9,004.01	9,393.60	9,384.10	9.49	989.530		
1,200.00	1,190.72	391.00	425.60	6.50	3.59	65.31	-2,743.09	-9,007.30	9,394.68	9,384.67	10.01	938.473		
1,300.00	1,289.36	391.00	425.60	6.98	3.59	65.31	-2,743.09	-9,007.30	9,396.52	9,386.04	10.48	896.444		
1,400.00	1,388.01	427.76	462.16	7.47	3.66	65.35	-2,742.40	-9,011.05	9,399.15	9,388.12	11.03	852.205		
1,500.00	1,486.65	481.00	515.00	7.97	3.78	65.42	-2,740.87	-9,017.39	9,402.77	9,391.14	11.62	808.889		
1,600.00	1,585.30	481.00	515.00	8.48	3.78	65.42	-2,740.87	-9,017.39	9,406.86	9,394.74	12.12	776.107		
1,700.00	1,683.94	481.00	515.00	9.00	3.78	65.42	-2,740.87	-9,017.39	9,412.02	9,399.40	12.62	745.673		
1,800.00	1,782.59	531.28	564.77	9.52	3.91	65.49	-2,738.95	-9,024.30	9,417.75	9,404.51	13.24	711.235		
1,900.00	1,881.24	572.00	604.97	10.05	4.02	65.55	-2,737.17	-9,030.48	9,424.40	9,410.55	13.85	680.500		
2,000.00	1,979.88	572.00	604.97	10.58	4.02	65.55	-2,737.17	-9,030.48	9,431.79	9,417.43	14.36	656.815		
2,100.00	2,078.53	572.00	604.97	11.11	4.02	65.55	-2,737.17	-9,030.48	9,440.23	9,425.36	14.87	634.756		
2,200.00	2,177.17	626.29	658.42	11.64	4.20	65.63	-2,734.57	-9,039.65	9,449.03	9,433.50	15.53	608.242		
2,300.00	2,275.82	648.07	679.80	12.18	4.28	65.66	-2,733.49	-9,043.64	9,458.91	9,442.80	16.11	587.116		
2,400.00	2,374.46	693.00	723.80	12.72	4.44	65.73	-2,731.18	-9,052.45	9,469.73	9,452.97	16.76	565.027		
2,500.00	2,473.11	693.00	723.80	13.26	4.44	65.73	-2,731.18	-9,052.45	9,481.13	9,463.86	17.27	548.898		
2,600.00	2,571.76	693.00	723.80	13.80	4.44	65.73	-2,731.18	-9,052.45	9,493.57	9,475.78	17.79	533.780		
2,700.00	2,670.40	761.00	790.15	14.35	4.72	65.83	-2,727.94	-9,066.98	9,506.65	9,488.13	18.52	513.263		
2,800.00	2,769.05	761.00	790.15	14.89	4.72	65.83	-2,727.94	-9,066.98	9,520.47	9,501.43	19.03	500.239		
2,900.00	2,867.69	804.09	832.06	15.44	4.92	65.90	-2,725.84	-9,076.81	9,535.05	9,515.35	19.70	483.960		
3,000.00	2,966.34	855.00	881.38	15.99	5.16	65.98	-2,722.67	-9,089.00	9,550.35	9,529.96	20.39	468.321		
3,100.00	3,064.98	855.00	881.38	16.53	5.16	65.98	-2,722.67	-9,089.00	9,566.30	9,545.41	20.90	457.779		
3,200.00	3,163.63	890.12	915.27	17.08	5.35	66.04	-2,720.19	-9,097.84	9,583.01	9,561.47	21.54	444.951		
3,300.00	3,262.27	912.69	937.00	17.63	5.47	66.08	-2,718.57	-9,103.74	9,600.53	9,578.40	22.13	433.820		
3,400.00	3,360.92	949.00	971.84	18.18	5.67	66.14	-2,715.91	-9,113.60	9,618.89	9,596.10	22.79	422.158		
3,500.00	3,459.57	968.23	990.25	18.74	5.79	66.18	-2,714.44	-9,118.97	9,637.92	9,614.56	23.36	412.504		
3,600.00	3,558.21	1,018.20	1,037.97	19.29	6.09	66.27	-2,710.17	-9,133.16	9,657.56	9,633.48	24.08	400.989		
3,700.00	3,656.86	1,044.00	1,062.55	19.84	6.25	66.32	-2,707.71	-9,140.62	9,677.77	9,653.08	24.69	391.899		
3,800.00	3,755.50	1,079.72	1,096.48	20.39	6.49	66.39	-2,704.14	-9,151.21	9,698.65	9,673.30	25.36	382.499		
3,900.00	3,854.15	1,103.70	1,119.17	20.95	6.66	66.43	-2,701.68	-9,158.54	9,720.32	9,694.36	25.96	374.453		
4,000.00	3,952.79	1,139.00	1,152.47	21.50	6.90	66.50	-2,697.97	-9,169.64	9,742.76	9,716.14	26.62	366.014		
4,100.00	4,051.44	1,139.00	1,152.47	22.05	6.90	66.50	-2,697.97	-9,169.64	9,765.92	9,738.83	27.09	360.457		
4,200.00	4,150.08	1,176.98	1,188.14	22.61	7.18	66.58	-2,693.76	-9,182.01	9,789.78	9,762.01	27.77	352.518		
4,300.00	4,248.73	1,201.74	1,211.28	23.16	7.37	66.63	-2,690.83	-9,190.30	9,814.41	9,786.03	28.38	345.878		
4,400.00	4,347.38	1,234.00	1,241.31	23.72	7.62	66.70	-2,686.81	-9,201.39	9,839.77	9,810.75	29.02	339.067		
4,500.00	4,446.02	1,234.00	1,241.31	24.27	7.62	66.70	-2,686.81	-9,201.39	9,865.89	9,836.41	29.48	334.675		
4,600.00	4,544.67	1,271.56	1,276.09	24.83	7.93	66.78	-2,681.92	-9,214.70	9,892.66	9,862.50	30.16	328.025		
4,700.00	4,643.31	1,293.67	1,296.47	25.39	8.12	66.83	-2,678.98	-9,222.73	9,920.21	9,889.47	30.74	322.683		
4,800.00	4,741.96	1,329.00	1,328.91	25.94	8.42	66.91	-2,674.17	-9,235.88	9,948.53	9,917.12	31.41	316.769		
4,900.00	4,840.60	1,329.00	1,328.91	26.50	8.42	66.91	-2,674.17	-9,235.88	9,977.51	9,945.67	31.85	313.285		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
8,000.00	7,244.44	3,853.12	3,621.84	47.99	34.73	-18.45	-2,372.80	-10,246.10	9,936.05	9,876.37	59.68	166.490		
8,100.00	7,243.91	3,887.00	3,652.90	49.96	35.07	-18.54	-2,368.72	-10,259.01	9,843.59	9,783.71	59.88	164.383		
8,200.00	7,243.39	3,887.00	3,652.90	52.10	35.07	-18.54	-2,368.72	-10,259.01	9,751.15	9,691.31	59.84	162.953		
8,300.00	7,242.86	3,887.00	3,652.90	54.38	35.07	-18.54	-2,368.72	-10,259.01	9,658.86	9,599.06	59.81	161.498		
8,400.00	7,242.33	3,887.00	3,652.90	56.78	35.07	-18.54	-2,368.72	-10,259.01	9,566.73	9,506.94	59.79	160.018		
8,500.00	7,241.80	3,927.29	3,689.74	59.28	35.50	-18.65	-2,363.84	-10,274.57	9,474.51	9,414.43	60.08	157.705		
8,600.00	7,241.27	3,940.95	3,702.20	61.88	35.64	-18.68	-2,362.21	-10,279.92	9,382.51	9,322.33	60.18	155.912		
8,700.00	7,240.74	3,954.78	3,714.80	64.54	35.79	-18.72	-2,360.56	-10,285.36	9,290.61	9,230.32	60.29	154.096		
8,800.00	7,240.21	7,324.59	6,944.34	67.27	57.68	-75.88	-2,169.06	-11,005.79	9,191.11	9,114.62	76.49	120.166		
8,900.00	7,239.68	7,325.72	6,945.47	70.06	57.68	-75.94	-2,169.10	-11,005.82	9,091.73	9,015.28	76.45	118.923		
9,000.00	7,239.16	7,326.86	6,946.61	72.89	57.68	-76.00	-2,169.13	-11,005.85	8,992.36	8,915.94	76.42	117.672		
9,100.00	7,238.63	7,328.01	6,947.76	75.77	57.68	-76.07	-2,169.16	-11,005.89	8,893.00	8,816.61	76.39	116.413		
9,200.00	7,238.10	7,329.18	6,948.93	78.69	57.69	-76.13	-2,169.20	-11,005.92	8,793.66	8,717.29	76.37	115.145		
9,300.00	7,237.57	7,330.35	6,950.10	81.64	57.69	-76.20	-2,169.23	-11,005.96	8,694.34	8,617.98	76.35	113.869		
9,400.00	7,237.04	7,331.55	6,951.29	84.62	57.69	-76.26	-2,169.27	-11,005.99	8,595.02	8,518.68	76.34	112.583		
9,500.00	7,236.51	7,332.75	6,952.50	87.63	57.70	-76.33	-2,169.30	-11,006.03	8,495.73	8,419.39	76.34	111.288		
9,600.00	7,235.98	7,333.97	6,953.71	90.66	57.70	-76.40	-2,169.34	-11,006.07	8,396.45	8,320.11	76.34	109.983		
9,700.00	7,235.45	7,335.20	6,954.94	93.72	57.70	-76.46	-2,169.38	-11,006.10	8,297.19	8,220.84	76.35	108.668		
9,800.00	7,234.93	7,336.44	6,956.19	96.79	57.70	-76.53	-2,169.41	-11,006.14	8,197.95	8,121.57	76.37	107.342		
9,900.00	7,234.40	7,337.70	6,957.44	99.88	57.71	-76.60	-2,169.45	-11,006.18	8,098.72	8,022.32	76.40	106.006		
10,000.00	7,233.87	7,338.97	6,958.72	102.98	57.71	-76.67	-2,169.49	-11,006.22	7,999.51	7,923.08	76.43	104.659		
10,100.00	7,233.34	7,340.26	6,960.00	106.10	57.71	-76.74	-2,169.53	-11,006.26	7,900.33	7,823.85	76.48	103.300		
10,200.00	7,232.81	7,341.56	6,961.30	109.23	57.72	-76.82	-2,169.57	-11,006.30	7,801.16	7,724.63	76.53	101.930		
10,300.00	7,232.28	7,342.88	6,962.62	112.38	57.72	-76.89	-2,169.61	-11,006.34	7,702.01	7,625.41	76.60	100.547		
10,400.00	7,231.75	7,344.21	6,963.95	115.53	57.72	-76.96	-2,169.65	-11,006.38	7,602.89	7,526.21	76.68	99.153		
10,500.00	7,231.23	7,345.56	6,965.29	118.70	57.73	-77.04	-2,169.69	-11,006.42	7,503.79	7,427.02	76.77	97.746		
10,600.00	7,230.70	7,346.92	6,966.65	121.87	57.73	-77.11	-2,169.74	-11,006.47	7,404.71	7,327.84	76.87	96.325		
10,700.00	7,230.17	7,348.30	6,968.03	125.05	57.73	-77.19	-2,169.78	-11,006.51	7,305.66	7,228.67	76.99	94.892		
10,800.00	7,229.64	7,349.69	6,969.43	128.25	57.74	-77.27	-2,169.82	-11,006.55	7,206.63	7,129.51	77.12	93.445		
10,900.00	7,229.11	7,386.00	7,005.69	131.44	57.82	-79.30	-2,171.04	-11,007.79	7,107.79	7,030.48	77.31	91.936		
11,000.00	7,228.58	7,386.00	7,005.69	134.65	57.82	-79.30	-2,171.04	-11,007.79	7,008.81	6,931.34	77.47	90.466		
11,100.00	7,228.05	7,386.00	7,005.69	137.86	57.82	-79.30	-2,171.04	-11,007.79	6,909.85	6,832.20	77.66	88.981		
11,200.00	7,227.52	7,386.00	7,005.69	141.08	57.82	-79.30	-2,171.04	-11,007.79	6,810.93	6,733.07	77.86	87.481		
11,300.00	7,227.00	7,386.00	7,005.69	144.30	57.82	-79.30	-2,171.04	-11,007.79	6,712.04	6,633.96	78.08	85.967		
11,400.00	7,226.47	7,386.00	7,005.69	147.52	57.82	-79.30	-2,171.04	-11,007.79	6,613.18	6,534.86	78.32	84.437		
11,500.00	7,225.94	7,386.00	7,005.69	150.76	57.82	-79.30	-2,171.04	-11,007.79	6,514.35	6,435.77	78.59	82.893		
11,600.00	7,225.41	7,386.00	7,005.69	153.99	57.82	-79.30	-2,171.04	-11,007.79	6,415.57	6,336.69	78.88	81.333		
11,700.00	7,224.88	7,386.00	7,005.69	157.23	57.82	-79.30	-2,171.04	-11,007.79	6,316.82	6,237.62	79.20	79.759		
11,800.00	7,224.35	7,386.00	7,005.69	160.48	57.82	-79.30	-2,171.04	-11,007.79	6,218.11	6,138.56	79.55	78.169		
11,900.00	7,223.82	7,386.00	7,005.69	163.72	57.82	-79.30	-2,171.04	-11,007.79	6,119.44	6,039.51	79.92	76.565		
12,000.00	7,223.29	7,386.00	7,005.69	166.98	57.82	-79.30	-2,171.04	-11,007.79	6,020.81	5,940.48	80.34	74.946		
12,100.00	7,222.77	7,386.00	7,005.69	170.23	57.82	-79.30	-2,171.04	-11,007.79	5,922.23	5,841.46	80.78	73.313		
12,200.00	7,222.24	7,386.00	7,005.69	173.49	57.82	-79.30	-2,171.04	-11,007.79	5,823.71	5,742.44	81.26	71.667		
12,300.00	7,221.71	7,386.00	7,005.69	176.75	57.82	-79.30	-2,171.04	-11,007.79	5,725.23	5,643.45	81.78	70.007		
12,400.00	7,221.18	7,386.00	7,005.69	180.01	57.82	-79.30	-2,171.04	-11,007.79	5,626.80	5,544.46	82.34	68.335		
12,500.00	7,220.65	7,386.00	7,005.69	183.28	57.82	-79.30	-2,171.04	-11,007.79	5,528.43	5,445.49	82.95	66.651		
12,600.00	7,220.12	7,386.00	7,005.69	186.54	57.82	-79.30	-2,171.04	-11,007.79	5,430.12	5,346.53	83.60	64.955		
12,700.00	7,219.59	7,386.00	7,005.69	189.81	57.82	-79.30	-2,171.04	-11,007.79	5,331.88	5,247.58	84.30	63.250		
12,800.00	7,219.06	7,386.00	7,005.69	193.09	57.82	-79.30	-2,171.04	-11,007.79	5,233.70	5,148.65	85.05	61.536		
12,900.00	7,218.54	7,386.00	7,005.69	196.36	57.82	-79.30	-2,171.04	-11,007.79	5,135.59	5,049.73	85.86	59.813		
13,000.00	7,218.01	7,386.00	7,005.69	199.64	57.82	-79.30	-2,171.04	-11,007.79	5,037.55	4,950.83	86.73	58.085		
13,100.00	7,217.48	7,386.00	7,005.69	202.92	57.82	-79.30	-2,171.04	-11,007.79	4,939.60	4,851.94	87.66	56.350		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
13,200.00	7,216.95	7,386.00	7,005.69	206.20	57.82	-79.30	-2,171.04	-11,007.79	4,841.73	4,753.07	88.66	54.613	
13,300.00	7,216.42	7,386.00	7,005.69	209.48	57.82	-79.30	-2,171.04	-11,007.79	4,743.94	4,654.22	89.72	52.873	
13,400.00	7,215.89	7,386.00	7,005.69	212.76	57.82	-79.30	-2,171.04	-11,007.79	4,646.25	4,555.39	90.87	51.133	
13,500.00	7,215.36	7,396.44	7,016.12	216.05	57.85	-79.89	-2,171.41	-11,008.17	4,548.65	4,456.55	92.10	49.391	
13,600.00	7,214.84	7,398.81	7,018.49	219.33	57.86	-80.03	-2,171.50	-11,008.25	4,451.16	4,357.75	93.40	47.655	
13,700.00	7,214.31	7,401.21	7,020.88	222.62	57.87	-80.16	-2,171.58	-11,008.34	4,353.78	4,258.97	94.80	45.924	
13,800.00	7,213.78	7,403.64	7,023.31	225.91	57.87	-80.30	-2,171.67	-11,008.43	4,256.52	4,160.22	96.30	44.201	
13,900.00	7,213.25	7,406.11	7,025.77	229.20	57.88	-80.44	-2,171.76	-11,008.53	4,159.39	4,061.49	97.90	42.487	
14,000.00	7,212.72	7,408.60	7,028.26	232.49	57.89	-80.58	-2,171.84	-11,008.62	4,062.40	3,962.79	99.61	40.784	
14,100.00	7,212.19	7,411.12	7,030.78	235.79	57.89	-80.73	-2,171.93	-11,008.71	3,965.55	3,864.12	101.43	39.096	
14,200.00	7,211.66	7,413.67	7,033.33	239.08	57.90	-80.87	-2,172.02	-11,008.81	3,868.86	3,765.48	103.38	37.423	
14,300.00	7,211.13	7,416.26	7,035.91	242.38	57.91	-81.02	-2,172.11	-11,008.91	3,772.34	3,666.88	105.47	35.768	
14,400.00	7,210.61	7,418.88	7,038.52	245.67	57.91	-81.17	-2,172.21	-11,009.01	3,676.01	3,568.32	107.69	34.134	
14,500.00	7,210.08	7,421.53	7,041.17	248.97	57.92	-81.32	-2,172.30	-11,009.12	3,579.88	3,469.80	110.07	32.523	
14,600.00	7,209.55	7,424.22	7,043.86	252.27	57.93	-81.47	-2,172.39	-11,009.22	3,483.96	3,371.34	112.62	30.936	
14,700.00	7,209.02	7,426.94	7,046.57	255.57	57.93	-81.63	-2,172.49	-11,009.33	3,388.27	3,272.93	115.34	29.376	
14,800.00	7,208.49	7,429.69	7,049.33	258.87	57.94	-81.78	-2,172.59	-11,009.44	3,292.84	3,174.58	118.25	27.846	
14,900.00	7,207.96	7,432.49	7,052.12	262.17	57.95	-81.94	-2,172.68	-11,009.55	3,197.68	3,076.31	121.37	26.346	
15,000.00	7,207.43	7,435.32	7,054.94	265.47	57.96	-82.11	-2,172.78	-11,009.66	3,102.82	2,978.11	124.71	24.879	
15,081.89	7,207.00	7,437.66	7,057.28	268.17	57.96	-82.24	-2,172.86	-11,009.75	3,025.39	2,897.76	127.63	23.704 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-106.95	-2,731.03	-8,961.82	9,368.78					
100.00	100.00	0.00	35.00	3.28	3.28	-106.95	-2,731.03	-8,961.82	9,368.94	9,362.37	6.56	1,427.126		
200.00	200.00	57.94	92.94	3.34	3.28	-106.95	-2,731.40	-8,962.05	9,369.65	9,363.03	6.62	1,415.410		
300.00	299.98	577.00	611.23	3.44	3.96	65.18	-2,716.83	-8,960.91	9,368.15	9,360.74	7.41	1,264.162		
400.00	399.84	577.00	611.23	3.59	3.96	65.27	-2,716.83	-8,960.91	9,363.16	9,355.61	7.55	1,239.335		
500.00	499.45	629.46	663.27	3.80	4.10	65.43	-2,710.28	-8,961.63	9,357.34	9,349.45	7.90	1,184.710		
600.00	598.70	667.00	700.45	4.06	4.21	65.61	-2,705.17	-8,962.64	9,350.87	9,342.61	8.26	1,131.950		
700.00	697.49	799.84	831.61	4.38	4.65	65.95	-2,684.67	-8,967.21	9,343.38	9,334.36	9.02	1,036.303		
800.00	796.13	953.94	983.07	4.74	5.26	66.26	-2,656.78	-8,972.50	9,334.78	9,324.80	9.98	935.311		
900.00	894.78	1,033.04	1,060.31	5.15	5.62	66.44	-2,640.07	-8,975.81	9,326.24	9,315.51	10.73	869.343		
1,000.00	993.43	1,132.10	1,156.39	5.58	6.11	66.67	-2,616.47	-8,980.75	9,317.86	9,306.22	11.64	800.688		
1,100.00	1,092.07	1,193.18	1,215.24	6.03	6.45	66.83	-2,600.50	-8,984.28	9,309.76	9,297.35	12.41	750.226		
1,200.00	1,190.72	1,262.35	1,281.48	6.50	6.85	67.01	-2,581.13	-8,988.86	9,302.12	9,288.86	13.27	701.234		
1,300.00	1,289.36	1,340.84	1,356.02	6.98	7.34	67.23	-2,557.26	-8,994.68	9,294.81	9,280.58	14.22	653.506		
1,400.00	1,388.01	1,411.79	1,422.81	7.47	7.81	67.44	-2,534.04	-9,000.50	9,287.86	9,272.68	15.18	611.947		
1,500.00	1,486.65	1,446.33	1,455.14	7.97	8.05	67.54	-2,522.26	-9,003.58	9,281.48	9,265.56	15.91	583.296		
1,600.00	1,585.30	1,477.83	1,484.54	8.48	8.28	67.64	-2,511.38	-9,006.63	9,275.87	9,259.23	16.64	557.574		
1,700.00	1,683.94	1,512.00	1,516.35	9.00	8.53	67.75	-2,499.43	-9,010.19	9,271.05	9,253.66	17.39	533.216		
1,800.00	1,782.59	1,567.47	1,567.83	9.52	8.95	67.92	-2,479.71	-9,016.31	9,266.89	9,248.57	18.32	505.881		
1,900.00	1,881.24	1,607.00	1,604.40	10.05	9.25	68.05	-2,465.39	-9,020.81	9,263.29	9,244.15	19.13	484.114		
2,000.00	1,979.88	1,667.14	1,659.81	10.58	9.73	68.24	-2,443.14	-9,028.02	9,260.27	9,240.14	20.14	459.898		
2,100.00	2,078.53	1,701.00	1,690.87	11.11	10.01	68.35	-2,430.35	-9,032.30	9,257.96	9,237.03	20.93	442.363		
2,200.00	2,177.17	1,754.46	1,739.68	11.64	10.46	68.53	-2,409.73	-9,039.38	9,256.31	9,234.41	21.90	422.567		
2,300.00	2,275.82	1,804.82	1,785.40	12.18	10.89	68.70	-2,389.84	-9,046.43	9,255.37	9,232.50	22.86	404.835		
2,400.00	2,374.46	1,944.07	1,911.02	12.72	12.15	69.19	-2,332.96	-9,065.80	9,254.41	9,229.75	24.65	375.396		
2,500.00	2,473.11	1,989.00	1,951.35	13.26	12.57	69.35	-2,314.17	-9,072.08	9,253.84	9,228.24	25.59	361.555		
2,542.32	2,514.86	2,023.87	1,982.60	13.49	12.90	69.47	-2,299.53	-9,077.03	9,253.75	9,227.60	26.15	353.902		
2,600.00	2,571.76	2,048.60	2,004.76	13.80	13.13	69.56	-2,289.16	-9,080.62	9,253.86	9,227.18	26.69	346.775		
2,700.00	2,670.40	2,112.51	2,062.01	14.35	13.74	69.79	-2,262.37	-9,090.11	9,254.60	9,226.78	27.82	332.624		
2,800.00	2,769.05	2,215.85	2,154.43	14.89	14.74	70.16	-2,218.69	-9,105.23	9,255.48	9,226.13	29.35	315.310		
2,900.00	2,867.69	2,274.00	2,206.37	15.44	15.30	70.36	-2,193.99	-9,113.84	9,256.86	9,226.41	30.45	304.004		
3,000.00	2,966.34	2,323.19	2,250.29	15.99	15.79	70.54	-2,173.14	-9,121.27	9,258.84	9,227.38	31.46	294.303		
3,100.00	3,064.98	2,369.00	2,291.24	16.53	16.24	70.70	-2,153.84	-9,128.32	9,261.46	9,229.02	32.44	285.522		
3,200.00	3,163.63	2,409.02	2,327.03	17.08	16.64	70.85	-2,137.08	-9,134.63	9,264.78	9,231.43	33.35	277.764		
3,300.00	3,262.27	2,464.00	2,376.22	17.63	17.18	71.04	-2,114.23	-9,143.62	9,268.90	9,234.48	34.42	269.278		
3,400.00	3,360.92	2,510.51	2,417.86	18.18	17.64	71.21	-2,095.00	-9,151.38	9,273.63	9,238.23	35.40	261.950		
3,500.00	3,459.57	2,586.97	2,486.35	18.74	18.40	71.47	-2,063.48	-9,164.07	9,278.75	9,242.07	36.68	252.956		
3,600.00	3,558.21	2,646.82	2,540.10	19.29	18.99	71.68	-2,039.14	-9,174.09	9,284.38	9,246.59	37.79	245.676		
3,700.00	3,656.86	2,863.30	2,733.46	19.84	21.18	72.45	-1,948.31	-9,209.00	9,289.54	9,249.02	40.51	229.297		
3,800.00	3,755.50	2,914.16	2,778.42	20.39	21.71	72.64	-1,925.97	-9,217.10	9,294.92	9,253.36	41.56	223.645		
3,900.00	3,854.15	2,986.39	2,842.46	20.95	22.46	72.90	-1,894.65	-9,228.75	9,300.89	9,258.07	42.82	217.200		
4,000.00	3,952.79	3,189.87	3,024.69	21.50	24.53	73.62	-1,809.56	-9,259.59	9,306.34	9,260.92	45.42	204.913		
4,100.00	4,051.44	3,243.47	3,072.38	22.05	25.08	73.81	-1,786.44	-9,267.58	9,312.05	9,265.57	46.48	200.354		
4,200.00	4,150.08	3,290.26	3,114.16	22.61	25.56	73.98	-1,766.60	-9,274.69	9,318.41	9,270.95	47.47	196.315		
4,300.00	4,248.73	3,423.58	3,233.90	23.16	26.91	74.44	-1,711.54	-9,294.83	9,325.13	9,275.81	49.33	189.049		
4,400.00	4,347.38	3,471.29	3,276.86	23.72	27.38	74.61	-1,692.06	-9,301.95	9,332.04	9,281.73	50.31	185.496		
4,500.00	4,446.02	3,523.90	3,324.29	24.27	27.91	74.79	-1,670.75	-9,309.99	9,339.58	9,288.24	51.34	181.925		
4,600.00	4,544.67	3,585.51	3,379.75	24.83	28.53	75.00	-1,645.68	-9,319.55	9,347.66	9,295.21	52.46	178.203		
4,700.00	4,643.31	3,709.87	3,491.58	25.39	29.78	75.43	-1,594.79	-9,338.75	9,356.00	9,301.79	54.21	172.587		
4,800.00	4,741.96	3,795.83	3,569.15	25.94	30.64	75.73	-1,560.13	-9,351.80	9,364.47	9,308.91	55.57	168.526		
4,900.00	4,840.60	4,900.00	3,652.22	26.50	41.73	76.04	-1,522.57	-9,365.68	9,373.15	9,306.31	66.84	140.239		
5,000.00	4,939.25	3,922.19	3,682.74	27.05	31.92	76.16	-1,508.18	-9,370.91	9,382.38	9,324.55	57.83	162.233		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	3,976.00	3,730.52	27.61	32.49	76.35	-1,484.97	-9,379.54	9,392.44	9,333.56	58.88	159.524		
5,200.00	5,136.54	3,976.00	3,730.52	28.17	32.49	76.35	-1,484.97	-9,379.54	9,403.17	9,343.82	59.35	158.432		
5,300.00	5,235.19	4,022.38	3,771.36	28.72	32.99	76.52	-1,464.42	-9,387.32	9,414.69	9,354.35	60.33	156.049		
5,400.00	5,333.83	4,071.00	3,813.84	29.28	33.53	76.70	-1,442.35	-9,395.80	9,427.01	9,365.68	61.33	153.705		
5,500.00	5,432.48	4,094.93	3,834.64	29.84	33.80	76.79	-1,431.31	-9,400.08	9,440.03	9,377.97	62.06	152.102		
5,600.00	5,531.12	4,138.76	3,872.54	30.40	34.30	76.96	-1,410.79	-9,408.03	9,453.76	9,390.74	63.02	150.015		
5,700.00	5,629.77	4,165.00	3,895.12	30.95	34.60	77.05	-1,398.33	-9,412.86	9,468.20	9,404.43	63.77	148.483		
5,800.00	5,728.41	4,212.77	3,936.11	31.51	35.16	77.24	-1,375.51	-9,421.84	9,483.33	9,418.56	64.77	146.420		
5,900.00	5,827.06	6,037.69	5,654.04	32.07	49.28	82.15	-844.33	-9,616.68	9,492.98	9,413.62	79.36	119.621		
6,000.00	5,925.71	6,177.64	5,793.72	32.63	49.72	82.34	-836.01	-9,618.86	9,492.35	9,412.01	80.33	118.161		
6,100.00	6,024.35	6,321.13	5,937.06	33.19	50.15	82.52	-829.55	-9,620.62	9,491.49	9,410.20	81.29	116.763		
6,200.00	6,123.00	6,428.81	6,044.66	33.74	50.45	82.65	-825.53	-9,621.44	9,490.14	9,408.01	82.13	115.548		
6,300.00	6,221.64	6,507.90	6,123.71	34.30	50.66	82.74	-823.14	-9,622.13	9,488.96	9,406.07	82.89	114.477		
6,400.00	6,320.29	6,585.09	6,200.88	34.86	50.87	82.83	-821.25	-9,622.99	9,488.03	9,404.39	83.64	113.437		
6,500.00	6,418.93	6,672.63	6,288.39	35.42	51.10	82.92	-819.62	-9,624.15	9,487.34	9,402.93	84.41	112.392		
6,600.00	6,517.58	6,776.01	6,391.75	35.98	51.36	83.03	-818.21	-9,625.52	9,486.68	9,401.46	85.22	111.325		
6,700.00	6,616.23	6,876.23	6,491.96	36.54	51.61	83.14	-817.29	-9,626.81	9,486.00	9,400.00	86.01	110.292		
6,800.00	6,714.51	6,973.71	6,589.43	37.10	51.85	83.25	-816.64	-9,628.08	9,479.96	9,393.17	86.79	109.231		
6,900.00	6,810.42	7,069.55	6,685.26	37.66	52.08	83.36	-816.16	-9,629.34	9,458.65	9,371.10	87.54	108.043		
7,000.00	6,901.58	7,161.13	6,776.83	38.21	52.30	83.47	-815.73	-9,630.54	9,422.37	9,334.11	88.26	106.757		
7,100.00	6,985.76	7,245.91	6,861.60	38.76	52.51	83.58	-815.32	-9,631.65	9,372.01	9,283.09	88.92	105.398		
7,200.00	7,060.88	7,321.81	6,937.49	39.32	52.70	83.69	-814.96	-9,632.65	9,308.81	9,219.30	89.51	103.996		
7,300.00	7,125.09	7,386.95	7,002.63	39.90	52.87	83.80	-814.65	-9,633.50	9,234.32	9,144.30	90.02	102.584		
7,400.00	7,176.81	7,458.49	7,074.16	40.55	53.05	83.91	-814.31	-9,634.37	9,150.31	9,059.83	90.47	101.137		
7,500.00	7,214.77	7,511.63	7,127.30	41.30	53.18	84.02	-814.07	-9,634.91	9,058.84	8,968.02	90.82	99.746		
7,600.00	7,238.02	7,544.46	7,160.13	42.22	53.27	84.13	-813.92	-9,635.21	8,962.21	8,871.17	91.05	98.436		
7,700.00	7,246.01	7,556.42	7,172.08	43.32	53.30	84.24	-813.87	-9,635.31	8,862.86	8,771.70	91.16	97.220		
7,800.00	7,245.50	7,556.83	7,172.50	44.65	53.30	84.35	-813.86	-9,635.31	8,762.94	8,671.72	91.22	96.063		
7,900.00	7,244.97	7,557.22	7,172.88	46.21	53.30	84.46	-813.86	-9,635.32	8,663.03	8,571.75	91.28	94.905		
8,000.00	7,244.44	7,557.60	7,173.26	47.99	53.30	84.57	-813.86	-9,635.32	8,563.12	8,471.78	91.34	93.746		
8,100.00	7,243.91	7,557.98	7,173.64	49.96	53.30	84.68	-813.86	-9,635.32	8,463.21	8,371.80	91.41	92.586		
8,200.00	7,243.39	7,558.35	7,174.02	52.10	53.30	84.79	-813.86	-9,635.33	8,363.31	8,271.83	91.48	91.425		
8,300.00	7,242.86	7,558.73	7,174.39	54.38	53.30	84.90	-813.86	-9,635.33	8,263.40	8,171.85	91.55	90.263		
8,400.00	7,242.33	7,559.10	7,174.76	56.78	53.30	85.01	-813.85	-9,635.33	8,163.50	8,071.88	91.62	89.100		
8,500.00	7,241.80	7,559.46	7,175.13	59.28	53.30	85.12	-813.85	-9,635.34	8,063.60	7,971.90	91.70	87.936		
8,600.00	7,241.27	7,559.83	7,175.49	61.88	53.31	85.23	-813.85	-9,635.34	7,963.70	7,871.93	91.78	86.771		
8,700.00	7,240.74	7,560.19	7,175.86	64.54	53.31	85.34	-813.85	-9,635.34	7,863.81	7,771.95	91.86	85.605		
8,800.00	7,240.21	7,560.55	7,176.21	67.27	53.31	85.45	-813.85	-9,635.34	7,763.92	7,671.97	91.95	84.439		
8,900.00	7,239.68	7,560.90	7,176.57	70.06	53.31	85.56	-813.85	-9,635.35	7,664.03	7,571.99	92.04	83.272		
9,000.00	7,239.16	7,561.26	7,176.92	72.89	53.31	85.67	-813.84	-9,635.35	7,564.14	7,472.01	92.13	82.104		
9,100.00	7,238.63	7,561.61	7,177.27	75.77	53.31	85.78	-813.84	-9,635.35	7,464.26	7,372.04	92.23	80.935		
9,200.00	7,238.10	7,561.96	7,177.62	78.69	53.31	85.89	-813.84	-9,635.36	7,364.38	7,272.06	92.33	79.765		
9,300.00	7,237.57	7,562.30	7,177.97	81.64	53.31	86.00	-813.84	-9,635.36	7,264.51	7,172.08	92.43	78.595		
9,400.00	7,237.04	7,562.65	7,178.31	84.62	53.31	86.11	-813.84	-9,635.36	7,164.63	7,072.09	92.54	77.424		
9,500.00	7,236.51	7,562.99	7,178.65	87.63	53.31	86.22	-813.84	-9,635.36	7,064.76	6,972.11	92.65	76.253		
9,600.00	7,235.98	7,563.32	7,178.99	90.66	53.31	86.33	-813.84	-9,635.37	6,964.90	6,872.13	92.77	75.080		
9,700.00	7,235.45	7,563.66	7,179.33	93.72	53.31	86.44	-813.83	-9,635.37	6,865.04	6,772.15	92.89	73.908		
9,800.00	7,234.93	7,563.99	7,179.66	96.79	53.32	86.55	-813.83	-9,635.37	6,765.18	6,672.17	93.01	72.734		
9,900.00	7,234.40	7,564.32	7,179.99	99.88	53.32	86.66	-813.83	-9,635.38	6,665.33	6,572.18	93.14	71.561		
10,000.00	7,233.87	7,564.65	7,180.32	102.98	53.32	86.77	-813.83	-9,635.38	6,565.48	6,472.20	93.28	70.386		
10,100.00	7,233.34	7,564.98	7,180.64	106.10	53.32	86.88	-813.83	-9,635.38	6,465.63	6,372.21	93.42	69.211		
10,200.00	7,232.81	7,565.30	7,180.97	109.23	53.32	86.99	-813.83	-9,635.38	6,365.79	6,272.23	93.57	68.036		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,565.62	7,181.29	112.38	53.32	87.18	-813.83	-9,635.39	6,265.96	6,172.24	93.72	66.860		
10,400.00	7,231.75	7,565.94	7,181.61	115.53	53.32	87.23	-813.82	-9,635.39	6,166.13	6,072.25	93.88	65.684		
10,500.00	7,231.23	7,566.26	7,181.92	118.70	53.32	87.28	-813.82	-9,635.39	6,066.31	5,972.27	94.04	64.507		
10,600.00	7,230.70	7,566.57	7,182.24	121.87	53.32	87.32	-813.82	-9,635.39	5,966.49	5,872.28	94.21	63.330		
10,700.00	7,230.17	7,566.88	7,182.55	125.05	53.32	87.37	-813.82	-9,635.40	5,866.68	5,772.29	94.39	62.153		
10,800.00	7,229.64	7,567.19	7,182.86	128.25	53.32	87.42	-813.82	-9,635.40	5,766.88	5,672.30	94.58	60.975		
10,900.00	7,229.11	7,567.50	7,183.17	131.44	53.32	87.47	-813.82	-9,635.40	5,667.08	5,572.31	94.77	59.797		
11,000.00	7,228.58	7,567.80	7,183.47	134.65	53.33	87.52	-813.82	-9,635.40	5,567.29	5,472.31	94.97	58.619		
11,100.00	7,228.05	7,568.11	7,183.77	137.86	53.33	87.57	-813.81	-9,635.40	5,467.50	5,372.32	95.19	57.440		
11,200.00	7,227.52	7,568.41	7,184.08	141.08	53.33	87.61	-813.81	-9,635.41	5,367.73	5,272.32	95.41	56.261		
11,300.00	7,227.00	7,568.71	7,184.37	144.30	53.33	87.66	-813.81	-9,635.41	5,267.96	5,172.33	95.64	55.082		
11,400.00	7,226.47	7,569.01	7,184.67	147.52	53.33	87.71	-813.81	-9,635.41	5,168.21	5,072.33	95.88	53.903		
11,500.00	7,225.94	7,569.30	7,184.97	150.76	53.33	87.75	-813.81	-9,635.41	5,068.46	4,972.33	96.13	52.723		
11,600.00	7,225.41	7,569.59	7,185.26	153.99	53.33	87.80	-813.81	-9,635.42	4,968.72	4,872.32	96.40	51.544		
11,700.00	7,224.88	7,569.88	7,185.55	157.23	53.33	87.85	-813.81	-9,635.42	4,869.00	4,772.32	96.68	50.364		
11,800.00	7,224.35	7,570.17	7,185.84	160.48	53.33	87.89	-813.81	-9,635.42	4,769.28	4,672.31	96.97	49.184		
11,900.00	7,223.82	7,570.46	7,186.13	163.72	53.33	87.94	-813.80	-9,635.42	4,669.58	4,572.30	97.27	48.004		
12,000.00	7,223.29	7,570.74	7,186.41	166.98	53.33	87.98	-813.80	-9,635.43	4,569.89	4,472.29	97.60	46.824		
12,100.00	7,222.77	7,571.03	7,186.69	170.23	53.33	88.03	-813.80	-9,635.43	4,470.21	4,372.28	97.94	45.644		
12,200.00	7,222.24	7,571.31	7,186.97	173.49	53.33	88.07	-813.80	-9,635.43	4,370.55	4,272.26	98.29	44.464		
12,300.00	7,221.71	7,571.59	7,187.25	176.75	53.34	88.11	-813.80	-9,635.43	4,270.90	4,172.23	98.67	43.284		
12,400.00	7,221.18	7,571.86	7,187.53	180.01	53.34	88.16	-813.80	-9,635.43	4,171.28	4,072.21	99.07	42.104		
12,500.00	7,220.65	7,572.14	7,187.81	183.28	53.34	88.20	-813.80	-9,635.44	4,071.67	3,972.17	99.49	40.925		
12,600.00	7,220.12	7,572.41	7,188.08	186.54	53.34	88.25	-813.80	-9,635.44	3,972.07	3,872.14	99.94	39.745		
12,700.00	7,219.59	7,572.69	7,188.35	189.81	53.34	88.29	-813.79	-9,635.44	3,872.50	3,772.09	100.41	38.566		
12,800.00	7,219.06	7,572.96	7,188.62	193.09	53.34	88.33	-813.79	-9,635.44	3,772.96	3,672.04	100.92	37.387		
12,900.00	7,218.54	7,573.22	7,188.89	196.36	53.34	88.37	-813.79	-9,635.44	3,673.44	3,571.98	101.45	36.209		
13,000.00	7,218.01	7,573.49	7,189.16	199.64	53.34	88.41	-813.79	-9,635.45	3,573.94	3,471.92	102.02	35.031		
13,100.00	7,217.48	7,573.76	7,189.42	202.92	53.34	88.46	-813.79	-9,635.45	3,474.47	3,371.84	102.63	33.854		
13,200.00	7,216.95	7,574.02	7,189.68	206.20	53.34	88.50	-813.79	-9,635.45	3,375.04	3,271.76	103.28	32.678		
13,300.00	7,216.42	7,574.28	7,189.95	209.48	53.34	88.54	-813.79	-9,635.45	3,275.64	3,171.66	103.98	31.503		
13,400.00	7,215.89	7,574.54	7,190.21	212.76	53.34	88.58	-813.79	-9,635.45	3,176.27	3,071.54	104.73	30.329		
13,500.00	7,215.36	7,574.80	7,190.46	216.05	53.34	88.62	-813.79	-9,635.46	3,076.95	2,971.42	105.53	29.156		
13,600.00	7,214.84	7,575.05	7,190.72	219.33	53.34	88.66	-813.78	-9,635.46	2,977.67	2,871.27	106.40	27.985		
13,700.00	7,214.31	7,575.31	7,190.97	222.62	53.34	88.70	-813.78	-9,635.46	2,878.45	2,771.11	107.34	26.816		
13,800.00	7,213.78	7,575.56	7,191.23	225.91	53.35	88.74	-813.78	-9,635.46	2,779.28	2,670.92	108.35	25.650		
13,900.00	7,213.25	7,575.81	7,191.48	229.20	53.35	88.78	-813.78	-9,635.46	2,680.17	2,570.71	109.46	24.486		
14,000.00	7,212.72	7,576.06	7,191.73	232.49	53.35	88.82	-813.78	-9,635.47	2,581.12	2,470.47	110.66	23.325		
14,100.00	7,212.19	7,576.31	7,191.98	235.79	53.35	88.86	-813.78	-9,635.47	2,482.16	2,370.19	111.97	22.169		
14,200.00	7,211.66	7,576.56	7,192.22	239.08	53.35	88.90	-813.78	-9,635.47	2,383.28	2,269.88	113.40	21.016		
14,300.00	7,211.13	7,576.80	7,192.47	242.38	53.35	88.94	-813.78	-9,635.47	2,284.50	2,169.52	114.98	19.869		
14,400.00	7,210.61	7,577.05	7,192.71	245.67	53.35	88.98	-813.78	-9,635.47	2,185.83	2,069.12	116.72	18.728		
14,500.00	7,210.08	7,577.29	7,192.95	248.97	53.35	89.01	-813.77	-9,635.48	2,087.29	1,968.65	118.64	17.594		
14,600.00	7,209.55	7,577.53	7,193.19	252.27	53.35	89.05	-813.77	-9,635.48	1,988.89	1,868.12	120.78	16.468		
14,700.00	7,209.02	7,577.77	7,193.43	255.57	53.35	89.09	-813.77	-9,635.48	1,890.66	1,767.51	123.16	15.352		
14,800.00	7,208.49	7,578.00	7,193.67	258.87	53.35	89.13	-813.77	-9,635.48	1,792.63	1,666.80	125.83	14.247		
14,900.00	7,207.96	7,578.24	7,193.91	262.17	53.35	89.16	-813.77	-9,635.48	1,694.83	1,565.99	128.83	13.155		
15,000.00	7,207.43	7,578.47	7,194.14	265.47	53.35	89.20	-813.77	-9,635.48	1,597.30	1,465.06	132.24	12.079		
15,081.89	7,207.00	7,578.67	7,194.33	268.17	53.35	89.23	-813.77	-9,635.49	1,517.67	1,382.30	135.37	11.211 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2,139.89	3.28	15.40	-103.97	-2,177.15	-8,749.55	9,266.81					
100.00	100.00	2,242.71	2,172.53	3.28	15.71	-103.90	-2,163.40	-8,745.10	9,244.05	9,226.05	18.00	513.418		
200.00	200.00	2,302.00	2,226.88	3.34	16.24	-103.77	-2,140.72	-8,738.14	9,222.04	9,203.53	18.51	498.130		
300.00	299.98	2,334.40	2,256.62	3.44	16.53	68.69	-2,128.40	-8,734.48	9,199.89	9,181.04	18.85	487.952		
400.00	399.84	2,530.20	2,435.99	3.59	18.28	69.64	-2,053.45	-8,711.13	9,176.11	9,155.53	20.58	445.804		
500.00	499.45	2,585.00	2,485.87	3.80	18.78	70.28	-2,031.67	-8,704.80	9,151.28	9,130.05	21.22	431.158		
600.00	598.70	2,632.40	2,528.98	4.06	19.22	70.92	-2,012.67	-8,699.55	9,125.83	9,103.97	21.87	417.344		
700.00	697.49	700.00	2,632.53	4.38	4.12	71.66	-1,966.88	-8,686.80	9,099.50	9,091.60	7.90	1,151.582		
800.00	796.13	2,910.44	2,781.05	4.74	21.82	72.22	-1,899.86	-8,667.30	9,072.22	9,047.33	24.89	364.561		
900.00	894.78	2,964.00	2,829.67	5.15	22.32	72.40	-1,878.36	-8,660.84	9,045.44	9,019.71	25.73	351.569		
1,000.00	993.43	3,031.41	2,891.25	5.58	22.94	72.62	-1,852.21	-8,652.61	9,019.14	8,992.43	26.70	337.752		
1,100.00	1,092.07	3,110.24	2,963.67	6.03	23.65	72.87	-1,822.66	-8,642.75	8,993.17	8,965.37	27.79	323.566		
1,200.00	1,190.72	3,197.42	3,043.53	6.50	24.44	73.16	-1,789.40	-8,632.04	8,967.47	8,938.49	28.98	309.470		
1,300.00	1,289.36	3,267.93	3,108.13	6.98	25.08	73.39	-1,762.48	-8,623.34	8,942.00	8,911.96	30.04	297.650		
1,400.00	1,388.01	3,311.35	3,148.11	7.47	25.46	73.53	-1,746.42	-8,618.02	8,917.10	8,886.20	30.90	288.623		
1,500.00	1,486.65	3,346.00	3,180.19	7.97	25.77	73.64	-1,734.01	-8,613.81	8,892.85	8,861.16	31.69	280.605		
1,600.00	1,585.30	3,388.00	3,219.22	8.48	26.13	73.77	-1,719.30	-8,608.85	8,869.28	8,836.74	32.55	272.521		
1,700.00	1,683.94	3,440.00	3,267.68	9.00	26.57	73.94	-1,701.37	-8,603.06	8,846.49	8,813.01	33.49	264.188		
1,800.00	1,782.59	3,548.48	3,369.15	9.52	27.48	74.27	-1,665.02	-8,590.79	8,824.13	8,789.28	34.85	253.203		
1,900.00	1,881.24	3,796.45	3,601.45	10.05	29.53	75.02	-1,583.95	-8,560.03	8,801.77	8,764.54	37.23	236.441		
2,000.00	1,979.88	3,910.05	3,707.29	10.58	30.49	75.37	-1,545.70	-8,544.68	8,777.90	8,739.26	38.64	227.145		
2,100.00	2,078.53	3,956.88	3,750.64	11.11	30.90	75.52	-1,529.07	-8,538.48	8,754.16	8,714.57	39.59	221.137		
2,200.00	2,177.17	4,015.00	3,804.31	11.64	31.42	75.71	-1,507.99	-8,531.27	8,731.14	8,690.51	40.63	214.907		
2,300.00	2,275.82	4,054.15	3,840.42	12.18	31.77	75.84	-1,493.57	-8,526.62	8,708.69	8,667.16	41.53	209.693		
2,400.00	2,374.46	4,124.07	3,904.81	12.72	32.39	76.08	-1,467.60	-8,518.44	8,686.71	8,644.02	42.69	203.495		
2,500.00	2,473.11	4,185.19	3,961.14	13.26	32.94	76.28	-1,444.91	-8,511.42	8,665.20	8,621.42	43.78	197.929		
2,600.00	2,571.76	4,618.39	4,355.54	13.80	36.99	77.81	-1,275.27	-8,455.58	8,642.60	8,594.58	48.02	179.964		
2,700.00	2,670.40	4,679.00	4,409.34	14.35	37.61	78.05	-1,248.69	-8,447.04	8,618.43	8,569.23	49.20	175.165		
2,800.00	2,769.05	4,725.10	4,450.40	14.89	38.08	78.22	-1,228.73	-8,440.64	8,594.89	8,544.64	50.24	171.068		
2,900.00	2,867.69	4,774.00	4,494.17	15.44	38.57	78.41	-1,207.91	-8,434.17	8,572.18	8,520.87	51.31	167.060		
3,000.00	2,966.34	4,774.00	4,494.17	15.99	38.57	78.41	-1,207.91	-8,434.17	8,550.24	8,498.30	51.94	164.618		
3,100.00	3,064.98	4,828.07	4,542.93	16.53	39.08	78.61	-1,185.57	-8,427.33	8,529.02	8,475.98	53.04	160.801		
3,200.00	3,163.63	4,869.00	4,580.16	17.08	39.48	78.76	-1,169.31	-8,422.35	8,508.64	8,454.61	54.03	157.485		
3,300.00	3,262.27	4,938.56	4,643.86	17.63	40.11	79.01	-1,142.65	-8,413.97	8,488.86	8,433.62	55.24	153.675		
3,400.00	3,360.92	5,041.19	4,738.08	18.18	41.05	79.37	-1,103.95	-8,401.43	8,469.34	8,412.61	56.73	149.299		
3,500.00	3,459.57	5,091.48	4,784.09	18.74	41.51	79.55	-1,084.59	-8,395.33	8,450.13	8,392.35	57.78	146.241		
3,600.00	3,558.21	5,152.00	4,839.75	19.29	42.06	79.77	-1,061.89	-8,388.31	8,431.69	8,372.77	58.92	143.095		
3,700.00	3,656.86	5,173.15	4,859.29	19.84	42.25	79.84	-1,054.13	-8,385.94	8,413.90	8,354.17	59.73	140.868		
3,800.00	3,755.50	5,214.31	4,897.44	20.39	42.61	79.98	-1,039.35	-8,381.46	8,396.89	8,336.20	60.69	138.346		
3,900.00	3,854.15	5,247.00	4,927.86	20.95	42.89	80.10	-1,027.90	-8,378.03	8,380.63	8,319.04	61.59	136.068		
4,000.00	3,952.79	5,297.53	4,975.12	21.50	43.31	80.26	-1,010.74	-8,372.93	8,365.09	8,302.48	62.61	133.603		
4,100.00	4,051.44	5,342.00	5,016.93	22.05	43.68	80.41	-996.22	-8,368.66	8,350.29	8,286.70	63.58	131.326		
4,200.00	4,150.08	5,370.84	5,044.19	22.61	43.89	80.50	-987.18	-8,366.03	8,336.27	8,271.85	64.42	129.411		
4,300.00	4,248.73	5,401.76	5,073.57	23.16	44.13	80.60	-977.92	-8,363.39	8,323.10	8,257.84	65.26	127.534		
4,400.00	4,347.38	5,437.00	5,107.25	23.72	44.40	80.70	-967.91	-8,360.59	8,310.79	8,244.65	66.14	125.663		
4,500.00	4,446.02	5,470.97	5,139.87	24.27	44.63	80.80	-958.79	-8,358.09	8,299.28	8,232.31	66.97	123.920		
4,600.00	4,544.67	5,531.00	5,197.87	24.83	45.04	80.97	-943.83	-8,354.05	8,288.61	8,220.63	67.98	121.929		
4,700.00	4,643.31	5,590.43	5,255.59	25.39	45.41	81.13	-930.22	-8,350.22	8,278.47	8,209.52	68.95	120.071		
4,800.00	4,741.96	5,668.16	5,331.44	25.94	45.87	81.32	-914.02	-8,345.05	8,268.50	8,198.51	70.00	118.123		
4,900.00	4,840.60	5,748.99	5,410.81	26.50	46.32	81.51	-899.67	-8,339.91	8,259.03	8,188.00	71.03	116.271		
5,000.00	4,939.25	5,814.00	5,474.81	27.05	46.66	81.66	-889.13	-8,335.55	8,249.55	8,177.59	71.96	114.636		
5,100.00	5,037.90	5,870.27	5,530.36	27.61	46.93	81.78	-880.88	-8,331.99	8,240.62	8,167.79	72.82	113.158		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,909.00	5,568.71	28.17	47.12	81.85	-875.91	-8,329.94	8,232.60	8,159.00	73.60	111.852		
5,300.00	5,235.19	5,975.17	5,634.35	28.72	47.41	81.98	-868.18	-8,326.76	8,225.21	8,150.74	74.48	110.440		
5,400.00	5,333.83	6,041.69	5,700.41	29.28	47.69	82.11	-861.01	-8,323.72	8,218.17	8,142.83	75.34	109.078		
5,500.00	5,432.48	6,097.00	5,755.41	29.84	47.92	82.21	-855.61	-8,321.41	8,211.63	8,135.47	76.15	107.828		
5,600.00	5,531.12	6,147.24	5,805.41	30.40	48.11	82.29	-851.05	-8,319.58	8,205.68	8,128.75	76.93	106.658		
5,700.00	5,629.77	6,192.00	5,849.98	30.95	48.28	82.37	-847.18	-8,318.23	8,200.40	8,122.71	77.69	105.551		
5,800.00	5,728.41	6,256.87	5,914.59	31.51	48.53	82.48	-841.57	-8,316.60	8,195.68	8,117.16	78.52	104.374		
5,900.00	5,827.06	6,328.86	5,986.29	32.07	48.80	82.61	-835.25	-8,315.08	8,191.42	8,112.04	79.38	103.195		
6,000.00	5,925.71	6,410.37	6,067.53	32.63	49.10	82.75	-828.89	-8,313.54	8,187.44	8,107.18	80.26	102.010		
6,100.00	6,024.35	6,493.65	6,150.60	33.19	49.39	82.88	-823.19	-8,312.12	8,183.70	8,102.56	81.14	100.863		
6,200.00	6,123.00	6,570.00	6,226.81	33.74	49.65	83.00	-818.62	-8,310.94	8,180.18	8,098.21	81.98	99.787		
6,300.00	6,221.64	6,628.87	6,285.59	34.30	49.84	83.09	-815.54	-8,310.25	8,177.09	8,094.35	82.74	98.825		
6,400.00	6,320.29	6,692.38	6,349.03	34.86	50.03	83.18	-812.64	-8,309.88	8,174.57	8,091.05	83.52	97.877		
6,500.00	6,418.93	6,787.16	6,443.75	35.42	50.31	83.31	-809.14	-8,309.54	8,172.32	8,087.94	84.38	96.846		
6,600.00	6,517.58	6,900.00	6,556.55	35.98	50.63	83.46	-806.06	-8,308.99	8,169.98	8,084.68	85.29	95.788		
6,700.00	6,616.23	6,999.38	6,655.89	36.54	50.91	83.59	-803.69	-8,308.45	8,167.61	8,081.46	86.15	94.803		
6,800.00	6,714.51	7,098.58	6,755.07	37.10	51.19	83.66	-801.55	-8,307.91	8,159.88	8,072.87	87.01	93.781		
6,900.00	6,810.42	7,195.54	6,852.02	37.66	51.45	83.74	-799.81	-8,307.37	8,136.91	8,049.07	87.84	92.635		
7,000.00	6,901.58	7,286.19	6,942.65	38.21	51.70	83.82	-798.50	-8,306.86	8,099.06	8,010.45	88.61	91.399		
7,100.00	6,985.76	7,368.96	7,025.42	38.76	51.92	83.90	-797.51	-8,306.41	8,047.27	7,957.94	89.32	90.094		
7,200.00	7,060.88	7,449.63	7,106.08	39.32	52.14	83.98	-796.74	-8,305.98	7,982.79	7,892.82	89.97	88.723		
7,300.00	7,125.09	7,532.97	7,189.41	39.90	52.37	84.06	-795.95	-8,305.38	7,907.10	7,816.53	90.58	87.298		
7,400.00	7,176.81	7,599.39	7,255.83	40.55	52.54	84.14	-795.30	-8,304.74	7,822.08	7,731.01	91.07	85.894		
7,500.00	7,214.77	7,622.77	7,279.21	41.30	52.61	84.22	-795.03	-8,304.54	7,729.97	7,638.59	91.37	84.597		
7,600.00	7,238.02	7,641.24	7,297.68	42.22	52.66	84.30	-794.81	-8,304.38	7,633.01	7,541.41	91.60	83.331		
7,700.00	7,246.01	7,647.15	7,303.58	43.32	52.68	84.38	-794.73	-8,304.33	7,533.57	7,441.85	91.73	82.132		
7,800.00	7,245.50	7,646.04	7,302.47	44.65	52.67	84.46	-794.75	-8,304.34	7,433.71	7,341.91	91.80	80.976		
7,900.00	7,244.97	7,644.91	7,301.34	46.21	52.67	84.54	-794.76	-8,304.35	7,333.85	7,241.96	91.88	79.819		
8,000.00	7,244.44	7,643.77	7,300.20	47.99	52.67	84.62	-794.78	-8,304.36	7,233.99	7,142.02	91.96	78.661		
8,100.00	7,243.91	7,642.63	7,299.06	49.96	52.67	84.70	-794.79	-8,304.37	7,134.13	7,042.08	92.05	77.502		
8,200.00	7,243.39	7,641.48	7,297.92	52.10	52.66	84.78	-794.80	-8,304.38	7,034.28	6,942.14	92.14	76.342		
8,300.00	7,242.86	7,640.33	7,296.76	54.38	52.66	84.86	-794.82	-8,304.39	6,934.43	6,842.19	92.24	75.181		
8,400.00	7,242.33	7,639.17	7,295.61	56.78	52.66	84.94	-794.83	-8,304.40	6,834.59	6,742.25	92.34	74.019		
8,500.00	7,241.80	7,638.01	7,294.45	59.28	52.65	85.02	-794.85	-8,304.41	6,734.75	6,642.31	92.44	72.856		
8,600.00	7,241.27	7,636.85	7,293.28	61.88	52.65	85.10	-794.86	-8,304.42	6,634.91	6,542.37	92.55	71.691		
8,700.00	7,240.74	7,635.68	7,292.11	64.54	52.65	85.18	-794.88	-8,304.43	6,535.08	6,442.42	92.66	70.526		
8,800.00	7,240.21	7,634.50	7,290.94	67.27	52.64	85.26	-794.89	-8,304.44	6,435.26	6,342.48	92.78	69.360		
8,900.00	7,239.68	7,633.32	7,289.76	70.06	52.64	85.34	-794.91	-8,304.45	6,335.44	6,242.54	92.90	68.194		
9,000.00	7,239.16	7,632.13	7,288.57	72.89	52.64	85.42	-794.92	-8,304.46	6,235.63	6,142.59	93.03	67.026		
9,100.00	7,238.63	7,630.94	7,287.38	75.77	52.63	85.50	-794.94	-8,304.47	6,135.82	6,042.65	93.17	65.857		
9,200.00	7,238.10	7,629.75	7,286.18	78.69	52.63	85.58	-794.95	-8,304.48	6,036.02	5,942.71	93.31	64.688		
9,300.00	7,237.57	7,628.55	7,284.98	81.64	52.63	85.66	-794.96	-8,304.49	5,936.22	5,842.76	93.46	63.518		
9,400.00	7,237.04	7,627.34	7,283.78	84.62	52.62	85.74	-794.98	-8,304.50	5,836.43	5,742.82	93.61	62.347		
9,500.00	7,236.51	7,626.13	7,282.56	87.63	52.62	85.82	-794.99	-8,304.51	5,736.65	5,642.88	93.77	61.176		
9,600.00	7,235.98	7,624.91	7,281.35	90.66	52.62	85.90	-795.01	-8,304.52	5,636.88	5,542.93	93.94	60.004		
9,700.00	7,235.45	7,623.69	7,280.12	93.72	52.61	85.98	-795.02	-8,304.53	5,537.11	5,442.99	94.12	58.831		
9,800.00	7,234.93	7,622.46	7,278.90	96.79	52.61	86.06	-795.04	-8,304.54	5,437.35	5,343.05	94.31	57.657		
9,900.00	7,234.40	7,621.23	7,277.66	99.88	52.61	86.14	-795.05	-8,304.56	5,337.60	5,243.10	94.50	56.483		
10,000.00	7,233.87	7,619.99	7,276.43	102.98	52.60	86.22	-795.07	-8,304.57	5,237.86	5,143.16	94.70	55.308		
10,100.00	7,233.34	7,618.74	7,275.18	106.10	52.60	86.30	-795.08	-8,304.58	5,138.13	5,043.21	94.92	54.133		
10,200.00	7,232.81	7,617.50	7,273.93	109.23	52.60	86.38	-795.09	-8,304.59	5,038.41	4,943.27	95.14	52.957		
10,300.00	7,232.28	7,616.24	7,272.68	112.38	52.59	86.46	-795.11	-8,304.60	4,938.70	4,843.32	95.38	51.780		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,614.98	7,271.42	115.53	52.59	99.88	-795.12	-8,304.61	4,839.01	4,743.38	95.63	50.603		
10,500.00	7,231.23	7,613.71	7,270.15	118.70	52.59	99.69	-795.14	-8,304.62	4,739.32	4,643.43	95.89	49.426		
10,600.00	7,230.70	7,612.44	7,268.88	121.87	52.58	99.50	-795.15	-8,304.63	4,639.65	4,543.48	96.16	48.248		
10,700.00	7,230.17	7,611.16	7,267.60	125.05	52.58	99.31	-795.17	-8,304.65	4,539.99	4,443.54	96.45	47.069		
10,800.00	7,229.64	7,609.88	7,266.32	128.25	52.57	99.12	-795.18	-8,304.66	4,440.35	4,343.59	96.76	45.891		
10,900.00	7,229.11	7,608.59	7,265.03	131.44	52.57	98.93	-795.20	-8,304.67	4,340.72	4,243.64	97.08	44.711		
11,000.00	7,228.58	7,607.30	7,263.74	134.65	52.57	98.74	-795.21	-8,304.68	4,241.11	4,143.68	97.42	43.532		
11,100.00	7,228.05	7,606.00	7,262.44	137.86	52.56	98.54	-795.22	-8,304.69	4,141.52	4,043.73	97.79	42.352		
11,200.00	7,227.52	7,604.69	7,261.13	141.08	52.56	98.35	-795.24	-8,304.71	4,041.95	3,943.78	98.17	41.173		
11,300.00	7,227.00	7,603.38	7,259.82	144.30	52.56	98.15	-795.25	-8,304.72	3,942.39	3,843.82	98.58	39.993		
11,400.00	7,226.47	7,607.71	7,264.15	147.52	52.57	98.80	-795.22	-8,304.66	3,842.85	3,743.83	99.02	38.808		
11,500.00	7,225.94	7,605.90	7,262.34	150.76	52.56	98.53	-795.24	-8,304.68	3,743.35	3,643.87	99.48	37.628		
11,600.00	7,225.41	7,604.11	7,260.54	153.99	52.56	98.26	-795.26	-8,304.70	3,643.87	3,543.90	99.97	36.449		
11,700.00	7,224.88	7,602.32	7,258.76	157.23	52.55	97.99	-795.27	-8,304.71	3,544.43	3,443.93	100.50	35.270		
11,800.00	7,224.35	7,600.54	7,256.98	160.48	52.55	97.73	-795.29	-8,304.73	3,445.01	3,343.96	101.05	34.091		
11,900.00	7,223.82	7,598.78	7,255.22	163.72	52.54	97.46	-795.31	-8,304.75	3,345.63	3,243.98	101.65	32.912		
12,000.00	7,223.29	7,597.03	7,253.47	166.98	52.54	97.20	-795.33	-8,304.77	3,246.29	3,143.99	102.30	31.734		
12,100.00	7,222.77	7,595.29	7,251.73	170.23	52.53	96.94	-795.34	-8,304.79	3,146.99	3,044.00	102.99	30.556		
12,200.00	7,222.24	7,593.56	7,250.00	173.49	52.53	96.68	-795.36	-8,304.81	3,047.73	2,943.99	103.74	29.380		
12,300.00	7,221.71	7,591.85	7,248.29	176.75	52.52	96.42	-795.38	-8,304.82	2,948.52	2,843.98	104.54	28.205		
12,400.00	7,221.18	7,590.14	7,246.58	180.01	52.52	96.16	-795.39	-8,304.84	2,849.36	2,743.95	105.41	27.031		
12,500.00	7,220.65	7,588.45	7,244.89	183.28	52.51	95.90	-795.41	-8,304.86	2,750.27	2,643.91	106.36	25.859		
12,600.00	7,220.12	7,586.77	7,243.21	186.54	52.51	95.65	-795.43	-8,304.88	2,651.24	2,543.86	107.39	24.689		
12,700.00	7,219.59	7,585.09	7,241.54	189.81	52.51	95.39	-795.44	-8,304.89	2,552.29	2,443.78	108.51	23.522		
12,800.00	7,219.06	7,583.43	7,239.87	193.09	52.50	95.14	-795.46	-8,304.91	2,453.42	2,343.69	109.73	22.358		
12,900.00	7,218.54	7,581.78	7,238.22	196.36	52.50	94.89	-795.48	-8,304.93	2,354.65	2,243.57	111.08	21.198		
13,000.00	7,218.01	7,580.14	7,236.58	199.64	52.49	94.64	-795.49	-8,304.94	2,255.98	2,143.42	112.56	20.042		
13,100.00	7,217.48	7,578.51	7,234.96	202.92	52.49	94.39	-795.51	-8,304.96	2,157.44	2,043.24	114.20	18.892		
13,200.00	7,216.95	7,576.90	7,233.34	206.20	52.48	94.15	-795.53	-8,304.97	2,059.03	1,943.02	116.01	17.748		
13,300.00	7,216.42	7,575.29	7,231.73	209.48	52.48	93.90	-795.54	-8,304.99	1,960.78	1,842.75	118.03	16.612		
13,400.00	7,215.89	7,573.69	7,230.13	212.76	52.47	93.66	-795.56	-8,305.01	1,862.72	1,742.43	120.29	15.485		
13,500.00	7,215.36	7,572.10	7,228.54	216.05	52.47	93.41	-795.57	-8,305.02	1,764.88	1,642.05	122.83	14.369		
13,600.00	7,214.84	7,570.52	7,226.97	219.33	52.47	93.17	-795.59	-8,305.04	1,667.29	1,541.60	125.69	13.265		
13,700.00	7,214.31	7,568.96	7,225.40	222.62	52.46	92.93	-795.60	-8,305.05	1,570.00	1,441.07	128.93	12.177		
13,800.00	7,213.78	7,567.40	7,223.84	225.91	52.46	92.70	-795.62	-8,305.07	1,473.07	1,340.43	132.64	11.106		
13,900.00	7,213.25	7,565.85	7,222.29	229.20	52.45	92.46	-795.63	-8,305.08	1,376.58	1,239.69	136.89	10.056		
14,000.00	7,212.72	7,564.31	7,220.75	232.49	52.45	92.22	-795.65	-8,305.10	1,280.63	1,138.82	141.81	9.030		
14,100.00	7,212.19	7,562.78	7,219.22	235.79	52.45	91.99	-795.66	-8,305.11	1,185.35	1,037.80	147.55	8.034		
14,200.00	7,211.66	7,561.26	7,217.70	239.08	52.44	91.76	-795.68	-8,305.12	1,090.91	936.63	154.27	7.071		
14,300.00	7,211.13	7,559.75	7,216.19	242.38	52.44	91.53	-795.69	-8,305.14	997.55	835.31	162.24	6.149		
14,400.00	7,210.61	7,558.25	7,214.69	245.67	52.43	91.30	-795.71	-8,305.15	905.60	733.86	171.74	5.273		
14,500.00	7,210.08	7,556.76	7,213.20	248.97	52.43	91.07	-795.72	-8,305.17	815.56	632.38	183.18	4.452		
14,600.00	7,209.55	7,555.27	7,211.72	252.27	52.43	90.84	-795.74	-8,305.18	728.11	531.10	197.01	3.696		
14,700.00	7,209.02	7,553.80	7,210.24	255.57	52.42	90.61	-795.75	-8,305.19	644.32	430.57	213.75	3.014		
14,800.00	7,208.49	7,552.34	7,208.78	258.87	52.42	90.39	-795.76	-8,305.21	565.81	332.04	233.77	2.420		
14,900.00	7,207.96	7,550.88	7,207.32	262.17	52.41	90.17	-795.78	-8,305.22	495.12	238.25	256.87	1.928		
15,000.00	7,207.43	7,549.43	7,205.88	265.47	52.41	89.94	-795.79	-8,305.23	436.04	154.90	281.14	1.551		
15,081.89	7,207.00	7,548.26	7,204.70	268.17	52.41	89.76	-795.80	-8,305.24	399.97	101.50	298.47	1.340	Level 3, 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-107.26	-2,796.95	-9,003.01	9,427.53					
100.00	100.00	37.23	72.23	3.28	3.28	-107.26	-2,796.87	-9,003.10	9,427.57	9,421.00	6.57	1,435.896		
200.00	200.00	94.50	129.50	3.34	3.29	-107.25	-2,796.43	-9,003.54	9,428.09	9,421.46	6.62	1,423.563		
300.00	299.98	168.00	202.98	3.44	3.30	64.72	-2,795.31	-9,004.69	9,428.34	9,421.60	6.74	1,399.413		
400.00	399.84	168.00	202.98	3.59	3.30	64.73	-2,795.31	-9,004.69	9,427.66	9,420.77	6.89	1,368.499		
500.00	499.45	212.05	247.00	3.80	3.33	64.78	-2,794.46	-9,005.88	9,426.16	9,419.04	7.12	1,323.874		
600.00	598.70	259.00	293.90	4.06	3.37	64.86	-2,793.57	-9,007.82	9,424.12	9,416.70	7.42	1,270.410		
700.00	697.49	259.00	293.90	4.38	3.37	64.90	-2,793.57	-9,007.82	9,421.27	9,413.53	7.73	1,218.264		
800.00	796.13	291.21	326.07	4.74	3.40	64.94	-2,793.05	-9,009.51	9,418.89	9,410.77	8.13	1,159.078		
900.00	894.78	319.09	353.89	5.15	3.44	64.97	-2,792.74	-9,011.17	9,417.30	9,408.74	8.55	1,101.098		
1,000.00	993.43	350.00	384.74	5.58	3.48	65.00	-2,792.55	-9,013.21	9,416.47	9,407.46	9.01	1,044.692		
1,098.79	1,090.88	404.89	439.48	6.02	3.57	65.06	-2,792.39	-9,017.13	9,416.27	9,406.73	9.53	987.695		
1,100.00	1,092.07	405.64	440.24	6.03	3.57	65.06	-2,792.39	-9,017.18	9,416.27	9,406.73	9.54	987.004		
1,200.00	1,190.72	479.86	514.25	6.50	3.72	65.13	-2,792.24	-9,022.72	9,416.45	9,406.31	10.13	929.182		
1,300.00	1,289.36	532.00	566.24	6.98	3.84	65.19	-2,792.07	-9,026.69	9,416.88	9,406.17	10.71	878.895		
1,400.00	1,388.01	584.03	618.09	7.47	3.97	65.24	-2,792.03	-9,030.88	9,417.84	9,406.52	11.32	832.260		
1,500.00	1,486.65	644.00	677.83	7.97	4.14	65.31	-2,792.36	-9,036.23	9,419.58	9,407.62	11.96	787.870		
1,600.00	1,585.30	668.21	701.93	8.48	4.21	65.33	-2,792.59	-9,038.51	9,421.82	9,409.30	12.52	752.799		
1,700.00	1,683.94	751.68	785.01	9.00	4.47	65.41	-2,793.57	-9,046.51	9,424.55	9,411.30	13.25	711.161		
1,800.00	1,782.59	861.72	894.55	9.52	4.84	65.52	-2,794.93	-9,056.89	9,427.18	9,413.08	14.10	668.800		
1,900.00	1,881.24	1,900.00	1,082.68	10.05	9.11	65.72	-2,795.50	-9,074.64	9,429.72	9,411.11	18.61	506.676		
2,000.00	1,979.88	1,096.00	1,127.81	10.58	5.72	65.77	-2,795.49	-9,078.63	9,431.63	9,415.72	15.92	592.523		
2,100.00	2,078.53	1,150.28	1,181.87	11.11	5.93	65.83	-2,795.35	-9,083.56	9,433.90	9,417.27	16.63	567.244		
2,200.00	2,177.17	1,190.00	1,221.36	11.64	6.09	65.87	-2,795.12	-9,087.79	9,437.16	9,419.87	17.30	545.640		
2,300.00	2,275.82	1,190.00	1,221.36	12.18	6.09	65.87	-2,795.12	-9,087.79	9,441.17	9,423.36	17.81	530.013		
2,400.00	2,374.46	1,236.57	1,267.60	12.72	6.29	65.92	-2,794.80	-9,093.29	9,445.88	9,427.37	18.51	510.327		
2,500.00	2,473.11	1,285.00	1,315.63	13.26	6.50	65.98	-2,794.49	-9,099.51	9,451.39	9,432.17	19.22	491.844		
2,600.00	2,571.76	1,285.00	1,315.63	13.80	6.50	65.98	-2,794.49	-9,099.51	9,457.57	9,437.84	19.73	479.253		
2,700.00	2,670.40	1,336.60	1,366.74	14.35	6.73	66.04	-2,794.47	-9,106.61	9,464.41	9,443.95	20.46	462.656		
2,800.00	2,769.05	1,379.00	1,408.70	14.89	6.92	66.09	-2,794.89	-9,112.72	9,471.99	9,450.85	21.14	447.962		
2,900.00	2,867.69	1,407.32	1,436.69	15.44	7.06	66.12	-2,795.24	-9,116.97	9,480.24	9,458.47	21.78	435.340		
3,000.00	2,966.34	1,443.80	1,472.71	15.99	7.23	66.16	-2,795.50	-9,122.72	9,489.17	9,466.73	22.44	422.821		
3,100.00	3,064.98	1,475.00	1,503.49	16.53	7.38	66.19	-2,795.55	-9,127.87	9,498.77	9,475.69	23.09	411.444		
3,200.00	3,163.63	1,518.35	1,546.20	17.08	7.59	66.24	-2,795.60	-9,135.31	9,509.03	9,485.24	23.78	399.820		
3,300.00	3,262.27	1,570.00	1,597.02	17.63	7.85	66.30	-2,795.91	-9,144.52	9,519.96	9,495.44	24.52	388.302		
3,400.00	3,360.92	1,599.38	1,625.89	18.18	8.00	66.34	-2,796.14	-9,149.92	9,531.47	9,506.32	25.15	378.925		
3,500.00	3,459.57	1,665.00	1,690.32	18.74	8.34	66.41	-2,796.57	-9,162.39	9,543.62	9,517.67	25.95	367.738		
3,600.00	3,558.21	1,665.00	1,690.32	19.29	8.34	66.41	-2,796.57	-9,162.39	9,556.33	9,529.87	26.46	361.219		
3,700.00	3,656.86	1,712.80	1,737.15	19.84	8.60	66.47	-2,796.79	-9,171.94	9,569.68	9,542.51	27.18	352.147		
3,800.00	3,755.50	1,759.00	1,782.31	20.39	8.85	66.53	-2,796.96	-9,181.69	9,583.84	9,555.95	27.89	343.662		
3,900.00	3,854.15	1,759.00	1,782.31	20.95	8.85	66.53	-2,796.96	-9,181.69	9,598.67	9,570.29	28.38	338.185		
4,000.00	3,952.79	1,809.26	1,831.34	21.50	9.14	66.59	-2,797.48	-9,192.72	9,614.14	9,585.03	29.11	330.241		
4,100.00	4,051.44	1,853.00	1,873.94	22.05	9.39	66.63	-2,798.54	-9,202.57	9,630.33	9,600.52	29.81	323.049		
4,200.00	4,150.08	1,893.98	1,913.81	22.61	9.63	66.68	-2,799.79	-9,211.98	9,647.11	9,616.61	30.50	316.349		
4,300.00	4,248.73	1,947.00	1,965.35	23.16	9.94	66.74	-2,801.39	-9,224.33	9,664.33	9,633.10	31.24	309.385		
4,400.00	4,347.38	2,015.42	2,031.79	23.72	10.36	66.81	-2,803.43	-9,240.53	9,681.95	9,649.90	32.06	302.027		
4,500.00	4,446.02	2,042.00	2,057.58	24.27	10.52	66.84	-2,804.22	-9,246.90	9,700.04	9,667.38	32.67	296.927		
4,600.00	4,544.67	2,042.00	2,057.58	24.83	10.52	66.84	-2,804.22	-9,246.90	9,719.08	9,685.93	33.14	293.245		
4,700.00	4,643.31	2,042.00	2,057.58	25.39	10.52	66.84	-2,804.22	-9,246.90	9,739.10	9,705.48	33.61	289.737		
4,800.00	4,741.96	2,089.96	2,103.93	25.94	10.83	66.89	-2,805.53	-9,259.16	9,759.25	9,724.92	34.33	284.293		
4,900.00	4,840.60	2,137.00	2,148.98	26.50	11.14	66.95	-2,806.63	-9,272.64	9,781.12	9,746.08	35.04	279.167		
5,000.00	4,939.25	2,474.91	2,474.57	27.05	13.39	67.36	-2,811.08	-9,362.60	9,801.36	9,764.07	37.30	262.804		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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	5,037.90	2,513.00	2,511.26	27.61	13.64	67.41	-2,810.46	-9,372.82	9,821.06	9,783.09	37.97	258.665		
5,200.00	5,136.54	2,513.00	2,511.26	28.17	13.64	67.41	-2,810.46	-9,372.82	9,841.37	9,802.93	38.43	256.067		
5,300.00	5,235.19	2,554.42	2,551.03	28.72	13.93	67.46	-2,809.72	-9,384.37	9,862.44	9,823.32	39.12	252.096		
5,400.00	5,333.83	2,609.00	2,603.36	29.28	14.31	67.54	-2,809.01	-9,399.88	9,884.12	9,844.23	39.88	247.833		
5,500.00	5,432.48	2,609.00	2,603.36	29.84	14.31	67.54	-2,809.01	-9,399.88	9,906.40	9,866.07	40.33	245.606		
5,600.00	5,531.12	2,609.00	2,603.36	30.40	14.31	67.54	-2,809.01	-9,399.88	9,929.64	9,888.86	40.78	243.484		
5,700.00	5,629.77	2,658.66	2,650.79	30.95	14.68	67.61	-2,808.72	-9,414.60	9,953.20	9,911.69	41.51	239.784		
5,800.00	5,728.41	2,704.00	2,693.83	31.51	15.02	67.66	-2,808.82	-9,428.83	9,977.97	9,935.76	42.21	236.389		
7,300.00	7,125.09	7,036.69	6,920.41	39.90	40.76	-4.73	-2,835.80	-10,248.24	9,997.21	9,927.05	70.16	142.487		
7,400.00	7,176.81	7,085.14	6,968.83	40.55	40.92	-10.32	-2,837.17	-10,249.02	9,913.03	9,842.57	70.47	140.673		
7,500.00	7,214.77	7,121.11	7,004.78	41.30	41.04	-19.59	-2,838.37	-10,249.58	9,821.92	9,751.29	70.64	139.048		
7,600.00	7,238.02	7,143.70	7,027.36	42.22	41.11	-39.20	-2,839.21	-10,249.92	9,726.12	9,655.45	70.67	137.624		
7,700.00	7,246.01	7,152.37	7,036.02	43.32	41.14	-81.91	-2,839.54	-10,250.05	9,627.99	9,557.40	70.58	136.405		
7,800.00	7,245.50	7,153.29	7,036.94	44.65	41.14	-84.53	-2,839.58	-10,250.07	9,529.51	9,459.07	70.44	135.290		
7,900.00	7,244.97	7,154.19	7,037.83	46.21	41.14	-84.56	-2,839.62	-10,250.08	9,431.07	9,360.77	70.30	134.157		
8,000.00	7,244.44	7,155.09	7,038.73	47.99	41.15	-84.59	-2,839.65	-10,250.09	9,332.66	9,262.49	70.17	133.005		
8,100.00	7,243.91	7,155.98	7,039.62	49.96	41.15	-84.62	-2,839.69	-10,250.11	9,234.28	9,164.24	70.05	131.832		
8,200.00	7,243.39	7,156.88	7,040.52	52.10	41.15	-84.65	-2,839.72	-10,250.12	9,135.94	9,066.01	69.93	130.638		
8,300.00	7,242.86	7,157.77	7,041.41	54.38	41.16	-84.68	-2,839.76	-10,250.13	9,037.64	8,967.81	69.83	129.421		
8,400.00	7,242.33	7,158.66	7,042.30	56.78	41.16	-84.71	-2,839.80	-10,250.15	8,939.37	8,869.63	69.74	128.181		
8,500.00	7,241.80	7,159.55	7,043.19	59.28	41.16	-84.74	-2,839.83	-10,250.16	8,841.14	8,771.48	69.66	126.917		
8,600.00	7,241.27	7,160.43	7,044.07	61.88	41.17	-84.77	-2,839.87	-10,250.17	8,742.96	8,673.36	69.60	125.626		
8,700.00	7,240.74	7,161.32	7,044.96	64.54	41.17	-84.80	-2,839.90	-10,250.19	8,644.81	8,575.27	69.54	124.309		
8,800.00	7,240.21	7,162.20	7,045.84	67.27	41.17	-84.83	-2,839.94	-10,250.20	8,546.71	8,477.20	69.51	122.964		
8,900.00	7,239.68	7,163.08	7,046.72	70.06	41.17	-84.86	-2,839.98	-10,250.21	8,448.65	8,379.16	69.49	121.589		
9,000.00	7,239.16	7,163.96	7,047.60	72.89	41.18	-84.89	-2,840.01	-10,250.23	8,350.63	8,281.15	69.48	120.185		
9,100.00	7,238.63	7,164.84	7,048.47	75.77	41.18	-84.92	-2,840.05	-10,250.24	8,252.67	8,183.17	69.50	118.749		
9,200.00	7,238.10	7,165.72	7,049.35	78.69	41.18	-84.95	-2,840.08	-10,250.25	8,154.75	8,085.22	69.53	117.281		
9,300.00	7,237.57	7,166.59	7,050.22	81.64	41.19	-84.98	-2,840.12	-10,250.27	8,056.89	7,987.30	69.59	115.781		
9,400.00	7,237.04	7,167.47	7,051.10	84.62	41.19	-85.01	-2,840.16	-10,250.28	7,959.07	7,889.41	69.67	114.246		
9,500.00	7,236.51	7,168.34	7,051.97	87.63	41.19	-85.04	-2,840.19	-10,250.29	7,861.32	7,791.55	69.77	112.676		
9,600.00	7,235.98	7,169.21	7,052.83	90.66	41.19	-85.07	-2,840.23	-10,250.30	7,763.62	7,693.72	69.90	111.072		
9,700.00	7,235.45	7,170.07	7,053.70	93.72	41.20	-85.10	-2,840.26	-10,250.32	7,665.98	7,595.92	70.05	109.431		
9,800.00	7,234.93	7,170.94	7,054.57	96.79	41.20	-85.13	-2,840.30	-10,250.33	7,568.40	7,498.16	70.24	107.754		
9,900.00	7,234.40	7,171.80	7,055.43	99.88	41.20	-85.16	-2,840.34	-10,250.34	7,470.88	7,400.43	70.45	106.041		
10,000.00	7,233.87	7,172.67	7,056.29	102.98	41.21	-85.19	-2,840.37	-10,250.36	7,373.43	7,302.73	70.70	104.292		
10,100.00	7,233.34	7,173.53	7,057.15	106.10	41.21	-85.22	-2,840.41	-10,250.37	7,276.05	7,205.07	70.98	102.506		
10,200.00	7,232.81	7,174.39	7,058.01	109.23	41.21	-85.25	-2,840.45	-10,250.38	7,178.74	7,107.44	71.30	100.685		
10,300.00	7,232.28	7,175.25	7,058.87	112.38	41.21	-85.28	-2,840.48	-10,250.39	7,081.51	7,009.85	71.66	98.828		
10,400.00	7,231.75	7,176.10	7,059.72	115.53	41.22	-85.31	-2,840.52	-10,250.41	6,984.35	6,912.30	72.05	96.937		
10,500.00	7,231.23	7,176.96	7,060.58	118.70	41.22	-85.34	-2,840.55	-10,250.42	6,887.28	6,814.79	72.49	95.012		
10,600.00	7,230.70	7,177.81	7,061.43	121.87	41.22	-85.37	-2,840.59	-10,250.43	6,790.29	6,717.32	72.97	93.056		
10,700.00	7,230.17	7,178.66	7,062.28	125.05	41.23	-85.40	-2,840.63	-10,250.44	6,693.39	6,619.89	73.50	91.069		
10,800.00	7,229.64	7,179.51	7,063.13	128.25	41.23	-85.43	-2,840.66	-10,250.46	6,596.58	6,522.51	74.07	89.054		
10,900.00	7,229.11	7,180.36	7,063.97	131.44	41.23	-85.46	-2,840.70	-10,250.47	6,499.87	6,425.17	74.70	87.013		
11,000.00	7,228.58	7,181.20	7,064.82	134.65	41.23	-85.49	-2,840.74	-10,250.48	6,403.26	6,327.88	75.38	84.947		
11,100.00	7,228.05	7,182.05	7,065.66	137.86	41.24	-85.51	-2,840.77	-10,250.49	6,306.75	6,230.64	76.11	82.860		
11,200.00	7,227.52	7,182.89	7,066.51	141.08	41.24	-85.54	-2,840.81	-10,250.51	6,210.35	6,133.45	76.90	80.754		
11,300.00	7,227.00	7,183.73	7,067.35	144.30	41.24	-85.57	-2,840.85	-10,250.52	6,114.07	6,036.32	77.76	78.632		
11,400.00	7,226.47	7,184.57	7,068.19	147.52	41.25	-85.60	-2,840.88	-10,250.53	6,017.92	5,939.25	78.67	76.497		
11,500.00	7,225.94	7,185.41	7,069.02	150.76	41.25	-85.63	-2,840.92	-10,250.54	5,921.89	5,842.24	79.65	74.352		
11,600.00	7,225.41	7,186.25	7,069.86	153.99	41.25	-85.66	-2,840.96	-10,250.56	5,825.99	5,745.30	80.69	72.200		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
11,700.00	7,224.88	7,187.08	7,070.69	157.23	41.25	-85.69	-2,840.99	-10,250.57	5,730.23	5,648.42	81.81	70.045		
11,800.00	7,224.35	7,187.92	7,071.53	160.48	41.26	-85.72	-2,841.03	-10,250.58	5,634.62	5,551.62	83.00	67.891		
11,900.00	7,223.82	7,188.75	7,072.36	163.72	41.26	-85.74	-2,841.07	-10,250.59	5,539.16	5,454.90	84.26	65.740		
12,000.00	7,223.29	7,189.58	7,073.19	166.98	41.26	-85.77	-2,841.10	-10,250.60	5,443.87	5,358.27	85.60	63.596		
12,100.00	7,222.77	7,190.41	7,074.01	170.23	41.26	-85.80	-2,841.14	-10,250.62	5,348.75	5,261.73	87.02	61.462		
12,200.00	7,222.24	7,191.23	7,074.84	173.49	41.27	-85.83	-2,841.17	-10,250.63	5,253.81	5,165.28	88.53	59.342		
12,300.00	7,221.71	7,192.06	7,075.66	176.75	41.27	-85.86	-2,841.21	-10,250.64	5,159.06	5,068.93	90.13	57.239		
12,400.00	7,221.18	7,192.88	7,076.49	180.01	41.27	-85.89	-2,841.25	-10,250.65	5,064.51	4,972.69	91.82	55.156		
12,500.00	7,220.65	7,193.71	7,077.31	183.28	41.28	-85.92	-2,841.28	-10,250.66	4,970.18	4,876.57	93.61	53.095		
12,600.00	7,220.12	7,194.53	7,078.13	186.54	41.28	-85.94	-2,841.32	-10,250.68	4,876.07	4,780.58	95.50	51.061		
12,700.00	7,219.59	7,195.49	7,079.09	189.81	41.28	-85.98	-2,841.36	-10,250.69	4,782.20	4,684.72	97.49	49.054		
12,800.00	7,219.06	7,196.64	7,080.24	193.09	41.29	-86.02	-2,841.42	-10,250.71	4,688.59	4,589.00	99.59	47.079		
12,900.00	7,218.54	7,197.79	7,081.39	196.36	41.29	-86.06	-2,841.47	-10,250.72	4,595.24	4,493.43	101.81	45.136		
13,000.00	7,218.01	7,198.94	7,082.54	199.64	41.29	-86.10	-2,841.52	-10,250.74	4,502.18	4,398.03	104.15	43.230		
13,100.00	7,217.48	7,200.09	7,083.69	202.92	41.30	-86.14	-2,841.57	-10,250.76	4,409.42	4,302.81	106.61	41.361		
13,200.00	7,216.95	7,201.25	7,084.84	206.20	41.30	-86.17	-2,841.62	-10,250.77	4,316.99	4,207.78	109.20	39.532		
13,300.00	7,216.42	7,202.40	7,085.99	209.48	41.30	-86.21	-2,841.67	-10,250.79	4,224.90	4,112.96	111.94	37.744		
13,400.00	7,215.89	7,203.55	7,087.14	212.76	41.31	-86.25	-2,841.72	-10,250.81	4,133.17	4,018.36	114.82	35.998		
13,500.00	7,215.36	7,204.70	7,088.29	216.05	41.31	-86.29	-2,841.77	-10,250.82	4,041.84	3,923.99	117.85	34.297		
13,600.00	7,214.84	7,205.85	7,089.44	219.33	41.32	-86.33	-2,841.82	-10,250.84	3,950.93	3,829.89	121.04	32.641		
13,700.00	7,214.31	7,207.00	7,090.59	222.62	41.32	-86.37	-2,841.87	-10,250.86	3,860.47	3,736.07	124.40	31.032		
13,800.00	7,213.78	7,208.15	7,091.74	225.91	41.32	-86.41	-2,841.92	-10,250.87	3,770.49	3,642.54	127.95	29.470		
13,900.00	7,213.25	7,209.30	7,092.89	229.20	41.33	-86.45	-2,841.97	-10,250.89	3,681.02	3,549.35	131.68	27.955		
14,000.00	7,212.72	7,210.45	7,094.04	232.49	41.33	-86.49	-2,842.02	-10,250.91	3,592.12	3,456.51	135.60	26.490		
14,100.00	7,212.19	7,211.60	7,095.19	235.79	41.34	-86.53	-2,842.07	-10,250.92	3,503.81	3,364.06	139.74	25.073		
14,200.00	7,211.66	7,212.75	7,096.34	239.08	41.34	-86.57	-2,842.12	-10,250.94	3,416.14	3,272.04	144.10	23.706		
14,300.00	7,211.13	7,213.90	7,097.48	242.38	41.34	-86.61	-2,842.17	-10,250.96	3,329.17	3,180.47	148.70	22.389		
14,400.00	7,210.61	7,215.05	7,098.63	245.67	41.35	-86.65	-2,842.22	-10,250.97	3,242.95	3,089.41	153.54	21.121		
14,500.00	7,210.08	7,216.20	7,099.78	248.97	41.35	-86.69	-2,842.27	-10,250.99	3,157.54	2,998.90	158.64	19.904		
14,600.00	7,209.55	7,217.35	7,100.93	252.27	41.35	-86.73	-2,842.32	-10,251.01	3,073.01	2,909.00	164.01	18.736		
14,700.00	7,209.02	7,218.50	7,102.08	255.57	41.36	-86.77	-2,842.37	-10,251.02	2,989.44	2,819.76	169.68	17.618		
14,800.00	7,208.49	7,219.65	7,103.23	258.87	41.36	-86.81	-2,842.42	-10,251.04	2,906.90	2,731.26	175.64	16.550		
14,900.00	7,207.96	7,220.80	7,104.37	262.17	41.37	-86.85	-2,842.46	-10,251.06	2,825.50	2,643.57	181.92	15.531		
15,000.00	7,207.43	7,221.95	7,105.52	265.47	41.37	-86.89	-2,842.51	-10,251.07	2,745.32	2,556.78	188.54	14.561		
15,081.89	7,207.00	7,222.89	7,106.46	268.17	41.37	-86.92	-2,842.55	-10,251.09	2,680.65	2,486.45	194.21	13.803 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-106.96	-2,729.21	-8,947.08	9,354.14					
100.00	100.00	37.25	72.25	3.28	3.28	-106.96	-2,729.13	-8,947.16	9,354.17	9,347.61	6.57	1,424.735		
200.00	200.00	94.54	129.54	3.34	3.29	-106.96	-2,728.71	-8,947.60	9,354.70	9,348.08	6.62	1,412.591		
300.00	299.98	464.58	499.42	3.44	3.72	65.11	-2,719.18	-8,946.59	9,352.08	9,344.92	7.16	1,305.837		
400.00	399.84	723.23	757.88	3.59	4.37	65.32	-2,711.00	-8,941.39	9,347.26	9,339.29	7.97	1,172.762		
500.00	499.45	790.61	825.18	3.80	4.57	65.50	-2,708.26	-8,939.54	9,339.86	9,331.48	8.37	1,115.363		
600.00	598.70	850.00	884.47	4.06	4.76	65.71	-2,705.01	-8,938.61	9,331.62	9,322.80	8.82	1,058.477		
700.00	697.49	879.73	914.14	4.38	4.86	65.87	-2,703.06	-8,938.42	9,322.55	9,313.32	9.22	1,010.790		
800.00	796.13	945.00	979.22	4.74	5.08	65.96	-2,698.10	-8,938.56	9,313.74	9,303.95	9.80	950.702		
900.00	894.78	992.44	1,026.46	5.15	5.25	66.03	-2,693.73	-8,939.12	9,305.38	9,295.03	10.35	898.857		
1,000.00	993.43	1,136.00	1,168.90	5.58	5.79	66.27	-2,676.20	-8,942.00	9,297.22	9,285.91	11.31	822.074		
1,100.00	1,092.07	1,471.81	1,499.42	6.03	7.28	66.93	-2,617.74	-8,949.24	9,288.77	9,275.54	13.23	702.122		
1,200.00	1,190.72	1,830.27	1,846.98	6.50	9.23	67.79	-2,530.43	-8,953.30	9,277.31	9,261.71	15.60	594.632		
1,300.00	1,289.36	2,010.95	2,020.50	6.98	10.33	68.25	-2,480.12	-8,953.25	9,263.62	9,246.47	17.15	540.160		
1,400.00	1,388.01	2,048.19	2,056.18	7.47	10.56	68.35	-2,469.46	-8,953.23	9,249.87	9,232.01	17.86	517.826		
1,500.00	1,486.65	2,081.00	2,087.61	7.97	10.77	68.44	-2,460.04	-8,953.40	9,236.82	9,218.26	18.56	497.682		
1,600.00	1,585.30	2,127.67	2,132.27	8.48	11.08	68.56	-2,446.49	-8,953.95	9,224.44	9,205.08	19.36	476.477		
1,700.00	1,683.94	2,175.00	2,177.46	9.00	11.38	68.69	-2,432.45	-8,954.88	9,212.74	9,192.56	20.17	456.706		
1,800.00	1,782.59	2,390.73	2,382.79	9.52	12.85	69.29	-2,366.38	-8,958.23	9,200.55	9,178.42	22.13	415.798		
1,900.00	1,881.24	2,482.37	2,469.90	10.05	13.49	69.55	-2,337.94	-8,959.24	9,188.24	9,164.97	23.27	394.792		
2,000.00	1,979.88	2,595.97	2,578.16	10.58	14.28	69.86	-2,303.52	-8,959.95	9,175.88	9,151.30	24.58	373.363		
2,100.00	2,078.53	2,736.26	2,711.34	11.11	15.28	70.26	-2,259.46	-8,960.94	9,163.65	9,137.56	26.09	351.249		
2,200.00	2,177.17	2,806.90	2,778.04	11.64	15.81	70.47	-2,236.19	-8,961.44	9,151.25	9,124.11	27.14	337.225		
2,300.00	2,275.82	2,867.28	2,835.16	12.18	16.25	70.64	-2,216.63	-8,961.94	9,139.31	9,111.21	28.11	325.150		
2,400.00	2,374.46	2,933.00	2,897.91	12.72	16.71	70.83	-2,197.13	-8,962.34	9,127.91	9,098.80	29.11	313.556		
2,500.00	2,473.11	2,983.26	2,946.10	13.26	17.06	70.96	-2,182.85	-8,962.66	9,117.00	9,087.00	30.00	303.903		
2,600.00	2,571.76	3,156.06	3,111.60	13.80	18.27	71.43	-2,133.19	-8,963.54	9,106.20	9,074.48	31.72	287.052		
2,700.00	2,670.40	3,279.65	3,230.34	14.35	19.12	71.76	-2,098.89	-8,963.18	9,095.06	9,061.96	33.10	274.747		
2,800.00	2,769.05	3,347.94	3,295.88	14.89	19.59	71.94	-2,079.71	-8,962.74	9,083.73	9,049.61	34.12	266.225		
2,900.00	2,867.69	3,409.00	3,354.40	15.44	20.02	72.10	-2,062.30	-8,962.85	9,073.12	9,038.03	35.09	258.539		
3,000.00	2,966.34	3,462.85	3,406.01	15.99	20.39	72.25	-2,046.96	-8,963.14	9,063.02	9,027.00	36.02	251.607		
3,100.00	3,064.98	3,547.33	3,487.09	16.53	20.98	72.48	-2,023.21	-8,963.46	9,053.13	9,015.97	37.16	243.631		
3,200.00	3,163.63	3,616.35	3,553.21	17.08	21.47	72.67	-2,003.40	-8,963.95	9,043.63	9,005.43	38.20	236.766		
3,300.00	3,262.27	3,686.03	3,619.88	17.63	21.96	72.86	-1,983.15	-8,964.65	9,034.53	8,995.29	39.25	230.205		
3,400.00	3,360.92	3,772.83	3,702.63	18.18	22.60	73.11	-1,957.01	-8,965.80	9,025.77	8,985.34	40.43	223.232		
3,500.00	3,459.57	3,861.51	3,786.74	18.74	23.26	73.37	-1,928.94	-8,967.22	9,017.23	8,975.58	41.65	216.494		
3,600.00	3,558.21	3,962.63	3,882.53	19.29	24.03	73.67	-1,896.57	-8,968.85	9,008.88	8,965.91	42.97	209.649		
3,700.00	3,656.86	4,033.44	3,949.65	19.84	24.56	73.88	-1,874.04	-8,969.95	9,000.75	8,956.69	44.06	204.265		
3,800.00	3,755.50	4,090.86	4,004.18	20.39	24.99	74.04	-1,856.10	-8,970.94	8,993.10	8,948.04	45.05	199.604		
3,900.00	3,854.15	4,137.46	4,048.54	20.95	25.34	74.18	-1,841.86	-8,971.91	8,986.06	8,940.10	45.96	195.516		
4,000.00	3,952.79	4,553.02	4,442.54	21.50	28.49	75.41	-1,709.98	-8,975.92	8,979.13	8,929.51	49.63	180.931		
4,100.00	4,051.44	4,590.50	4,477.81	22.05	28.78	75.52	-1,697.31	-8,975.73	8,969.84	8,919.34	50.49	177.640		
4,200.00	4,150.08	4,639.00	4,523.56	22.61	29.16	75.67	-1,681.20	-8,975.67	8,961.22	8,909.78	51.44	174.192		
4,300.00	4,248.73	4,684.88	4,567.01	23.16	29.51	75.81	-1,666.45	-8,975.75	8,953.25	8,900.89	52.36	170.995		
4,400.00	4,347.38	4,736.00	4,615.68	23.72	29.89	75.96	-1,650.83	-8,975.94	8,945.88	8,892.56	53.31	167.799		
4,500.00	4,446.02	4,787.90	4,665.27	24.27	30.27	76.10	-1,635.57	-8,976.27	8,939.10	8,884.84	54.26	164.759		
4,600.00	4,544.67	4,846.04	4,720.98	24.83	30.68	76.26	-1,618.91	-8,976.86	8,932.92	8,877.69	55.24	161.722		
4,700.00	4,643.31	4,936.88	4,808.69	25.39	31.30	76.50	-1,595.32	-8,977.60	8,927.06	8,870.64	56.42	158.233		
4,800.00	4,741.96	5,002.43	4,872.35	25.94	31.73	76.67	-1,579.67	-8,978.11	8,921.53	8,864.12	57.40	155.414		
4,900.00	4,840.60	5,071.83	4,939.91	26.50	32.16	76.84	-1,563.82	-8,978.77	8,916.42	8,858.02	58.40	152.666		
5,000.00	4,939.25	5,149.68	5,015.95	27.05	32.63	77.02	-1,547.16	-8,979.58	8,911.69	8,852.25	59.44	149.927		
5,100.00	5,037.90	5,237.82	5,102.50	27.61	33.14	77.22	-1,530.54	-8,980.36	8,907.18	8,846.67	60.51	147.212		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,322.84	5,186.43	28.17	33.59	77.39	-1,516.97	-8,980.97	8,902.86	8,841.35	61.52	144.716		
5,300.00	5,235.19	5,398.61	5,261.43	28.72	33.97	77.54	-1,506.23	-8,981.53	8,898.83	8,836.36	62.46	142.467		
5,400.00	5,333.83	5,485.38	5,347.59	29.28	34.37	77.69	-1,496.08	-8,982.15	8,895.04	8,831.61	63.42	140.247		
5,500.00	5,432.48	5,558.99	5,420.89	29.84	34.68	77.81	-1,489.35	-8,982.65	8,891.49	8,827.19	64.30	138.285		
5,600.00	5,531.12	5,600.00	5,626.33	30.40	34.87	78.11	-1,474.65	-8,982.72	8,887.51	8,822.47	65.04	136.645		
5,700.00	5,629.77	5,840.88	5,702.15	30.95	35.78	78.22	-1,470.89	-8,982.10	8,882.98	8,816.48	66.51	133.561		
5,800.00	5,728.41	5,891.79	5,753.02	31.51	35.96	78.28	-1,468.83	-8,981.97	8,879.05	8,811.80	67.25	132.027		
5,900.00	5,827.06	5,946.65	5,807.84	32.07	36.15	78.35	-1,467.08	-8,982.07	8,875.66	8,807.66	68.00	130.523		
6,000.00	5,925.71	6,019.32	5,880.50	32.63	36.39	78.44	-1,465.35	-8,982.48	8,872.72	8,803.91	68.80	128.958		
6,100.00	6,024.35	6,116.91	5,978.06	33.19	36.71	78.55	-1,463.26	-8,983.16	8,869.97	8,800.28	69.68	127.288		
6,200.00	6,123.00	6,230.22	6,091.35	33.74	37.09	78.68	-1,461.06	-8,983.79	8,867.13	8,796.52	70.62	125.566		
6,300.00	6,221.64	6,302.88	6,163.99	34.30	37.33	78.77	-1,459.63	-8,984.26	8,864.41	8,792.99	71.42	124.117		
6,400.00	6,320.29	6,379.00	6,240.09	34.86	37.58	78.86	-1,458.02	-8,984.95	8,861.98	8,789.75	72.23	122.686		
6,500.00	6,418.93	6,458.98	6,320.05	35.42	37.85	78.95	-1,456.29	-8,985.85	8,859.81	8,786.75	73.06	121.264		
6,600.00	6,517.58	6,540.79	6,401.84	35.98	38.13	79.05	-1,454.62	-8,986.94	8,857.87	8,783.97	73.90	119.868		
6,700.00	6,616.23	6,650.28	6,511.30	36.54	38.50	79.18	-1,452.47	-8,988.41	8,855.99	8,781.17	74.83	118.353		
6,800.00	6,714.51	6,741.40	6,602.39	37.10	38.80	44.47	-1,450.74	-8,989.57	8,848.69	8,773.00	75.69	116.908		
6,900.00	6,810.42	6,818.31	6,679.28	37.66	39.06	25.78	-1,449.32	-8,990.70	8,826.33	8,749.86	76.47	115.418		
7,000.00	6,901.58	6,898.89	6,759.84	38.21	39.34	17.52	-1,447.82	-8,992.03	8,789.24	8,712.00	77.23	113.805		
7,100.00	6,985.76	6,979.16	6,840.07	38.76	39.62	13.05	-1,446.03	-8,993.43	8,738.18	8,660.24	77.94	112.114		
7,200.00	7,060.88	7,062.20	6,923.08	39.32	39.91	10.25	-1,443.93	-8,994.89	8,674.36	8,595.76	78.60	110.357		
7,300.00	7,125.09	7,140.57	7,001.41	39.90	40.19	8.19	-1,442.01	-8,996.15	8,599.23	8,520.05	79.18	108.602		
7,400.00	7,176.81	7,194.72	7,055.54	40.55	40.38	6.31	-1,440.74	-8,996.96	8,514.70	8,435.10	79.60	106.973		
7,500.00	7,214.77	7,229.75	7,090.55	41.30	40.50	3.87	-1,439.98	-8,997.50	8,422.91	8,343.05	79.87	105.462		
7,600.00	7,238.02	7,251.83	7,112.62	42.22	40.58	-1.72	-1,439.53	-8,997.85	8,326.12	8,246.11	80.02	104.056		
7,700.00	7,246.01	7,260.36	7,121.15	43.32	40.61	-60.31	-1,439.37	-8,997.98	8,226.69	8,146.64	80.05	102.771		
7,800.00	7,245.50	7,261.32	7,122.11	44.65	40.61	-73.17	-1,439.35	-8,998.00	8,126.75	8,046.73	80.02	101.556		
7,900.00	7,244.97	7,262.26	7,123.06	46.21	40.61	-73.36	-1,439.33	-8,998.01	8,026.81	7,946.81	79.99	100.342		
8,000.00	7,244.44	7,263.21	7,124.01	47.99	40.62	-73.55	-1,439.31	-8,998.03	7,926.87	7,846.90	79.97	99.126		
8,100.00	7,243.91	7,264.16	7,124.96	49.96	40.62	-73.73	-1,439.29	-8,998.04	7,826.93	7,746.99	79.94	97.909		
8,200.00	7,243.39	7,265.12	7,125.91	52.10	40.62	-73.92	-1,439.27	-8,998.06	7,726.99	7,647.08	79.91	96.690		
8,300.00	7,242.86	7,266.07	7,126.87	54.38	40.63	-74.11	-1,439.26	-8,998.07	7,627.06	7,547.17	79.89	95.471		
8,400.00	7,242.33	7,267.03	7,127.82	56.78	40.63	-74.30	-1,439.24	-8,998.09	7,527.13	7,447.26	79.86	94.251		
8,500.00	7,241.80	7,267.99	7,128.78	59.28	40.63	-74.49	-1,439.22	-8,998.10	7,427.19	7,347.36	79.84	93.029		
8,600.00	7,241.27	7,268.95	7,129.74	61.88	40.64	-74.68	-1,439.20	-8,998.12	7,327.26	7,247.45	79.81	91.807		
8,700.00	7,240.74	7,269.92	7,130.71	64.54	40.64	-74.88	-1,439.18	-8,998.13	7,227.34	7,147.55	79.79	90.583		
8,800.00	7,240.21	7,270.88	7,131.67	67.27	40.64	-75.07	-1,439.16	-8,998.15	7,127.41	7,047.65	79.76	89.358		
8,900.00	7,239.68	7,271.85	7,132.64	70.06	40.65	-75.26	-1,439.15	-8,998.16	7,027.49	6,947.75	79.74	88.133		
9,000.00	7,239.16	7,272.82	7,133.61	72.89	40.65	-75.46	-1,439.13	-8,998.18	6,927.56	6,847.85	79.71	86.906		
9,100.00	7,238.63	7,273.79	7,134.58	75.77	40.65	-75.65	-1,439.11	-8,998.20	6,827.64	6,747.95	79.69	85.679		
9,200.00	7,238.10	7,274.77	7,135.56	78.69	40.66	-75.85	-1,439.09	-8,998.21	6,727.72	6,648.06	79.66	84.451		
9,300.00	7,237.57	7,275.75	7,136.54	81.64	40.66	-76.05	-1,439.07	-8,998.23	6,627.81	6,548.17	79.64	83.221		
9,400.00	7,237.04	7,276.73	7,137.52	84.62	40.66	-76.25	-1,439.05	-8,998.24	6,527.90	6,448.28	79.62	81.991		
9,500.00	7,236.51	7,277.71	7,138.50	87.63	40.67	-76.44	-1,439.04	-8,998.26	6,427.98	6,348.39	79.59	80.760		
9,600.00	7,235.98	7,278.69	7,139.48	90.66	40.67	-76.64	-1,439.02	-8,998.27	6,328.08	6,248.51	79.57	79.528		
9,700.00	7,235.45	7,279.68	7,140.47	93.72	40.67	-76.85	-1,439.00	-8,998.29	6,228.17	6,148.62	79.55	78.295		
9,800.00	7,234.93	7,280.67	7,141.46	96.79	40.68	-77.05	-1,438.98	-8,998.31	6,128.27	6,048.74	79.53	77.061		
9,900.00	7,234.40	7,281.66	7,142.45	99.88	40.68	-77.25	-1,438.96	-8,998.32	6,028.37	5,948.87	79.50	75.826		
10,000.00	7,233.87	7,282.65	7,143.44	102.98	40.68	-77.45	-1,438.95	-8,998.34	5,928.47	5,848.99	79.48	74.590		
10,100.00	7,233.34	7,283.65	7,144.43	106.10	40.69	-77.66	-1,438.93	-8,998.35	5,828.58	5,749.12	79.46	73.353		
10,200.00	7,232.81	7,284.64	7,145.43	109.23	40.69	-77.86	-1,438.91	-8,998.37	5,728.69	5,649.25	79.44	72.115		
10,300.00	7,232.28	7,285.64	7,146.43	112.38	40.70	-78.07	-1,438.89	-8,998.39	5,628.80	5,549.39	79.42	70.877		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,286.65	7,147.43	115.53	40.70	-78.27	-1,438.87	-8,998.40	5,528.92	5,449.53	79.40	69.637	
10,500.00	7,231.23	7,287.65	7,148.44	118.70	40.70	-78.48	-1,438.85	-8,998.42	5,429.05	5,349.67	79.38	68.396	
10,600.00	7,230.70	7,288.66	7,149.45	121.87	40.71	-78.69	-1,438.84	-8,998.44	5,329.17	5,249.82	79.36	67.154	
10,700.00	7,230.17	7,289.67	7,150.45	125.05	40.71	-78.90	-1,438.82	-8,998.45	5,229.30	5,149.97	79.34	65.911	
10,800.00	7,229.64	7,290.68	7,151.47	128.25	40.71	-79.11	-1,438.80	-8,998.47	5,129.44	5,050.12	79.32	64.667	
10,900.00	7,229.11	7,291.69	7,152.48	131.44	40.72	-79.32	-1,438.78	-8,998.49	5,029.58	4,950.28	79.30	63.422	
11,000.00	7,228.58	7,292.71	7,153.50	134.65	40.72	-79.53	-1,438.76	-8,998.50	4,929.73	4,850.44	79.29	62.175	
11,100.00	7,228.05	7,293.73	7,154.52	137.86	40.72	-79.74	-1,438.74	-8,998.52	4,829.88	4,750.61	79.27	60.927	
11,200.00	7,227.52	7,294.75	7,155.54	141.08	40.73	-79.95	-1,438.73	-8,998.54	4,730.04	4,650.78	79.26	59.678	
11,300.00	7,227.00	7,295.78	7,156.56	144.30	40.73	-80.17	-1,438.71	-8,998.55	4,630.21	4,550.96	79.25	58.427	
11,400.00	7,226.47	7,296.80	7,157.59	147.52	40.73	-80.38	-1,438.69	-8,998.57	4,530.38	4,451.14	79.24	57.174	
11,500.00	7,225.94	7,297.83	7,158.61	150.76	40.74	-80.60	-1,438.67	-8,998.59	4,430.56	4,351.33	79.23	55.920	
11,600.00	7,225.41	7,298.86	7,159.64	153.99	40.74	-80.81	-1,438.65	-8,998.60	4,330.75	4,251.52	79.23	54.663	
11,700.00	7,224.88	7,299.89	7,160.68	157.23	40.75	-81.03	-1,438.64	-8,998.62	4,230.95	4,151.72	79.22	53.405	
11,800.00	7,224.35	7,300.93	7,161.71	160.48	40.75	-81.25	-1,438.62	-8,998.64	4,131.15	4,051.93	79.23	52.144	
11,900.00	7,223.82	7,301.97	7,162.75	163.72	40.75	-81.47	-1,438.60	-8,998.65	4,031.37	3,952.14	79.23	50.881	
12,000.00	7,223.29	7,303.01	7,163.79	166.98	40.76	-81.69	-1,438.58	-8,998.67	3,931.60	3,852.36	79.24	49.616	
12,100.00	7,222.77	7,304.05	7,164.84	170.23	40.76	-81.91	-1,438.56	-8,998.69	3,831.83	3,752.58	79.26	48.347	
12,200.00	7,222.24	7,305.10	7,165.88	173.49	40.76	-82.13	-1,438.55	-8,998.71	3,732.09	3,652.81	79.28	47.076	
12,300.00	7,221.71	7,306.15	7,166.93	176.75	40.77	-82.35	-1,438.53	-8,998.72	3,632.35	3,553.04	79.31	45.801	
12,400.00	7,221.18	7,307.20	7,167.98	180.01	40.77	-82.57	-1,438.51	-8,998.74	3,532.63	3,453.28	79.35	44.522	
12,500.00	7,220.65	7,308.25	7,169.03	183.28	40.77	-82.79	-1,438.49	-8,998.76	3,432.92	3,353.53	79.39	43.239	
12,600.00	7,220.12	7,309.31	7,170.09	186.54	40.78	-83.02	-1,438.47	-8,998.78	3,333.24	3,253.78	79.45	41.952	
12,700.00	7,219.59	7,310.37	7,171.15	189.81	40.78	-83.24	-1,438.45	-8,998.79	3,233.57	3,154.04	79.53	40.660	
12,800.00	7,219.06	7,311.43	7,172.21	193.09	40.79	-83.47	-1,438.44	-8,998.81	3,133.92	3,054.30	79.62	39.362	
12,900.00	7,218.54	7,312.49	7,173.27	196.36	40.79	-83.70	-1,438.42	-8,998.83	3,034.30	2,954.57	79.73	38.058	
13,000.00	7,218.01	7,313.56	7,174.34	199.64	40.79	-83.92	-1,438.40	-8,998.85	2,934.70	2,854.84	79.86	36.748	
13,100.00	7,217.48	7,314.62	7,175.40	202.92	40.80	-84.15	-1,438.38	-8,998.86	2,835.12	2,755.10	80.02	35.430	
13,200.00	7,216.95	7,315.70	7,176.47	206.20	40.80	-84.38	-1,438.36	-8,998.88	2,735.58	2,655.37	80.21	34.105	
13,300.00	7,216.42	7,316.77	7,177.55	209.48	40.80	-84.61	-1,438.35	-8,998.90	2,636.07	2,555.64	80.44	32.771	
13,400.00	7,215.89	7,317.85	7,178.62	212.76	40.81	-84.84	-1,438.33	-8,998.92	2,536.61	2,455.89	80.71	31.428	
13,500.00	7,215.36	7,318.92	7,179.70	216.05	40.81	-85.07	-1,438.31	-8,998.93	2,437.18	2,356.14	81.04	30.074	
13,600.00	7,214.84	7,320.01	7,180.78	219.33	40.82	-85.30	-1,438.29	-8,998.95	2,337.80	2,256.37	81.43	28.710	
13,700.00	7,214.31	7,321.09	7,181.87	222.62	40.82	-85.54	-1,438.27	-8,998.97	2,238.48	2,156.58	81.90	27.333	
13,800.00	7,213.78	7,322.18	7,182.95	225.91	40.82	-85.77	-1,438.26	-8,998.99	2,139.22	2,056.76	82.46	25.944	
13,900.00	7,213.25	7,323.27	7,184.04	229.20	40.83	-86.00	-1,438.24	-8,999.01	2,040.03	1,956.90	83.13	24.541	
14,000.00	7,212.72	7,324.36	7,185.13	232.49	40.83	-86.24	-1,438.22	-8,999.03	1,940.92	1,856.99	83.93	23.125	
14,100.00	7,212.19	7,325.45	7,186.23	235.79	40.83	-86.47	-1,438.20	-8,999.04	1,841.91	1,757.01	84.90	21.695	
14,200.00	7,211.66	7,326.55	7,187.33	239.08	40.84	-86.71	-1,438.18	-8,999.06	1,743.02	1,656.95	86.07	20.252	
14,300.00	7,211.13	7,327.65	7,188.43	242.38	40.84	-86.95	-1,438.17	-8,999.08	1,644.25	1,556.77	87.48	18.795	
14,400.00	7,210.61	7,328.75	7,189.53	245.67	40.85	-87.18	-1,438.15	-8,999.10	1,545.65	1,456.45	89.20	17.329	
14,500.00	7,210.08	7,329.86	7,190.63	248.97	40.85	-87.42	-1,438.13	-8,999.12	1,447.23	1,355.95	91.28	15.854	
14,600.00	7,209.55	7,330.97	7,191.74	252.27	40.85	-87.66	-1,438.11	-8,999.14	1,349.04	1,255.21	93.83	14.377	
14,700.00	7,209.02	7,332.08	7,192.85	255.57	40.86	-87.90	-1,438.10	-8,999.15	1,251.15	1,154.18	96.97	12.903	
14,800.00	7,208.49	7,333.19	7,193.97	258.87	40.86	-88.14	-1,438.08	-8,999.17	1,153.61	1,052.77	100.84	11.440	
14,900.00	7,207.96	7,334.31	7,195.08	262.17	40.87	-88.38	-1,438.06	-8,999.19	1,056.53	950.88	105.65	10.000	
15,000.00	7,207.43	7,335.43	7,196.20	265.47	40.87	-88.62	-1,438.04	-8,999.21	960.05	848.36	111.69	8.596	
15,081.89	7,207.00	7,336.34	7,197.12	268.17	40.87	-88.82	-1,438.03	-8,999.23	881.62	763.82	117.80	7.484 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-106.94	-2,735.03	-8,977.96	9,385.38					
100.00	100.00	176.86	211.83	3.28	3.33	-106.93	-2,732.29	-8,977.65	9,384.89	9,378.28	6.61	1,419.476		
200.00	200.00	306.58	341.52	3.34	3.47	-106.91	-2,729.24	-8,976.66	9,383.45	9,376.65	6.80	1,378.926		
300.00	299.98	410.60	445.48	3.44	3.64	65.12	-2,726.09	-8,976.00	9,381.23	9,374.15	7.08	1,324.662		
400.00	399.84	495.13	529.95	3.59	3.82	65.22	-2,722.99	-8,975.57	9,377.49	9,370.08	7.41	1,265.491		
500.00	499.45	542.00	576.78	3.80	3.93	65.35	-2,720.97	-8,975.57	9,372.66	9,364.94	7.72	1,213.427		
600.00	598.70	589.53	624.26	4.06	4.05	65.49	-2,718.83	-8,975.87	9,366.94	9,358.84	8.10	1,156.172		
700.00	697.49	648.00	682.67	4.38	4.21	65.65	-2,716.24	-8,976.79	9,360.58	9,352.01	8.57	1,092.085		
800.00	796.13	663.81	698.46	4.74	4.25	65.67	-2,715.56	-8,977.15	9,354.40	9,345.43	8.97	1,042.676		
900.00	894.78	711.12	745.72	5.15	4.39	65.72	-2,713.69	-8,978.39	9,348.94	9,339.45	9.50	984.402		
1,000.00	993.43	790.00	824.51	5.58	4.62	65.81	-2,710.80	-8,980.59	9,343.81	9,333.66	10.15	920.445		
1,100.00	1,092.07	834.46	868.91	6.03	4.76	65.87	-2,709.04	-8,982.05	9,339.12	9,328.39	10.73	870.322		
1,200.00	1,190.72	884.00	918.35	6.50	4.93	65.93	-2,706.64	-8,984.17	9,335.08	9,323.74	11.35	822.657		
1,300.00	1,289.36	884.00	918.35	6.98	4.93	65.93	-2,706.64	-8,984.17	9,331.80	9,319.98	11.82	789.682		
1,400.00	1,388.01	931.78	965.99	7.47	5.09	65.99	-2,704.11	-8,986.80	9,329.14	9,316.68	12.46	748.833		
1,500.00	1,486.65	979.00	1,013.03	7.97	5.25	66.06	-2,701.61	-8,990.05	9,327.44	9,314.33	13.11	711.477		
1,600.00	1,585.30	979.00	1,013.03	8.48	5.25	66.06	-2,701.61	-8,990.05	9,326.38	9,312.77	13.61	685.467		
1,700.00	1,683.94	1,039.20	1,072.92	9.00	5.47	66.14	-2,698.02	-8,994.92	9,325.99	9,311.67	14.32	651.109		
1,714.67	1,698.42	1,046.27	1,079.95	9.08	5.50	66.15	-2,697.55	-8,995.54	9,325.99	9,311.57	14.42	646.606		
1,800.00	1,782.59	1,096.73	1,130.06	9.52	5.69	66.23	-2,693.82	-9,000.15	9,326.18	9,311.14	15.04	619.944		
1,900.00	1,881.24	1,168.00	1,200.70	10.05	5.97	66.34	-2,687.45	-9,007.09	9,326.69	9,310.86	15.83	589.198		
2,000.00	1,979.88	1,207.43	1,239.71	10.58	6.14	66.41	-2,683.40	-9,011.26	9,327.72	9,311.22	16.50	565.221		
2,100.00	2,078.53	1,263.00	1,294.53	11.11	6.37	66.51	-2,677.12	-9,017.78	9,329.53	9,312.29	17.25	540.894		
2,200.00	2,177.17	1,263.00	1,294.53	11.64	6.37	66.51	-2,677.12	-9,017.78	9,331.96	9,314.20	17.76	525.326		
2,300.00	2,275.82	1,306.25	1,337.07	12.18	6.57	66.59	-2,671.73	-9,023.43	9,335.15	9,316.68	18.47	505.391		
2,400.00	2,374.46	1,358.00	1,387.78	12.72	6.80	66.69	-2,664.63	-9,030.91	9,339.19	9,319.97	19.22	485.912		
2,500.00	2,473.11	1,388.07	1,417.18	13.26	6.95	66.75	-2,660.31	-9,035.49	9,343.82	9,323.94	19.88	470.073		
2,600.00	2,571.76	1,492.69	1,519.54	13.80	7.46	66.95	-2,645.50	-9,051.31	9,348.74	9,327.85	20.89	447.483		
2,700.00	2,670.40	1,570.56	1,595.88	14.35	7.85	67.10	-2,635.30	-9,062.81	9,353.70	9,331.91	21.79	429.316		
2,800.00	2,769.05	1,614.06	1,638.49	14.89	8.07	67.19	-2,629.67	-9,069.43	9,359.19	9,336.67	22.52	415.614		
2,900.00	2,867.69	1,681.66	1,704.67	15.44	8.42	67.32	-2,620.90	-9,080.10	9,365.27	9,341.90	23.37	400.698		
3,000.00	2,966.34	1,831.00	1,851.05	15.99	9.21	67.60	-2,602.16	-9,102.97	9,371.08	9,346.44	24.65	380.228		
3,100.00	3,064.98	1,890.22	1,909.05	16.53	9.53	67.71	-2,584.26	-9,111.99	9,376.90	9,351.43	25.47	368.129		
3,200.00	3,163.63	3,200.00	2,006.76	17.08	16.90	67.90	-2,581.38	-9,127.61	9,383.22	9,350.43	32.79	286.123		
3,300.00	3,262.27	2,079.23	2,094.24	17.63	10.56	68.07	-2,570.33	-9,141.22	9,389.37	9,361.88	27.50	341.477		
3,400.00	3,360.92	2,340.24	2,349.52	18.18	12.04	68.58	-2,533.43	-9,180.90	9,395.64	9,366.21	29.43	319.240		
3,500.00	3,459.57	2,401.00	2,409.05	18.74	12.38	68.70	-2,525.03	-9,189.72	9,400.91	9,370.63	30.29	310.397		
3,600.00	3,558.21	2,426.19	2,433.76	19.29	12.53	68.74	-2,521.88	-9,193.45	9,406.70	9,375.75	30.94	304.010		
3,700.00	3,656.86	2,495.00	2,501.21	19.84	12.92	68.87	-2,513.02	-9,203.79	9,412.95	9,381.12	31.83	295.695		
3,800.00	3,755.50	2,544.28	2,549.45	20.39	13.20	68.97	-2,506.44	-9,211.43	9,419.68	9,387.06	32.62	288.746		
3,900.00	3,854.15	2,591.19	2,595.30	20.95	13.48	69.06	-2,500.01	-9,218.99	9,427.01	9,393.61	33.40	282.260		
4,000.00	3,952.79	2,710.13	2,711.51	21.50	14.18	69.29	-2,483.58	-9,238.23	9,434.46	9,399.87	34.58	272.800		
4,100.00	4,051.44	2,782.26	2,782.00	22.05	14.60	69.43	-2,473.71	-9,249.94	9,442.11	9,406.61	35.50	265.940		
4,200.00	4,150.08	2,904.79	2,902.05	22.61	15.32	69.65	-2,458.38	-9,269.08	9,449.39	9,412.69	36.70	257.489		
4,300.00	4,248.73	2,936.92	2,933.56	23.16	15.50	69.71	-2,454.78	-9,274.19	9,457.38	9,419.99	37.38	252.978		
4,400.00	4,347.38	2,969.22	2,965.23	23.72	15.69	69.77	-2,451.33	-9,279.53	9,466.09	9,428.02	38.07	248.657		
4,500.00	4,446.02	3,206.32	3,197.77	24.27	17.05	70.19	-2,425.56	-9,317.86	9,474.61	9,434.73	39.88	237.575		
4,600.00	4,544.67	3,283.05	3,273.28	24.83	17.48	70.31	-2,418.64	-9,329.63	9,482.62	9,441.82	40.80	232.436		
4,700.00	4,643.31	3,689.53	3,674.40	25.39	19.67	70.96	-2,382.70	-9,384.49	9,488.78	9,445.36	43.42	218.529		
4,800.00	4,741.96	3,729.00	3,713.36	25.94	19.88	71.03	-2,378.64	-9,389.30	9,493.93	9,449.78	44.15	215.045		
4,900.00	4,840.60	3,777.50	3,761.17	26.50	20.15	71.11	-2,373.37	-9,395.53	9,499.66	9,454.73	44.93	211.437		
5,000.00	4,939.25	3,824.00	3,806.87	27.05	20.41	71.20	-2,367.81	-9,402.07	9,506.22	9,460.52	45.70	208.028		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,037.90	3,824.00	3,806.87	27.61	20.41	71.20	-2,367.81	-9,402.07	9,513.47	9,467.26	46.21	205.885		
5,200.00	5,136.54	3,880.54	3,862.30	28.17	20.75	71.30	-2,360.65	-9,410.62	9,521.34	9,474.31	47.04	202.423		
5,300.00	5,235.19	3,920.49	3,901.40	28.72	20.99	71.37	-2,355.48	-9,416.99	9,529.93	9,482.16	47.77	199.498		
5,400.00	5,333.83	5,400.00	4,047.77	29.28	29.73	71.65	-2,336.70	-9,440.91	9,538.81	9,482.63	56.19	169.764		
5,500.00	5,432.48	4,201.00	4,176.33	29.84	22.64	71.88	-2,321.03	-9,460.66	9,546.85	9,496.47	50.38	189.511		
5,600.00	5,531.12	4,289.26	4,262.78	30.40	23.17	72.04	-2,309.51	-9,474.21	9,555.16	9,503.77	51.39	185.937		
5,700.00	5,629.77	4,408.18	4,378.93	30.95	23.89	72.27	-2,291.81	-9,492.59	9,563.45	9,510.85	52.60	181.825		
5,800.00	5,728.41	4,464.86	4,434.11	31.51	24.25	72.39	-2,282.47	-9,501.54	9,571.95	9,518.50	53.45	179.086		
5,900.00	5,827.06	4,518.93	4,486.63	32.07	24.60	72.50	-2,273.10	-9,510.30	9,580.88	9,526.60	54.28	176.496		
6,000.00	5,925.71	6,000.00	4,595.11	32.63	33.98	72.73	-2,254.20	-9,528.66	9,590.24	9,526.94	63.30	151.497		
6,100.00	6,024.35	5,827.85	5,779.66	33.19	31.37	74.56	-2,150.10	-9,645.70	9,598.03	9,536.12	61.91	155.030		
6,200.00	6,123.00	6,108.20	6,059.96	33.74	32.40	74.84	-2,147.75	-9,650.30	9,595.04	9,531.56	63.49	151.131		
6,300.00	6,221.64	6,300.00	6,281.15	34.30	33.09	75.07	-2,145.56	-9,650.05	9,590.18	9,525.46	64.72	148.175		
6,400.00	6,320.29	6,435.76	6,387.49	34.86	33.58	75.17	-2,144.17	-9,649.27	9,585.01	9,519.22	65.79	145.701		
6,500.00	6,418.93	6,479.40	6,431.12	35.42	33.74	75.22	-2,143.47	-9,649.17	9,580.34	9,513.82	66.52	144.015		
6,600.00	6,517.58	6,566.00	6,517.71	35.98	34.06	75.31	-2,141.92	-9,649.74	9,576.49	9,509.08	67.41	142.060		
6,700.00	6,616.23	6,566.00	6,517.71	36.54	34.06	75.31	-2,141.92	-9,649.74	9,572.80	9,504.80	67.99	140.793		
6,800.00	6,714.51	6,623.65	6,575.35	37.10	34.28	40.51	-2,140.91	-9,650.58	9,564.48	9,495.70	68.77	139.075		
6,900.00	6,810.42	6,679.33	6,631.01	37.66	34.49	21.63	-2,140.07	-9,651.61	9,541.43	9,471.93	69.51	137.277		
7,000.00	6,901.58	6,755.00	6,706.65	38.21	34.79	13.06	-2,139.15	-9,653.37	9,504.01	9,433.75	70.26	135.266		
7,100.00	6,985.76	6,790.12	6,741.76	38.76	34.92	8.08	-2,138.79	-9,654.30	9,452.89	9,382.09	70.80	133.507		
7,200.00	7,060.88	6,847.74	6,799.35	39.32	35.15	4.51	-2,138.25	-9,655.92	9,389.31	9,317.94	71.36	131.575		
7,300.00	7,125.09	6,897.62	6,849.21	39.90	35.34	1.26	-2,137.82	-9,657.41	9,314.70	9,242.89	71.81	129.713		
7,400.00	7,176.81	6,944.00	6,895.57	40.55	35.52	-2.59	-2,137.45	-9,658.87	9,230.84	9,158.68	72.16	127.921		
7,500.00	7,214.77	6,944.00	6,895.57	41.30	35.52	-8.67	-2,137.45	-9,658.87	9,139.79	9,067.54	72.25	126.498		
7,600.00	7,238.02	6,977.30	6,928.85	42.22	35.66	-22.69	-2,137.18	-9,660.00	9,043.65	8,971.26	72.39	124.933		
7,700.00	7,246.01	6,983.72	6,935.26	43.32	35.69	-70.64	-2,137.12	-9,660.22	8,944.84	8,872.49	72.35	123.635		
7,800.00	7,245.50	6,985.45	6,936.99	44.65	35.69	-74.73	-2,137.10	-9,660.29	8,845.47	8,773.21	72.26	122.416		
7,900.00	7,244.97	6,987.19	6,938.73	46.21	35.70	-74.83	-2,137.09	-9,660.35	8,746.11	8,673.94	72.17	121.191		
8,000.00	7,244.44	6,988.95	6,940.49	47.99	35.71	-74.92	-2,137.07	-9,660.41	8,646.76	8,574.68	72.08	119.959		
8,100.00	7,243.91	6,990.73	6,942.26	49.96	35.71	-75.02	-2,137.05	-9,660.48	8,547.43	8,475.44	72.00	118.720		
8,200.00	7,243.39	6,992.52	6,944.06	52.10	35.72	-75.12	-2,137.04	-9,660.55	8,448.12	8,376.20	71.91	117.474		
8,300.00	7,242.86	6,994.34	6,945.87	54.38	35.73	-75.22	-2,137.02	-9,660.61	8,348.82	8,276.98	71.84	116.219		
8,400.00	7,242.33	6,996.18	6,947.71	56.78	35.74	-75.33	-2,137.00	-9,660.68	8,249.54	8,177.78	71.76	114.957		
8,500.00	7,241.80	6,998.03	6,949.56	59.28	35.74	-75.43	-2,136.98	-9,660.75	8,150.27	8,078.58	71.69	113.686		
8,600.00	7,241.27	6,999.91	6,951.44	61.88	35.75	-75.53	-2,136.96	-9,660.82	8,051.02	7,979.40	71.62	112.406		
8,700.00	7,240.74	7,001.80	6,953.33	64.54	35.76	-75.64	-2,136.95	-9,660.89	7,951.79	7,880.23	71.56	111.117		
8,800.00	7,240.21	7,003.72	6,955.25	67.27	35.77	-75.75	-2,136.93	-9,660.96	7,852.58	7,781.08	71.50	109.819		
8,900.00	7,239.68	7,005.66	6,957.19	70.06	35.77	-75.86	-2,136.91	-9,661.04	7,753.39	7,681.94	71.45	108.510		
9,000.00	7,239.16	7,007.62	6,959.14	72.89	35.78	-75.97	-2,136.89	-9,661.11	7,654.22	7,582.81	71.41	107.192		
9,100.00	7,238.63	7,009.60	6,961.13	75.77	35.79	-76.08	-2,136.87	-9,661.19	7,555.07	7,483.70	71.37	105.862		
9,200.00	7,238.10	7,011.61	6,963.13	78.69	35.80	-76.19	-2,136.85	-9,661.27	7,455.94	7,384.60	71.33	104.521		
9,300.00	7,237.57	7,013.64	6,965.15	81.64	35.81	-76.30	-2,136.82	-9,661.34	7,356.83	7,285.52	71.31	103.169		
9,400.00	7,237.04	7,015.69	6,967.20	84.62	35.81	-76.42	-2,136.80	-9,661.42	7,257.75	7,186.46	71.29	101.805		
9,500.00	7,236.51	7,017.76	6,969.28	87.63	35.82	-76.54	-2,136.78	-9,661.50	7,158.69	7,087.41	71.28	100.428		
9,600.00	7,235.98	7,019.86	6,971.37	90.66	35.83	-76.65	-2,136.76	-9,661.59	7,059.66	6,988.38	71.28	99.037		
9,700.00	7,235.45	7,021.98	6,973.50	93.72	35.84	-76.77	-2,136.74	-9,661.67	6,960.65	6,889.36	71.29	97.634		
9,800.00	7,234.93	7,024.13	6,975.64	96.79	35.85	-76.89	-2,136.71	-9,661.76	6,861.67	6,790.36	71.32	96.216		
9,900.00	7,234.40	7,026.31	6,977.81	99.88	35.86	-77.02	-2,136.69	-9,661.84	6,762.73	6,691.38	71.35	94.783		
10,000.00	7,233.87	7,028.50	6,980.01	102.98	35.87	-77.14	-2,136.66	-9,661.93	6,663.81	6,592.41	71.40	93.335		
10,100.00	7,233.34	7,030.73	6,982.23	106.10	35.88	-77.27	-2,136.64	-9,662.02	6,564.92	6,493.46	71.46	91.872		
10,200.00	7,232.81	7,032.98	6,984.48	109.23	35.88	-77.39	-2,136.61	-9,662.11	6,466.06	6,394.53	71.53	90.392		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,035.26	6,986.76	112.38	35.89	-77.52	-2,136.59	-9,662.21	6,367.24	6,295.62	71.63	88.896		
10,400.00	7,231.75	7,037.57	6,989.07	115.53	35.90	-77.66	-2,136.56	-9,662.30	6,268.46	6,196.72	71.74	87.382		
10,500.00	7,231.23	7,039.90	6,991.40	118.70	35.91	-77.79	-2,136.54	-9,662.40	6,169.71	6,097.85	71.87	85.851		
10,600.00	7,230.70	7,042.27	6,993.76	121.87	35.92	-77.92	-2,136.51	-9,662.49	6,071.01	5,998.99	72.02	84.302		
10,700.00	7,230.17	7,044.66	6,996.15	125.05	35.93	-78.06	-2,136.48	-9,662.59	5,972.34	5,900.16	72.19	82.734		
10,800.00	7,229.64	7,047.08	6,998.57	128.25	35.94	-78.20	-2,136.45	-9,662.69	5,873.72	5,801.34	72.38	81.147		
10,900.00	7,229.11	7,049.54	7,001.02	131.44	35.95	-78.34	-2,136.42	-9,662.80	5,775.15	5,702.54	72.61	79.541		
11,000.00	7,228.58	7,052.02	7,003.51	134.65	35.96	-78.48	-2,136.39	-9,662.90	5,676.62	5,603.76	72.86	77.915		
11,100.00	7,228.05	7,054.54	7,006.02	137.86	35.97	-78.62	-2,136.36	-9,663.01	5,578.14	5,505.01	73.14	76.271		
11,200.00	7,227.52	7,057.09	7,008.57	141.08	35.98	-78.77	-2,136.33	-9,663.12	5,479.72	5,406.27	73.45	74.606		
11,300.00	7,227.00	7,059.67	7,011.14	144.30	35.99	-78.92	-2,136.30	-9,663.23	5,381.36	5,307.56	73.80	72.922		
11,400.00	7,226.47	7,062.28	7,013.75	147.52	36.00	-79.07	-2,136.27	-9,663.34	5,283.05	5,208.87	74.18	71.219		
11,500.00	7,225.94	7,064.93	7,016.40	150.76	36.01	-79.22	-2,136.23	-9,663.46	5,184.80	5,110.20	74.61	69.496		
11,600.00	7,225.41	7,067.61	7,019.08	153.99	36.02	-79.37	-2,136.20	-9,663.58	5,086.63	5,011.55	75.07	67.755		
11,700.00	7,224.88	7,070.33	7,021.80	157.23	36.04	-79.53	-2,136.16	-9,663.69	4,988.52	4,912.93	75.59	65.996		
11,800.00	7,224.35	7,073.08	7,024.55	160.48	36.05	-79.69	-2,136.13	-9,663.82	4,890.49	4,814.33	76.15	64.220		
11,900.00	7,223.82	7,075.87	7,027.33	163.72	36.06	-79.85	-2,136.09	-9,663.94	4,792.53	4,715.76	76.77	62.427		
12,000.00	7,223.29	7,078.70	7,030.16	166.98	36.07	-80.01	-2,136.05	-9,664.07	4,694.66	4,617.22	77.45	60.619		
12,100.00	7,222.77	7,081.57	7,033.02	170.23	36.08	-80.18	-2,136.02	-9,664.20	4,596.88	4,518.70	78.18	58.797		
12,200.00	7,222.24	7,084.48	7,035.93	173.49	36.09	-80.35	-2,135.98	-9,664.33	4,499.20	4,420.21	78.98	56.963		
12,300.00	7,221.71	7,087.42	7,038.87	176.75	36.10	-80.52	-2,135.94	-9,664.46	4,401.61	4,321.76	79.86	55.119		
12,400.00	7,221.18	7,090.41	7,041.85	180.01	36.12	-80.69	-2,135.90	-9,664.60	4,304.14	4,223.33	80.81	53.265		
12,500.00	7,220.65	7,093.44	7,044.88	183.28	36.13	-80.87	-2,135.86	-9,664.74	4,206.78	4,124.94	81.83	51.406		
12,600.00	7,220.12	7,096.51	7,047.94	186.54	36.14	-81.04	-2,135.81	-9,664.88	4,109.54	4,026.59	82.95	49.542		
12,700.00	7,219.59	7,099.62	7,051.05	189.81	36.15	-81.23	-2,135.77	-9,665.03	4,012.44	3,928.28	84.16	47.676		
12,800.00	7,219.06	7,102.78	7,054.21	193.09	36.17	-81.41	-2,135.72	-9,665.18	3,915.47	3,830.01	85.47	45.812		
12,900.00	7,218.54	7,105.98	7,057.41	196.36	36.18	-81.60	-2,135.68	-9,665.33	3,818.67	3,731.78	86.88	43.951		
13,000.00	7,218.01	7,109.23	7,060.65	199.64	36.19	-81.79	-2,135.63	-9,665.48	3,722.02	3,633.61	88.41	42.097		
13,100.00	7,217.48	7,112.53	7,063.95	202.92	36.21	-81.98	-2,135.58	-9,665.64	3,625.56	3,535.49	90.07	40.254		
13,200.00	7,216.95	7,115.87	7,067.29	206.20	36.22	-82.17	-2,135.53	-9,665.80	3,529.29	3,437.43	91.85	38.423		
13,300.00	7,216.42	7,119.27	7,070.68	209.48	36.23	-82.37	-2,135.48	-9,665.97	3,433.22	3,339.44	93.78	36.609		
13,400.00	7,215.89	7,122.71	7,074.12	212.76	36.25	-82.57	-2,135.43	-9,666.13	3,337.39	3,241.52	95.86	34.814		
13,500.00	7,215.36	7,126.21	7,077.61	216.05	36.26	-82.78	-2,135.38	-9,666.31	3,241.80	3,143.69	98.11	33.042		
13,600.00	7,214.84	7,129.76	7,081.15	219.33	36.28	-82.99	-2,135.33	-9,666.48	3,146.47	3,045.94	100.54	31.297		
13,700.00	7,214.31	7,133.51	7,084.90	222.62	36.29	-83.21	-2,135.27	-9,666.67	3,051.45	2,948.29	103.15	29.582		
13,800.00	7,213.78	7,138.66	7,090.04	225.91	36.31	-83.51	-2,135.19	-9,666.93	2,956.74	2,850.76	105.98	27.899		
13,900.00	7,213.25	7,143.75	7,095.12	229.20	36.33	-83.81	-2,135.11	-9,667.18	2,862.39	2,753.35	109.04	26.252		
14,000.00	7,212.72	7,148.77	7,100.14	232.49	36.35	-84.11	-2,135.03	-9,667.43	2,768.43	2,656.09	112.34	24.644		
14,100.00	7,212.19	7,153.73	7,105.10	235.79	36.37	-84.40	-2,134.96	-9,667.67	2,674.89	2,558.99	115.91	23.078		
14,200.00	7,211.66	7,158.64	7,110.00	239.08	36.39	-84.69	-2,134.88	-9,667.91	2,581.83	2,462.06	119.77	21.557		
14,300.00	7,211.13	7,163.49	7,114.84	242.38	36.41	-84.98	-2,134.81	-9,668.14	2,489.31	2,365.35	123.95	20.083		
14,400.00	7,210.61	7,168.28	7,119.62	245.67	36.43	-85.26	-2,134.74	-9,668.37	2,397.37	2,268.88	128.49	18.659		
14,500.00	7,210.08	7,173.01	7,124.35	248.97	36.45	-85.54	-2,134.67	-9,668.60	2,306.09	2,172.69	133.40	17.287		
14,600.00	7,209.55	7,177.69	7,129.02	252.27	36.47	-85.82	-2,134.60	-9,668.83	2,215.56	2,076.82	138.74	15.969		
14,700.00	7,209.02	7,182.32	7,133.65	255.57	36.49	-86.09	-2,134.53	-9,669.05	2,125.87	1,981.33	144.54	14.708		
14,800.00	7,208.49	7,186.89	7,138.21	258.87	36.51	-86.37	-2,134.46	-9,669.26	2,037.13	1,886.28	150.85	13.504		
14,900.00	7,207.96	7,191.41	7,142.73	262.17	36.53	-86.64	-2,134.39	-9,669.47	1,949.47	1,791.76	157.72	12.361		
15,000.00	7,207.43	7,195.89	7,147.20	265.47	36.55	-86.90	-2,134.33	-9,669.68	1,863.05	1,697.85	165.19	11.278		
15,081.89	7,207.00	7,199.51	7,150.81	268.17	36.56	-87.12	-2,134.28	-9,669.85	1,793.32	1,621.51	171.81	10.438 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	35.00	3.28	3.28	-107.27	-2,793.31	-8,986.32	9,410.52				
100.00	100.00	43.25	78.25	3.28	3.28	-107.27	-2,793.21	-8,986.41	9,410.53	9,403.96	6.57	1,433.293	
200.00	200.00	112.77	147.77	3.34	3.29	-107.26	-2,792.57	-8,986.90	9,410.93	9,404.30	6.63	1,419.521	
300.00	299.98	171.00	205.98	3.44	3.33	64.71	-2,791.61	-8,987.60	9,410.89	9,404.13	6.76	1,391.287	
400.00	399.84	209.22	244.19	3.59	3.36	64.74	-2,790.93	-8,988.30	9,409.94	9,403.00	6.95	1,354.459	
500.00	499.45	263.00	297.94	3.80	3.41	64.81	-2,790.23	-8,989.80	9,408.32	9,401.11	7.21	1,304.907	
600.00	598.70	263.00	297.94	4.06	3.41	64.85	-2,790.23	-8,989.80	9,405.79	9,398.32	7.47	1,258.990	
700.00	697.49	263.00	297.94	4.38	3.41	64.89	-2,790.23	-8,989.80	9,402.90	9,395.11	7.79	1,207.474	
800.00	796.13	304.89	339.80	4.74	3.47	64.93	-2,790.12	-8,991.53	9,400.18	9,391.98	8.20	1,146.316	
900.00	894.78	354.00	388.82	5.15	3.55	64.98	-2,790.79	-8,994.40	9,398.77	9,390.10	8.67	1,084.450	
1,000.00	993.43	354.00	388.82	5.58	3.55	64.98	-2,790.79	-8,994.40	9,397.72	9,388.63	9.09	1,034.084	
1,048.02	1,040.80	354.00	388.82	5.79	3.55	64.98	-2,790.79	-8,994.40	9,397.60	9,388.30	9.30	1,010.671	
1,100.00	1,092.07	354.00	388.82	6.03	3.55	64.98	-2,790.79	-8,994.40	9,397.74	9,388.21	9.53	986.070	
1,200.00	1,190.72	387.10	421.82	6.50	3.61	65.01	-2,791.78	-8,996.75	9,398.60	9,388.56	10.04	935.811	
1,300.00	1,289.36	412.23	446.85	6.98	3.66	65.03	-2,792.86	-8,998.68	9,400.27	9,389.71	10.56	890.239	
1,400.00	1,388.01	445.00	479.46	7.47	3.73	65.05	-2,794.70	-9,001.37	9,402.74	9,391.64	11.10	846.877	
1,500.00	1,486.65	557.36	591.14	7.97	4.00	65.12	-2,803.21	-9,010.18	9,405.55	9,393.71	11.84	794.441	
1,600.00	1,585.30	628.94	662.22	8.48	4.20	65.15	-2,809.80	-9,015.44	9,408.36	9,395.84	12.52	751.566	
1,700.00	1,683.94	748.23	780.57	9.00	4.59	65.20	-2,822.28	-9,023.81	9,411.19	9,397.83	13.37	704.081	
1,800.00	1,782.59	1,338.23	1,368.19	9.52	6.83	65.58	-2,859.12	-9,057.78	9,413.04	9,397.07	15.97	589.473	
1,900.00	1,881.24	1,383.00	1,412.90	10.05	7.01	65.62	-2,859.97	-9,059.98	9,411.18	9,394.53	16.65	565.203	
2,000.00	1,979.88	1,383.00	1,412.90	10.58	7.01	65.62	-2,859.97	-9,059.98	9,409.89	9,392.73	17.17	548.119	
2,070.98	2,049.90	1,383.00	1,412.90	10.95	7.01	65.62	-2,859.97	-9,059.98	9,409.62	9,392.09	17.54	536.603	
2,100.00	2,078.53	1,383.00	1,412.90	11.11	7.01	65.62	-2,859.97	-9,059.98	9,409.67	9,391.98	17.69	532.035	
2,200.00	2,177.17	1,383.00	1,412.90	11.64	7.01	65.62	-2,859.97	-9,059.98	9,410.51	9,392.30	18.21	516.891	
2,300.00	2,275.82	1,383.00	1,412.90	12.18	7.01	65.62	-2,859.97	-9,059.98	9,412.41	9,393.69	18.73	502.626	
2,400.00	2,374.46	1,445.00	1,474.62	12.72	7.27	65.68	-2,861.68	-9,065.50	9,415.02	9,395.53	19.49	483.095	
2,500.00	2,473.11	1,445.00	1,474.62	13.26	7.27	65.68	-2,861.68	-9,065.50	9,418.40	9,398.39	20.01	470.689	
2,600.00	2,571.76	1,445.00	1,474.62	13.80	7.27	65.68	-2,861.68	-9,065.50	9,422.83	9,402.30	20.53	458.978	
2,700.00	2,670.40	1,445.00	1,474.62	14.35	7.27	65.68	-2,861.68	-9,065.50	9,428.33	9,407.28	21.05	447.918	
2,800.00	2,769.05	1,522.17	1,551.16	14.89	7.62	65.75	-2,865.16	-9,074.72	9,434.41	9,412.52	21.88	431.110	
2,900.00	2,867.69	1,569.00	1,597.58	15.44	7.83	65.78	-2,867.78	-9,080.32	9,440.89	9,418.29	22.60	417.808	
3,000.00	2,966.34	1,608.83	1,637.02	15.99	8.02	65.81	-2,870.53	-9,085.18	9,447.97	9,424.69	23.28	405.760	
3,100.00	3,064.98	1,665.00	1,692.49	16.53	8.29	65.84	-2,875.62	-9,092.36	9,455.92	9,431.87	24.04	393.268	
3,200.00	3,163.63	1,665.00	1,692.49	17.08	8.29	65.84	-2,875.62	-9,092.36	9,464.38	9,439.82	24.56	385.377	
3,300.00	3,262.27	1,665.00	1,692.49	17.63	8.29	65.84	-2,875.62	-9,092.36	9,473.88	9,448.81	25.07	377.891	
3,400.00	3,360.92	1,708.85	1,735.65	18.18	8.51	65.87	-2,880.45	-9,098.43	9,483.93	9,458.15	25.78	367.882	
3,500.00	3,459.57	3,500.00	1,814.95	18.74	18.40	65.90	-2,890.39	-9,110.46	9,494.95	9,460.45	34.49	275.258	
3,600.00	3,558.21	1,913.27	1,936.35	19.29	9.59	65.95	-2,905.56	-9,128.01	9,505.29	9,477.54	27.75	342.503	
3,700.00	3,656.86	2,075.70	2,095.87	19.84	10.46	66.01	-2,926.70	-9,150.05	9,515.16	9,486.12	29.04	327.639	
3,800.00	3,755.50	2,101.60	2,121.31	20.39	10.60	66.02	-2,929.97	-9,153.67	9,525.45	9,495.77	29.68	320.985	
3,900.00	3,854.15	2,136.00	2,155.05	20.95	10.79	66.04	-2,934.32	-9,158.79	9,536.52	9,506.17	30.35	314.223	
4,000.00	3,952.79	2,195.78	2,213.62	21.50	11.12	66.06	-2,942.01	-9,167.98	9,548.18	9,517.03	31.15	306.528	
4,100.00	4,051.44	2,398.01	2,411.84	22.05	12.26	66.14	-2,969.08	-9,197.47	9,559.17	9,526.50	32.67	292.618	
4,200.00	4,150.08	2,449.88	2,462.67	22.61	12.56	66.15	-2,976.38	-9,204.80	9,570.07	9,536.63	33.44	286.207	
4,300.00	4,248.73	2,489.98	2,501.88	23.16	12.79	66.16	-2,982.36	-9,210.64	9,581.57	9,547.42	34.15	280.595	
4,400.00	4,347.38	2,542.12	2,552.78	23.72	13.10	66.17	-2,990.52	-9,218.46	9,593.66	9,558.74	34.92	274.733	
4,500.00	4,446.02	2,607.00	2,616.09	24.27	13.49	66.19	-3,000.75	-9,228.34	9,606.09	9,570.32	35.76	268.617	
4,600.00	4,544.67	3,337.30	3,332.55	24.83	17.68	66.41	-3,103.00	-9,322.79	9,617.68	9,577.63	40.05	240.153	
4,700.00	4,643.31	3,500.27	3,493.51	25.39	18.56	66.46	-3,123.80	-9,337.51	9,623.11	9,581.72	41.39	232.505	
4,800.00	4,741.96	3,550.00	3,542.56	25.94	18.83	66.47	-3,130.66	-9,342.03	9,628.93	9,586.76	42.17	228.354	
4,900.00	4,840.60	3,550.00	3,542.56	26.50	18.83	66.47	-3,130.66	-9,342.03	9,635.44	9,592.75	42.69	225.706	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,939.25	3,610.10	3,601.76	27.05	19.16	66.48	-3,139.07	-9,348.06	9,642.47	9,598.95	43.52	221.562		
5,100.00	5,037.90	3,644.00	3,635.14	27.61	19.35	66.49	-3,143.70	-9,351.80	9,650.24	9,606.03	44.21	218.264		
5,200.00	5,136.54	3,644.00	3,635.14	28.17	19.35	66.49	-3,143.70	-9,351.80	9,658.88	9,614.16	44.73	215.956		
5,300.00	5,235.19	3,690.99	3,681.32	28.72	19.63	66.51	-3,150.32	-9,357.47	9,668.06	9,622.57	45.49	212.550		
5,400.00	5,333.83	3,739.00	3,728.32	29.28	19.91	66.52	-3,157.60	-9,363.93	9,678.29	9,632.04	46.25	209.262		
5,500.00	5,432.48	3,739.00	3,728.32	29.84	19.91	66.52	-3,157.60	-9,363.93	9,689.02	9,642.27	46.75	207.250		
5,600.00	5,531.12	3,774.06	3,762.56	30.40	20.12	66.52	-3,163.20	-9,368.96	9,700.61	9,653.17	47.44	204.470		
5,700.00	5,629.77	4,305.00	4,282.41	30.95	23.29	66.63	-3,246.18	-9,436.45	9,711.57	9,660.71	50.86	190.959		
5,800.00	5,728.41	4,337.57	4,314.48	31.51	23.48	66.64	-3,250.50	-9,440.09	9,719.40	9,667.85	51.54	188.563		
5,900.00	5,827.06	4,369.14	4,345.53	32.07	23.66	66.65	-3,254.78	-9,443.83	9,727.92	9,675.70	52.22	186.272		
6,000.00	5,925.71	4,399.00	4,374.88	32.63	23.83	66.65	-3,258.91	-9,447.55	9,737.14	9,684.25	52.89	184.095		
6,100.00	6,024.35	4,456.15	4,431.00	33.19	24.17	66.67	-3,266.63	-9,455.05	9,746.93	9,693.23	53.70	181.496		
6,200.00	6,123.00	4,495.00	4,469.16	33.74	24.40	66.69	-3,271.59	-9,460.39	9,757.20	9,702.79	54.41	179.313		
6,300.00	6,221.64	4,550.50	4,523.63	34.30	24.73	66.71	-3,278.78	-9,468.29	9,767.99	9,712.77	55.21	176.909		
6,400.00	6,320.29	4,602.49	4,574.54	34.86	25.04	66.72	-3,285.98	-9,475.93	9,779.36	9,723.36	56.00	174.646		
6,500.00	6,418.93	4,636.47	4,623.32	35.42	33.43	67.88	-3,393.92	-9,613.14	9,775.93	9,711.45	64.49	151.596		
6,600.00	6,517.58	4,668.47	4,626.31	35.98	33.80	67.98	-3,393.71	-9,614.22	9,770.67	9,705.23	65.44	149.299		
6,700.00	6,616.23	4,672.71	4,630.54	36.54	34.18	68.07	-3,393.19	-9,615.32	9,765.37	9,698.97	66.40	147.061		
6,800.00	6,714.51	4,694.60	4,652.42	37.10	34.61	33.19	-3,392.18	-9,616.60	9,754.79	9,687.39	67.40	144.725		
6,900.00	6,810.42	4,713.00	4,670.79	37.66	35.36	14.07	-3,388.75	-9,617.47	9,728.67	9,660.04	68.64	141.744		
7,000.00	6,901.58	4,701.66	4,659.43	38.21	35.66	4.89	-3,386.84	-9,617.30	9,687.59	9,618.21	69.38	139.640		
7,100.00	6,985.76	4,706.97	4,702.73	38.76	35.87	-1.02	-3,385.64	-9,617.29	9,633.41	9,563.46	69.94	137.729		
7,200.00	7,060.88	4,717.88	4,705.63	39.32	36.05	-6.03	-3,384.68	-9,617.38	9,567.43	9,497.03	70.40	135.900		
7,300.00	7,125.09	4,716.03	4,712.78	39.90	36.21	-11.51	-3,383.94	-9,617.54	9,491.22	9,420.49	70.73	134.186		
7,400.00	7,176.81	4,703.24	4,716.98	40.55	36.34	-18.98	-3,383.39	-9,617.71	9,406.61	9,335.67	70.93	132.614		
7,500.00	7,214.77	4,729.00	4,718.74	41.30	36.43	-31.19	-3,383.06	-9,617.85	9,315.62	9,244.63	70.99	131.215		
7,600.00	7,238.02	4,747.92	4,705.66	42.22	36.50	-53.67	-3,382.80	-9,617.98	9,220.49	9,149.54	70.95	129.959		
7,700.00	7,246.01	4,754.00	4,711.73	43.32	36.52	-88.52	-3,382.71	-9,618.02	9,123.54	9,052.75	70.79	128.881		
7,800.00	7,245.50	4,754.18	4,711.91	44.65	36.52	-90.33	-3,382.71	-9,618.02	9,026.54	8,955.95	70.59	127.875		
7,900.00	7,244.97	4,754.35	4,712.08	46.21	36.52	-90.33	-3,382.70	-9,618.02	8,929.60	8,859.20	70.40	126.835		
8,000.00	7,244.44	4,754.52	4,712.25	47.99	36.52	-90.34	-3,382.70	-9,618.03	8,832.74	8,762.50	70.24	125.757		
8,100.00	7,243.91	4,754.69	4,712.42	49.96	36.52	-90.34	-3,382.70	-9,618.03	8,735.94	8,665.85	70.09	124.641		
8,200.00	7,243.39	4,754.87	4,712.60	52.10	36.52	-90.35	-3,382.70	-9,618.03	8,639.22	8,569.25	69.96	123.484		
8,300.00	7,242.86	4,755.04	4,712.78	54.38	36.52	-90.35	-3,382.69	-9,618.03	8,542.57	8,472.71	69.86	122.283		
8,400.00	7,242.33	4,755.22	4,712.95	56.78	36.52	-90.36	-3,382.69	-9,618.03	8,446.00	8,376.22	69.78	121.036		
8,500.00	7,241.80	4,755.40	4,713.13	59.28	36.52	-90.36	-3,382.69	-9,618.03	8,349.51	8,279.78	69.73	119.742		
8,600.00	7,241.27	4,755.58	4,713.31	61.88	36.52	-90.37	-3,382.69	-9,618.03	8,253.11	8,183.40	69.71	118.398		
8,700.00	7,240.74	4,755.77	4,713.50	64.54	36.52	-90.37	-3,382.68	-9,618.03	8,156.79	8,087.07	69.71	117.003		
8,800.00	7,240.21	4,755.95	4,713.68	67.27	36.52	-90.38	-3,382.68	-9,618.04	8,060.56	7,990.80	69.76	115.554		
8,900.00	7,239.68	4,756.14	4,713.87	70.06	36.52	-90.38	-3,382.68	-9,618.04	7,964.42	7,894.59	69.83	114.051		
9,000.00	7,239.16	4,756.33	4,714.06	72.89	36.53	-90.39	-3,382.67	-9,618.04	7,868.38	7,798.44	69.95	112.493		
9,100.00	7,238.63	4,756.52	4,714.25	75.77	36.53	-90.39	-3,382.67	-9,618.04	7,772.44	7,702.34	70.10	110.878		
9,200.00	7,238.10	4,756.72	4,714.45	78.69	36.53	-90.40	-3,382.67	-9,618.04	7,676.61	7,606.31	70.29	109.207		
9,300.00	7,237.57	4,756.91	4,714.64	81.64	36.53	-90.40	-3,382.66	-9,618.04	7,580.88	7,510.34	70.53	107.478		
9,400.00	7,237.04	4,757.11	4,714.84	84.62	36.53	-90.41	-3,382.66	-9,618.05	7,485.26	7,414.44	70.82	105.694		
9,500.00	7,236.51	4,757.31	4,715.04	87.63	36.53	-90.41	-3,382.66	-9,618.05	7,389.76	7,318.60	71.16	103.853		
9,600.00	7,235.98	4,757.51	4,715.25	90.66	36.53	-90.42	-3,382.66	-9,618.05	7,294.38	7,222.84	71.54	101.959		
9,700.00	7,235.45	4,757.72	4,715.45	93.72	36.53	-90.42	-3,382.65	-9,618.05	7,199.12	7,127.14	71.98	100.012		
9,800.00	7,234.93	4,757.93	4,715.66	96.79	36.53	-90.43	-3,382.65	-9,618.05	7,104.00	7,031.52	72.48	98.016		
9,900.00	7,234.40	4,758.14	4,715.87	99.88	36.53	-90.43	-3,382.65	-9,618.05	7,009.01	6,935.98	73.03	95.972		
10,000.00	7,233.87	4,758.35	4,716.08	102.98	36.53	-90.44	-3,382.64	-9,618.06	6,914.16	6,840.52	73.65	93.884		
10,100.00	7,233.34	4,758.57	4,716.30	106.10	36.53	-90.44	-3,382.64	-9,618.06	6,819.46	6,745.14	74.32	91.755		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.81	7,258.78	7,216.52	109.23	36.53	-90.45	-3,382.64	-9,618.06	6,724.92	6,649.85	75.06	89.590		
10,300.00	7,232.28	7,259.00	7,216.74	112.38	36.53	-90.45	-3,382.63	-9,618.06	6,630.53	6,554.66	75.87	87.393		
10,400.00	7,231.75	7,259.23	7,216.96	115.53	36.54	-90.46	-3,382.63	-9,618.06	6,536.31	6,459.56	76.75	85.168		
10,500.00	7,231.23	7,259.45	7,217.18	118.70	36.54	-90.47	-3,382.63	-9,618.06	6,442.26	6,364.57	77.69	82.920		
10,600.00	7,230.70	7,259.68	7,217.41	121.87	36.54	-90.47	-3,382.62	-9,618.07	6,348.40	6,269.69	78.71	80.655		
10,700.00	7,230.17	7,259.91	7,217.64	125.05	36.54	-90.48	-3,382.62	-9,618.07	6,254.73	6,174.92	79.80	78.376		
10,800.00	7,229.64	7,260.15	7,217.88	128.25	36.54	-90.48	-3,382.61	-9,618.07	6,161.25	6,080.28	80.97	76.090		
10,900.00	7,229.11	7,260.38	7,218.12	131.44	36.54	-90.49	-3,382.61	-9,618.07	6,067.98	5,985.76	82.22	73.801		
11,000.00	7,228.58	7,260.62	7,218.35	134.65	36.54	-90.50	-3,382.61	-9,618.07	5,974.94	5,891.39	83.55	71.514		
11,100.00	7,228.05	7,260.87	7,218.60	137.86	36.54	-90.50	-3,382.60	-9,618.08	5,882.11	5,797.15	84.96	69.234		
11,200.00	7,227.52	7,261.11	7,218.84	141.08	36.54	-90.51	-3,382.60	-9,618.08	5,789.53	5,703.08	86.46	66.966		
11,300.00	7,227.00	7,261.36	7,219.09	144.30	36.54	-90.52	-3,382.60	-9,618.08	5,697.20	5,609.16	88.04	64.713		
11,400.00	7,226.47	7,261.61	7,219.34	147.52	36.54	-90.52	-3,382.59	-9,618.08	5,605.13	5,515.43	89.71	62.481		
11,500.00	7,225.94	7,261.87	7,219.60	150.76	36.54	-90.53	-3,382.59	-9,618.08	5,513.34	5,421.87	91.47	60.273		
11,600.00	7,225.41	7,262.13	7,219.86	153.99	36.55	-90.54	-3,382.58	-9,618.09	5,421.84	5,328.51	93.33	58.093		
11,700.00	7,224.88	7,262.39	7,220.12	157.23	36.55	-90.54	-3,382.58	-9,618.09	5,330.65	5,235.36	95.29	55.944		
11,800.00	7,224.35	7,262.65	7,220.39	160.48	36.55	-90.55	-3,382.57	-9,618.09	5,239.77	5,142.43	97.34	53.829		
11,900.00	7,223.82	7,262.92	7,220.65	163.72	36.55	-90.56	-3,382.57	-9,618.09	5,149.24	5,049.74	99.50	51.752		
12,000.00	7,223.29	7,263.20	7,220.93	166.98	36.55	-90.56	-3,382.57	-9,618.10	5,059.06	4,957.29	101.76	49.714		
12,100.00	7,222.77	7,263.47	7,221.20	170.23	36.55	-90.57	-3,382.56	-9,618.10	4,969.25	4,865.11	104.14	47.718		
12,200.00	7,222.24	7,263.75	7,221.48	173.49	36.55	-90.58	-3,382.56	-9,618.10	4,879.84	4,773.22	106.63	45.766		
12,300.00	7,221.71	7,264.04	7,221.77	176.75	36.55	-90.59	-3,382.55	-9,618.10	4,790.86	4,681.62	109.23	43.860		
12,400.00	7,221.18	7,264.32	7,222.05	180.01	36.55	-90.59	-3,382.55	-9,618.10	4,702.31	4,590.35	111.96	42.001		
12,500.00	7,220.65	7,264.61	7,222.35	183.28	36.55	-90.60	-3,382.54	-9,618.11	4,614.23	4,499.42	114.81	40.190		
12,600.00	7,220.12	7,264.91	7,222.64	186.54	36.56	-90.61	-3,382.54	-9,618.11	4,526.65	4,408.85	117.79	38.428		
12,700.00	7,219.59	7,265.21	7,222.94	189.81	36.56	-90.62	-3,382.53	-9,618.11	4,439.59	4,318.68	120.91	36.717		
12,800.00	7,219.06	7,265.51	7,223.24	193.09	36.56	-90.62	-3,382.53	-9,618.12	4,353.09	4,228.92	124.17	35.057		
12,900.00	7,218.54	7,265.82	7,223.55	196.36	36.56	-90.63	-3,382.52	-9,618.12	4,267.18	4,139.60	127.58	33.448		
13,000.00	7,218.01	7,266.13	7,223.86	199.64	36.56	-90.64	-3,382.52	-9,618.12	4,181.89	4,050.76	131.13	31.890		
13,100.00	7,217.48	7,266.45	7,224.18	202.92	36.56	-90.65	-3,382.51	-9,618.12	4,097.27	3,962.42	134.85	30.384		
13,200.00	7,216.95	7,266.77	7,224.50	206.20	36.56	-90.66	-3,382.51	-9,618.13	4,013.36	3,874.63	138.72	28.931		
13,300.00	7,216.42	7,267.10	7,224.83	209.48	36.56	-90.67	-3,382.50	-9,618.13	3,930.20	3,787.43	142.77	27.528		
13,400.00	7,215.89	7,267.43	7,225.16	212.76	36.56	-90.67	-3,382.50	-9,618.13	3,847.84	3,700.85	146.99	26.178		
13,500.00	7,215.36	7,267.76	7,225.49	216.05	36.57	-90.68	-3,382.49	-9,618.13	3,766.34	3,614.95	151.39	24.878		
13,600.00	7,214.84	7,268.10	7,225.83	219.33	36.57	-90.69	-3,382.49	-9,618.14	3,685.74	3,529.76	155.98	23.630		
13,700.00	7,214.31	7,268.45	7,226.18	222.62	36.57	-90.70	-3,382.48	-9,618.14	3,606.12	3,445.36	160.76	22.431		
13,800.00	7,213.78	7,268.80	7,226.53	225.91	36.57	-90.71	-3,382.47	-9,618.14	3,527.54	3,361.79	165.75	21.283		
13,900.00	7,213.25	7,269.16	7,226.89	229.20	36.57	-90.72	-3,382.47	-9,618.15	3,450.07	3,279.13	170.93	20.184		
14,000.00	7,212.72	7,269.52	7,227.25	232.49	36.57	-90.73	-3,382.46	-9,618.15	3,373.78	3,197.45	176.33	19.133		
14,100.00	7,212.19	7,269.88	7,227.62	235.79	36.57	-90.74	-3,382.46	-9,618.15	3,298.75	3,116.81	181.94	18.131		
14,200.00	7,211.66	7,270.26	7,227.99	239.08	36.57	-90.75	-3,382.45	-9,618.16	3,225.09	3,037.31	187.77	17.175		
14,300.00	7,211.13	7,270.64	7,228.37	242.38	36.58	-90.76	-3,382.44	-9,618.16	3,152.87	2,959.05	193.82	16.267		
14,400.00	7,210.61	7,271.02	7,228.75	245.67	36.58	-90.77	-3,382.44	-9,618.16	3,082.21	2,882.11	200.10	15.404		
14,500.00	7,210.08	7,271.41	7,229.14	248.97	36.58	-90.78	-3,382.43	-9,618.17	3,013.21	2,806.62	206.59	14.585		
14,600.00	7,209.55	7,271.81	7,229.54	252.27	36.58	-90.79	-3,382.42	-9,618.17	2,945.99	2,732.69	213.30	13.811		
14,700.00	7,209.02	7,272.21	7,229.94	255.57	36.58	-90.80	-3,382.42	-9,618.17	2,880.67	2,660.44	220.23	13.081		
14,800.00	7,208.49	7,272.62	7,230.35	258.87	36.58	-90.81	-3,382.41	-9,618.18	2,817.39	2,590.03	227.35	12.392		
14,900.00	7,207.96	7,273.04	7,230.77	262.17	36.58	-90.82	-3,382.40	-9,618.18	2,756.28	2,521.61	234.67	11.745		
15,000.00	7,207.43	7,273.46	7,231.19	265.47	36.59	-90.83	-3,382.40	-9,618.19	2,697.50	2,455.33	242.16	11.139		
15,081.89	7,207.00	7,273.81	7,231.54	268.17	36.59	-90.84	-3,382.39	-9,618.19	2,651.20	2,402.79	248.41	10.673 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	936.37	962.00	3.28	5.57	-107.99	-2,872.17	-8,842.46	9,346.87					
100.00	100.00	1,003.00	1,026.88	3.28	5.92	-108.08	-2,883.05	-8,831.91	9,336.69	9,327.53	9.16	1,019.312		
200.00	200.00	1,057.76	1,080.20	3.34	6.21	-108.15	-2,892.16	-8,823.42	9,326.95	9,317.47	9.48	983.685		
300.00	299.98	1,098.00	1,119.48	3.44	6.43	63.94	-2,898.60	-8,817.49	9,317.04	9,307.26	9.78	952.312		
400.00	399.84	1,137.35	1,157.98	3.59	6.64	64.10	-2,904.64	-8,812.03	9,306.25	9,296.13	10.12	919.151		
500.00	499.45	1,193.00	1,212.58	3.80	6.93	64.28	-2,912.72	-8,805.00	9,294.70	9,284.10	10.61	876.323		
600.00	598.70	1,223.59	1,242.63	4.06	7.10	64.50	-2,917.13	-8,801.33	9,282.18	9,271.16	11.01	842.833		
700.00	697.49	1,297.30	1,314.86	4.38	7.49	64.65	-2,928.79	-8,792.32	9,268.62	9,256.92	11.70	791.868		
800.00	796.13	1,371.84	1,387.89	4.74	7.90	64.63	-2,940.70	-8,783.38	9,254.95	9,242.50	12.45	743.288		
900.00	894.78	1,699.94	1,710.81	5.15	9.66	64.61	-2,983.53	-8,744.48	9,241.35	9,226.81	14.54	635.623		
1,000.00	993.43	1,757.00	1,766.95	5.58	9.97	64.60	-2,990.73	-8,737.24	9,225.84	9,210.59	15.25	605.164		
1,100.00	1,092.07	1,757.00	1,766.95	6.03	9.97	64.60	-2,990.73	-8,737.24	9,210.82	9,195.15	15.67	587.689		
1,200.00	1,190.72	1,829.62	1,838.40	6.50	10.37	64.60	-3,000.37	-8,728.57	9,196.42	9,179.91	16.51	557.127		
1,300.00	1,289.36	2,242.77	2,243.74	6.98	12.75	64.54	-3,055.93	-8,671.74	9,179.68	9,160.45	19.22	477.491		
1,400.00	1,388.01	2,306.32	2,306.19	7.47	13.11	64.54	-3,063.24	-8,662.51	9,162.29	9,142.25	20.04	457.292		
1,500.00	1,486.65	2,321.00	2,320.65	7.97	13.19	64.54	-3,064.77	-8,660.47	9,145.48	9,124.88	20.60	443.987		
1,600.00	1,585.30	2,382.84	2,381.58	8.48	13.53	64.54	-3,071.40	-8,652.22	9,129.12	9,107.71	21.41	426.364		
1,700.00	1,683.94	2,464.68	2,462.16	9.00	13.99	64.53	-3,081.20	-8,641.84	9,113.55	9,091.21	22.35	407.829		
1,800.00	1,782.59	2,574.43	2,569.90	9.52	14.63	64.52	-3,095.84	-8,626.92	9,097.56	9,074.11	23.45	387.990		
1,900.00	1,881.24	2,743.69	2,735.91	10.05	15.63	64.49	-3,118.84	-8,603.41	9,081.42	9,056.51	24.90	364.700		
2,000.00	1,979.88	2,838.12	2,828.06	10.58	16.21	64.46	-3,133.78	-8,589.18	9,064.81	9,038.84	25.97	349.111		
2,100.00	2,078.53	2,890.00	2,878.83	11.11	16.53	64.45	-3,141.34	-8,581.63	9,048.40	9,021.61	26.79	337.795		
2,200.00	2,177.17	2,941.56	2,929.43	11.64	16.83	64.44	-3,148.31	-8,574.58	9,032.51	9,004.91	27.59	327.342		
2,300.00	2,275.82	2,984.00	2,971.18	12.18	17.08	64.44	-3,153.75	-8,569.25	9,017.32	8,988.96	28.35	318.030		
2,400.00	2,374.46	3,058.27	3,044.19	12.72	17.51	64.43	-3,163.80	-8,560.10	9,002.59	8,973.30	29.29	307.340		
2,500.00	2,473.11	3,111.55	3,096.50	13.26	17.81	64.42	-3,171.53	-8,553.50	8,988.16	8,958.05	30.11	298.487		
2,600.00	2,571.76	3,169.00	3,153.18	13.80	18.14	64.42	-3,178.47	-8,547.28	8,974.35	8,943.40	30.95	289.930		
2,700.00	2,670.40	3,200.82	3,184.67	14.35	18.30	64.42	-3,181.83	-8,544.19	8,961.10	8,929.45	31.65	283.166		
2,800.00	2,769.05	3,262.00	3,245.28	14.89	18.62	64.43	-3,188.06	-8,538.71	8,948.48	8,916.00	32.48	275.470		
2,900.00	2,867.69	3,307.90	3,290.77	15.44	18.85	64.44	-3,192.83	-8,534.81	8,936.35	8,903.10	33.25	268.763		
3,000.00	2,966.34	3,376.43	3,358.59	15.99	19.20	64.45	-3,200.67	-8,528.97	8,924.60	8,890.47	34.13	261.495		
3,100.00	3,064.98	3,100.00	3,504.47	16.53	17.79	64.46	-3,216.51	-8,516.72	8,912.87	8,879.62	33.25	268.045		
3,200.00	3,163.63	3,601.94	3,581.95	17.08	20.37	64.47	-3,225.01	-8,509.70	8,900.60	8,864.27	36.33	244.977		
3,300.00	3,262.27	4,082.82	4,054.92	17.63	23.12	64.42	-3,289.61	-8,453.89	8,886.33	8,846.87	39.46	225.226		
3,400.00	3,360.92	4,112.00	4,083.51	18.18	23.30	64.42	-3,293.81	-8,449.85	8,870.53	8,830.36	40.18	220.776		
3,500.00	3,459.57	4,179.70	4,150.03	18.74	23.69	64.41	-3,302.82	-8,441.09	8,855.24	8,814.14	41.10	215.474		
3,600.00	3,558.21	4,236.96	4,206.41	19.29	24.03	64.41	-3,310.04	-8,434.18	8,840.48	8,798.52	41.96	210.678		
3,700.00	3,656.86	4,301.00	4,269.26	19.84	24.40	64.39	-3,319.44	-8,426.30	8,826.14	8,783.27	42.87	205.893		
3,800.00	3,755.50	4,345.60	4,312.99	20.39	24.67	64.38	-3,326.37	-8,420.92	8,812.30	8,768.62	43.67	201.786		
3,900.00	3,854.15	4,396.00	4,362.53	20.95	24.96	64.37	-3,333.76	-8,415.33	8,799.07	8,754.56	44.51	197.700		
4,000.00	3,952.79	4,454.50	4,420.14	21.50	25.30	64.37	-3,341.94	-8,409.28	8,786.35	8,740.98	45.38	193.638		
4,100.00	4,051.44	4,491.00	4,456.11	22.05	25.50	64.36	-3,346.92	-8,405.65	8,774.08	8,727.96	46.13	190.224		
4,200.00	4,150.08	4,554.88	4,519.18	22.61	25.85	64.36	-3,355.23	-8,399.80	8,762.30	8,715.29	47.01	186.396		
4,300.00	4,248.73	4,585.00	4,548.97	23.16	26.01	64.36	-3,358.94	-8,397.33	8,751.22	8,703.50	47.72	183.399		
4,400.00	4,347.38	4,633.80	4,597.31	23.72	26.26	64.37	-3,364.56	-8,393.78	8,740.79	8,692.28	48.50	180.204		
4,500.00	4,446.02	4,680.00	4,643.17	24.27	26.49	64.38	-3,369.41	-8,391.03	8,731.10	8,681.82	49.28	177.175		
4,600.00	4,544.67	4,710.31	4,673.29	24.83	26.63	64.38	-3,372.40	-8,389.51	8,722.09	8,672.13	49.96	174.565		
4,700.00	4,643.31	4,700.00	4,765.47	25.39	26.60	64.42	-3,380.68	-8,385.78	8,713.81	8,663.34	50.47	172.660		
4,800.00	4,741.96	4,939.32	4,901.39	25.94	27.66	64.48	-3,390.35	-8,380.11	8,704.81	8,652.73	52.08	167.151		
4,900.00	4,840.60	4,993.59	4,955.52	26.50	27.89	64.50	-3,393.65	-8,378.14	8,696.07	8,643.22	52.85	164.534		
5,000.00	4,939.25	5,059.00	5,020.81	27.05	28.16	64.54	-3,397.28	-8,376.30	8,687.90	8,634.23	53.67	161.874		
5,100.00	5,037.90	5,134.47	5,096.23	27.61	28.44	64.60	-3,399.66	-8,375.02	8,680.08	8,625.58	54.50	159.276		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,208.14	5,169.89	28.17	28.70	64.67	-3,399.71	-8,374.56	8,672.41	8,617.12	55.29	156.842		
5,300.00	5,235.19	5,274.10	5,235.85	28.72	28.92	64.74	-3,399.66	-8,374.44	8,665.12	8,609.07	56.06	154.582		
5,400.00	5,333.83	5,343.00	5,304.75	29.28	29.14	64.80	-3,399.82	-8,374.53	8,658.24	8,601.42	56.82	152.367		
5,500.00	5,432.48	5,427.79	5,389.54	29.84	29.42	64.88	-3,400.22	-8,374.81	8,651.64	8,593.99	57.65	150.063		
5,600.00	5,531.12	5,518.69	5,480.44	30.40	29.72	64.97	-3,400.74	-8,375.17	8,645.16	8,586.66	58.50	147.770		
5,700.00	5,629.77	5,609.63	5,571.37	30.95	30.02	65.06	-3,401.33	-8,375.58	8,638.79	8,579.44	59.36	145.542		
5,800.00	5,728.41	5,718.28	5,680.02	31.51	30.38	65.16	-3,401.98	-8,376.10	8,632.45	8,572.19	60.26	143.246		
5,900.00	5,827.06	5,829.61	5,791.34	32.07	30.74	65.27	-3,402.32	-8,376.56	8,625.99	8,564.81	61.18	140.994		
6,000.00	5,925.71	5,940.82	5,902.56	32.63	31.10	65.38	-3,402.32	-8,376.96	8,619.41	8,557.31	62.10	138.807		
6,100.00	6,024.35	6,044.04	6,005.77	33.19	31.46	65.48	-3,402.72	-8,377.12	8,612.77	8,549.76	63.01	136.688		
6,200.00	6,123.00	6,149.40	6,111.14	33.74	31.83	65.58	-3,403.57	-8,377.06	8,606.08	8,542.15	63.93	134.624		
6,300.00	6,221.64	6,283.55	6,245.27	34.30	32.33	65.70	-3,405.15	-8,376.55	8,599.23	8,534.25	64.98	132.343		
6,400.00	6,320.29	6,433.54	6,395.25	34.86	32.90	65.84	-3,407.02	-8,375.10	8,591.84	8,525.74	66.10	129.985		
6,500.00	6,418.93	6,527.74	6,489.43	35.42	33.26	65.92	-3,408.32	-8,373.80	8,584.13	8,517.11	67.02	128.091		
6,600.00	6,517.58	6,604.12	6,565.79	35.98	33.57	65.99	-3,409.74	-8,372.84	8,576.67	8,508.80	67.87	126.373		
6,700.00	6,616.23	6,680.62	6,642.26	36.54	33.87	66.05	-3,411.51	-8,371.97	8,569.49	8,500.77	68.72	124.701		
6,800.00	6,714.51	6,757.95	6,719.55	37.10	34.17	31.06	-3,413.67	-8,371.21	8,557.41	8,487.85	69.56	123.024		
6,900.00	6,810.42	6,859.28	6,820.85	37.66	34.57	11.72	-3,416.43	-8,370.31	8,530.83	8,460.40	70.43	121.120		
7,000.00	6,901.58	6,955.38	6,916.92	38.21	34.96	2.35	-3,418.57	-8,369.54	8,490.06	8,418.85	71.21	119.220		
7,100.00	6,985.76	7,048.50	7,010.02	38.76	35.33	-3.84	-3,420.22	-8,368.86	8,436.10	8,364.20	71.90	117.330		
7,200.00	7,060.88	7,159.77	7,121.27	39.32	35.77	-9.34	-3,421.99	-8,367.77	8,370.11	8,297.55	72.57	115.346		
7,300.00	7,125.09	7,253.70	7,215.18	39.90	36.14	-15.62	-3,423.47	-8,366.45	8,293.73	8,220.67	73.06	113.515		
7,400.00	7,176.81	7,328.07	7,289.53	40.55	36.44	-24.38	-3,424.64	-8,365.16	8,208.99	8,135.60	73.39	111.861		
7,500.00	7,214.77	7,381.25	7,342.70	41.30	36.65	-38.51	-3,425.47	-8,364.09	8,118.11	8,044.58	73.53	110.398		
7,600.00	7,238.02	7,412.24	7,373.67	42.22	36.78	-62.15	-3,425.95	-8,363.42	8,023.46	7,949.94	73.52	109.131		
7,700.00	7,246.01	7,420.62	7,382.05	43.32	36.81	-92.98	-3,426.09	-8,363.23	7,927.45	7,854.08	73.37	108.054		
7,800.00	7,245.50	7,416.64	7,378.07	44.65	36.79	-94.36	-3,426.02	-8,363.32	7,831.66	7,758.50	73.15	107.059		
7,900.00	7,244.97	7,412.68	7,374.11	46.21	36.78	-94.26	-3,425.96	-8,363.41	7,735.98	7,663.01	72.97	106.022		
8,000.00	7,244.44	7,408.76	7,370.20	47.99	36.76	-94.17	-3,425.90	-8,363.50	7,640.40	7,567.60	72.81	104.941		
8,100.00	7,243.91	7,404.89	7,366.33	49.96	36.75	-94.07	-3,425.84	-8,363.58	7,544.95	7,472.27	72.68	103.813		
8,200.00	7,243.39	7,401.07	7,362.50	52.10	36.73	-93.97	-3,425.78	-8,363.67	7,449.60	7,377.02	72.58	102.635		
8,300.00	7,242.86	7,397.28	7,358.72	54.38	36.72	-93.88	-3,425.72	-8,363.75	7,354.39	7,281.86	72.52	101.405		
8,400.00	7,242.33	7,393.54	7,354.98	56.78	36.70	-93.78	-3,425.66	-8,363.83	7,259.29	7,186.79	72.51	100.120		
8,500.00	7,241.80	7,389.84	7,351.28	59.28	36.69	-93.69	-3,425.61	-8,363.91	7,164.34	7,091.81	72.53	98.779		
8,600.00	7,241.27	7,386.18	7,347.62	61.88	36.67	-93.60	-3,425.55	-8,363.99	7,069.51	6,996.92	72.60	97.378		
8,700.00	7,240.74	7,382.56	7,344.01	64.54	36.66	-93.50	-3,425.49	-8,364.07	6,974.84	6,902.12	72.72	95.917		
8,800.00	7,240.21	7,378.99	7,340.43	67.27	36.64	-93.41	-3,425.44	-8,364.14	6,880.31	6,807.42	72.89	94.395		
8,900.00	7,239.68	7,375.45	7,336.89	70.06	36.63	-93.32	-3,425.38	-8,364.22	6,785.93	6,712.82	73.12	92.811		
9,000.00	7,239.16	7,371.95	7,333.39	72.89	36.62	-93.24	-3,425.33	-8,364.29	6,691.72	6,618.32	73.40	91.165		
9,100.00	7,238.63	7,368.48	7,329.93	75.77	36.60	-93.15	-3,425.27	-8,364.36	6,597.68	6,523.93	73.75	89.458		
9,200.00	7,238.10	7,365.06	7,326.51	78.69	36.59	-93.06	-3,425.22	-8,364.43	6,503.81	6,429.65	74.17	87.691		
9,300.00	7,237.57	7,361.67	7,323.12	81.64	36.57	-92.98	-3,425.17	-8,364.50	6,410.13	6,335.48	74.65	85.865		
9,400.00	7,237.04	7,358.32	7,319.77	84.62	36.56	-92.89	-3,425.11	-8,364.57	6,316.64	6,241.43	75.21	83.985		
9,500.00	7,236.51	7,355.00	7,316.45	87.63	36.55	-92.81	-3,425.06	-8,364.63	6,223.35	6,147.51	75.85	82.053		
9,600.00	7,235.98	7,351.72	7,313.17	90.66	36.53	-92.72	-3,425.01	-8,364.70	6,130.27	6,053.72	76.56	80.073		
9,700.00	7,235.45	7,348.47	7,309.92	93.72	36.52	-92.64	-3,424.96	-8,364.76	6,037.42	5,960.06	77.35	78.049		
9,800.00	7,234.93	7,345.26	7,306.71	96.79	36.51	-92.56	-3,424.91	-8,364.83	5,944.79	5,866.55	78.23	75.987		
9,900.00	7,234.40	7,342.08	7,303.53	99.88	36.50	-92.48	-3,424.86	-8,364.89	5,852.40	5,773.20	79.20	73.893		
10,000.00	7,233.87	7,338.93	7,300.39	102.98	36.48	-92.40	-3,424.81	-8,364.95	5,760.27	5,680.01	80.26	71.771		
10,100.00	7,233.34	7,335.81	7,297.27	106.10	36.47	-92.32	-3,424.76	-8,365.01	5,668.40	5,586.99	81.41	69.629		
10,200.00	7,232.81	7,332.73	7,294.19	109.23	36.46	-92.24	-3,424.71	-8,365.07	5,576.81	5,494.16	82.65	67.472		
10,300.00	7,232.28	7,329.68	7,291.14	112.38	36.45	-92.17	-3,424.66	-8,365.13	5,485.51	5,401.52	84.00	65.306		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,326.66	7,288.12	115.53	36.43	-92.09	-3,424.62	-8,365.18	5,394.52	5,309.08	85.44	63.138		
10,500.00	7,231.23	7,323.66	7,285.13	118.70	36.42	-92.01	-3,424.57	-8,365.24	5,303.85	5,216.87	86.99	60.974		
10,600.00	7,230.70	7,320.70	7,282.17	121.87	36.41	-91.94	-3,424.52	-8,365.30	5,213.53	5,124.89	88.64	58.819		
10,700.00	7,230.17	7,317.77	7,279.23	125.05	36.40	-91.86	-3,424.48	-8,365.35	5,123.56	5,033.16	90.39	56.680		
10,800.00	7,229.64	7,314.87	7,276.33	128.25	36.39	-91.79	-3,424.43	-8,365.40	5,033.97	4,941.70	92.26	54.561		
10,900.00	7,229.11	7,311.99	7,273.46	131.44	36.38	-91.72	-3,424.39	-8,365.46	4,944.77	4,850.53	94.24	52.468		
11,000.00	7,228.58	7,309.15	7,270.61	134.65	36.36	-91.65	-3,424.34	-8,365.51	4,856.00	4,759.65	96.34	50.404		
11,100.00	7,228.05	7,306.33	7,267.80	137.86	36.35	-91.57	-3,424.30	-8,365.56	4,767.66	4,669.11	98.56	48.374		
11,200.00	7,227.52	7,303.54	7,265.01	141.08	36.34	-91.50	-3,424.26	-8,365.61	4,679.80	4,578.90	100.90	46.382		
11,300.00	7,227.00	7,300.78	7,262.24	144.30	36.33	-91.43	-3,424.21	-8,365.66	4,592.43	4,489.07	103.36	44.431		
11,400.00	7,226.47	7,298.04	7,259.51	147.52	36.32	-91.36	-3,424.17	-8,365.71	4,505.59	4,399.63	105.95	42.524		
11,500.00	7,225.94	7,295.33	7,256.80	150.76	36.31	-91.29	-3,424.13	-8,365.75	4,419.30	4,310.62	108.68	40.663		
11,600.00	7,225.41	7,292.64	7,254.11	153.99	36.30	-91.23	-3,424.08	-8,365.80	4,333.60	4,222.05	111.54	38.851		
11,700.00	7,224.88	7,289.98	7,251.45	157.23	36.29	-91.16	-3,424.04	-8,365.85	4,248.52	4,133.97	114.55	37.089		
11,800.00	7,224.35	7,287.35	7,248.82	160.48	36.28	-91.09	-3,424.00	-8,365.89	4,164.10	4,046.40	117.70	35.380		
11,900.00	7,223.82	7,284.74	7,246.21	163.72	36.27	-91.03	-3,423.96	-8,365.94	4,080.39	3,959.39	121.00	33.723		
12,000.00	7,223.29	7,282.15	7,243.63	166.98	36.26	-90.96	-3,423.92	-8,365.98	3,997.42	3,872.97	124.45	32.120		
12,100.00	7,222.77	7,279.59	7,241.07	170.23	36.25	-90.90	-3,423.88	-8,366.03	3,915.25	3,787.19	128.06	30.572		
12,200.00	7,222.24	7,277.06	7,238.53	173.49	36.24	-90.83	-3,423.84	-8,366.07	3,833.93	3,702.08	131.84	29.080		
12,300.00	7,221.71	7,274.54	7,236.02	176.75	36.23	-90.77	-3,423.80	-8,366.11	3,753.50	3,617.71	135.79	27.642		
12,400.00	7,221.18	7,272.05	7,233.53	180.01	36.22	-90.70	-3,423.76	-8,366.15	3,674.04	3,534.13	139.91	26.261		
12,500.00	7,220.65	7,269.58	7,231.06	183.28	36.21	-90.64	-3,423.72	-8,366.19	3,595.59	3,451.39	144.20	24.934		
12,600.00	7,220.12	7,267.14	7,228.61	186.54	36.20	-90.58	-3,423.68	-8,366.23	3,518.24	3,369.56	148.68	23.663		
12,700.00	7,219.59	7,264.71	7,226.19	189.81	36.19	-90.52	-3,423.64	-8,366.27	3,442.06	3,288.71	153.35	22.446		
12,800.00	7,219.06	7,262.31	7,223.79	193.09	36.18	-90.46	-3,423.61	-8,366.31	3,367.12	3,208.92	158.20	21.284		
12,900.00	7,218.54	7,259.93	7,221.41	196.36	36.17	-90.40	-3,423.57	-8,366.35	3,293.51	3,130.27	163.24	20.175		
13,000.00	7,218.01	7,257.57	7,219.05	199.64	36.16	-90.34	-3,423.53	-8,366.39	3,221.32	3,052.84	168.48	19.120		
13,100.00	7,217.48	7,255.23	7,216.71	202.92	36.15	-90.28	-3,423.50	-8,366.43	3,150.65	2,976.74	173.91	18.116		
13,200.00	7,216.95	7,252.92	7,214.40	206.20	36.14	-90.22	-3,423.46	-8,366.46	3,081.61	2,902.07	179.54	17.164		
13,300.00	7,216.42	7,250.62	7,212.10	209.48	36.13	-90.16	-3,423.42	-8,366.50	3,014.30	2,828.95	185.35	16.263		
13,400.00	7,215.89	7,248.34	7,209.82	212.76	36.12	-90.10	-3,423.39	-8,366.54	2,948.84	2,757.49	191.35	15.411		
13,500.00	7,215.36	7,246.09	7,207.57	216.05	36.11	-90.04	-3,423.35	-8,366.57	2,885.36	2,687.84	197.53	14.607		
13,600.00	7,214.84	7,243.85	7,205.33	219.33	36.10	-89.99	-3,423.32	-8,366.61	2,824.00	2,620.13	203.87	13.852		
13,700.00	7,214.31	7,241.63	7,203.11	222.62	36.10	-89.93	-3,423.28	-8,366.64	2,764.89	2,554.52	210.37	13.143		
13,800.00	7,213.78	7,239.43	7,200.92	225.91	36.09	-89.87	-3,423.25	-8,366.67	2,708.18	2,491.18	217.00	12.480		
13,900.00	7,213.25	7,237.25	7,198.74	229.20	36.08	-89.82	-3,423.21	-8,366.71	2,654.03	2,430.28	223.75	11.862		
14,000.00	7,212.72	7,235.09	7,196.58	232.49	36.07	-89.76	-3,423.18	-8,366.74	2,602.59	2,372.01	230.58	11.287		
14,100.00	7,212.19	7,232.95	7,194.43	235.79	36.06	-89.71	-3,423.14	-8,366.77	2,554.03	2,316.55	237.48	10.755		
14,200.00	7,211.66	7,230.82	7,192.31	239.08	36.05	-89.66	-3,423.11	-8,366.80	2,508.52	2,264.12	244.40	10.264		
14,300.00	7,211.13	7,228.72	7,190.20	242.38	36.04	-89.60	-3,423.08	-8,366.84	2,466.22	2,214.92	251.30	9.814		
14,400.00	7,210.61	7,226.63	7,188.11	245.67	36.04	-89.55	-3,423.04	-8,366.87	2,427.31	2,169.17	258.14	9.403		
14,500.00	7,210.08	7,224.56	7,186.04	248.97	36.03	-89.50	-3,423.01	-8,366.90	2,391.94	2,127.07	264.87	9.031		
14,600.00	7,209.55	7,222.50	7,183.99	252.27	36.02	-89.44	-3,422.98	-8,366.93	2,360.29	2,088.85	271.44	8.695		
14,700.00	7,209.02	7,220.47	7,181.95	255.57	36.01	-89.39	-3,422.95	-8,366.96	2,332.49	2,054.70	277.80	8.396		
14,800.00	7,208.49	7,218.44	7,179.93	258.87	36.00	-89.34	-3,422.92	-8,366.99	2,308.69	2,024.81	283.88	8.133		
14,900.00	7,207.96	7,216.44	7,177.93	262.17	35.99	-89.29	-3,422.88	-8,367.02	2,289.02	1,999.37	289.64	7.903		
15,000.00	7,207.43	7,214.45	7,175.94	265.47	35.99	-89.24	-3,422.85	-8,367.04	2,273.57	1,978.54	295.03	7.706		
15,081.89	7,207.00	7,212.84	7,174.33	268.17	35.98	-89.20	-3,422.83	-8,367.07	2,264.14	1,965.01	299.13	7.569	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	64.00	3.28	3.28	-132.85	-3,126.24	-3,370.09	4,597.28				
100.00	100.00	36.00	100.00	3.28	3.34	-132.85	-3,126.24	-3,370.09	4,596.84	4,590.21	6.62	693.928	
200.00	200.00	136.00	200.00	3.34	4.45	-132.85	-3,126.24	-3,370.09	4,596.84	4,589.05	7.78	590.580	
300.00	299.98	235.98	299.98	3.44	7.27	39.14	-3,126.24	-3,370.09	4,595.48	4,584.77	10.71	428.929	
400.00	399.84	335.84	399.84	3.59	10.50	39.23	-3,126.24	-3,370.09	4,591.42	4,577.33	14.10	325.741	
500.00	499.45	435.45	499.45	3.80	13.85	39.39	-3,126.24	-3,370.09	4,584.67	4,567.03	17.64	259.845	
600.00	598.70	534.70	598.70	4.06	17.24	39.60	-3,126.24	-3,370.09	4,575.24	4,553.96	21.28	215.007	
700.00	697.49	633.49	697.49	4.38	20.63	39.84	-3,126.24	-3,370.09	4,563.25	4,538.28	24.97	182.738	
800.00	796.13	732.13	796.13	4.74	24.04	39.97	-3,126.24	-3,370.09	4,550.60	4,521.89	28.70	158.538	
900.00	894.78	830.78	894.78	5.15	27.45	40.10	-3,126.24	-3,370.09	4,537.97	4,505.49	32.47	139.741	
1,000.00	993.43	929.43	993.43	5.58	30.88	40.23	-3,126.24	-3,370.09	4,525.36	4,489.09	36.27	124.752	
1,100.00	1,092.07	1,028.07	1,092.07	6.03	34.30	40.37	-3,126.24	-3,370.09	4,512.78	4,472.68	40.10	112.541	
1,200.00	1,190.72	1,126.72	1,190.72	6.50	37.73	40.50	-3,126.24	-3,370.09	4,500.23	4,456.28	43.94	102.413	
1,300.00	1,289.36	1,225.36	1,289.36	6.98	41.16	40.64	-3,126.24	-3,370.09	4,487.70	4,439.89	47.80	93.884	
1,400.00	1,388.01	1,324.01	1,388.01	7.47	44.60	40.77	-3,126.24	-3,370.09	4,475.19	4,423.52	51.67	86.609	
1,500.00	1,486.65	1,422.65	1,486.65	7.97	48.03	40.91	-3,126.24	-3,370.09	4,462.71	4,407.16	55.55	80.334	
1,600.00	1,585.30	1,521.30	1,585.30	8.48	51.47	41.05	-3,126.24	-3,370.09	4,450.25	4,390.81	59.44	74.868	
1,700.00	1,683.94	1,619.94	1,683.94	9.00	54.90	41.18	-3,126.24	-3,370.09	4,437.82	4,374.48	63.34	70.065	
1,800.00	1,782.59	1,718.59	1,782.59	9.52	58.34	41.32	-3,126.24	-3,370.09	4,425.42	4,358.18	67.24	65.814	
1,900.00	1,881.24	1,817.24	1,881.24	10.05	61.78	41.46	-3,126.24	-3,370.09	4,413.04	4,341.89	71.15	62.024	
2,000.00	1,979.88	1,915.88	1,979.88	10.58	65.22	41.60	-3,126.24	-3,370.09	4,400.69	4,325.63	75.06	58.626	
2,100.00	2,078.53	2,014.53	2,078.53	11.11	68.66	41.75	-3,126.24	-3,370.09	4,388.36	4,309.38	78.98	55.562	
2,200.00	2,177.17	2,113.17	2,177.17	11.64	72.10	41.89	-3,126.24	-3,370.09	4,376.07	4,293.16	82.90	52.786	
2,300.00	2,275.82	2,211.82	2,275.82	12.18	75.54	42.03	-3,126.24	-3,370.09	4,363.79	4,276.97	86.83	50.259	
2,400.00	2,374.46	2,310.46	2,374.46	12.72	78.98	42.17	-3,126.24	-3,370.09	4,351.55	4,260.80	90.75	47.949	
2,500.00	2,473.11	2,409.11	2,473.11	13.26	82.42	42.32	-3,126.24	-3,370.09	4,339.33	4,244.65	94.68	45.830	
2,600.00	2,571.76	2,507.76	2,571.76	13.80	85.86	42.46	-3,126.24	-3,370.09	4,327.14	4,228.53	98.62	43.879	
2,700.00	2,670.40	2,606.40	2,670.40	14.35	89.30	42.61	-3,126.24	-3,370.09	4,314.98	4,212.43	102.55	42.077	
2,800.00	2,769.05	2,705.05	2,769.05	14.89	92.75	42.76	-3,126.24	-3,370.09	4,302.85	4,196.36	106.49	40.407	
2,900.00	2,867.69	2,803.69	2,867.69	15.44	96.19	42.91	-3,126.24	-3,370.09	4,290.75	4,180.32	110.43	38.857	
3,000.00	2,966.34	2,902.34	2,966.34	15.99	99.63	43.05	-3,126.24	-3,370.09	4,278.67	4,164.31	114.37	37.412	
3,100.00	3,064.98	3,000.98	3,064.98	16.53	103.07	43.20	-3,126.24	-3,370.09	4,266.62	4,148.32	118.31	36.064	
3,200.00	3,163.63	3,100.37	3,163.63	17.08	106.54	43.35	-3,126.24	-3,370.09	4,254.61	4,132.33	122.28	34.795	
3,300.00	3,262.27	3,201.73	3,262.27	17.63	110.08	43.50	-3,126.24	-3,370.09	4,242.62	4,116.30	126.32	33.587	
3,400.00	3,360.92	3,303.08	3,360.92	18.18	113.61	43.66	-3,126.24	-3,370.09	4,230.66	4,100.30	130.36	32.454	
3,500.00	3,459.57	3,404.43	3,459.57	18.74	117.15	43.81	-3,126.24	-3,370.09	4,218.73	4,084.33	134.40	31.390	
3,600.00	3,558.21	3,505.79	3,558.21	19.29	120.69	43.96	-3,126.24	-3,370.09	4,206.83	4,068.39	138.44	30.387	
3,700.00	3,656.86	3,607.14	3,656.86	19.84	124.22	44.12	-3,126.24	-3,370.09	4,194.96	4,052.48	142.49	29.441	
3,800.00	3,755.50	3,708.50	3,755.50	20.39	127.76	44.27	-3,126.24	-3,370.09	4,183.12	4,036.59	146.53	28.547	
3,900.00	3,854.15	3,809.85	3,854.15	20.95	131.30	44.43	-3,126.24	-3,370.09	4,171.32	4,020.74	150.58	27.702	
4,000.00	3,952.79	3,888.79	3,952.79	21.50	134.05	44.59	-3,126.24	-3,370.09	4,159.54	4,005.70	153.85	27.037	
4,100.00	4,051.44	3,987.44	4,051.44	22.05	137.50	44.74	-3,126.24	-3,370.09	4,147.80	3,990.00	157.80	26.285	
4,200.00	4,150.08	4,086.08	4,150.08	22.61	140.94	44.90	-3,126.24	-3,370.09	4,136.09	3,974.33	161.76	25.570	
4,300.00	4,248.73	4,184.73	4,248.73	23.16	144.38	45.06	-3,126.24	-3,370.09	4,124.40	3,958.69	165.71	24.889	
4,400.00	4,347.38	4,283.38	4,347.38	23.72	147.82	45.22	-3,126.24	-3,370.09	4,112.76	3,943.09	169.67	24.240	
4,500.00	4,446.02	4,382.02	4,446.02	24.27	151.27	45.38	-3,126.24	-3,370.09	4,101.14	3,927.51	173.63	23.620	
4,600.00	4,544.67	4,480.67	4,544.67	24.83	154.71	45.55	-3,126.24	-3,370.09	4,089.56	3,911.97	177.59	23.028	
4,700.00	4,643.31	4,579.31	4,643.31	25.39	158.15	45.71	-3,126.24	-3,370.09	4,078.01	3,896.46	181.55	22.462	
4,800.00	4,741.96	4,677.96	4,741.96	25.94	161.60	45.87	-3,126.24	-3,370.09	4,066.49	3,880.98	185.51	21.920	
4,900.00	4,840.60	4,776.60	4,840.60	26.50	165.04	46.04	-3,126.24	-3,370.09	4,055.01	3,865.53	189.47	21.401	
5,000.00	4,939.25	4,875.25	4,939.25	27.05	168.48	46.21	-3,126.24	-3,370.09	4,043.56	3,850.12	193.44	20.904	
5,100.00	5,037.90	4,973.90	5,037.90	27.61	171.92	46.37	-3,126.24	-3,370.09	4,032.14	3,834.74	197.40	20.426	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,072.54	5,136.54	28.17	175.37	46.54	-3,126.24	-3,370.09	4,020.76	3,819.40	201.37	19.967		
5,300.00	5,235.19	5,171.19	5,235.19	28.72	178.81	46.71	-3,126.24	-3,370.09	4,009.42	3,804.08	205.33	19.526		
5,400.00	5,333.83	5,269.83	5,333.83	29.28	182.25	46.88	-3,126.24	-3,370.09	3,998.11	3,788.81	209.30	19.102		
5,500.00	5,432.48	5,368.48	5,432.48	29.84	185.70	47.05	-3,126.24	-3,370.09	3,986.83	3,773.56	213.27	18.694		
5,600.00	5,531.12	5,467.12	5,531.12	30.40	189.14	47.22	-3,126.24	-3,370.09	3,975.59	3,758.36	217.24	18.301		
5,700.00	5,629.77	5,565.77	5,629.77	30.95	192.58	47.40	-3,126.24	-3,370.09	3,964.39	3,743.18	221.21	17.922		
5,800.00	5,728.41	5,664.41	5,728.41	31.51	196.03	47.57	-3,126.24	-3,370.09	3,953.22	3,728.05	225.18	17.556		
5,900.00	5,827.06	5,763.06	5,827.06	32.07	199.47	47.74	-3,126.24	-3,370.09	3,942.09	3,712.94	229.15	17.203		
6,000.00	5,925.71	5,861.71	5,925.71	32.63	202.91	47.92	-3,126.24	-3,370.09	3,931.00	3,697.88	233.12	16.862		
6,100.00	6,024.35	5,960.35	6,024.35	33.19	206.36	48.10	-3,126.24	-3,370.09	3,919.94	3,682.85	237.09	16.533		
6,200.00	6,123.00	6,059.00	6,123.00	33.74	209.80	48.27	-3,126.24	-3,370.09	3,908.92	3,667.86	241.07	16.215		
6,300.00	6,221.64	6,157.64	6,221.64	34.30	213.24	48.45	-3,126.24	-3,370.09	3,897.94	3,652.90	245.04	15.907		
6,400.00	6,320.29	6,256.29	6,320.29	34.86	216.69	48.63	-3,126.24	-3,370.09	3,887.00	3,637.98	249.02	15.609		
6,500.00	6,418.93	6,354.93	6,418.93	35.42	220.13	48.81	-3,126.24	-3,370.09	3,876.10	3,623.10	253.00	15.321		
6,600.00	6,517.58	6,453.58	6,517.58	35.98	223.57	48.99	-3,126.24	-3,370.09	3,865.23	3,608.26	256.97	15.041		
6,700.00	6,616.23	6,552.23	6,616.23	36.54	227.02	49.18	-3,126.24	-3,370.09	3,854.41	3,593.45	260.95	14.771		
6,800.00	6,714.51	6,650.51	6,714.51	37.10	230.45	13.87	-3,126.24	-3,370.09	3,839.10	3,574.21	264.89	14.493		
6,900.00	6,810.42	6,746.42	6,810.42	37.66	233.80	-6.27	-3,126.24	-3,370.09	3,811.16	3,542.52	268.64	14.187		
7,000.00	6,901.58	6,837.58	6,901.58	38.21	236.98	-16.90	-3,126.24	-3,370.09	3,771.09	3,498.97	272.12	13.858		
7,100.00	6,985.76	6,921.76	6,985.76	38.76	239.92	-24.88	-3,126.24	-3,370.09	3,719.92	3,444.68	275.24	13.515		
7,200.00	7,060.88	7,003.12	7,060.88	39.32	242.76	-32.63	-3,126.24	-3,370.09	3,659.03	3,380.87	278.16	13.154		
7,300.00	7,125.09	7,061.09	7,125.09	39.90	244.78	-41.39	-3,126.24	-3,370.09	3,590.09	3,309.93	280.16	12.814		
7,400.00	7,176.81	7,112.81	7,176.81	40.55	246.59	-51.85	-3,126.24	-3,370.09	3,515.00	3,233.14	281.86	12.471		
7,500.00	7,214.77	7,150.77	7,214.77	41.30	247.91	-64.09	-3,126.24	-3,370.09	3,435.88	3,152.82	283.05	12.139		
7,600.00	7,238.02	7,174.02	7,238.02	42.22	248.72	-77.27	-3,126.24	-3,370.09	3,354.92	3,071.18	283.74	11.824		
7,700.00	7,246.01	7,182.01	7,246.01	43.32	249.00	-89.81	-3,126.24	-3,370.09	3,274.38	2,990.42	283.96	11.531		
7,800.00	7,245.50	7,181.50	7,245.50	44.65	248.98	-90.38	-3,126.24	-3,370.09	3,195.44	2,911.41	284.03	11.250		
7,900.00	7,244.97	7,180.97	7,244.97	46.21	248.96	-90.37	-3,126.24	-3,370.09	3,117.71	2,833.42	284.30	10.966		
8,000.00	7,244.44	7,180.44	7,244.44	47.99	248.95	-90.35	-3,126.24	-3,370.09	3,041.29	2,756.50	284.79	10.679		
8,100.00	7,243.91	7,179.91	7,243.91	49.96	248.93	-90.34	-3,126.24	-3,370.09	2,966.27	2,680.74	285.53	10.389		
8,200.00	7,243.39	7,179.39	7,243.39	52.10	248.91	-90.32	-3,126.24	-3,370.09	2,892.76	2,606.23	286.53	10.096		
8,300.00	7,242.86	7,178.86	7,242.86	54.38	248.89	-90.31	-3,126.24	-3,370.09	2,820.88	2,533.06	287.82	9.801		
8,400.00	7,242.33	7,178.33	7,242.33	56.78	248.87	-90.29	-3,126.24	-3,370.09	2,750.76	2,461.36	289.40	9.505		
8,500.00	7,241.80	7,177.80	7,241.80	59.28	248.85	-90.28	-3,126.24	-3,370.09	2,682.53	2,391.25	291.28	9.209		
8,600.00	7,241.27	7,177.27	7,241.27	61.88	248.84	-90.26	-3,126.24	-3,370.09	2,616.35	2,322.89	293.46	8.916		
8,700.00	7,240.74	7,176.74	7,240.74	64.54	248.82	-90.24	-3,126.24	-3,370.09	2,552.36	2,256.43	295.94	8.625		
8,800.00	7,240.21	7,176.21	7,240.21	67.27	248.80	-90.23	-3,126.24	-3,370.09	2,490.76	2,192.05	298.71	8.338		
8,900.00	7,239.68	7,175.68	7,239.68	70.06	248.78	-90.21	-3,126.24	-3,370.09	2,431.70	2,129.94	301.76	8.058		
9,000.00	7,239.16	7,175.16	7,239.16	72.89	248.76	-90.20	-3,126.24	-3,370.09	2,375.39	2,070.30	305.09	7.786		
9,100.00	7,238.63	7,174.63	7,238.63	75.77	248.74	-90.18	-3,126.24	-3,370.09	2,322.02	2,013.36	308.66	7.523		
9,200.00	7,238.10	7,174.10	7,238.10	78.69	248.72	-90.17	-3,126.24	-3,370.09	2,271.80	1,959.34	312.46	7.271		
9,300.00	7,237.57	7,173.57	7,237.57	81.64	248.71	-90.15	-3,126.24	-3,370.09	2,224.94	1,908.47	316.47	7.031		
9,400.00	7,237.04	7,173.04	7,237.04	84.62	248.69	-90.14	-3,126.24	-3,370.09	2,181.66	1,861.01	320.66	6.804		
9,500.00	7,236.51	7,172.51	7,236.51	87.63	248.67	-90.12	-3,126.24	-3,370.09	2,142.18	1,817.20	324.99	6.592		
9,600.00	7,235.98	7,171.98	7,235.98	90.66	248.65	-90.11	-3,126.24	-3,370.09	2,106.72	1,777.29	329.43	6.395		
9,700.00	7,235.45	7,171.45	7,235.45	93.72	248.63	-90.09	-3,126.24	-3,370.09	2,075.46	1,741.52	333.94	6.215		
9,800.00	7,234.93	7,170.93	7,234.93	96.79	248.61	-90.08	-3,126.24	-3,370.09	2,048.62	1,710.14	338.47	6.053		
9,900.00	7,234.40	7,170.40	7,234.40	99.88	248.60	-90.06	-3,126.24	-3,370.09	2,026.36	1,683.37	342.99	5.908		
10,000.00	7,233.87	7,169.87	7,233.87	102.98	248.58	-90.05	-3,126.24	-3,370.09	2,008.84	1,661.40	347.44	5.782		
10,100.00	7,233.34	7,169.34	7,233.34	106.10	248.56	-90.03	-3,126.24	-3,370.09	1,996.18	1,644.40	351.78	5.675		
10,200.00	7,232.81	7,168.81	7,232.81	109.23	248.54	-90.02	-3,126.24	-3,370.09	1,988.47	1,632.52	355.95	5.586		
10,300.00	7,232.28	7,168.28	7,232.28	112.38	248.52	-90.00	-3,126.24	-3,370.09	1,985.78	1,625.85	359.93	5.517		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,303.54	7,232.26	7,168.26	7,232.26	112.49	248.52	-90.00	-3,126.24	-3,370.09	1,985.77	1,625.71	360.06	5.515 CC		
10,400.00	7,231.75	7,167.75	7,231.75	115.53	248.50	-89.99	-3,126.24	-3,370.09	1,988.11	1,624.45	363.66	5.467 ES		
10,500.00	7,231.23	7,167.23	7,231.23	118.70	248.48	-89.97	-3,126.24	-3,370.09	1,995.47	1,628.34	367.13	5.435		
10,600.00	7,230.70	7,166.70	7,230.70	121.87	248.47	-89.95	-3,126.24	-3,370.09	2,007.78	1,637.47	370.31	5.422 SF		
10,700.00	7,230.17	7,166.17	7,230.17	125.05	248.45	-89.94	-3,126.24	-3,370.09	2,024.96	1,651.78	373.18	5.426		
10,800.00	7,229.64	7,165.64	7,229.64	128.25	248.43	-89.92	-3,126.24	-3,370.09	2,046.89	1,671.16	375.73	5.448		
10,900.00	7,229.11	7,165.11	7,229.11	131.44	248.41	-89.91	-3,126.24	-3,370.09	2,073.42	1,695.44	377.97	5.486		
11,000.00	7,228.58	7,164.58	7,228.58	134.65	248.39	-89.89	-3,126.24	-3,370.09	2,104.36	1,724.46	379.90	5.539		
11,100.00	7,228.05	7,164.05	7,228.05	137.86	248.37	-89.88	-3,126.24	-3,370.09	2,139.54	1,758.01	381.53	5.608		
11,200.00	7,227.52	7,163.52	7,227.52	141.08	248.36	-89.86	-3,126.24	-3,370.09	2,178.74	1,795.87	382.87	5.691		
11,300.00	7,227.00	7,163.00	7,227.00	144.30	248.34	-89.85	-3,126.24	-3,370.09	2,221.76	1,837.80	383.96	5.786		
11,400.00	7,226.47	7,162.47	7,226.47	147.52	248.32	-89.83	-3,126.24	-3,370.09	2,268.37	1,883.57	384.80	5.895		
11,500.00	7,225.94	7,161.94	7,225.94	150.76	248.30	-89.82	-3,126.24	-3,370.09	2,318.36	1,932.94	385.42	6.015		
11,600.00	7,225.41	7,161.41	7,225.41	153.99	248.28	-89.80	-3,126.24	-3,370.09	2,371.51	1,985.67	385.84	6.146		
11,700.00	7,224.88	7,160.88	7,224.88	157.23	248.26	-89.79	-3,126.24	-3,370.09	2,427.62	2,041.53	386.09	6.288		
11,800.00	7,224.35	7,160.35	7,224.35	160.48	248.24	-89.77	-3,126.24	-3,370.09	2,486.49	2,100.31	386.18	6.439		
11,900.00	7,223.82	7,159.82	7,223.82	163.72	248.23	-89.76	-3,126.24	-3,370.09	2,547.92	2,161.78	386.14	6.598		
12,000.00	7,223.29	7,159.29	7,223.29	166.98	248.21	-89.74	-3,126.24	-3,370.09	2,611.74	2,225.75	385.99	6.766		
12,100.00	7,222.77	7,158.77	7,222.77	170.23	248.19	-89.73	-3,126.24	-3,370.09	2,677.77	2,292.04	385.73	6.942		
12,200.00	7,222.24	7,158.24	7,222.24	173.49	248.17	-89.71	-3,126.24	-3,370.09	2,745.86	2,360.47	385.40	7.125		
12,300.00	7,221.71	7,157.71	7,221.71	176.75	248.15	-89.70	-3,126.24	-3,370.09	2,815.85	2,430.87	384.99	7.314		
12,400.00	7,221.18	7,157.18	7,221.18	180.01	248.13	-89.68	-3,126.24	-3,370.09	2,887.61	2,503.09	384.53	7.510		
12,500.00	7,220.65	7,156.65	7,220.65	183.28	248.12	-89.66	-3,126.24	-3,370.09	2,961.01	2,577.00	384.01	7.711		
12,600.00	7,220.12	7,156.12	7,220.12	186.54	248.10	-89.65	-3,126.24	-3,370.09	3,035.93	2,652.47	383.47	7.917		
12,700.00	7,219.59	7,155.59	7,219.59	189.81	248.08	-89.63	-3,126.24	-3,370.09	3,112.26	2,729.37	382.89	8.128		
12,800.00	7,219.06	7,155.06	7,219.06	193.09	248.06	-89.62	-3,126.24	-3,370.09	3,189.90	2,807.61	382.28	8.344		
12,900.00	7,218.54	7,154.54	7,218.54	196.36	248.04	-89.60	-3,126.24	-3,370.09	3,268.75	2,887.08	381.67	8.564		
13,000.00	7,218.01	7,154.01	7,218.01	199.64	248.02	-89.59	-3,126.24	-3,370.09	3,348.73	2,967.69	381.04	8.788		
13,100.00	7,217.48	7,153.48	7,217.48	202.92	248.00	-89.57	-3,126.24	-3,370.09	3,429.76	3,049.36	380.40	9.016		
13,200.00	7,216.95	7,152.95	7,216.95	206.20	247.99	-89.56	-3,126.24	-3,370.09	3,511.77	3,132.01	379.76	9.247		
13,300.00	7,216.42	7,152.42	7,216.42	209.48	247.97	-89.54	-3,126.24	-3,370.09	3,594.69	3,215.58	379.11	9.482		
13,400.00	7,215.89	7,151.89	7,215.89	212.76	247.95	-89.53	-3,126.24	-3,370.09	3,678.46	3,299.99	378.47	9.719		
13,500.00	7,215.36	7,151.36	7,215.36	216.05	247.93	-89.51	-3,126.24	-3,370.09	3,763.03	3,385.19	377.84	9.959		
13,600.00	7,214.84	7,150.84	7,214.84	219.33	247.91	-89.50	-3,126.24	-3,370.09	3,848.33	3,471.12	377.21	10.202		
13,700.00	7,214.31	7,150.31	7,214.31	222.62	247.89	-89.48	-3,126.24	-3,370.09	3,934.32	3,557.74	376.58	10.447		
13,800.00	7,213.78	7,149.78	7,213.78	225.91	247.88	-89.47	-3,126.24	-3,370.09	4,020.97	3,645.00	375.97	10.695		
13,900.00	7,213.25	7,149.25	7,213.25	229.20	247.86	-89.45	-3,126.24	-3,370.09	4,108.22	3,732.85	375.37	10.945		
14,000.00	7,212.72	7,148.72	7,212.72	232.49	247.84	-89.44	-3,126.24	-3,370.09	4,196.04	3,821.27	374.77	11.196		
14,100.00	7,212.19	7,148.19	7,212.19	235.79	247.82	-89.42	-3,126.24	-3,370.09	4,284.39	3,910.20	374.19	11.450		
14,200.00	7,211.66	7,147.66	7,211.66	239.08	247.80	-89.41	-3,126.24	-3,370.09	4,373.24	3,999.63	373.61	11.705		
14,300.00	7,211.13	7,147.13	7,211.13	242.38	247.78	-89.39	-3,126.24	-3,370.09	4,462.57	4,089.52	373.05	11.962		
14,400.00	7,210.61	7,146.61	7,210.61	245.67	247.76	-89.38	-3,126.24	-3,370.09	4,552.34	4,179.84	372.50	12.221		
14,500.00	7,210.08	7,146.08	7,210.08	248.97	247.75	-89.36	-3,126.24	-3,370.09	4,642.53	4,270.56	371.97	12.481		
14,600.00	7,209.55	7,145.55	7,209.55	252.27	247.73	-89.34	-3,126.24	-3,370.09	4,733.11	4,361.67	371.44	12.743		
14,700.00	7,209.02	7,145.02	7,209.02	255.57	247.71	-89.33	-3,126.24	-3,370.09	4,824.07	4,453.14	370.93	13.005		
14,800.00	7,208.49	7,144.49	7,208.49	258.87	247.69	-89.31	-3,126.24	-3,370.09	4,915.37	4,544.95	370.42	13.270		
14,900.00	7,207.96	7,143.96	7,207.96	262.17	247.67	-89.30	-3,126.24	-3,370.09	5,007.01	4,637.08	369.93	13.535		
15,000.00	7,207.43	7,143.43	7,207.43	265.47	247.65	-89.28	-3,126.24	-3,370.09	5,098.96	4,729.51	369.46	13.801		
15,081.89	7,207.00	7,143.00	7,207.00	268.17	247.64	-89.27	-3,126.24	-3,370.09	5,174.48	4,805.41	369.07	14.020		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	10.00	3.28	3.28	23.71	1,117.69	490.89	1,220.78					
100.00	100.00	87.28	97.28	3.28	3.29	23.71	1,117.77	490.95	1,220.84	1,214.27	6.57	185.818		
200.00	200.00	187.51	197.51	3.34	3.33	23.72	1,117.93	491.16	1,221.07	1,214.40	6.67	183.079		
300.00	299.98	290.60	300.60	3.44	3.44	-164.33	1,117.94	491.36	1,222.84	1,215.96	6.88	177.794		
400.00	399.84	383.40	393.40	3.59	3.58	-164.34	1,117.95	491.80	1,228.07	1,220.91	7.17	171.293		
500.00	499.45	486.15	496.15	3.80	3.78	-164.37	1,118.04	492.81	1,236.95	1,229.38	7.57	163.464		
600.00	598.70	580.60	590.58	4.06	3.99	-164.40	1,118.05	493.73	1,249.09	1,241.06	8.03	155.612		
700.00	697.49	683.74	693.72	4.38	4.26	-164.48	1,118.01	495.26	1,264.60	1,256.02	8.58	147.440		
800.00	796.13	784.14	794.10	4.74	4.55	-164.62	1,117.67	496.55	1,280.62	1,271.45	9.16	139.733		
900.00	894.78	879.56	889.52	5.15	4.84	-164.75	1,117.45	497.70	1,296.71	1,286.92	9.78	132.549		
1,000.00	993.43	981.09	991.04	5.58	5.17	-164.88	1,117.20	499.19	1,312.90	1,302.44	10.46	125.544		
1,100.00	1,092.07	1,074.03	1,083.97	6.03	5.48	-165.01	1,117.07	500.25	1,329.07	1,317.94	11.13	119.386		
1,200.00	1,190.72	1,173.47	1,183.40	6.50	5.83	-165.14	1,117.20	501.68	1,345.60	1,333.74	11.86	113.500		
1,300.00	1,289.36	1,281.27	1,291.19	6.98	6.22	-165.26	1,116.85	503.21	1,361.72	1,349.08	12.63	107.793		
1,400.00	1,388.01	1,380.65	1,390.57	7.47	6.58	-165.39	1,116.24	504.10	1,377.38	1,363.98	13.39	102.835		
1,500.00	1,486.65	1,480.93	1,490.84	7.97	6.96	-165.53	1,115.68	504.87	1,393.05	1,378.87	14.17	98.285		
1,600.00	1,585.30	1,578.96	1,588.86	8.48	7.33	-165.64	1,114.90	506.00	1,408.65	1,393.70	14.96	94.184		
1,700.00	1,683.94	1,674.84	1,684.73	9.00	7.70	-165.75	1,114.32	507.00	1,424.40	1,408.66	15.74	90.498		
1,800.00	1,782.59	1,775.28	1,785.16	9.52	8.09	-165.88	1,113.93	507.77	1,440.24	1,423.69	16.55	87.018		
1,900.00	1,881.24	1,883.38	1,893.26	10.05	8.52	-166.02	1,113.18	508.30	1,455.72	1,438.31	17.41	83.638		
2,000.00	1,979.88	1,977.29	1,987.17	10.58	8.89	-166.17	1,112.50	508.11	1,470.92	1,452.72	18.20	80.816		
2,100.00	2,078.53	2,078.70	2,088.58	11.11	9.29	-166.33	1,112.10	507.76	1,486.37	1,467.33	19.04	78.080		
2,200.00	2,177.17	2,170.30	2,180.18	11.64	9.66	-166.47	1,111.66	507.54	1,501.80	1,481.97	19.83	75.731		
2,300.00	2,275.82	2,264.82	2,274.70	12.18	10.04	-166.61	1,111.75	507.34	1,517.77	1,497.13	20.64	73.528		
2,400.00	2,374.46	2,361.80	2,371.68	12.72	10.43	-166.75	1,111.79	507.54	1,533.86	1,512.39	21.47	71.444		
2,500.00	2,473.11	2,464.14	2,474.02	13.26	10.84	-166.89	1,111.92	507.60	1,549.98	1,527.65	22.33	69.423		
2,600.00	2,571.76	2,560.61	2,570.49	13.80	11.24	-167.04	1,111.98	507.17	1,565.88	1,542.72	23.16	67.620		
2,700.00	2,670.40	2,656.01	2,665.88	14.35	11.62	-167.19	1,112.37	506.77	1,582.11	1,558.13	23.98	65.964		
2,800.00	2,769.05	2,757.22	2,767.09	14.89	12.04	-167.34	1,112.82	506.28	1,598.36	1,573.52	24.84	64.336		
2,900.00	2,867.69	2,865.56	2,875.43	15.44	12.48	-167.52	1,113.03	505.34	1,614.26	1,588.52	25.74	62.709		
3,000.00	2,966.34	2,963.47	2,973.33	15.99	12.88	-167.67	1,112.80	504.29	1,629.71	1,603.13	26.59	61.293		
3,100.00	3,064.98	3,064.66	3,074.51	16.53	13.30	-167.85	1,112.92	502.84	1,645.37	1,617.92	27.45	59.931		
3,200.00	3,163.63	3,161.64	3,171.48	17.08	13.70	-168.03	1,112.94	500.97	1,660.80	1,632.50	28.30	58.686		
3,300.00	3,262.27	3,263.85	3,273.67	17.63	14.13	-168.20	1,113.01	499.42	1,676.42	1,647.24	29.17	57.464		
3,400.00	3,360.92	3,366.74	3,376.55	18.18	14.55	-168.36	1,112.56	498.01	1,691.63	1,661.57	30.05	56.289		
3,500.00	3,459.57	3,464.17	3,473.97	18.74	14.96	-168.51	1,112.15	496.53	1,706.81	1,675.91	30.90	55.230		
3,600.00	3,558.21	3,557.70	3,567.49	19.29	15.35	-168.64	1,111.85	495.36	1,722.18	1,690.45	31.74	54.267		
3,700.00	3,656.86	3,645.91	3,655.70	19.84	15.72	-168.75	1,111.75	494.86	1,738.00	1,705.46	32.54	53.415		
3,800.00	3,755.50	3,737.13	3,746.92	20.39	16.10	-168.86	1,112.17	494.76	1,754.48	1,721.12	33.36	52.598		
3,900.00	3,854.15	3,839.56	3,849.35	20.95	16.53	-168.98	1,112.67	494.54	1,770.97	1,736.73	34.24	51.724		
4,000.00	3,952.79	3,939.93	3,949.72	21.50	16.95	-169.10	1,113.05	493.98	1,787.25	1,752.14	35.11	50.904		
4,100.00	4,051.44	4,038.63	4,048.41	22.05	17.36	-169.22	1,113.49	493.31	1,803.57	1,767.60	35.97	50.138		
4,200.00	4,150.08	4,140.25	4,150.03	22.61	17.79	-169.34	1,113.73	492.82	1,819.77	1,782.92	36.85	49.380		
4,300.00	4,248.73	4,238.84	4,248.62	23.16	18.20	-169.46	1,113.91	492.20	1,835.87	1,798.16	37.72	48.676		
4,400.00	4,347.38	4,335.45	4,345.22	23.72	18.61	-169.56	1,114.16	491.71	1,852.09	1,813.52	38.57	48.020		
4,500.00	4,446.02	4,433.07	4,442.85	24.27	19.02	-169.67	1,114.44	491.25	1,868.35	1,828.92	39.43	47.387		
4,600.00	4,544.67	4,527.76	4,537.54	24.83	19.42	-169.77	1,114.78	490.99	1,884.75	1,844.48	40.27	46.803		
4,700.00	4,643.31	4,622.42	4,632.20	25.39	19.82	-169.85	1,115.29	491.03	1,901.42	1,860.31	41.11	46.249		
4,800.00	4,741.96	4,721.56	4,731.33	25.94	20.23	-169.95	1,115.81	491.05	1,918.08	1,876.10	41.98	45.688		
4,900.00	4,840.60	4,810.41	4,820.18	26.50	20.61	-170.02	1,116.45	491.38	1,935.02	1,892.23	42.79	45.222		
5,000.00	4,939.25	4,896.65	4,906.41	27.05	20.97	-170.08	1,117.46	492.11	1,952.54	1,908.95	43.58	44.803		
5,100.00	5,037.90	4,999.77	5,009.52	27.61	21.41	-170.16	1,118.94	492.81	1,970.26	1,925.78	44.48	44.299		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,118.08	5,127.82	28.17	21.91	-170.26	1,120.03	493.05	1,987.35	1,941.89	45.47	43.712		
5,300.00	5,235.19	5,226.35	5,236.09	28.72	22.37	-170.36	1,120.28	492.71	2,003.65	1,957.25	46.39	43.190		
5,400.00	5,333.83	5,326.42	5,336.16	29.28	22.79	-170.46	1,120.55	491.90	2,019.84	1,972.58	47.27	42.732		
5,500.00	5,432.48	5,438.50	5,448.23	29.84	23.26	-170.58	1,120.30	490.73	2,035.50	1,987.28	48.22	42.217		
5,600.00	5,531.12	5,537.18	5,546.89	30.40	23.68	-170.70	1,119.97	489.09	2,050.88	2,001.79	49.08	41.783		
5,700.00	5,629.77	5,632.98	5,642.68	30.95	24.09	-170.80	1,119.69	487.82	2,066.42	2,016.48	49.94	41.381		
5,800.00	5,728.41	5,732.68	5,742.37	31.51	24.51	-170.90	1,119.43	486.48	2,081.97	2,031.16	50.81	40.974		
5,900.00	5,827.06	5,830.25	5,839.92	32.07	24.92	-171.02	1,119.31	484.60	2,097.52	2,045.84	51.68	40.590		
6,000.00	5,925.71	5,924.82	5,934.49	32.63	25.32	-171.14	1,119.35	482.85	2,113.23	2,060.71	52.52	40.236		
6,100.00	6,024.35	6,022.49	6,032.13	33.19	25.74	-171.25	1,119.51	481.05	2,129.07	2,075.69	53.38	39.882		
6,200.00	6,123.00	6,125.64	6,135.26	33.74	26.17	-171.38	1,119.72	478.80	2,144.88	2,090.59	54.28	39.514		
6,300.00	6,221.64	6,229.90	6,239.49	34.30	26.62	-171.51	1,119.51	476.56	2,160.30	2,105.11	55.19	39.146		
6,400.00	6,320.29	6,323.86	6,333.43	34.86	27.02	-171.62	1,119.55	474.33	2,175.90	2,119.88	56.03	38.836		
6,500.00	6,418.93	6,426.98	6,436.50	35.42	27.45	-171.77	1,119.55	471.29	2,191.32	2,134.40	56.92	38.495		
6,600.00	6,517.58	6,514.57	6,524.05	35.98	27.83	-171.89	1,119.87	468.60	2,207.06	2,149.33	57.73	38.232		
6,700.00	6,616.23	6,613.92	6,623.34	36.54	28.25	-172.05	1,120.60	465.02	2,223.02	2,164.41	58.60	37.934		
6,800.00	6,714.51	6,718.89	6,728.22	37.10	28.70	151.86	1,121.30	460.74	2,240.26	2,180.75	59.51	37.647		
6,900.00	6,810.42	6,818.88	6,828.13	37.66	29.12	131.67	1,121.66	456.86	2,261.22	2,200.86	60.36	37.462		
7,000.00	6,901.58	6,908.84	6,918.01	38.21	29.51	121.90	1,122.11	453.00	2,285.95	2,224.82	61.13	37.393 SF		
7,100.00	6,985.76	6,992.94	7,002.00	38.76	29.87	115.88	1,122.77	448.89	2,314.44	2,252.58	61.87	37.411		
7,200.00	7,060.88	7,079.20	7,088.14	39.32	30.24	111.58	1,123.45	444.42	2,346.48	2,283.85	62.63	37.465		
7,300.00	7,125.09	7,151.40	7,160.22	39.90	30.55	107.85	1,123.91	440.34	2,381.93	2,318.57	63.36	37.592		
7,400.00	7,176.81	7,212.42	7,221.09	40.55	30.81	104.25	1,124.52	436.11	2,420.85	2,356.74	64.11	37.760		
7,500.00	7,214.77	7,262.42	7,270.96	41.30	31.02	100.55	1,124.93	432.56	2,462.97	2,398.06	64.90	37.948		
7,600.00	7,238.02	7,292.04	7,300.52	42.22	31.15	96.38	1,125.12	430.51	2,507.91	2,442.23	65.69	38.179		
7,700.00	7,246.01	7,306.90	7,315.34	43.32	31.22	91.85	1,125.22	429.48	2,555.03	2,488.55	66.48	38.433		
7,800.00	7,245.50	7,313.31	7,321.74	44.65	31.24	91.77	1,125.26	429.04	2,604.30	2,536.99	67.31	38.691		
7,900.00	7,244.97	7,319.71	7,328.12	46.21	31.27	91.93	1,125.30	428.60	2,656.41	2,588.19	68.21	38.942		
8,000.00	7,244.44	7,326.11	7,334.50	47.99	31.30	92.09	1,125.34	428.15	2,711.19	2,642.02	69.17	39.196		
8,100.00	7,243.91	7,332.50	7,340.88	49.96	31.33	92.26	1,125.39	427.71	2,768.48	2,698.32	70.16	39.460		
8,200.00	7,243.39	7,338.90	7,347.26	52.10	31.36	92.42	1,125.43	427.27	2,828.14	2,756.97	71.17	39.740		
8,300.00	7,242.86	7,345.30	7,353.64	54.38	31.38	92.58	1,125.47	426.82	2,890.01	2,817.83	72.18	40.040		
8,400.00	7,242.33	7,351.69	7,360.02	56.78	31.41	92.74	1,125.51	426.38	2,953.95	2,880.77	73.19	40.362		
8,500.00	7,241.80	7,358.09	7,366.41	59.28	31.44	92.91	1,125.55	425.94	3,019.85	2,945.67	74.18	40.709		
8,600.00	7,241.27	7,364.49	7,372.79	61.88	31.47	93.07	1,125.59	425.49	3,087.56	3,012.40	75.16	41.082		
8,700.00	7,240.74	7,370.88	7,379.17	64.54	31.50	93.23	1,125.63	425.05	3,156.97	3,080.86	76.11	41.479		
8,800.00	7,240.21	7,377.28	7,385.55	67.27	31.52	93.39	1,125.67	424.61	3,227.98	3,150.94	77.04	41.902		
8,900.00	7,239.68	7,383.68	7,391.93	70.06	31.55	93.56	1,125.72	424.16	3,300.48	3,222.54	77.93	42.349		
9,000.00	7,239.16	7,390.07	7,398.31	72.89	31.58	93.72	1,125.76	423.72	3,374.37	3,295.57	78.80	42.820		
9,100.00	7,238.63	7,396.47	7,404.69	75.77	31.61	93.88	1,125.80	423.28	3,449.57	3,369.92	79.64	43.313		
9,200.00	7,238.10	7,402.87	7,411.08	78.69	31.64	94.04	1,125.84	422.83	3,525.98	3,445.53	80.45	43.828		
9,300.00	7,237.57	7,409.27	7,417.46	81.64	31.66	94.21	1,125.88	422.39	3,603.54	3,522.32	81.23	44.364		
9,400.00	7,237.04	7,415.66	7,423.84	84.62	31.69	94.37	1,125.92	421.95	3,682.18	3,600.20	81.97	44.918		
9,500.00	7,236.51	7,422.06	7,430.22	87.63	31.72	94.53	1,125.96	421.50	3,761.81	3,679.12	82.69	45.491		
9,600.00	7,235.98	7,428.46	7,436.60	90.66	31.75	94.69	1,126.00	421.06	3,842.39	3,759.00	83.38	46.081		
9,700.00	7,235.45	7,434.85	7,442.98	93.72	31.77	94.85	1,126.05	420.62	3,923.85	3,839.80	84.05	46.686		
9,800.00	7,234.93	7,441.25	7,449.36	96.79	31.80	95.01	1,126.09	420.17	4,006.14	3,921.46	84.68	47.307		
9,900.00	7,234.40	7,447.65	7,455.74	99.88	31.83	95.18	1,126.13	419.73	4,089.21	4,003.91	85.30	47.942		
10,000.00	7,233.87	7,454.04	7,462.13	102.98	31.86	95.34	1,126.17	419.29	4,173.01	4,087.13	85.88	48.589		
10,100.00	7,233.34	7,460.44	7,468.51	106.10	31.89	95.50	1,126.21	418.84	4,257.51	4,171.06	86.45	49.249		
10,200.00	7,232.81	7,466.84	7,476.58	109.23	31.91	95.66	1,126.25	418.40	4,342.71	4,255.86	86.85	50.000		
10,300.00	7,232.28	7,473.24	7,484.65	112.38	31.94	95.82	1,126.29	417.96	4,428.50	4,341.16	87.34	50.704		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,443.00	7,451.11	115.53	31.81	95.06	1,126.10	420.05	4,514.88	4,427.07	87.81	51.418		
10,500.00	7,231.23	7,443.00	7,451.11	118.70	31.81	95.06	1,126.10	420.05	4,601.81	4,513.56	88.25	52.143		
10,600.00	7,230.70	7,443.00	7,451.11	121.87	31.81	95.06	1,126.10	420.05	4,689.26	4,600.58	88.68	52.876		
10,700.00	7,230.17	7,443.00	7,451.11	125.05	31.81	95.06	1,126.10	420.05	4,777.20	4,688.10	89.10	53.618		
10,800.00	7,229.64	7,443.00	7,451.11	128.25	31.81	95.06	1,126.10	420.05	4,865.61	4,776.12	89.49	54.369		
10,900.00	7,229.11	7,443.00	7,451.11	131.44	31.81	95.06	1,126.10	420.05	4,954.46	4,864.58	89.87	55.126		
11,000.00	7,228.58	7,443.00	7,451.11	134.65	31.81	95.06	1,126.10	420.05	5,043.72	4,953.48	90.24	55.891		
11,100.00	7,228.05	7,443.00	7,451.11	137.86	31.81	95.06	1,126.10	420.05	5,133.38	5,042.79	90.60	56.662		
11,200.00	7,227.52	7,443.00	7,451.11	141.08	31.81	95.06	1,126.10	420.05	5,223.42	5,132.49	90.94	57.440		
11,300.00	7,227.00	7,443.00	7,451.11	144.30	31.81	95.06	1,126.10	420.05	5,313.82	5,222.55	91.27	58.224		
11,400.00	7,226.47	7,443.00	7,451.11	147.52	31.81	95.06	1,126.10	420.05	5,404.55	5,312.96	91.58	59.013		
11,500.00	7,225.94	7,443.00	7,451.11	150.76	31.81	95.06	1,126.10	420.05	5,495.60	5,403.71	91.89	59.807		
11,600.00	7,225.41	7,443.00	7,451.11	153.99	31.81	95.06	1,126.10	420.05	5,586.96	5,494.78	92.19	60.606		
11,700.00	7,224.88	7,443.00	7,451.11	157.23	31.81	95.06	1,126.10	420.05	5,678.61	5,586.14	92.47	61.409		
11,800.00	7,224.35	7,443.00	7,451.11	160.48	31.81	95.06	1,126.10	420.05	5,770.54	5,677.79	92.75	62.217		
11,900.00	7,223.82	7,443.00	7,451.11	163.72	31.81	95.06	1,126.10	420.05	5,862.73	5,769.72	93.02	63.029		
12,000.00	7,223.29	7,443.00	7,451.11	166.98	31.81	95.06	1,126.10	420.05	5,955.18	5,861.90	93.28	63.845		
12,100.00	7,222.77	7,443.00	7,451.11	170.23	31.81	95.06	1,126.10	420.05	6,047.86	5,954.33	93.53	64.664		
12,200.00	7,222.24	7,443.00	7,451.11	173.49	31.81	95.06	1,126.10	420.05	6,140.78	6,047.00	93.77	65.486		
12,300.00	7,221.71	7,443.00	7,451.11	176.75	31.81	95.06	1,126.10	420.05	6,233.91	6,139.90	94.01	66.312		
12,400.00	7,221.18	7,443.00	7,451.11	180.01	31.81	95.06	1,126.10	420.05	6,327.25	6,233.01	94.24	67.141		
12,500.00	7,220.65	7,443.00	7,451.11	183.28	31.81	95.06	1,126.10	420.05	6,420.80	6,326.33	94.46	67.972		
12,600.00	7,220.12	7,443.00	7,451.11	186.54	31.81	95.06	1,126.10	420.05	6,514.53	6,419.85	94.68	68.806		
12,700.00	7,219.59	7,443.00	7,451.11	189.81	31.81	95.06	1,126.10	420.05	6,608.45	6,513.56	94.89	69.642		
12,800.00	7,219.06	7,443.00	7,451.11	193.09	31.81	95.06	1,126.10	420.05	6,702.55	6,607.45	95.10	70.481		
12,900.00	7,218.54	7,443.00	7,451.11	196.36	31.81	95.06	1,126.10	420.05	6,796.81	6,701.51	95.30	71.321		
13,000.00	7,218.01	7,443.00	7,451.11	199.64	31.81	95.06	1,126.10	420.05	6,891.23	6,795.74	95.49	72.164		
13,100.00	7,217.48	7,443.00	7,451.11	202.92	31.81	95.06	1,126.10	420.05	6,985.81	6,890.13	95.69	73.008		
13,200.00	7,216.95	7,443.00	7,451.11	206.20	31.81	95.06	1,126.10	420.05	7,080.54	6,984.67	95.87	73.854		
13,300.00	7,216.42	7,443.00	7,451.11	209.48	31.81	95.06	1,126.10	420.05	7,175.42	7,079.36	96.05	74.702		
13,400.00	7,215.89	7,443.00	7,451.11	212.76	31.81	95.06	1,126.10	420.05	7,270.43	7,174.19	96.23	75.551		
13,500.00	7,215.36	7,443.00	7,451.11	216.05	31.81	95.06	1,126.10	420.05	7,365.57	7,269.16	96.41	76.401		
13,600.00	7,214.84	7,443.00	7,451.11	219.33	31.81	95.06	1,126.10	420.05	7,460.84	7,364.26	96.58	77.253		
13,700.00	7,214.31	7,443.00	7,451.11	222.62	31.81	95.06	1,126.10	420.05	7,556.23	7,459.49	96.74	78.106		
13,800.00	7,213.78	7,443.00	7,451.11	225.91	31.81	95.06	1,126.10	420.05	7,651.74	7,554.83	96.91	78.960		
13,900.00	7,213.25	7,443.00	7,451.11	229.20	31.81	95.06	1,126.10	420.05	7,747.36	7,650.29	97.07	79.815		
14,000.00	7,212.72	7,443.00	7,451.11	232.49	31.81	95.06	1,126.10	420.05	7,843.09	7,745.87	97.22	80.670		
14,100.00	7,212.19	7,443.00	7,451.11	235.79	31.81	95.06	1,126.10	420.05	7,938.93	7,841.55	97.38	81.527		
14,200.00	7,211.66	7,443.00	7,451.11	239.08	31.81	95.06	1,126.10	420.05	8,034.87	7,937.34	97.53	82.384		
14,300.00	7,211.13	7,443.00	7,451.11	242.38	31.81	95.06	1,126.10	420.05	8,130.90	8,033.23	97.68	83.242		
14,400.00	7,210.61	7,443.00	7,451.11	245.67	31.81	95.06	1,126.10	420.05	8,227.03	8,129.21	97.82	84.101		
14,500.00	7,210.08	7,443.00	7,451.11	248.97	31.81	95.06	1,126.10	420.05	8,323.26	8,225.29	97.97	84.960		
14,600.00	7,209.55	7,443.00	7,451.11	252.27	31.81	95.06	1,126.10	420.05	8,419.57	8,321.46	98.11	85.819		
14,700.00	7,209.02	7,443.00	7,451.11	255.57	31.81	95.06	1,126.10	420.05	8,515.96	8,417.71	98.25	86.679		
14,800.00	7,208.49	7,443.00	7,451.11	258.87	31.81	95.06	1,126.10	420.05	8,612.44	8,514.05	98.38	87.539		
14,900.00	7,207.96	7,443.00	7,451.11	262.17	31.81	95.06	1,126.10	420.05	8,708.99	8,610.48	98.52	88.400		
15,000.00	7,207.43	7,443.00	7,451.11	265.47	31.81	95.06	1,126.10	420.05	8,805.63	8,706.98	98.65	89.260		
15,081.89	7,207.00	7,443.00	7,451.11	268.17	31.81	95.06	1,126.10	420.05	8,884.81	8,786.06	98.76	89.965		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	20.00	3.28	3.28	82.91	64.85	521.51	525.91					
100.00	100.00	78.57	98.57	3.28	3.28	82.85	65.38	521.55	525.64	519.07	6.57	80.010 CC		
200.00	200.00	180.86	200.84	3.34	3.33	82.68	66.98	521.49	525.78	519.11	6.67	78.855		
230.17	230.17	212.06	232.04	3.36	3.36	-105.43	67.41	521.36	525.74	519.02	6.72	78.240 ES		
300.00	299.98	281.83	301.81	3.44	3.43	-105.69	68.29	521.02	525.95	519.08	6.87	76.541		
400.00	399.84	379.27	399.23	3.59	3.58	-106.32	69.43	520.70	527.23	520.06	7.17	73.569		
500.00	499.45	476.69	496.65	3.80	3.76	-107.27	70.59	520.85	530.10	522.54	7.56	70.153		
600.00	598.70	574.65	594.60	4.06	3.98	-108.54	71.88	521.28	534.54	526.50	8.04	66.505		
700.00	697.49	672.84	692.78	4.38	4.23	-110.14	73.44	521.80	540.57	531.97	8.60	62.827		
800.00	796.13	770.33	790.26	4.74	4.51	-111.84	74.79	522.43	547.48	538.24	9.24	59.281		
900.00	894.78	867.69	887.59	5.15	4.81	-113.52	76.44	523.19	555.08	545.16	9.92	55.974		
1,000.00	993.43	966.38	986.27	5.58	5.12	-115.16	77.92	524.10	563.25	552.60	10.64	52.926		
1,100.00	1,092.07	1,064.97	1,084.85	6.03	5.46	-116.74	79.35	524.92	571.76	560.36	11.40	50.161		
1,200.00	1,190.72	1,164.41	1,184.27	6.50	5.80	-118.30	80.87	525.67	580.65	568.47	12.18	47.665		
1,300.00	1,289.36	1,263.88	1,283.73	6.98	6.16	-119.81	82.26	526.20	589.72	576.73	12.98	45.416		
1,400.00	1,388.01	1,361.81	1,381.65	7.47	6.52	-121.28	83.86	526.56	599.12	585.32	13.80	43.428		
1,500.00	1,486.65	1,462.47	1,482.30	7.97	6.89	-122.72	85.32	527.00	608.90	594.27	14.63	41.621		
1,600.00	1,585.30	1,562.36	1,582.18	8.48	7.27	-124.10	86.51	527.00	618.54	603.07	15.47	39.986		
1,700.00	1,683.94	1,663.54	1,683.35	9.00	7.66	-125.48	87.85	526.76	628.38	612.06	16.32	38.502		
1,800.00	1,782.59	1,762.31	1,782.12	9.52	8.05	-126.76	88.75	526.22	638.10	620.93	17.17	37.170		
1,900.00	1,881.24	1,859.42	1,879.22	10.05	8.43	-127.97	89.54	526.01	648.35	630.34	18.01	36.000		
2,000.00	1,979.88	1,960.13	1,979.93	10.58	8.83	-129.19	90.49	525.74	658.92	640.05	18.87	34.914		
2,100.00	2,078.53	2,062.73	2,082.52	11.11	9.24	-130.38	91.02	525.02	669.18	649.44	19.75	33.889		
2,200.00	2,177.17	2,161.49	2,181.28	11.64	9.63	-131.47	91.03	524.19	679.31	658.71	20.60	32.971		
2,300.00	2,275.82	2,260.68	2,280.47	12.18	10.03	-132.52	91.03	523.52	689.80	668.34	21.46	32.138		
2,400.00	2,374.46	2,361.40	2,381.19	12.72	10.44	-133.53	90.65	522.76	700.25	677.92	22.33	31.354		
2,500.00	2,473.11	2,460.88	2,480.66	13.26	10.84	-134.49	90.12	521.87	710.69	687.49	23.20	30.635		
2,600.00	2,571.76	2,559.96	2,579.73	13.80	11.24	-135.40	89.23	521.20	721.27	697.21	24.06	29.974		
2,700.00	2,670.40	2,658.86	2,678.63	14.35	11.64	-136.24	88.23	520.70	732.07	707.15	24.92	29.379		
2,800.00	2,769.05	2,756.10	2,775.86	14.89	12.04	-137.06	87.22	520.54	743.31	717.53	25.79	28.826		
2,900.00	2,867.69	2,855.45	2,875.21	15.44	12.45	-137.86	86.10	520.13	754.43	727.77	26.65	28.303		
3,000.00	2,966.34	2,952.93	2,972.68	15.99	12.85	-138.65	85.40	519.58	765.84	738.33	27.51	27.837		
3,100.00	3,064.98	3,050.85	3,070.60	16.53	13.25	-139.44	84.88	519.01	777.53	749.16	28.37	27.405		
3,200.00	3,163.63	3,149.58	3,169.33	17.08	13.66	-140.24	84.71	518.25	789.44	760.21	29.23	27.005		
3,300.00	3,262.27	3,248.65	3,268.39	17.63	14.08	-141.02	84.53	517.39	801.43	771.33	30.10	26.628		
3,400.00	3,360.92	3,345.35	3,365.09	18.18	14.48	-141.75	84.34	516.64	813.63	782.68	30.95	26.290		
3,500.00	3,459.57	3,442.45	3,462.18	18.74	14.88	-142.44	84.09	516.44	826.30	794.50	31.80	25.983		
3,600.00	3,558.21	3,542.62	3,562.36	19.29	15.30	-143.12	83.72	516.23	839.02	806.35	32.67	25.678		
3,700.00	3,656.86	3,642.84	3,662.57	19.84	15.72	-143.79	83.26	515.86	851.68	818.14	33.55	25.387		
3,800.00	3,755.50	3,743.10	3,762.83	20.39	16.14	-144.43	82.69	515.35	864.28	829.86	34.42	25.109		
3,900.00	3,854.15	3,843.39	3,863.11	20.95	16.56	-145.07	82.03	514.69	876.80	841.51	35.29	24.843		
4,000.00	3,952.79	3,943.72	3,963.44	21.50	16.98	-145.68	81.26	513.88	889.25	853.09	36.17	24.588		
4,100.00	4,051.44	4,044.08	4,063.79	22.05	17.40	-146.29	80.39	512.92	901.63	864.59	37.04	24.343		
4,200.00	4,150.08	4,144.48	4,164.18	22.61	17.83	-146.87	79.42	511.81	913.93	876.01	37.91	24.107		
4,300.00	4,248.73	4,244.91	4,264.60	23.16	18.25	-147.45	78.35	510.55	926.14	887.36	38.78	23.879		
4,400.00	4,347.38	4,339.46	4,359.14	23.72	18.65	-147.97	77.40	509.65	938.68	899.06	39.62	23.691		
4,500.00	4,446.02	4,434.54	4,454.21	24.27	19.05	-148.47	76.60	509.04	951.63	911.17	40.46	23.518		
4,600.00	4,544.67	4,531.18	4,550.85	24.83	19.45	-148.99	76.29	508.35	965.00	923.69	41.31	23.359		
4,700.00	4,643.31	4,629.62	4,649.29	25.39	19.87	-149.51	76.09	507.55	978.49	936.32	42.17	23.203		
4,800.00	4,741.96	4,726.57	4,746.23	25.94	20.28	-150.00	75.94	506.97	992.22	949.20	43.02	23.063		
4,900.00	4,840.60	4,824.38	4,844.05	26.50	20.69	-150.47	75.65	506.64	1,006.07	962.19	43.88	22.929		
5,000.00	4,939.25	4,919.13	4,938.79	27.05	21.09	-150.91	75.66	506.47	1,020.32	975.60	44.71	22.819		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,037.90	5,018.69	5,038.35	27.61	21.51	-151.38	75.92	506.12	1,034.73	989.15	45.58	22.701		
5,200.00	5,136.54	5,118.41	5,138.07	28.17	21.93	-151.84	76.11	505.67	1,049.09	1,002.64	46.45	22.586		
5,300.00	5,235.19	5,216.84	5,236.50	28.72	22.35	-152.28	76.32	505.21	1,063.53	1,016.22	47.31	22.481		
5,400.00	5,333.83	5,319.65	5,339.30	29.28	22.79	-152.74	76.50	504.38	1,077.80	1,029.60	48.20	22.362		
5,500.00	5,432.48	5,420.37	5,440.02	29.84	23.21	-153.19	76.45	503.31	1,091.80	1,042.73	49.07	22.249		
5,600.00	5,531.12	5,516.41	5,536.05	30.40	23.62	-153.59	76.41	502.43	1,105.96	1,056.05	49.91	22.157		
5,700.00	5,629.77	5,615.03	5,634.67	30.95	24.04	-153.99	76.34	501.81	1,120.31	1,069.53	50.78	22.064		
5,800.00	5,728.41	5,717.54	5,737.18	31.51	24.47	-154.38	75.94	501.24	1,134.48	1,082.82	51.67	21.958		
5,900.00	5,827.06	5,815.50	5,835.14	32.07	24.89	-154.74	75.39	500.68	1,148.56	1,096.03	52.53	21.867		
6,000.00	5,925.71	5,908.21	5,927.85	32.63	25.28	-155.07	75.17	500.31	1,163.03	1,109.69	53.35	21.801		
6,100.00	6,024.35	6,008.81	6,028.45	33.19	25.71	-155.43	75.18	499.81	1,177.71	1,123.49	54.22	21.720		
6,200.00	6,123.00	6,111.69	6,131.33	33.74	26.14	-155.80	75.03	499.05	1,192.17	1,137.05	55.12	21.630		
6,300.00	6,221.64	6,207.81	6,227.44	34.30	26.55	-156.13	74.82	498.37	1,206.63	1,150.67	55.96	21.562		
6,400.00	6,320.29	6,302.54	6,322.17	34.86	26.96	-156.45	74.73	497.96	1,221.38	1,164.58	56.80	21.505		
6,500.00	6,418.93	6,401.05	6,420.68	35.42	27.37	-156.76	74.72	497.69	1,236.31	1,178.66	57.66	21.442		
6,600.00	6,517.58	6,499.56	6,519.19	35.98	27.79	-157.06	74.71	497.45	1,251.30	1,192.78	58.52	21.382		
6,700.00	6,616.23	6,598.07	6,617.69	36.54	28.21	-157.36	74.70	497.23	1,266.33	1,206.95	59.39	21.324		
6,800.00	6,714.51	6,696.22	6,715.85	37.10	28.63	-157.67	74.70	497.02	1,281.41	1,223.87	60.24	21.315 SF		
6,900.00	6,810.42	6,792.03	6,811.66	37.66	29.04	-157.98	74.69	496.85	1,309.41	1,248.34	61.07	21.442		
7,000.00	6,901.58	6,883.12	6,902.74	38.21	29.43	-158.34	74.68	496.70	1,342.07	1,280.23	61.85	21.700		
7,100.00	6,985.76	6,967.23	6,986.86	38.76	29.78	-158.69	74.68	496.58	1,381.95	1,319.38	62.56	22.088		
7,200.00	7,060.88	7,042.30	7,061.93	39.32	30.10	-159.03	74.68	496.48	1,428.90	1,365.68	63.22	22.602		
7,300.00	7,125.09	7,106.47	7,126.10	39.90	30.38	-159.38	74.67	496.41	1,482.66	1,418.84	63.81	23.234		
7,400.00	7,176.81	7,158.17	7,177.79	40.55	30.60	-159.74	74.67	496.36	1,542.72	1,478.37	64.35	23.975		
7,500.00	7,214.77	7,196.12	7,215.75	41.30	30.76	-160.12	74.67	496.32	1,608.23	1,543.41	64.82	24.810		
7,600.00	7,238.02	7,219.40	7,239.03	42.22	30.86	-160.52	74.67	496.30	1,678.01	1,612.78	65.23	25.725		
7,700.00	7,246.01	7,227.44	7,247.07	43.32	30.89	-160.94	74.67	496.30	1,750.52	1,684.96	65.56	26.701		
7,800.00	7,245.50	7,227.02	7,246.64	44.65	30.89	-161.38	74.67	496.30	1,825.00	1,759.14	65.86	27.708		
7,900.00	7,244.97	7,226.57	7,246.20	46.21	30.89	-161.84	74.67	496.30	1,901.82	1,835.63	66.19	28.734		
8,000.00	7,244.44	7,226.12	7,245.75	47.99	30.89	-162.32	74.67	496.30	1,980.71	1,914.19	66.52	29.776		
8,100.00	7,243.91	7,225.68	7,245.30	49.96	30.89	-162.82	74.67	496.30	2,061.44	1,994.58	66.86	30.834		
8,200.00	7,243.39	7,225.23	7,244.86	52.10	30.88	-163.34	74.67	496.30	2,143.79	2,076.60	67.19	31.908		
8,300.00	7,242.86	7,224.78	7,244.41	54.38	30.88	-163.88	74.67	496.30	2,227.58	2,160.07	67.51	32.996		
8,400.00	7,242.33	7,224.34	7,243.97	56.78	30.88	-164.44	74.67	496.30	2,312.67	2,244.84	67.83	34.096		
8,500.00	7,241.80	7,223.89	7,243.52	59.28	30.88	-165.02	74.67	496.30	2,398.90	2,330.77	68.13	35.209		
8,600.00	7,241.27	7,223.45	7,243.08	61.88	30.88	-165.62	74.67	496.30	2,486.17	2,417.74	68.43	36.333		
8,700.00	7,240.74	7,223.00	7,242.63	64.54	30.87	-166.24	74.67	496.30	2,574.36	2,505.65	68.71	37.468		
8,800.00	7,240.21	7,222.56	7,242.19	67.27	30.87	-166.88	74.67	496.30	2,663.39	2,594.41	68.98	38.611		
8,900.00	7,239.68	7,222.11	7,241.74	70.06	30.87	-167.54	74.67	496.30	2,753.17	2,683.93	69.24	39.763		
9,000.00	7,239.16	7,221.67	7,241.30	72.89	30.87	-168.22	74.67	496.30	2,843.63	2,774.14	69.49	40.924		
9,100.00	7,238.63	7,221.22	7,240.85	75.77	30.87	-168.92	74.67	496.30	2,934.71	2,864.98	69.72	42.091		
9,200.00	7,238.10	7,220.78	7,240.41	78.69	30.86	-169.64	74.67	496.30	3,026.35	2,956.40	69.95	43.264		
9,300.00	7,237.57	7,220.33	7,239.96	81.64	30.86	-170.38	74.67	496.30	3,118.51	3,048.34	70.17	44.444		
9,400.00	7,237.04	7,219.89	7,239.52	84.62	30.86	-171.14	74.67	496.30	3,211.14	3,140.76	70.38	45.629		
9,500.00	7,236.51	7,219.45	7,239.08	87.63	30.86	-171.92	74.67	496.30	3,304.19	3,233.62	70.57	46.818		
9,600.00	7,235.98	7,219.00	7,238.63	90.66	30.86	-172.72	74.67	496.30	3,397.64	3,326.88	70.77	48.012		
9,700.00	7,235.45	7,218.56	7,238.19	93.72	30.86	-173.54	74.67	496.30	3,491.46	3,420.51	70.95	49.210		
9,800.00	7,234.93	7,218.12	7,237.75	96.79	30.85	-174.38	74.67	496.30	3,585.61	3,514.48	71.13	50.412		
9,900.00	7,234.40	7,217.67	7,237.30	99.88	30.85	-175.24	74.67	496.30	3,680.06	3,608.77	71.30	51.616		
10,000.00	7,233.87	7,217.23	7,236.86	102.98	30.85	-176.12	74.67	496.30	3,774.81	3,703.35	71.46	52.824		
10,100.00	7,233.34	7,216.79	7,236.42	106.10	30.85	-177.02	74.67	496.30	3,869.81	3,798.19	71.62	54.034		
10,200.00	7,232.81	7,216.35	7,235.97	109.23	30.85	-177.94	74.67	496.30	3,965.07	3,893.29	71.77	55.246		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.28	7,215.90	7,235.53	112.38	30.84	89.17	74.67	496.30	4,060.55	3,988.63	71.92	56.460		
10,400.00	7,231.75	7,215.46	7,235.09	115.53	30.84	89.15	74.67	496.31	4,156.24	4,084.18	72.06	57.676		
10,500.00	7,231.23	7,215.02	7,234.65	118.70	30.84	89.13	74.67	496.31	4,252.13	4,179.93	72.20	58.893		
10,600.00	7,230.70	7,214.58	7,234.21	121.87	30.84	89.11	74.67	496.31	4,348.21	4,275.87	72.34	60.112		
10,700.00	7,230.17	7,214.14	7,233.77	125.05	30.84	89.09	74.67	496.31	4,444.46	4,371.99	72.47	61.331		
10,800.00	7,229.64	7,213.70	7,233.32	128.25	30.83	89.06	74.67	496.31	4,540.87	4,468.27	72.59	62.552		
10,900.00	7,229.11	7,213.26	7,232.88	131.44	30.83	89.04	74.67	496.31	4,637.43	4,564.71	72.72	63.773		
11,000.00	7,228.58	7,212.81	7,232.44	134.65	30.83	89.02	74.67	496.31	4,734.14	4,661.30	72.84	64.994		
11,100.00	7,228.05	7,212.37	7,232.00	137.86	30.83	89.00	74.67	496.31	4,830.98	4,758.02	72.96	66.216		
11,200.00	7,227.52	7,211.93	7,231.56	141.08	30.83	88.98	74.67	496.31	4,927.95	4,854.87	73.07	67.438		
11,300.00	7,227.00	7,211.49	7,231.12	144.30	30.83	88.96	74.67	496.31	5,025.03	4,951.84	73.19	68.660		
11,400.00	7,226.47	7,211.05	7,230.68	147.52	30.82	88.94	74.67	496.31	5,122.23	5,048.93	73.30	69.882		
11,500.00	7,225.94	7,210.61	7,230.24	150.76	30.82	88.92	74.67	496.31	5,219.53	5,146.12	73.41	71.104		
11,600.00	7,225.41	7,210.17	7,229.80	153.99	30.82	88.89	74.67	496.31	5,316.93	5,243.42	73.51	72.326		
11,700.00	7,224.88	7,209.73	7,229.36	157.23	30.82	88.87	74.67	496.31	5,414.43	5,340.81	73.62	73.547		
11,800.00	7,224.35	7,209.29	7,228.92	160.48	30.82	88.85	74.67	496.31	5,512.02	5,438.30	73.72	74.767		
11,900.00	7,223.82	7,208.85	7,228.48	163.72	30.81	88.83	74.67	496.31	5,609.69	5,535.87	73.82	75.987		
12,000.00	7,223.29	7,208.42	7,228.04	166.98	30.81	88.81	74.67	496.31	5,707.45	5,633.52	73.92	77.206		
12,100.00	7,222.77	7,207.98	7,227.60	170.23	30.81	88.79	74.67	496.31	5,805.27	5,731.25	74.02	78.424		
12,200.00	7,222.24	7,207.54	7,227.17	173.49	30.81	88.77	74.67	496.31	5,903.18	5,829.06	74.12	79.642		
12,300.00	7,221.71	7,207.10	7,226.73	176.75	30.81	88.75	74.67	496.31	6,001.15	5,926.93	74.22	80.858		
12,400.00	7,221.18	7,206.66	7,226.29	180.01	30.80	88.73	74.67	496.31	6,099.19	6,024.87	74.31	82.073		
12,500.00	7,220.65	7,206.22	7,225.85	183.28	30.80	88.71	74.67	496.31	6,197.29	6,122.88	74.41	83.287		
12,600.00	7,220.12	7,205.79	7,225.41	186.54	30.80	88.68	74.67	496.31	6,295.45	6,220.94	74.50	84.500		
12,700.00	7,219.59	7,205.35	7,224.98	189.81	30.80	88.66	74.67	496.31	6,393.66	6,319.07	74.60	85.712		
12,800.00	7,219.06	7,204.91	7,224.54	193.09	30.80	88.64	74.67	496.31	6,491.93	6,417.25	74.69	86.922		
12,900.00	7,218.54	7,204.47	7,224.10	196.36	30.80	88.62	74.67	496.31	6,590.26	6,515.48	74.78	88.130		
13,000.00	7,218.01	7,204.04	7,223.66	199.64	30.79	88.60	74.67	496.31	6,688.63	6,613.76	74.87	89.338		
13,100.00	7,217.48	7,203.60	7,223.23	202.92	30.79	88.58	74.67	496.32	6,787.05	6,712.09	74.96	90.543		
13,200.00	7,216.95	7,203.16	7,222.79	206.20	30.79	88.56	74.67	496.32	6,885.52	6,810.47	75.05	91.747		
13,300.00	7,216.42	7,202.73	7,222.35	209.48	30.79	88.54	74.67	496.32	6,984.02	6,908.89	75.14	92.949		
13,400.00	7,215.89	7,202.29	7,221.92	212.76	30.79	88.52	74.67	496.32	7,082.58	7,007.35	75.23	94.150		
13,500.00	7,215.36	7,201.85	7,221.48	216.05	30.78	88.50	74.67	496.32	7,181.17	7,105.85	75.31	95.348		
13,600.00	7,214.84	7,201.42	7,221.04	219.33	30.78	88.47	74.67	496.32	7,279.80	7,204.39	75.40	96.545		
13,700.00	7,214.31	7,200.98	7,220.61	222.62	30.78	88.45	74.67	496.32	7,378.46	7,302.97	75.49	97.740		
13,800.00	7,213.78	7,200.55	7,220.17	225.91	30.78	88.43	74.67	496.32	7,477.16	7,401.59	75.58	98.933		
13,900.00	7,213.25	7,200.11	7,219.74	229.20	30.78	88.41	74.67	496.32	7,575.90	7,500.24	75.66	100.124		
14,000.00	7,212.72	7,199.67	7,219.30	232.49	30.77	88.39	74.67	496.32	7,674.67	7,598.92	75.75	101.313		
14,100.00	7,212.19	7,199.24	7,218.87	235.79	30.77	88.37	74.67	496.32	7,773.47	7,697.63	75.84	102.500		
14,200.00	7,211.66	7,198.80	7,218.43	239.08	30.77	88.35	74.67	496.32	7,872.30	7,796.37	75.93	103.685		
14,300.00	7,211.13	7,198.37	7,218.00	242.38	30.77	88.33	74.67	496.32	7,971.16	7,895.15	76.01	104.868		
14,400.00	7,210.61	7,197.93	7,217.56	245.67	30.77	88.31	74.67	496.32	8,070.05	7,993.95	76.10	106.048		
14,500.00	7,210.08	7,197.50	7,217.13	248.97	30.77	88.29	74.67	496.32	8,168.96	8,092.78	76.18	107.226		
14,600.00	7,209.55	7,197.07	7,216.69	252.27	30.76	88.27	74.67	496.32	8,267.90	8,191.63	76.27	108.402		
14,700.00	7,209.02	7,196.63	7,216.26	255.57	30.76	88.24	74.67	496.32	8,366.87	8,290.51	76.36	109.576		
14,800.00	7,208.49	7,196.20	7,215.83	258.87	30.76	88.22	74.67	496.32	8,465.86	8,389.41	76.44	110.747		
14,900.00	7,207.96	7,195.76	7,215.39	262.17	30.76	88.20	74.67	496.32	8,564.87	8,488.34	76.53	111.916		
15,000.00	7,207.43	7,195.33	7,214.96	265.47	30.76	88.18	74.67	496.32	8,663.91	8,587.29	76.62	113.082		
15,081.89	7,207.00	7,194.98	7,214.60	268.17	30.75	88.17	74.67	496.32	8,745.02	8,668.34	76.69	114.036		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	0.45	319.86	2.50	319.87					
100.00	100.00	102.00	100.00	3.28	3.29	0.45	319.86	2.50	319.87	313.30	6.57	48.687		
200.00	200.00	202.00	200.00	3.34	3.34	0.45	319.86	2.50	319.87	313.19	6.68	47.915 CC, ES		
300.00	299.98	291.71	289.69	3.44	3.43	172.41	321.32	2.36	323.22	316.33	6.88	46.946		
400.00	399.84	381.04	378.92	3.59	3.57	172.41	325.55	1.93	333.13	325.92	7.20	46.257		
500.00	499.45	469.24	466.85	3.80	3.75	172.41	332.44	1.24	349.52	341.91	7.61	45.935		
600.00	598.70	555.78	552.87	4.06	3.95	172.41	341.81	0.30	372.27	364.19	8.09	46.044		
700.00	697.49	640.21	636.48	4.38	4.18	172.42	353.44	-0.87	401.10	392.49	8.61	46.561		
800.00	796.13	722.84	717.94	4.74	4.42	172.45	367.20	-2.25	433.55	424.40	9.16	47.348		
900.00	894.78	803.81	797.35	5.15	4.68	172.45	382.94	-3.83	468.67	458.95	9.72	48.210		
1,000.00	993.43	883.03	874.58	5.58	4.95	172.41	400.49	-5.59	506.38	496.08	10.30	49.169		
1,100.00	1,092.07	960.46	949.56	6.03	5.23	172.36	419.69	-7.52	546.58	535.69	10.89	50.197		
1,200.00	1,190.72	1,036.03	1,022.21	6.50	5.52	172.29	440.38	-9.60	589.21	577.73	11.48	51.329		
1,300.00	1,289.36	1,123.69	1,106.09	6.98	5.88	172.20	465.75	-12.14	633.31	621.18	12.13	52.209		
1,400.00	1,388.01	1,213.43	1,191.94	7.47	6.26	172.12	491.74	-14.75	677.43	664.61	12.82	52.858		
1,500.00	1,486.65	1,303.17	1,277.79	7.97	6.66	172.05	517.73	-17.36	721.55	708.03	13.52	53.355		
1,600.00	1,585.30	1,407.10	1,363.64	8.48	7.14	171.98	543.72	-19.97	765.67	751.36	14.31	53.504		
1,700.00	1,683.94	1,482.64	1,449.49	9.00	7.49	171.93	569.71	-22.58	809.80	794.80	14.99	54.015		
1,800.00	1,782.59	1,572.38	1,535.34	9.52	7.92	171.88	595.70	-25.19	853.92	838.17	15.75	54.224		
1,900.00	1,881.24	1,662.11	1,621.19	10.05	8.35	171.83	621.69	-27.80	898.04	881.53	16.52	54.375		
2,000.00	1,979.88	1,751.85	1,707.04	10.58	8.79	171.79	647.68	-30.41	942.17	924.87	17.29	54.481		
2,100.00	2,078.53	1,841.59	1,792.89	11.11	9.23	171.75	673.67	-33.02	986.29	968.21	18.08	54.551		
2,200.00	2,177.17	1,931.32	1,878.74	11.64	9.67	171.72	699.66	-35.63	1,030.42	1,011.54	18.87	54.592		
2,300.00	2,275.82	2,021.06	1,964.59	12.18	10.12	171.69	725.66	-38.24	1,074.54	1,054.87	19.68	54.611		
2,400.00	2,374.46	2,110.80	2,050.44	12.72	10.57	171.66	751.65	-40.85	1,118.67	1,098.19	20.48	54.613		
2,500.00	2,473.11	2,200.53	2,136.29	13.26	11.03	171.63	777.64	-43.46	1,162.80	1,141.50	21.30	54.601		
2,600.00	2,571.76	2,309.73	2,222.14	13.80	11.59	171.61	803.63	-46.07	1,206.92	1,184.72	22.21	54.350		
2,700.00	2,670.40	2,380.01	2,308.00	14.35	11.95	171.59	829.62	-48.67	1,251.05	1,228.11	22.94	54.546		
2,800.00	2,769.05	2,469.74	2,393.85	14.89	12.41	171.57	855.61	-51.28	1,295.18	1,271.41	23.76	54.508		
2,900.00	2,867.69	2,559.48	2,479.70	15.44	12.87	171.55	881.60	-53.89	1,339.30	1,314.71	24.59	54.465		
3,000.00	2,966.34	2,649.22	2,565.55	15.99	13.33	171.53	907.59	-56.50	1,383.43	1,358.01	25.42	54.419		
3,100.00	3,064.98	2,738.95	2,651.40	16.53	13.80	171.51	933.58	-59.11	1,427.56	1,401.30	26.26	54.369		
3,200.00	3,163.63	2,828.69	2,737.25	17.08	14.26	171.49	959.57	-61.72	1,471.68	1,444.59	27.09	54.317		
3,300.00	3,262.27	2,918.43	2,823.10	17.63	14.73	171.48	985.56	-64.33	1,515.81	1,487.88	27.93	54.264		
3,400.00	3,360.92	3,008.16	2,908.95	18.18	15.20	171.46	1,011.55	-66.94	1,559.94	1,531.16	28.78	54.210		
3,500.00	3,459.57	3,097.90	2,994.80	18.74	15.67	171.45	1,037.54	-69.55	1,604.07	1,574.45	29.62	54.156		
3,600.00	3,558.21	3,187.64	3,080.65	19.29	16.14	171.44	1,063.53	-72.16	1,648.19	1,617.73	30.46	54.101		
3,700.00	3,656.86	3,277.37	3,166.50	19.84	16.61	171.42	1,089.52	-74.77	1,692.32	1,661.01	31.31	54.047		
3,800.00	3,755.50	3,367.11	3,252.35	20.39	17.08	171.41	1,115.51	-77.38	1,736.45	1,704.29	32.16	53.993		
3,900.00	3,854.15	3,456.85	3,338.20	20.95	17.56	171.40	1,141.51	-79.99	1,780.58	1,747.56	33.01	53.939		
4,000.00	3,952.79	3,546.58	3,424.05	21.50	18.03	171.39	1,167.50	-82.60	1,824.70	1,790.84	33.86	53.886		
4,100.00	4,051.44	3,636.32	3,509.91	22.05	18.50	171.38	1,193.49	-85.21	1,868.83	1,834.12	34.72	53.833		
4,200.00	4,150.08	3,726.06	3,595.76	22.61	18.97	171.37	1,219.48	-87.82	1,912.96	1,877.39	35.57	53.782		
4,300.00	4,248.73	3,815.79	3,681.61	23.16	19.45	171.36	1,245.47	-90.42	1,957.09	1,920.66	36.42	53.731		
4,400.00	4,347.38	3,905.53	3,767.46	23.72	19.92	171.35	1,271.46	-93.03	2,001.21	1,963.93	37.28	53.681		
4,500.00	4,446.02	4,004.74	3,853.31	24.27	20.45	171.35	1,297.45	-95.64	2,045.34	2,007.16	38.18	53.566		
4,600.00	4,544.67	4,085.00	3,939.16	24.83	20.87	171.34	1,323.44	-98.25	2,089.47	2,050.48	38.99	53.584		
4,700.00	4,643.31	4,174.74	4,025.01	25.39	21.35	171.33	1,349.43	-100.86	2,133.60	2,093.75	39.85	53.537		
4,800.00	4,741.96	4,264.47	4,110.86	25.94	21.83	171.32	1,375.42	-103.47	2,177.73	2,137.01	40.71	53.491		
4,900.00	4,840.60	4,354.21	4,196.71	26.50	22.30	171.32	1,401.41	-106.08	2,221.85	2,180.28	41.57	53.445		
5,000.00	4,939.25	4,443.95	4,282.56	27.05	22.78	171.31	1,427.40	-108.69	2,265.98	2,223.55	42.43	53.401		
5,100.00	5,037.90	4,533.68	4,368.41	27.61	23.26	171.30	1,453.39	-111.30	2,310.11	2,266.82	43.29	53.358		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,136.54	4,623.42	4,454.26	28.17	23.73	171.30	1,479.38	-113.91	2,354.24	2,310.08	44.16	53.315		
5,300.00	5,235.19	4,713.16	4,540.11	28.72	24.21	171.29	1,505.37	-116.52	2,398.37	2,353.35	45.02	53.273		
5,400.00	5,333.83	4,802.89	4,625.96	29.28	24.69	171.28	1,531.36	-119.13	2,442.49	2,396.61	45.88	53.233		
5,500.00	5,432.48	4,892.63	4,711.81	29.84	25.17	171.28	1,557.36	-121.74	2,486.62	2,439.88	46.75	53.193		
5,600.00	5,531.12	4,982.37	4,797.67	30.40	25.64	171.27	1,583.35	-124.35	2,530.75	2,483.14	47.61	53.154		
5,700.00	5,629.77	5,072.10	4,883.52	30.95	26.12	171.27	1,609.34	-126.96	2,574.88	2,526.40	48.48	53.115		
5,800.00	5,728.41	5,161.84	4,969.37	31.51	26.60	171.26	1,635.33	-129.56	2,619.01	2,569.66	49.34	53.078		
5,900.00	5,827.06	5,251.58	5,055.22	32.07	27.08	171.26	1,661.32	-132.17	2,663.14	2,612.93	50.21	53.041		
6,000.00	5,925.71	5,341.31	5,141.07	32.63	27.56	171.25	1,687.31	-134.78	2,707.26	2,656.19	51.08	53.005		
6,100.00	6,024.35	5,431.00	5,230.69	33.19	31.08	171.45	1,825.00	-148.61	2,745.10	2,688.72	56.39	48.682		
6,200.00	6,123.00	5,530.74	5,330.39	33.74	31.93	171.51	1,825.10	-148.62	2,761.37	2,703.65	57.73	47.834		
6,300.00	6,221.64	5,630.48	5,430.14	34.30	32.28	171.56	1,825.10	-148.62	2,777.60	2,719.04	58.56	47.433		
6,400.00	6,320.29	5,730.23	5,530.29	34.86	32.63	171.61	1,825.10	-148.62	2,793.83	2,734.44	59.39	47.041		
6,500.00	6,418.93	5,830.00	5,630.00	35.42	32.99	171.65	1,825.10	-148.62	2,810.07	2,749.84	60.22	46.660		
6,600.00	6,517.58	5,929.77	5,729.77	35.98	33.35	171.70	1,825.10	-148.62	2,826.30	2,765.24	61.06	46.288		
6,700.00	6,616.23	6,029.52	5,829.52	36.54	33.71	171.75	1,825.10	-148.62	2,842.54	2,780.64	61.90	45.924		
6,800.00	6,714.87	6,129.26	5,929.26	37.10	34.07	171.76	1,825.04	-155.72	2,858.70	2,795.96	62.74	45.566		
6,900.00	6,813.52	6,229.01	6,029.01	37.66	34.43	171.76	1,824.86	-178.83	2,874.45	2,810.85	63.60	45.195		
7,000.00	6,912.17	6,328.76	6,128.76	38.21	34.77	171.76	1,824.56	-217.50	2,889.41	2,824.92	64.49	44.804		
7,100.00	6,985.76	6,428.51	6,228.51	38.76	35.09	171.76	1,824.14	-270.84	2,903.20	2,837.76	65.44	44.364		
7,200.00	7,060.88	6,528.26	6,328.26	39.32	35.38	171.76	1,823.62	-337.58	2,915.48	2,848.97	66.52	43.830		
7,300.00	7,125.09	6,628.01	6,428.01	39.90	35.65	171.76	1,823.00	-416.04	2,925.96	2,858.15	67.81	43.148		
7,400.00	7,176.81	6,727.76	6,527.76	40.55	35.95	171.76	1,822.32	-504.16	2,934.37	2,864.94	69.42	42.268		
7,500.00	7,214.77	6,827.51	6,565.71	41.30	36.44	171.76	1,821.57	-599.57	2,940.50	2,869.08	71.42	41.171		
7,600.00	7,238.02	6,927.26	6,603.76	42.22	37.24	171.76	1,820.79	-699.64	2,944.20	2,870.38	73.82	39.881		
7,700.00	7,246.01	6,985.01	6,621.01	43.32	38.31	171.76	1,819.99	-801.32	2,945.40	2,868.82	76.58	38.462		
7,800.00	7,245.50	6,985.12	6,621.56	44.65	39.56	171.76	1,819.21	-901.31	2,945.20	2,865.54	79.66	36.970		
7,900.00	7,244.97	6,985.12	6,621.58	46.21	40.97	171.76	1,818.43	-1,001.31	2,945.01	2,861.92	83.08	35.447		
8,000.00	7,244.44	6,985.12	6,621.58	47.99	42.53	171.76	1,817.65	-1,101.31	2,944.81	2,858.00	86.81	33.924		
8,100.00	7,243.91	6,985.12	6,621.58	49.96	44.23	171.76	1,816.86	-1,201.30	2,944.61	2,853.81	90.80	32.429		
8,200.00	7,243.39	6,985.12	6,621.58	52.10	46.04	171.76	1,816.08	-1,301.30	2,944.41	2,849.39	95.03	30.985		
8,300.00	7,242.86	6,985.12	6,621.58	54.38	47.95	171.76	1,815.30	-1,401.29	2,944.22	2,844.76	99.46	29.602		
8,400.00	7,242.33	6,985.12	6,621.58	56.78	49.96	171.76	1,814.52	-1,501.29	2,944.02	2,839.95	104.07	28.288		
8,500.00	7,241.80	6,985.12	6,621.58	59.28	52.04	171.76	1,813.74	-1,601.28	2,943.82	2,834.98	108.84	27.047		
8,600.00	7,241.27	6,985.12	6,621.58	61.88	54.20	171.76	1,812.95	-1,701.28	2,943.63	2,829.88	113.74	25.879		
8,700.00	7,240.74	6,985.12	6,621.58	64.54	56.42	171.76	1,812.17	-1,801.28	2,943.43	2,824.66	118.77	24.783		
8,800.00	7,240.21	6,985.12	6,621.58	67.27	58.69	171.76	1,811.39	-1,901.27	2,943.23	2,819.33	123.90	23.755		
8,900.00	7,239.68	6,985.12	6,621.58	70.06	61.02	171.76	1,810.61	-2,001.27	2,943.04	2,813.92	129.12	22.793		
9,000.00	7,239.16	6,985.12	6,621.58	72.89	63.38	171.76	1,809.83	-2,101.26	2,942.84	2,808.41	134.42	21.892		
9,100.00	7,238.63	6,985.12	6,621.58	75.77	65.79	171.76	1,809.04	-2,201.26	2,942.64	2,802.84	139.80	21.049		
9,200.00	7,238.10	6,985.12	6,621.58	78.69	68.23	171.76	1,808.26	-2,301.26	2,942.45	2,797.20	145.24	20.259		
9,300.00	7,237.57	6,985.12	6,621.58	81.64	70.70	171.76	1,807.48	-2,401.25	2,942.25	2,791.51	150.74	19.518		
9,400.00	7,237.04	6,985.12	6,621.58	84.62	73.20	171.76	1,806.70	-2,501.25	2,942.05	2,785.76	156.29	18.824		
9,500.00	7,236.51	6,985.12	6,621.58	87.63	75.73	171.76	1,805.92	-2,601.24	2,941.85	2,779.96	161.89	18.172		
9,600.00	7,235.98	6,985.12	6,621.58	90.66	78.28	171.76	1,805.13	-2,701.24	2,941.66	2,774.13	167.53	17.559		
9,700.00	7,235.45	6,985.12	6,621.58	93.72	80.85	171.76	1,804.35	-2,801.24	2,941.46	2,768.26	173.21	16.982		
9,800.00	7,234.93	6,985.12	6,621.58	96.79	83.44	171.76	1,803.57	-2,901.23	2,941.26	2,762.35	178.92	16.439		
9,900.00	7,234.40	6,985.12	6,621.58	99.88	86.04	171.76	1,802.79	-3,001.23	2,941.07	2,756.41	184.66	15.927		
10,000.00	7,233.87	6,985.12	6,621.58	102.98	88.66	171.76	1,802.01	-3,101.22	2,940.87	2,750.44	190.43	15.444		
10,100.00	7,233.34	6,985.12	6,621.58	106.10	91.30	171.76	1,801.22	-3,201.22	2,940.67	2,744.45	196.22	14.986		
10,200.00	7,232.81	6,985.12	6,621.58	109.23	93.95	171.76	1,800.44	-3,301.22	2,940.48	2,738.44	202.04	14.554		
10,300.00	7,232.28	6,985.12	6,621.58	112.38	96.61	171.76	1,799.66	-3,401.21	2,940.28	2,732.40	207.88	14.144		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,553.11	7,248.70	115.53	99.28	90.33	1,798.88	-3,501.21	2,940.08	2,726.34	213.74	13.755		
10,500.00	7,231.23	10,653.11	7,248.32	118.70	101.96	90.33	1,798.10	-3,601.20	2,939.89	2,720.27	219.62	13.386		
10,600.00	7,230.70	10,753.11	7,247.94	121.87	104.65	90.34	1,797.31	-3,701.20	2,939.69	2,714.17	225.51	13.035		
10,700.00	7,230.17	10,853.11	7,247.56	125.05	107.35	90.34	1,796.53	-3,801.19	2,939.49	2,708.07	231.43	12.702		
10,800.00	7,229.64	10,953.11	7,247.18	128.25	110.06	90.34	1,795.75	-3,901.19	2,939.30	2,701.95	237.35	12.384		
10,900.00	7,229.11	11,053.11	7,246.80	131.44	112.77	90.35	1,794.97	-4,001.19	2,939.10	2,695.81	243.29	12.081		
11,000.00	7,228.58	11,153.11	7,246.42	134.65	115.49	90.35	1,794.18	-4,101.18	2,938.90	2,689.66	249.24	11.792		
11,100.00	7,228.05	11,253.11	7,246.04	137.86	118.22	90.35	1,793.40	-4,201.18	2,938.71	2,683.51	255.20	11.515		
11,200.00	7,227.52	11,353.11	7,245.66	141.08	120.95	90.35	1,792.62	-4,301.17	2,938.51	2,677.34	261.17	11.251		
11,300.00	7,227.00	11,453.11	7,245.28	144.30	123.69	90.36	1,791.84	-4,401.17	2,938.31	2,671.16	267.15	10.999		
11,400.00	7,226.47	11,553.11	7,244.90	147.52	126.44	90.36	1,791.06	-4,501.17	2,938.12	2,664.97	273.15	10.757		
11,500.00	7,225.94	11,653.11	7,244.52	150.76	129.19	90.36	1,790.27	-4,601.16	2,937.92	2,658.77	279.15	10.525		
11,600.00	7,225.41	11,753.11	7,244.14	153.99	131.94	90.37	1,789.49	-4,701.16	2,937.72	2,652.57	285.16	10.302		
11,700.00	7,224.88	11,853.11	7,243.76	157.23	134.70	90.37	1,788.71	-4,801.15	2,937.53	2,646.35	291.17	10.089		
11,800.00	7,224.35	11,953.11	7,243.38	160.48	137.47	90.37	1,787.93	-4,901.15	2,937.33	2,640.13	297.19	9.884		
11,900.00	7,223.82	12,053.11	7,243.00	163.72	140.23	90.37	1,787.15	-5,001.15	2,937.13	2,633.91	303.22	9.686		
12,000.00	7,223.29	12,153.11	7,242.62	166.98	143.00	90.38	1,786.36	-5,101.14	2,936.94	2,627.67	309.26	9.497		
12,100.00	7,222.77	12,253.11	7,242.24	170.23	145.78	90.38	1,785.58	-5,201.14	2,936.74	2,621.44	315.30	9.314		
12,200.00	7,222.24	12,353.11	7,241.87	173.49	148.55	90.38	1,784.80	-5,301.13	2,936.54	2,615.19	321.35	9.138		
12,300.00	7,221.71	12,453.11	7,241.49	176.75	151.33	90.39	1,784.02	-5,401.13	2,936.35	2,608.94	327.41	8.969		
12,400.00	7,221.18	12,553.11	7,241.11	180.01	154.12	90.39	1,783.24	-5,501.13	2,936.15	2,602.69	333.46	8.805		
12,500.00	7,220.65	12,653.11	7,240.73	183.28	156.90	90.39	1,782.45	-5,601.12	2,935.95	2,596.43	339.53	8.647		
12,600.00	7,220.12	12,753.11	7,240.35	186.54	159.69	90.40	1,781.67	-5,701.12	2,935.76	2,590.16	345.59	8.495		
12,700.00	7,219.59	12,853.11	7,239.97	189.81	162.48	90.40	1,780.89	-5,801.11	2,935.56	2,583.89	351.67	8.348		
12,800.00	7,219.06	12,953.11	7,239.59	193.09	165.27	90.40	1,780.11	-5,901.11	2,935.36	2,577.62	357.74	8.205		
12,900.00	7,218.54	13,053.11	7,239.21	196.36	168.07	90.40	1,779.33	-6,001.11	2,935.17	2,571.34	363.82	8.068		
13,000.00	7,218.01	13,153.11	7,238.83	199.64	170.87	90.41	1,778.54	-6,101.10	2,934.97	2,565.06	369.91	7.934		
13,100.00	7,217.48	13,253.11	7,238.45	202.92	173.66	90.41	1,777.76	-6,201.10	2,934.77	2,558.78	375.99	7.805		
13,200.00	7,216.95	13,353.11	7,238.07	206.20	176.47	90.41	1,776.98	-6,301.09	2,934.58	2,552.49	382.08	7.680		
13,300.00	7,216.42	13,453.11	7,237.69	209.48	179.27	90.42	1,776.20	-6,401.09	2,934.38	2,546.20	388.18	7.559		
13,400.00	7,215.89	13,553.11	7,237.31	212.76	182.07	90.42	1,775.42	-6,501.08	2,934.18	2,539.91	394.28	7.442		
13,500.00	7,215.36	13,653.11	7,236.93	216.05	184.88	90.42	1,774.63	-6,601.08	2,933.99	2,533.61	400.37	7.328		
13,600.00	7,214.84	13,753.11	7,236.55	219.33	187.69	90.42	1,773.85	-6,701.08	2,933.79	2,527.31	406.48	7.218		
13,700.00	7,214.31	13,853.11	7,236.17	222.62	190.50	90.43	1,773.07	-6,801.07	2,933.59	2,521.01	412.58	7.110		
13,800.00	7,213.78	13,953.11	7,235.79	225.91	193.31	90.43	1,772.29	-6,901.07	2,933.40	2,514.71	418.69	7.006		
13,900.00	7,213.25	14,053.11	7,235.41	229.20	196.12	90.43	1,771.51	-7,001.06	2,933.20	2,508.40	424.80	6.905		
14,000.00	7,212.72	14,153.11	7,235.03	232.49	198.93	90.44	1,770.72	-7,101.06	2,933.00	2,502.09	430.91	6.807		
14,100.00	7,212.19	14,253.11	7,234.65	235.79	201.75	90.44	1,769.94	-7,201.06	2,932.81	2,495.78	437.03	6.711		
14,200.00	7,211.66	14,353.11	7,234.28	239.08	204.56	90.44	1,769.16	-7,301.05	2,932.61	2,489.47	443.14	6.618		
14,300.00	7,211.13	14,453.11	7,233.90	242.38	207.38	90.45	1,768.38	-7,401.05	2,932.41	2,483.15	449.26	6.527		
14,400.00	7,210.61	14,553.11	7,233.52	245.67	210.20	90.45	1,767.60	-7,501.04	2,932.22	2,476.83	455.38	6.439		
14,500.00	7,210.08	14,653.11	7,233.14	248.97	213.02	90.45	1,766.81	-7,601.04	2,932.02	2,470.52	461.50	6.353		
14,600.00	7,209.55	14,753.11	7,232.76	252.27	215.84	90.45	1,766.03	-7,701.04	2,931.82	2,464.20	467.63	6.270		
14,700.00	7,209.02	14,853.11	7,232.38	255.57	218.66	90.46	1,765.25	-7,801.03	2,931.63	2,457.87	473.76	6.188		
14,800.00	7,208.49	14,953.11	7,232.00	258.87	221.48	90.46	1,764.47	-7,901.03	2,931.43	2,451.55	479.88	6.109		
14,900.00	7,207.96	15,053.11	7,231.62	262.17	224.30	90.46	1,763.69	-8,001.02	2,931.23	2,445.22	486.01	6.031		
15,000.00	7,207.43	15,153.11	7,231.24	265.47	227.13	90.47	1,762.90	-8,101.02	2,931.04	2,438.90	492.14	5.956		
15,068.67	7,207.07	15,216.01	7,231.00	267.74	228.91	90.47	1,762.41	-8,163.93	2,930.91	2,434.73	496.17	5.907		
15,081.89	7,207.00	15,216.01	7,231.00	268.17	228.91	90.47	1,762.41	-8,163.93	2,930.94	2,434.37	496.57	5.902 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	0.48	300.19	2.50	300.20					
100.00	100.00	102.00	100.00	3.28	3.29	0.48	300.19	2.50	300.20	293.63	6.57	45.693		
200.00	200.00	202.00	200.00	3.34	3.34	0.48	300.19	2.50	300.20	293.52	6.68	44.969	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	172.48	300.19	2.50	301.93	295.04	6.89	43.836		
400.00	399.84	392.03	390.02	3.59	3.59	172.54	301.65	2.32	308.74	301.54	7.19	42.924		
500.00	499.45	481.39	479.27	3.80	3.77	172.58	305.88	1.77	322.08	314.48	7.59	42.411		
600.00	598.70	569.33	566.93	4.06	3.98	172.60	312.74	0.90	341.85	333.79	8.07	42.365		
700.00	697.49	655.35	652.44	4.38	4.21	172.62	322.02	-0.29	367.80	359.19	8.60	42.761		
800.00	796.13	739.71	735.99	4.74	4.46	172.64	333.59	-1.78	397.43	388.28	9.15	43.435		
900.00	894.78	822.50	817.61	5.15	4.72	172.60	347.32	-3.54	429.81	420.08	9.72	44.203		
1,000.00	993.43	908.60	902.07	5.58	5.01	172.53	363.85	-5.65	464.66	454.34	10.32	45.016		
1,100.00	1,092.07	1,002.14	993.75	6.03	5.33	172.46	382.27	-8.02	500.01	489.05	10.97	45.594		
1,200.00	1,190.72	1,104.32	1,085.43	6.50	5.71	172.39	400.69	-10.38	535.37	523.69	11.67	45.863		
1,300.00	1,289.36	1,189.22	1,177.11	6.98	6.04	172.33	419.12	-12.74	570.72	558.38	12.34	46.244		
1,400.00	1,388.01	1,282.76	1,268.79	7.47	6.42	172.28	437.54	-15.10	606.07	593.01	13.06	46.396		
1,500.00	1,486.65	1,376.30	1,360.46	7.97	6.80	172.23	455.96	-17.46	641.43	627.62	13.80	46.470		
1,600.00	1,585.30	1,469.84	1,452.14	8.48	7.20	172.19	474.38	-19.82	676.78	662.22	14.56	46.488		
1,700.00	1,683.94	1,563.38	1,543.82	9.00	7.60	172.16	492.81	-22.18	712.14	696.81	15.33	46.465		
1,800.00	1,782.59	1,656.92	1,635.50	9.52	8.00	172.12	511.23	-24.54	747.49	731.39	16.11	46.411		
1,900.00	1,881.24	1,750.46	1,727.18	10.05	8.42	172.09	529.65	-26.90	782.85	765.95	16.89	46.336		
2,000.00	1,979.88	1,844.00	1,818.86	10.58	8.83	172.07	548.08	-29.26	818.20	800.51	17.69	46.246		
2,100.00	2,078.53	1,937.54	1,910.53	11.11	9.25	172.04	566.50	-31.62	853.56	835.06	18.50	46.146		
2,200.00	2,177.17	2,031.08	2,002.21	11.64	9.67	172.02	584.92	-33.98	888.91	869.61	19.31	46.039		
2,300.00	2,275.82	2,124.62	2,093.89	12.18	10.09	172.00	603.34	-36.34	924.27	904.14	20.12	45.927		
2,400.00	2,374.46	2,218.17	2,185.57	12.72	10.52	171.98	621.77	-38.71	959.62	938.68	20.95	45.814		
2,500.00	2,473.11	2,311.71	2,277.25	13.26	10.95	171.96	640.19	-41.07	994.98	973.21	21.77	45.700		
2,600.00	2,571.76	2,405.25	2,368.93	13.80	11.38	171.94	658.61	-43.43	1,030.34	1,007.74	22.60	45.587		
2,700.00	2,670.40	2,498.79	2,460.60	14.35	11.81	171.92	677.03	-45.79	1,065.69	1,042.26	23.44	45.474		
2,800.00	2,769.05	2,607.67	2,552.28	14.89	12.32	171.91	695.46	-48.15	1,101.05	1,076.71	24.34	45.235		
2,900.00	2,867.69	2,695.87	2,643.96	15.44	12.68	171.89	713.88	-50.51	1,136.41	1,111.30	25.11	45.256		
3,000.00	2,966.34	2,779.41	2,735.64	15.99	13.12	171.88	732.30	-52.87	1,171.76	1,145.81	25.95	45.150		
3,100.00	3,064.98	2,872.95	2,827.32	16.53	13.56	171.87	750.72	-55.23	1,207.12	1,180.32	26.80	45.048		
3,200.00	3,163.63	2,966.49	2,918.99	17.08	13.99	171.86	769.15	-57.59	1,242.48	1,214.83	27.64	44.948		
3,300.00	3,262.27	3,060.03	3,010.67	17.63	14.43	171.85	787.57	-59.95	1,277.83	1,249.34	28.49	44.851		
3,400.00	3,360.92	3,153.57	3,102.35	18.18	14.87	171.84	805.99	-62.31	1,313.19	1,283.85	29.34	44.757		
3,500.00	3,459.57	3,247.11	3,194.03	18.74	15.31	171.83	824.42	-64.67	1,348.54	1,318.35	30.19	44.666		
3,600.00	3,558.21	3,340.65	3,285.71	19.29	15.76	171.82	842.84	-67.03	1,383.90	1,352.86	31.04	44.577		
3,700.00	3,656.86	3,434.19	3,377.39	19.84	16.20	171.81	861.26	-69.39	1,419.26	1,387.36	31.90	44.492		
3,800.00	3,755.50	3,527.74	3,469.06	20.39	16.64	171.80	879.68	-71.76	1,454.62	1,421.86	32.75	44.409		
3,900.00	3,854.15	3,621.28	3,560.74	20.95	17.08	171.79	898.11	-74.12	1,489.97	1,456.36	33.61	44.329		
4,000.00	3,952.79	3,714.82	3,652.42	21.50	17.53	171.78	916.53	-76.48	1,525.33	1,490.86	34.47	44.252		
4,100.00	4,051.44	3,808.36	3,744.10	22.05	17.97	171.78	934.95	-78.84	1,560.69	1,525.36	35.33	44.177		
4,200.00	4,150.08	3,901.90	3,835.78	22.61	18.42	171.77	953.37	-81.20	1,596.04	1,559.85	36.19	44.105		
4,300.00	4,248.73	4,004.56	3,927.45	23.16	18.91	171.76	971.80	-83.56	1,631.40	1,594.31	37.09	43.984		
4,400.00	4,347.38	4,088.98	4,019.13	23.72	19.31	171.75	990.22	-85.92	1,666.76	1,628.85	37.91	43.966		
4,500.00	4,446.02	4,182.52	4,110.81	24.27	19.75	171.75	1,008.64	-88.28	1,702.11	1,663.34	38.77	43.901		
4,600.00	4,544.67	4,276.06	4,202.49	24.83	20.20	171.74	1,027.07	-90.64	1,737.47	1,697.83	39.63	43.837		
4,700.00	4,643.31	4,369.60	4,294.17	25.39	20.65	171.74	1,045.49	-93.00	1,772.83	1,732.33	40.50	43.775		
4,800.00	4,741.96	4,463.14	4,385.85	25.94	21.09	171.73	1,063.91	-95.36	1,808.18	1,766.82	41.36	43.715		
4,900.00	4,840.60	4,556.68	4,477.52	26.50	21.54	171.73	1,082.33	-97.72	1,843.54	1,801.31	42.23	43.657		
5,000.00	4,939.25	4,650.22	4,569.20	27.05	21.99	171.72	1,100.76	-100.08	1,878.90	1,835.80	43.09	43.601		
5,100.00	5,037.90	4,743.76	4,660.88	27.61	22.43	171.72	1,119.18	-102.45	1,914.25	1,870.29	43.96	43.546		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	4,837.30	4,752.56	28.17	22.88	171.71	1,137.60	-104.81	1,949.61	1,904.79	44.83	43.493		
5,300.00	5,235.19	4,930.85	4,844.24	28.72	23.33	171.71	1,156.02	-107.17	1,984.97	1,939.28	45.69	43.442		
5,400.00	5,333.83	5,024.39	4,935.92	29.28	23.78	171.70	1,174.45	-109.53	2,020.33	1,973.76	46.56	43.392		
5,500.00	5,432.48	5,117.93	5,027.59	29.84	24.23	171.70	1,192.87	-111.89	2,055.68	2,008.25	47.43	43.343		
5,600.00	5,531.12	5,211.47	5,119.27	30.40	24.67	171.69	1,211.29	-114.25	2,091.04	2,042.74	48.30	43.296		
5,700.00	5,629.77	5,305.01	5,210.95	30.95	25.12	171.69	1,229.71	-116.61	2,126.40	2,077.23	49.17	43.250		
5,800.00	5,728.41	5,401.45	5,302.63	31.51	25.59	171.69	1,248.14	-118.97	2,161.75	2,111.70	50.05	43.193		
5,900.00	5,827.06	5,507.91	5,394.31	32.07	26.10	171.68	1,266.56	-121.33	2,197.11	2,146.13	50.98	43.099		
6,000.00	5,925.71	5,585.63	5,485.98	32.63	26.47	171.68	1,284.98	-123.69	2,232.47	2,180.69	51.77	43.119		
6,100.00	6,024.35	5,679.17	5,577.66	33.19	26.92	171.68	1,303.41	-126.05	2,267.82	2,215.18	52.65	43.077		
6,200.00	6,123.00	5,772.71	5,669.34	33.74	27.37	171.67	1,321.83	-128.41	2,303.18	2,249.67	53.52	43.037		
6,300.00	6,221.64	5,866.25	5,761.02	34.30	27.82	171.67	1,340.25	-130.77	2,338.54	2,284.15	54.39	42.998		
6,400.00	6,320.29	5,959.79	5,852.70	34.86	28.27	171.67	1,358.67	-133.14	2,373.90	2,318.64	55.26	42.959		
6,500.00	6,418.93	6,053.33	5,944.38	35.42	28.72	171.66	1,377.10	-135.50	2,409.25	2,353.12	56.13	42.922		
6,600.00	6,517.58	6,146.87	6,036.05	35.98	29.17	171.66	1,395.52	-137.86	2,444.61	2,387.61	57.00	42.886		
6,700.00	6,616.23	6,240.42	6,127.73	36.54	29.62	171.66	1,413.94	-140.22	2,479.97	2,422.09	57.88	42.850		
6,800.00	6,714.51	6,333.74	6,219.20	37.10	30.07	134.19	1,432.32	-142.57	2,515.24	2,456.49	58.75	42.812		
6,900.00	6,810.42	6,425.18	6,308.82	37.66	30.51	112.66	1,450.33	-144.88	2,549.91	2,490.30	59.62	42.773		
7,000.00	6,901.58	6,512.49	6,394.39	38.21	30.93	102.04	1,467.53	-147.08	2,583.48	2,523.02	60.45	42.735		
7,100.00	6,985.76	6,597.00	6,477.21	38.76	31.33	95.70	1,484.17	-149.44	2,615.68	2,554.38	61.30	42.671		
7,200.00	7,060.88	6,702.92	6,580.01	39.32	31.84	91.69	1,504.74	-163.65	2,645.87	2,583.45	62.42	42.389		
7,300.00	7,125.09	6,825.60	6,694.26	39.90	32.41	89.05	1,527.46	-201.52	2,673.12	2,609.30	63.81	41.890		
7,400.00	7,176.81	6,971.91	6,818.16	40.55	33.05	87.47	1,551.87	-274.76	2,696.43	2,630.84	65.59	41.108		
7,500.00	7,214.77	7,149.11	6,941.48	41.30	33.83	86.70	1,575.81	-398.94	2,714.62	2,646.65	67.96	39.944		
7,600.00	7,238.02	7,359.51	7,037.76	42.22	35.19	86.44	1,593.89	-584.06	2,726.21	2,654.92	71.29	38.242		
7,700.00	7,246.01	7,577.20	7,069.97	43.32	37.44	86.30	1,598.88	-798.23	2,729.92	2,654.37	75.55	36.136		
7,800.00	7,245.50	7,677.20	7,069.69	44.65	38.73	86.31	1,598.13	-898.23	2,729.74	2,651.08	78.66	34.701		
7,900.00	7,244.97	7,777.20	7,069.40	46.21	40.17	86.31	1,597.37	-998.22	2,729.56	2,647.44	82.12	33.240		
8,000.00	7,244.44	7,877.20	7,069.12	47.99	41.77	86.32	1,596.62	-1,098.22	2,729.37	2,643.50	85.88	31.782		
8,100.00	7,243.91	7,977.20	7,068.83	49.96	43.49	86.32	1,595.87	-1,198.22	2,729.19	2,639.29	89.90	30.357		
8,200.00	7,243.39	8,077.20	7,068.55	52.10	45.33	86.33	1,595.12	-1,298.21	2,729.01	2,634.84	94.16	28.981		
8,300.00	7,242.86	8,177.20	7,068.26	54.38	47.27	86.33	1,594.36	-1,398.21	2,728.82	2,630.20	98.63	27.668		
8,400.00	7,242.33	8,277.19	7,067.98	56.78	49.31	86.34	1,593.61	-1,498.21	2,728.64	2,625.37	103.27	26.423		
8,500.00	7,241.80	8,377.19	7,067.70	59.28	51.42	86.34	1,592.86	-1,598.20	2,728.46	2,620.40	108.06	25.250		
8,600.00	7,241.27	8,477.19	7,067.41	61.88	53.60	86.35	1,592.11	-1,698.20	2,728.27	2,615.29	112.99	24.147		
8,700.00	7,240.74	8,577.19	7,067.13	64.54	55.84	86.35	1,591.35	-1,798.20	2,728.09	2,610.06	118.03	23.113		
8,800.00	7,240.21	8,677.19	7,066.84	67.27	58.14	86.36	1,590.60	-1,898.19	2,727.91	2,604.73	123.18	22.145		
8,900.00	7,239.68	8,777.19	7,066.56	70.06	60.48	86.36	1,589.85	-1,998.19	2,727.72	2,599.30	128.42	21.241		
9,000.00	7,239.16	8,877.19	7,066.27	72.89	62.87	86.37	1,589.10	-2,098.18	2,727.54	2,593.80	133.74	20.394		
9,100.00	7,238.63	8,977.19	7,065.99	75.77	65.29	86.37	1,588.34	-2,198.18	2,727.36	2,588.23	139.13	19.603		
9,200.00	7,238.10	9,077.19	7,065.70	78.69	67.75	86.38	1,587.59	-2,298.18	2,727.17	2,582.59	144.59	18.862		
9,300.00	7,237.57	9,177.19	7,065.42	81.64	70.24	86.38	1,586.84	-2,398.17	2,726.99	2,576.90	150.10	18.168		
9,400.00	7,237.04	9,277.19	7,065.13	84.62	72.76	86.39	1,586.09	-2,498.17	2,726.81	2,571.15	155.66	17.518		
9,500.00	7,236.51	9,377.19	7,064.85	87.63	75.30	86.39	1,585.34	-2,598.17	2,726.63	2,565.36	161.26	16.908		
9,600.00	7,235.98	9,477.19	7,064.56	90.66	77.86	86.40	1,584.58	-2,698.16	2,726.44	2,559.53	166.91	16.335		
9,700.00	7,235.45	9,577.19	7,064.28	93.72	80.45	86.40	1,583.83	-2,798.16	2,726.26	2,553.67	172.59	15.796		
9,800.00	7,234.93	9,677.19	7,063.99	96.79	83.05	86.41	1,583.08	-2,898.15	2,726.08	2,547.77	178.31	15.288		
9,900.00	7,234.40	9,777.19	7,063.71	99.88	85.67	86.41	1,582.33	-2,998.15	2,725.89	2,541.84	184.06	14.810		
10,000.00	7,233.87	9,877.19	7,063.42	102.98	88.30	86.42	1,581.57	-3,098.15	2,725.71	2,535.88	189.83	14.359		
10,100.00	7,233.34	9,977.19	7,063.14	106.10	90.94	86.42	1,580.82	-3,198.14	2,725.53	2,529.90	195.63	13.932		
10,200.00	7,232.81	10,077.19	7,062.85	109.23	93.60	86.43	1,580.07	-3,298.14	2,725.34	2,523.89	201.45	13.529		
10,300.00	7,232.28	10,177.19	7,062.57	112.38	96.27	86.43	1,579.32	-3,398.14	2,725.16	2,517.87	207.29	13.146		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	10,277.19	7,062.28	115.53	98.95	86.43	1,578.56	-3,498.13	2,724.98	2,511.82	213.16	12.784		
10,500.00	7,231.23	10,377.19	7,062.00	118.70	101.64	86.44	1,577.81	-3,598.13	2,724.80	2,505.76	219.04	12.440		
10,600.00	7,230.70	10,477.18	7,061.72	121.87	104.34	86.44	1,577.06	-3,698.13	2,724.61	2,499.68	224.93	12.113		
10,700.00	7,230.17	10,577.18	7,061.43	125.05	107.05	86.45	1,576.31	-3,798.12	2,724.43	2,493.59	230.84	11.802		
10,800.00	7,229.64	10,677.18	7,061.15	128.25	109.77	86.45	1,575.55	-3,898.12	2,724.25	2,487.48	236.77	11.506		
10,900.00	7,229.11	10,777.18	7,060.86	131.44	112.49	86.46	1,574.80	-3,998.11	2,724.06	2,481.36	242.71	11.224		
11,000.00	7,228.58	10,877.18	7,060.58	134.65	115.22	86.46	1,574.05	-4,098.11	2,723.88	2,475.23	248.66	10.954		
11,100.00	7,228.05	10,977.18	7,060.29	137.86	117.95	86.47	1,573.30	-4,198.11	2,723.70	2,469.08	254.62	10.697		
11,200.00	7,227.52	11,077.18	7,060.01	141.08	120.69	86.47	1,572.54	-4,298.10	2,723.52	2,462.93	260.59	10.451		
11,300.00	7,227.00	11,177.18	7,059.72	144.30	123.44	86.48	1,571.79	-4,398.10	2,723.33	2,456.76	266.57	10.216		
11,400.00	7,226.47	11,277.18	7,059.44	147.52	126.19	86.48	1,571.04	-4,498.10	2,723.15	2,450.59	272.56	9.991		
11,500.00	7,225.94	11,377.18	7,059.15	150.76	128.95	86.49	1,570.29	-4,598.09	2,722.97	2,444.41	278.56	9.775		
11,600.00	7,225.41	11,477.18	7,058.87	153.99	131.71	86.49	1,569.53	-4,698.09	2,722.78	2,438.22	284.56	9.568		
11,700.00	7,224.88	11,577.18	7,058.58	157.23	134.47	86.50	1,568.78	-4,798.09	2,722.60	2,432.02	290.58	9.370		
11,800.00	7,224.35	11,677.18	7,058.30	160.48	137.24	86.50	1,568.03	-4,898.08	2,722.42	2,425.82	296.60	9.179		
11,900.00	7,223.82	11,777.18	7,058.01	163.72	140.01	86.51	1,567.28	-4,998.08	2,722.24	2,419.61	302.63	8.995		
12,000.00	7,223.29	11,877.18	7,057.73	166.98	142.79	86.51	1,566.52	-5,098.07	2,722.05	2,413.39	308.66	8.819		
12,100.00	7,222.77	11,977.18	7,057.44	170.23	145.56	86.52	1,565.77	-5,198.07	2,721.87	2,407.17	314.70	8.649		
12,200.00	7,222.24	12,077.18	7,057.16	173.49	148.35	86.52	1,565.02	-5,298.07	2,721.69	2,400.94	320.75	8.486		
12,300.00	7,221.71	12,177.18	7,056.87	176.75	151.13	86.53	1,564.27	-5,398.06	2,721.51	2,394.71	326.80	8.328		
12,400.00	7,221.18	12,277.18	7,056.59	180.01	153.92	86.53	1,563.51	-5,498.06	2,721.32	2,388.47	332.85	8.176		
12,500.00	7,220.65	12,377.18	7,056.30	183.28	156.71	86.54	1,562.76	-5,598.06	2,721.14	2,382.23	338.91	8.029		
12,600.00	7,220.12	12,477.18	7,056.02	186.54	159.50	86.54	1,562.01	-5,698.05	2,720.96	2,375.98	344.98	7.887		
12,700.00	7,219.59	12,577.18	7,055.74	189.81	162.29	86.55	1,561.26	-5,798.05	2,720.78	2,369.73	351.05	7.751		
12,800.00	7,219.06	12,677.18	7,055.45	193.09	165.09	86.55	1,560.50	-5,898.04	2,720.59	2,363.48	357.12	7.618		
12,900.00	7,218.54	12,777.17	7,055.17	196.36	167.89	86.56	1,559.75	-5,998.04	2,720.41	2,357.22	363.19	7.490		
13,000.00	7,218.01	12,877.17	7,054.88	199.64	170.69	86.56	1,559.00	-6,098.04	2,720.23	2,350.95	369.27	7.366		
13,100.00	7,217.48	12,977.17	7,054.60	202.92	173.49	86.57	1,558.25	-6,198.03	2,720.05	2,344.69	375.36	7.247		
13,200.00	7,216.95	13,077.17	7,054.31	206.20	176.30	86.57	1,557.49	-6,298.03	2,719.86	2,338.42	381.45	7.130		
13,300.00	7,216.42	13,177.17	7,054.03	209.48	179.10	86.58	1,556.74	-6,398.03	2,719.68	2,332.15	387.54	7.018		
13,400.00	7,215.89	13,277.17	7,053.74	212.76	181.91	86.58	1,555.99	-6,498.02	2,719.50	2,325.87	393.63	6.909		
13,500.00	7,215.36	13,377.17	7,053.46	216.05	184.72	86.59	1,555.24	-6,598.02	2,719.32	2,319.59	399.72	6.803		
13,600.00	7,214.84	13,477.17	7,053.17	219.33	187.53	86.59	1,554.48	-6,698.02	2,719.13	2,313.31	405.82	6.700		
13,700.00	7,214.31	13,577.17	7,052.89	222.62	190.34	86.60	1,553.73	-6,798.01	2,718.95	2,307.03	411.92	6.601		
13,800.00	7,213.78	13,677.17	7,052.60	225.91	193.15	86.60	1,552.98	-6,898.01	2,718.77	2,300.74	418.03	6.504		
13,900.00	7,213.25	13,777.17	7,052.32	229.20	195.97	86.61	1,552.23	-6,998.00	2,718.59	2,294.45	424.13	6.410		
14,000.00	7,212.72	13,877.17	7,052.03	232.49	198.78	86.61	1,551.48	-7,098.00	2,718.41	2,288.16	430.24	6.318		
14,100.00	7,212.19	13,977.17	7,051.75	235.79	201.60	86.62	1,550.72	-7,198.00	2,718.22	2,281.87	436.35	6.229		
14,200.00	7,211.66	14,077.17	7,051.46	239.08	204.42	86.62	1,549.97	-7,297.99	2,718.04	2,275.58	442.47	6.143		
14,300.00	7,211.13	14,177.17	7,051.18	242.38	207.24	86.63	1,549.22	-7,397.99	2,717.86	2,269.28	448.58	6.059		
14,400.00	7,210.61	14,277.17	7,050.89	245.67	210.06	86.63	1,548.47	-7,497.99	2,717.68	2,262.98	454.70	5.977		
14,500.00	7,210.08	14,377.17	7,050.61	248.97	212.88	86.64	1,547.71	-7,597.98	2,717.49	2,256.68	460.82	5.897		
14,600.00	7,209.55	14,477.17	7,050.32	252.27	215.70	86.64	1,546.96	-7,697.98	2,717.31	2,250.38	466.94	5.819		
14,700.00	7,209.02	14,577.17	7,050.04	255.57	218.53	86.65	1,546.21	-7,797.97	2,717.13	2,244.07	473.06	5.744		
14,800.00	7,208.49	14,677.17	7,049.76	258.87	221.35	86.65	1,545.46	-7,897.97	2,716.95	2,237.77	479.18	5.670		
14,900.00	7,207.96	14,777.17	7,049.47	262.17	224.18	86.66	1,544.70	-7,997.97	2,716.77	2,231.46	485.31	5.598		
15,000.00	7,207.43	14,877.17	7,049.19	265.47	227.00	86.66	1,543.95	-8,097.96	2,716.58	2,225.15	491.43	5.528		
15,069.43	7,207.07	14,946.60	7,048.99	267.76	228.96	86.66	1,543.43	-8,167.39	2,716.46	2,220.77	495.69	5.480		
15,081.89	7,207.00	14,942.37	7,049.00	268.17	228.85	86.66	1,543.46	-8,163.17	2,716.49	2,220.56	495.92	5.478 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	0.43	220.04	1.67	220.04					
100.00	100.00	101.00	100.00	3.28	3.28	0.43	220.04	1.67	220.04	213.47	6.57	33.494		
200.00	200.00	201.00	200.00	3.34	3.34	0.43	220.04	1.67	220.04	213.37	6.67	32.966 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	172.45	220.04	1.67	221.77	214.89	6.89	32.205		
400.00	399.84	400.84	399.84	3.59	3.60	172.61	220.04	1.67	226.96	219.76	7.20	31.535		
500.00	499.45	500.45	499.45	3.80	3.81	172.86	220.04	1.67	235.61	228.01	7.60	31.002		
600.00	598.70	599.70	598.70	4.06	4.05	173.18	220.04	1.67	247.70	239.62	8.08	30.655		
700.00	697.49	698.49	697.49	4.38	4.29	173.39	221.36	1.11	264.53	255.92	8.61	30.710		
800.00	796.13	797.13	796.13	4.74	4.56	173.38	225.29	-0.55	285.08	275.89	9.18	31.051		
900.00	894.78	895.78	894.78	5.15	4.86	173.23	231.14	-3.02	307.23	297.43	9.80	31.350		
1,000.00	993.43	994.43	993.43	5.58	5.19	173.10	237.03	-5.51	329.39	318.93	10.46	31.495		
1,100.00	1,092.07	1,093.07	1,092.07	6.03	5.53	172.98	242.92	-8.00	351.55	340.40	11.15	31.536		
1,200.00	1,190.72	1,191.72	1,190.72	6.50	5.88	172.88	248.81	-10.48	373.72	361.85	11.86	31.501		
1,300.00	1,289.36	1,290.36	1,289.36	6.98	6.24	172.79	254.70	-12.97	395.88	383.28	12.60	31.416		
1,400.00	1,388.01	1,389.01	1,388.01	7.47	6.61	172.71	260.59	-15.46	418.05	404.69	13.36	31.299		
1,500.00	1,486.65	1,487.65	1,486.65	7.97	6.98	172.63	266.48	-17.95	440.21	426.09	14.13	31.162		
1,600.00	1,585.30	1,586.30	1,585.30	8.48	7.37	172.57	272.37	-20.44	462.38	447.47	14.91	31.012		
1,700.00	1,683.94	1,684.94	1,683.94	9.00	7.75	172.51	278.26	-22.93	484.55	468.85	15.70	30.855		
1,800.00	1,782.59	1,783.59	1,782.59	9.52	8.15	172.45	284.15	-25.41	506.72	490.21	16.51	30.697		
1,900.00	1,881.24	1,882.24	1,881.24	10.05	8.54	172.40	290.04	-27.90	528.89	511.57	17.32	30.539		
2,000.00	1,979.88	1,980.88	1,979.88	10.58	8.94	172.35	295.93	-30.39	551.06	532.92	18.14	30.384		
2,100.00	2,078.53	2,079.53	2,078.53	11.11	9.34	172.31	301.82	-32.88	573.23	554.27	18.96	30.232		
2,200.00	2,177.17	2,178.17	2,177.17	11.64	9.75	172.27	307.72	-35.37	595.40	575.61	19.79	30.086		
2,300.00	2,275.82	2,276.82	2,275.82	12.18	10.16	172.24	313.61	-37.85	617.57	596.94	20.62	29.944		
2,400.00	2,374.46	2,375.46	2,374.46	12.72	10.56	172.20	319.50	-40.34	639.74	618.28	21.46	29.807		
2,500.00	2,473.11	2,474.11	2,473.11	13.26	10.98	172.17	325.39	-42.83	661.91	639.60	22.30	29.676		
2,600.00	2,571.76	2,572.76	2,571.76	13.80	11.39	172.14	331.28	-45.32	684.08	660.93	23.15	29.551		
2,700.00	2,670.40	2,671.40	2,670.40	14.35	11.80	172.11	337.17	-47.81	706.25	682.25	24.00	29.431		
2,800.00	2,769.05	2,770.05	2,769.05	14.89	12.22	172.09	343.06	-50.30	728.42	703.57	24.85	29.315		
2,900.00	2,867.69	2,868.69	2,867.69	15.44	12.63	172.06	348.95	-52.78	750.59	724.89	25.70	29.205		
3,000.00	2,966.34	2,967.34	2,966.34	15.99	13.05	172.04	354.84	-55.27	772.76	746.21	26.56	29.100		
3,100.00	3,064.98	3,065.98	3,064.98	16.53	13.47	172.02	360.73	-57.76	794.94	767.52	27.41	28.999		
3,200.00	3,163.63	3,164.63	3,163.63	17.08	13.89	172.00	366.62	-60.25	817.11	788.84	28.27	28.903		
3,300.00	3,262.27	3,263.27	3,262.27	17.63	14.31	171.98	372.51	-62.74	839.28	810.15	29.13	28.810		
3,400.00	3,360.92	3,361.92	3,360.92	18.18	14.73	171.96	378.40	-65.22	861.45	831.46	29.99	28.722		
3,500.00	3,459.57	3,460.57	3,459.57	18.74	15.15	171.94	384.29	-67.71	883.62	852.77	30.86	28.637		
3,600.00	3,558.21	3,559.21	3,558.21	19.29	15.57	171.92	390.18	-70.20	905.80	874.07	31.72	28.556		
3,700.00	3,656.86	3,657.86	3,656.86	19.84	15.99	171.91	396.07	-72.69	927.97	895.38	32.59	28.478		
3,800.00	3,755.50	3,756.50	3,755.50	20.39	16.41	171.89	401.96	-75.18	950.14	916.69	33.45	28.403		
3,900.00	3,854.15	3,855.15	3,854.15	20.95	16.84	171.88	407.85	-77.66	972.31	937.99	34.32	28.331		
4,000.00	3,952.79	3,953.79	3,952.79	21.50	17.26	171.86	413.75	-80.15	994.48	959.30	35.19	28.262		
4,100.00	4,051.44	4,052.44	4,051.44	22.05	17.70	171.85	419.64	-82.64	1,016.66	980.58	36.07	28.183		
4,200.00	4,150.08	4,151.08	4,150.08	22.61	18.15	171.84	425.53	-85.13	1,038.83	1,001.86	36.97	28.103		
4,300.00	4,248.73	4,249.73	4,248.73	23.16	18.59	171.83	431.42	-87.62	1,061.00	1,023.14	37.86	28.026		
4,400.00	4,347.38	4,348.38	4,347.38	23.72	19.04	171.81	437.31	-90.11	1,083.17	1,044.42	38.75	27.952		
4,500.00	4,446.02	4,447.02	4,446.02	24.27	19.38	171.80	443.20	-92.59	1,105.35	1,065.80	39.54	27.954		
4,600.00	4,544.67	4,545.67	4,544.67	24.83	19.81	171.79	449.09	-95.08	1,127.52	1,087.10	40.41	27.899		
4,700.00	4,643.31	4,644.31	4,643.31	25.39	20.23	171.78	454.98	-97.57	1,149.69	1,108.40	41.29	27.846		
4,800.00	4,741.96	4,742.96	4,741.96	25.94	20.66	171.77	460.87	-100.06	1,171.86	1,129.70	42.16	27.795		
4,900.00	4,840.60	4,841.60	4,840.60	26.50	21.09	171.76	466.76	-102.55	1,194.04	1,151.00	43.03	27.746		
5,000.00	4,939.25	4,940.25	4,939.25	27.05	21.51	171.75	472.65	-105.03	1,216.21	1,172.30	43.91	27.698		
5,100.00	5,037.90	5,038.90	5,037.90	27.61	21.94	171.74	478.54	-107.52	1,238.38	1,193.60	44.78	27.652		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,070.70	5,060.35	28.17	22.37	171.74	484.43	-110.01	1,260.55	1,214.89	45.66	27.608		
5,300.00	5,235.19	5,168.21	5,157.65	28.72	22.79	171.73	490.32	-112.50	1,282.73	1,236.19	46.54	27.564		
5,400.00	5,333.83	5,265.72	5,254.95	29.28	23.22	171.72	496.21	-114.99	1,304.90	1,257.49	47.41	27.523		
5,500.00	5,432.48	5,363.24	5,352.25	29.84	23.65	171.71	502.10	-117.48	1,327.07	1,278.78	48.29	27.482		
5,600.00	5,531.12	5,460.75	5,449.55	30.40	24.08	171.70	507.99	-119.96	1,349.24	1,300.08	49.17	27.443		
5,700.00	5,629.77	5,558.26	5,546.85	30.95	24.50	171.70	513.88	-122.45	1,371.42	1,321.37	50.04	27.405		
5,800.00	5,728.41	5,655.77	5,644.15	31.51	24.93	171.69	519.78	-124.94	1,393.59	1,342.67	50.92	27.368		
5,900.00	5,827.06	5,753.28	5,741.46	32.07	25.36	171.68	525.67	-127.43	1,415.76	1,363.96	51.80	27.332		
6,000.00	5,925.71	5,850.79	5,838.76	32.63	25.79	171.68	531.56	-129.92	1,437.94	1,385.26	52.68	27.297		
6,100.00	6,024.35	5,948.30	5,936.06	33.19	26.22	171.67	537.45	-132.40	1,460.11	1,406.55	53.56	27.264		
6,200.00	6,123.00	6,045.81	6,033.36	33.74	26.64	171.66	543.34	-134.89	1,482.28	1,427.85	54.43	27.231		
6,300.00	6,221.64	6,143.32	6,130.66	34.30	27.07	171.66	549.23	-137.38	1,504.45	1,449.14	55.31	27.199		
6,400.00	6,320.29	6,240.83	6,227.96	34.86	27.50	171.65	555.12	-139.87	1,526.63	1,470.44	56.19	27.168		
6,500.00	6,418.93	6,338.34	6,325.26	35.42	27.93	171.65	561.01	-142.36	1,548.80	1,491.73	57.07	27.138		
6,600.00	6,517.58	6,435.85	6,422.56	35.98	28.36	171.64	566.90	-144.84	1,570.97	1,513.02	57.95	27.108		
6,700.00	6,616.23	6,533.36	6,519.86	36.54	28.79	171.63	572.79	-147.33	1,593.15	1,534.32	58.83	27.080		
6,800.00	6,714.51	6,630.65	6,616.94	37.10	29.22	135.35	578.67	-149.82	1,615.27	1,555.56	59.71	27.051		
6,900.00	6,810.42	6,727.14	6,712.88	37.66	29.64	115.20	584.51	-157.34	1,637.09	1,576.50	60.59	27.019		
7,000.00	6,901.58	6,825.98	6,808.85	38.21	30.08	105.63	590.43	-179.80	1,658.18	1,596.67	61.51	26.958		
7,100.00	6,985.76	6,927.79	6,902.84	38.76	30.53	100.09	596.33	-218.19	1,678.04	1,615.55	62.49	26.852		
7,200.00	7,060.88	7,032.89	6,992.18	39.32	31.02	96.46	602.05	-273.02	1,696.18	1,632.59	63.59	26.674		
7,300.00	7,125.09	7,141.52	7,073.76	39.90	31.57	93.96	607.40	-344.35	1,712.11	1,647.22	64.89	26.384		
7,400.00	7,176.81	7,253.70	7,144.04	40.55	32.24	92.22	612.16	-431.47	1,725.41	1,658.90	66.51	25.942		
7,500.00	7,214.77	7,369.22	7,199.33	41.30	33.11	91.07	616.09	-532.64	1,735.68	1,667.11	68.57	25.314		
7,600.00	7,238.02	7,487.56	7,236.11	42.22	34.22	90.41	618.97	-644.91	1,742.61	1,671.49	71.12	24.502		
7,700.00	7,246.01	7,607.91	7,251.61	43.32	35.56	90.19	620.61	-764.06	1,745.96	1,671.82	74.14	23.548		
7,800.00	7,245.50	7,712.20	7,251.71	44.65	36.90	90.20	621.23	-868.35	1,747.14	1,669.86	77.29	22.606		
7,900.00	7,244.97	7,812.20	7,251.34	46.21	38.35	90.21	621.80	-968.34	1,748.30	1,667.59	80.71	21.662		
8,000.00	7,244.44	7,912.19	7,250.97	47.99	39.95	90.21	622.37	-1,068.33	1,749.45	1,665.00	84.45	20.717		
8,100.00	7,243.91	8,012.18	7,250.61	49.96	41.69	90.22	622.93	-1,168.32	1,750.60	1,662.14	88.46	19.790		
8,200.00	7,243.39	8,112.18	7,250.24	52.10	43.55	90.22	623.50	-1,268.31	1,751.75	1,659.04	92.71	18.895		
8,300.00	7,242.86	8,212.17	7,249.87	54.38	45.51	90.23	624.07	-1,368.31	1,752.90	1,655.73	97.17	18.039		
8,400.00	7,242.33	8,312.16	7,249.51	56.78	47.56	90.23	624.63	-1,468.30	1,754.06	1,652.24	101.81	17.228		
8,500.00	7,241.80	8,412.16	7,249.14	59.28	49.69	90.24	625.20	-1,568.29	1,755.21	1,648.59	106.61	16.463		
8,600.00	7,241.27	8,512.15	7,248.78	61.88	51.89	90.24	625.77	-1,668.28	1,756.36	1,644.81	111.55	15.745		
8,700.00	7,240.74	8,612.14	7,248.41	64.54	54.16	90.25	626.33	-1,768.27	1,757.51	1,640.90	116.61	15.072		
8,800.00	7,240.21	8,712.14	7,248.04	67.27	56.48	90.25	626.90	-1,868.26	1,758.66	1,636.89	121.77	14.442		
8,900.00	7,239.68	8,812.13	7,247.68	70.06	58.84	90.26	627.47	-1,968.25	1,759.82	1,632.79	127.02	13.854		
9,000.00	7,239.16	8,912.12	7,247.31	72.89	61.25	90.26	628.03	-2,068.24	1,760.97	1,628.61	132.36	13.304		
9,100.00	7,238.63	9,012.12	7,246.95	75.77	63.70	90.27	628.60	-2,168.23	1,762.12	1,624.35	137.77	12.790		
9,200.00	7,238.10	9,112.11	7,246.58	78.69	66.18	90.27	629.17	-2,268.22	1,763.27	1,620.03	143.24	12.310		
9,300.00	7,237.57	9,212.10	7,246.21	81.64	68.69	90.28	629.73	-2,368.21	1,764.42	1,615.66	148.77	11.860		
9,400.00	7,237.04	9,312.10	7,245.85	84.62	71.22	90.28	630.30	-2,468.21	1,765.57	1,611.23	154.35	11.439		
9,500.00	7,236.51	9,412.09	7,245.48	87.63	73.78	90.29	630.87	-2,568.20	1,766.73	1,606.76	159.97	11.044		
9,600.00	7,235.98	9,512.08	7,245.11	90.66	76.36	90.29	631.44	-2,668.19	1,767.88	1,602.24	165.64	10.673		
9,700.00	7,235.45	9,612.08	7,244.75	93.72	78.97	90.30	632.00	-2,768.18	1,769.03	1,597.69	171.34	10.325		
9,800.00	7,234.93	9,712.07	7,244.38	96.79	81.58	90.30	632.57	-2,868.17	1,770.18	1,593.11	177.07	9.997		
9,900.00	7,234.40	9,812.06	7,244.02	99.88	84.22	90.31	633.14	-2,968.16	1,771.34	1,588.50	182.84	9.688		
10,000.00	7,233.87	9,912.06	7,243.65	102.98	86.87	90.31	633.70	-3,068.15	1,772.49	1,583.86	188.63	9.397		
10,100.00	7,233.34	10,012.05	7,243.28	106.10	89.53	90.32	634.27	-3,168.14	1,773.64	1,579.19	194.45	9.121		
10,200.00	7,232.81	10,112.04	7,242.92	109.23	92.20	90.32	634.84	-3,268.13	1,774.79	1,574.51	200.29	8.861		
10,300.00	7,232.28	10,212.04	7,242.55	112.38	94.89	90.33	635.40	-3,368.12	1,775.94	1,569.80	206.15	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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	10,312.03	7,242.19	115.53	97.58	90.33	635.97	-3,468.12	1,777.10	1,565.07	212.03	8.381		
10,500.00	7,231.23	10,412.02	7,241.82	118.70	100.29	90.34	636.54	-3,568.11	1,778.25	1,560.32	217.92	8.160		
10,600.00	7,230.70	10,512.02	7,241.45	121.87	103.00	90.34	637.10	-3,668.10	1,779.40	1,555.56	223.84	7.950		
10,700.00	7,230.17	10,612.01	7,241.09	125.05	105.72	90.35	637.67	-3,768.09	1,780.55	1,550.79	229.76	7.749		
10,800.00	7,229.64	10,712.00	7,240.72	128.25	108.45	90.35	638.24	-3,868.08	1,781.70	1,546.00	235.71	7.559		
10,900.00	7,229.11	10,812.00	7,240.35	131.44	111.18	90.36	638.80	-3,968.07	1,782.86	1,541.20	241.66	7.378		
11,000.00	7,228.58	10,911.99	7,239.99	134.65	113.92	90.36	639.37	-4,068.06	1,784.01	1,536.38	247.63	7.204		
11,100.00	7,228.05	11,011.98	7,239.62	137.86	116.67	90.37	639.94	-4,168.05	1,785.16	1,531.56	253.60	7.039		
11,200.00	7,227.52	11,111.98	7,239.26	141.08	119.42	90.37	640.50	-4,268.04	1,786.31	1,526.72	259.59	6.881		
11,300.00	7,227.00	11,211.97	7,238.89	144.30	122.18	90.38	641.07	-4,368.03	1,787.47	1,521.88	265.59	6.730		
11,400.00	7,226.47	11,311.96	7,238.52	147.52	124.94	90.38	641.64	-4,468.03	1,788.62	1,517.02	271.59	6.586		
11,500.00	7,225.94	11,411.95	7,238.16	150.76	127.71	90.39	642.20	-4,568.02	1,789.77	1,512.16	277.61	6.447		
11,600.00	7,225.41	11,511.95	7,237.79	153.99	130.48	90.39	642.77	-4,668.01	1,790.92	1,507.29	283.63	6.314		
11,700.00	7,224.88	11,611.94	7,237.43	157.23	133.25	90.40	643.34	-4,768.00	1,792.07	1,502.41	289.66	6.187		
11,800.00	7,224.35	11,711.93	7,237.06	160.48	136.03	90.40	643.91	-4,867.99	1,793.23	1,497.53	295.70	6.064		
11,900.00	7,223.82	11,811.93	7,236.69	163.72	138.81	90.41	644.47	-4,967.98	1,794.38	1,492.64	301.74	5.947		
12,000.00	7,223.29	11,911.92	7,236.33	166.98	141.60	90.41	645.04	-5,067.97	1,795.53	1,487.74	307.79	5.834		
12,100.00	7,222.77	12,011.91	7,235.96	170.23	144.38	90.42	645.61	-5,167.96	1,796.68	1,482.84	313.84	5.725		
12,200.00	7,222.24	12,111.91	7,235.59	173.49	147.18	90.42	646.17	-5,267.95	1,797.84	1,477.93	319.90	5.620		
12,300.00	7,221.71	12,211.90	7,235.23	176.75	149.97	90.43	646.74	-5,367.94	1,798.99	1,473.02	325.97	5.519		
12,400.00	7,221.18	12,311.89	7,234.86	180.01	152.76	90.43	647.31	-5,467.93	1,800.14	1,468.11	332.04	5.422		
12,500.00	7,220.65	12,411.89	7,234.50	183.28	155.56	90.44	647.87	-5,567.93	1,801.29	1,463.18	338.11	5.328		
12,600.00	7,220.12	12,511.88	7,234.13	186.54	158.36	90.44	648.44	-5,667.92	1,802.45	1,458.26	344.19	5.237		
12,700.00	7,219.59	12,611.87	7,233.76	189.81	161.17	90.45	649.01	-5,767.91	1,803.60	1,453.33	350.27	5.149		
12,800.00	7,219.06	12,711.87	7,233.40	193.09	163.97	90.45	649.57	-5,867.90	1,804.75	1,448.39	356.36	5.064		
12,900.00	7,218.54	12,811.86	7,233.03	196.36	166.78	90.46	650.14	-5,967.89	1,805.90	1,443.46	362.45	4.983		
13,000.00	7,218.01	12,911.85	7,232.67	199.64	169.59	90.46	650.71	-6,067.88	1,807.06	1,438.51	368.54	4.903		
13,100.00	7,217.48	13,011.85	7,232.30	202.92	172.40	90.47	651.27	-6,167.87	1,808.21	1,433.57	374.64	4.827		
13,200.00	7,216.95	13,111.84	7,231.93	206.20	175.21	90.47	651.84	-6,267.86	1,809.36	1,428.62	380.74	4.752		
13,300.00	7,216.42	13,211.83	7,231.57	209.48	178.02	90.48	652.41	-6,367.85	1,810.51	1,423.67	386.84	4.680		
13,400.00	7,215.89	13,311.83	7,231.20	212.76	180.84	90.48	652.97	-6,467.84	1,811.67	1,418.72	392.95	4.610		
13,500.00	7,215.36	13,411.82	7,230.83	216.05	183.65	90.49	653.54	-6,567.84	1,812.82	1,413.76	399.06	4.543		
13,600.00	7,214.84	13,511.81	7,230.47	219.33	186.47	90.49	654.11	-6,667.83	1,813.97	1,408.80	405.17	4.477		
13,700.00	7,214.31	13,611.81	7,230.10	222.62	189.29	90.50	654.68	-6,767.82	1,815.12	1,403.84	411.28	4.413		
13,800.00	7,213.78	13,711.80	7,229.74	225.91	192.11	90.50	655.24	-6,867.81	1,816.28	1,398.88	417.40	4.351		
13,900.00	7,213.25	13,811.79	7,229.37	229.20	194.93	90.50	655.81	-6,967.80	1,817.43	1,393.91	423.52	4.291		
14,000.00	7,212.72	13,911.79	7,229.00	232.49	197.76	90.51	656.38	-7,067.79	1,818.58	1,388.95	429.64	4.233		
14,100.00	7,212.19	14,011.78	7,228.64	235.79	200.58	90.51	656.94	-7,167.78	1,819.73	1,383.98	435.76	4.176		
14,200.00	7,211.66	14,111.77	7,228.27	239.08	203.41	90.52	657.51	-7,267.77	1,820.89	1,379.00	441.88	4.121		
14,300.00	7,211.13	14,211.77	7,227.90	242.38	206.23	90.52	658.08	-7,367.76	1,822.04	1,374.03	448.01	4.067		
14,400.00	7,210.61	14,311.76	7,227.54	245.67	209.06	90.53	658.64	-7,467.75	1,823.19	1,369.05	454.14	4.015		
14,500.00	7,210.08	14,411.75	7,227.17	248.97	211.89	90.53	659.21	-7,567.75	1,824.34	1,364.08	460.27	3.964		
14,600.00	7,209.55	14,511.75	7,226.81	252.27	214.72	90.54	659.78	-7,667.74	1,825.50	1,359.10	466.40	3.914		
14,700.00	7,209.02	14,611.74	7,226.44	255.57	217.55	90.54	660.34	-7,767.73	1,826.65	1,354.12	472.53	3.866		
14,800.00	7,208.49	14,711.73	7,226.07	258.87	220.38	90.55	660.91	-7,867.72	1,827.80	1,349.13	478.67	3.819		
14,900.00	7,207.96	14,811.73	7,225.71	262.17	223.21	90.55	661.48	-7,967.71	1,828.96	1,344.15	484.81	3.773		
15,000.00	7,207.43	14,911.72	7,225.34	265.47	226.04	90.56	662.04	-8,067.70	1,830.11	1,339.16	490.94	3.728		
15,081.89	7,207.00	14,993.60	7,225.04	268.17	228.36	90.56	662.51	-8,149.58	1,831.05	1,335.08	495.97	3.692 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	-179.40	-79.79	-0.83	79.80					
100.00	100.00	100.00	100.00	3.28	3.28	-179.40	-79.79	-0.83	79.80	73.23	6.57	12.147		
200.00	200.00	200.00	200.00	3.34	3.34	-179.40	-79.79	-0.83	79.80	73.12	6.67	11.956		
300.00	299.98	297.30	297.28	3.44	3.44	-7.51	-81.44	-0.97	79.76	72.87	6.89	11.583		
400.00	399.84	394.60	394.45	3.59	3.58	-7.73	-86.37	-1.38	79.65	72.44	7.20	11.056		
500.00	499.45	491.90	491.40	3.80	3.77	-8.09	-94.60	-2.07	79.47	71.85	7.62	10.425		
600.00	598.70	589.21	588.02	4.06	4.01	-8.60	-106.10	-3.02	79.22	71.10	8.13	9.749		
674.44	672.32	661.66	659.66	4.29	4.20	-9.05	-116.78	-3.91	79.27	70.72	8.55	9.272		
700.00	697.49	686.54	684.20	4.38	4.27	-9.24	-120.86	-4.25	79.05	70.35	8.70	9.086 CC, ES		
800.00	796.13	783.80	779.77	4.74	4.58	-9.73	-138.87	-5.75	81.37	72.04	9.33	8.720		
900.00	894.78	880.81	874.42	5.15	4.93	-9.92	-160.03	-7.51	87.06	77.06	10.00	8.704		
1,000.00	993.43	977.34	967.84	5.58	5.30	-9.85	-184.25	-9.52	96.10	85.39	10.71	8.972		
1,100.00	1,092.07	1,076.24	1,062.99	6.03	5.72	-9.66	-211.11	-11.75	107.26	95.83	11.42	9.388		
1,200.00	1,190.72	1,175.61	1,158.59	6.50	6.16	-9.51	-238.13	-14.00	118.45	106.28	12.17	9.733		
1,300.00	1,289.36	1,274.98	1,254.19	6.98	6.61	-9.38	-265.15	-16.25	129.65	116.71	12.94	10.017		
1,400.00	1,388.01	1,374.35	1,349.79	7.47	7.08	-9.27	-292.17	-18.50	140.85	127.11	13.74	10.252		
1,500.00	1,486.65	1,473.72	1,445.39	7.97	7.56	-9.18	-319.19	-20.74	152.05	137.50	14.56	10.447		
1,600.00	1,585.30	1,573.09	1,540.99	8.48	8.05	-9.10	-346.21	-22.99	163.25	147.87	15.39	10.610		
1,700.00	1,683.94	1,672.46	1,636.59	9.00	8.54	-9.03	-373.24	-25.24	174.46	158.22	16.23	10.747		
1,800.00	1,782.59	1,771.83	1,732.19	9.52	9.04	-8.97	-400.26	-27.49	185.66	168.57	17.09	10.863		
1,900.00	1,881.24	1,871.20	1,827.79	10.05	9.55	-8.92	-427.28	-29.73	196.86	178.90	17.96	10.962		
2,000.00	1,979.88	1,970.57	1,923.39	10.58	10.06	-8.87	-454.30	-31.98	208.06	189.23	18.83	11.047		
2,100.00	2,078.53	2,069.94	2,018.98	11.11	10.58	-8.83	-481.32	-34.23	219.26	199.54	19.72	11.120		
2,200.00	2,177.17	2,169.31	2,114.58	11.64	11.10	-8.79	-508.34	-36.47	230.46	209.85	20.61	11.184		
2,300.00	2,275.82	2,268.68	2,210.18	12.18	11.62	-8.75	-535.37	-38.72	241.66	220.16	21.50	11.239		
2,400.00	2,374.46	2,368.05	2,305.78	12.72	12.14	-8.72	-562.39	-40.97	252.87	230.46	22.40	11.287		
2,500.00	2,473.11	2,467.42	2,401.38	13.26	12.67	-8.69	-589.41	-43.22	264.07	240.76	23.31	11.329		
2,600.00	2,571.76	2,566.79	2,496.98	13.80	13.20	-8.67	-616.43	-45.46	275.27	251.05	24.22	11.366		
2,700.00	2,670.40	2,666.16	2,592.58	14.35	13.73	-8.64	-643.45	-47.71	286.47	261.34	25.13	11.399		
2,800.00	2,769.05	2,765.53	2,688.18	14.89	14.26	-8.62	-670.47	-49.96	297.67	271.63	26.05	11.428		
2,900.00	2,867.69	2,864.91	2,783.78	15.44	14.79	-8.60	-697.50	-52.20	308.87	281.91	26.97	11.454		
3,000.00	2,966.34	2,964.28	2,879.38	15.99	15.32	-8.58	-724.52	-54.45	320.08	292.19	27.89	11.477		
3,100.00	3,064.98	3,063.65	2,974.98	16.53	15.86	-8.56	-751.54	-56.70	331.28	302.47	28.81	11.498		
3,200.00	3,163.63	3,163.02	3,070.58	17.08	16.40	-8.54	-778.56	-58.95	342.48	312.74	29.74	11.517		
3,300.00	3,262.27	3,262.39	3,166.18	17.63	16.93	-8.52	-805.58	-61.19	353.68	323.02	30.66	11.534		
3,400.00	3,360.92	3,361.76	3,261.78	18.18	17.47	-8.51	-832.60	-63.44	364.89	333.29	31.59	11.549		
3,500.00	3,459.57	3,461.13	3,357.38	18.74	18.01	-8.49	-859.63	-65.69	376.09	343.56	32.53	11.563		
3,600.00	3,558.21	3,560.50	3,452.98	19.29	18.55	-8.48	-886.65	-67.93	387.29	353.83	33.46	11.576		
3,700.00	3,656.86	3,659.87	3,548.58	19.84	19.09	-8.47	-913.67	-70.18	398.49	364.10	34.39	11.587		
3,800.00	3,755.50	3,759.24	3,644.18	20.39	19.63	-8.46	-940.69	-72.43	409.69	374.37	35.33	11.597		
3,900.00	3,854.15	3,858.61	3,739.78	20.95	20.17	-8.44	-967.71	-74.68	420.90	384.63	36.26	11.607		
4,000.00	3,952.79	3,957.98	3,835.38	21.50	20.71	-8.43	-994.73	-76.92	432.10	394.90	37.20	11.616		
4,100.00	4,051.44	4,057.35	3,930.98	22.05	21.25	-8.42	-1,021.76	-79.17	443.30	405.16	38.14	11.624		
4,200.00	4,150.08	4,156.72	4,026.58	22.61	21.79	-8.41	-1,048.78	-81.42	454.50	415.43	39.08	11.631		
4,300.00	4,248.73	4,256.09	4,122.18	23.16	22.33	-8.40	-1,075.80	-83.66	465.71	425.69	40.02	11.638		
4,400.00	4,347.38	4,355.46	4,217.78	23.72	22.88	-8.40	-1,102.82	-85.91	476.91	435.95	40.96	11.644		
4,500.00	4,446.02	4,454.83	4,313.37	24.27	23.42	-8.39	-1,129.84	-88.16	488.11	446.21	41.90	11.650		
4,600.00	4,544.67	4,554.20	4,408.97	24.83	23.96	-8.38	-1,156.86	-90.41	499.31	456.47	42.84	11.655		
4,700.00	4,643.31	4,653.57	4,504.57	25.39	24.51	-8.37	-1,183.89	-92.65	510.52	466.73	43.78	11.660		
4,800.00	4,741.96	4,752.95	4,600.17	25.94	25.05	-8.36	-1,210.91	-94.90	521.72	476.99	44.73	11.664		
4,900.00	4,840.60	4,852.32	4,695.77	26.50	25.60	-8.36	-1,237.93	-97.15	532.92	487.25	45.67	11.668		
5,000.00	4,939.25	4,951.69	4,791.37	27.05	26.14	-8.35	-1,264.95	-99.39	544.12	497.51	46.62	11.672		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	5,037.90	5,051.06	4,886.97	27.61	26.68	-8.34	-1,291.97	-101.64	555.33	507.76	47.56	11.676	
5,200.00	5,136.54	5,150.43	4,982.57	28.17	27.23	-8.34	-1,318.99	-103.89	566.53	518.02	48.51	11.679	
5,300.00	5,235.19	5,249.80	5,078.17	28.72	27.77	-8.33	-1,346.02	-106.14	577.73	528.28	49.45	11.682	
5,400.00	5,333.83	5,349.17	5,173.77	29.28	28.32	-8.33	-1,373.04	-108.38	588.93	538.53	50.40	11.685	
5,500.00	5,432.48	5,448.54	5,269.37	29.84	28.86	-8.32	-1,400.06	-110.63	600.14	548.79	51.35	11.688	
5,600.00	5,531.12	5,547.91	5,364.97	30.40	29.41	-8.32	-1,427.08	-112.88	611.34	559.05	52.29	11.691	
5,700.00	5,629.77	5,647.28	5,460.57	30.95	29.96	-8.31	-1,454.10	-115.13	622.54	569.30	53.24	11.693	
5,800.00	5,728.41	5,746.65	5,556.17	31.51	30.50	-8.31	-1,481.12	-117.37	633.74	579.55	54.19	11.695	
5,900.00	5,827.06	5,846.02	5,651.77	32.07	31.05	-8.30	-1,508.15	-119.62	644.95	589.81	55.14	11.697	
6,000.00	5,925.71	5,945.39	5,747.37	32.63	31.59	-8.30	-1,535.17	-121.87	656.15	600.06	56.08	11.699	
6,100.00	6,024.35	6,044.76	5,842.97	33.19	32.14	-8.29	-1,562.19	-124.11	667.35	610.32	57.03	11.701	
6,200.00	6,123.00	6,144.13	5,938.57	33.74	32.69	-8.29	-1,589.21	-126.36	678.55	620.57	57.98	11.703	
6,300.00	6,221.64	6,243.50	6,034.17	34.30	33.23	-8.28	-1,616.23	-128.61	689.76	630.82	58.93	11.704	
6,400.00	6,320.29	6,342.87	6,129.77	34.86	33.78	-8.28	-1,643.25	-130.86	700.96	641.08	59.88	11.706	
6,500.00	6,418.93	6,442.24	6,225.37	35.42	34.33	-8.27	-1,670.28	-133.10	712.16	651.33	60.83	11.707	
6,600.00	6,517.58	6,541.61	6,320.97	35.98	34.87	-8.27	-1,697.30	-135.35	723.36	661.58	61.78	11.709	
6,700.00	6,616.23	6,640.99	6,416.57	36.54	35.42	-8.27	-1,724.32	-137.60	734.57	671.83	62.73	11.710	
6,800.00	6,714.51	6,740.12	6,511.94	37.10	35.96	-42.62	-1,751.28	-139.84	745.76	682.05	63.71	11.706	
6,900.00	6,810.42	6,837.24	6,605.38	37.66	36.50	-61.81	-1,777.69	-142.04	757.12	692.36	64.76	11.691	
7,000.00	6,901.58	6,934.74	6,699.08	38.21	37.03	-71.38	-1,804.19	-146.17	769.43	703.46	65.98	11.662	
7,100.00	6,985.76	7,040.87	6,799.34	38.76	37.60	-77.25	-1,832.65	-165.55	782.58	715.18	67.40	11.611	
7,200.00	7,060.88	7,154.85	6,901.91	39.32	38.14	-81.34	-1,861.93	-205.30	795.98	727.07	68.91	11.551	
7,300.00	7,125.09	7,277.84	7,002.97	39.90	38.66	-84.43	-1,890.95	-268.73	808.94	738.56	70.39	11.493	
7,400.00	7,176.81	7,410.61	7,096.65	40.55	39.13	-86.81	-1,918.09	-358.46	820.63	748.87	71.76	11.436	
7,500.00	7,214.77	7,553.08	7,174.90	41.30	39.57	-88.59	-1,941.07	-474.91	830.10	756.99	73.11	11.354	
7,600.00	7,238.02	7,703.76	7,228.38	42.22	40.02	-89.74	-1,957.22	-614.47	836.44	761.72	74.72	11.194	
7,700.00	7,246.01	7,859.52	7,248.94	43.32	40.65	-90.20	-1,964.19	-768.32	838.97	762.06	76.91	10.909	
7,800.00	7,245.50	7,964.55	7,248.46	44.65	41.33	-90.20	-1,964.84	-873.35	838.99	759.12	79.87	10.504	
7,900.00	7,244.97	8,064.55	7,247.86	46.21	42.27	-90.20	-1,965.43	-973.35	838.99	755.80	83.19	10.085	
8,000.00	7,244.44	8,164.55	7,247.26	47.99	43.48	-90.19	-1,966.01	-1,073.34	838.99	752.16	86.83	9.663	
8,100.00	7,243.91	8,264.55	7,246.67	49.96	44.92	-90.19	-1,966.59	-1,173.34	838.99	748.25	90.74	9.246	
8,200.00	7,243.39	8,364.55	7,246.07	52.10	46.53	-90.18	-1,967.18	-1,273.34	838.99	744.10	94.89	8.842	
8,300.00	7,242.86	8,464.55	7,245.48	54.38	48.28	-90.18	-1,967.76	-1,373.33	838.99	739.74	99.25	8.453	
8,400.00	7,242.33	8,564.55	7,244.88	56.78	50.16	-90.17	-1,968.35	-1,473.33	838.98	735.19	103.80	8.083	
8,500.00	7,241.80	8,664.55	7,244.28	59.28	52.13	-90.17	-1,968.93	-1,573.33	838.98	730.48	108.51	7.732	
8,600.00	7,241.27	8,764.55	7,243.69	61.88	54.19	-90.17	-1,969.51	-1,673.32	838.98	725.63	113.36	7.401	
8,700.00	7,240.74	8,864.55	7,243.09	64.54	56.33	-90.16	-1,970.10	-1,773.32	838.98	720.65	118.33	7.090	
8,800.00	7,240.21	8,964.55	7,242.50	67.27	58.53	-90.16	-1,970.68	-1,873.32	838.98	715.57	123.42	6.798	
8,900.00	7,239.68	9,064.55	7,241.90	70.06	60.79	-90.15	-1,971.27	-1,973.31	838.98	710.38	128.60	6.524	
9,000.00	7,239.16	9,164.55	7,241.31	72.89	63.10	-90.15	-1,971.85	-2,073.31	838.98	705.12	133.86	6.267	
9,100.00	7,238.63	9,264.55	7,240.71	75.77	65.45	-90.14	-1,972.43	-2,173.31	838.98	699.77	139.21	6.027	
9,200.00	7,238.10	9,364.55	7,240.11	78.69	67.85	-90.14	-1,973.02	-2,273.30	838.98	694.36	144.62	5.801	
9,300.00	7,237.57	9,464.55	7,239.52	81.64	70.28	-90.13	-1,973.60	-2,373.30	838.98	688.89	150.09	5.590	
9,400.00	7,237.04	9,564.55	7,238.92	84.62	72.74	-90.13	-1,974.18	-2,473.30	838.98	683.36	155.61	5.391	
9,500.00	7,236.51	9,664.55	7,238.33	87.63	75.23	-90.12	-1,974.77	-2,573.29	838.98	677.79	161.19	5.205	
9,600.00	7,235.98	9,764.55	7,237.73	90.66	77.74	-90.12	-1,975.35	-2,673.29	838.98	672.17	166.80	5.030	
9,700.00	7,235.45	9,864.55	7,237.13	93.72	80.28	-90.11	-1,975.94	-2,773.28	838.97	666.51	172.46	4.865	
9,800.00	7,234.93	9,964.55	7,236.54	96.79	82.84	-90.11	-1,976.52	-2,873.28	838.97	660.82	178.15	4.709	
9,900.00	7,234.40	10,064.55	7,235.94	99.88	85.42	-90.11	-1,977.10	-2,973.28	838.97	655.10	183.88	4.563	
10,000.00	7,233.87	10,164.55	7,235.35	102.98	88.02	-90.10	-1,977.69	-3,073.27	838.97	649.34	189.63	4.424	
10,100.00	7,233.34	10,264.55	7,234.75	106.10	90.63	-90.10	-1,978.27	-3,173.27	838.97	643.56	195.41	4.293	
10,200.00	7,232.81	10,364.55	7,234.16	109.23	93.26	-90.09	-1,978.85	-3,273.27	838.97	637.76	201.21	4.170	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,232.28	10,464.55	7,233.56	112.38	95.90	-90.09	-1,979.44	-3,373.26	838.97	631.93	207.04	4.052		
10,400.00	7,231.75	10,564.55	7,232.96	115.53	98.56	-90.08	-1,980.02	-3,473.26	838.97	626.08	212.89	3.941		
10,500.00	7,231.23	10,664.55	7,232.37	118.70	101.22	-90.08	-1,980.61	-3,573.26	838.97	620.21	218.76	3.835		
10,600.00	7,230.70	10,764.55	7,231.77	121.87	103.90	-90.07	-1,981.19	-3,673.25	838.97	614.33	224.64	3.735		
10,700.00	7,230.17	10,864.55	7,231.18	125.05	106.58	-90.07	-1,981.77	-3,773.25	838.97	608.43	230.54	3.639		
10,800.00	7,229.64	10,964.55	7,230.58	128.25	109.27	-90.06	-1,982.36	-3,873.25	838.97	602.51	236.46	3.548		
10,900.00	7,229.11	11,064.55	7,229.98	131.44	111.98	-90.06	-1,982.94	-3,973.24	838.97	596.58	242.39	3.461		
11,000.00	7,228.58	11,164.55	7,229.39	134.65	114.69	-90.06	-1,983.52	-4,073.24	838.97	590.64	248.33	3.378		
11,100.00	7,228.05	11,264.55	7,228.79	137.86	117.40	-90.05	-1,984.11	-4,173.24	838.97	584.68	254.28	3.299		
11,200.00	7,227.52	11,364.55	7,228.20	141.08	120.12	-90.05	-1,984.69	-4,273.23	838.96	578.72	260.25	3.224		
11,300.00	7,227.00	11,464.55	7,227.60	144.30	122.85	-90.04	-1,985.28	-4,373.23	838.96	572.74	266.22	3.151		
11,400.00	7,226.47	11,564.55	7,227.00	147.52	125.59	-90.04	-1,985.86	-4,473.23	838.96	566.75	272.21	3.082		
11,500.00	7,225.94	11,664.55	7,226.41	150.76	128.33	-90.03	-1,986.44	-4,573.22	838.96	560.76	278.20	3.016		
11,600.00	7,225.41	11,764.55	7,225.81	153.99	131.08	-90.03	-1,987.03	-4,673.22	838.96	554.76	284.21	2.952		
11,700.00	7,224.88	11,864.55	7,225.22	157.23	133.83	-90.02	-1,987.61	-4,773.21	838.96	548.74	290.22	2.891		
11,800.00	7,224.35	11,964.55	7,224.62	160.48	136.58	-90.02	-1,988.19	-4,873.21	838.96	542.72	296.24	2.832		
11,900.00	7,223.82	12,064.55	7,224.03	163.72	139.34	-90.01	-1,988.78	-4,973.21	838.96	536.70	302.26	2.776		
12,000.00	7,223.29	12,164.55	7,223.43	166.98	142.10	-90.01	-1,989.36	-5,073.20	838.96	530.67	308.29	2.721		
12,100.00	7,222.77	12,264.55	7,222.83	170.23	144.87	-90.00	-1,989.95	-5,173.20	838.96	524.63	314.33	2.669		
12,200.00	7,222.24	12,364.55	7,222.24	173.49	147.64	-90.00	-1,990.53	-5,273.20	838.96	518.58	320.38	2.619		
12,300.00	7,221.71	12,464.55	7,221.64	176.75	150.41	-90.00	-1,991.11	-5,373.19	838.96	512.53	326.43	2.570		
12,400.00	7,221.18	12,564.55	7,221.05	180.01	153.19	-89.99	-1,991.70	-5,473.19	838.96	506.48	332.48	2.523		
12,500.00	7,220.65	12,664.55	7,220.45	183.28	155.97	-89.99	-1,992.28	-5,573.19	838.96	500.42	338.54	2.478		
12,600.00	7,220.12	12,764.55	7,219.85	186.54	158.75	-89.98	-1,992.86	-5,673.18	838.96	494.35	344.61	2.435		
12,700.00	7,219.59	12,864.55	7,219.26	189.81	161.54	-89.98	-1,993.45	-5,773.18	838.96	488.28	350.68	2.392		
12,800.00	7,219.06	12,964.55	7,218.66	193.09	164.33	-89.97	-1,994.03	-5,873.18	838.96	482.21	356.75	2.352		
12,900.00	7,218.54	13,064.55	7,218.07	196.36	167.12	-89.97	-1,994.62	-5,973.17	838.95	476.13	362.83	2.312		
13,000.00	7,218.01	13,164.55	7,217.47	199.64	169.91	-89.96	-1,995.20	-6,073.17	838.95	470.05	368.91	2.274		
13,100.00	7,217.48	13,264.55	7,216.88	202.92	172.70	-89.96	-1,995.78	-6,173.17	838.95	463.96	374.99	2.237		
13,200.00	7,216.95	13,364.55	7,216.28	206.20	175.50	-89.95	-1,996.37	-6,273.16	838.95	457.87	381.08	2.202		
13,300.00	7,216.42	13,464.55	7,215.68	209.48	178.30	-89.95	-1,996.95	-6,373.16	838.95	451.78	387.17	2.167		
13,400.00	7,215.89	13,564.55	7,215.09	212.76	181.10	-89.95	-1,997.54	-6,473.16	838.95	445.68	393.27	2.133		
13,500.00	7,215.36	13,664.55	7,214.49	216.05	183.90	-89.94	-1,998.12	-6,573.15	838.95	439.58	399.37	2.101		
13,600.00	7,214.84	13,764.55	7,213.90	219.33	186.71	-89.94	-1,998.70	-6,673.15	838.95	433.48	405.47	2.069		
13,700.00	7,214.31	13,864.55	7,213.30	222.62	189.51	-89.93	-1,999.29	-6,773.14	838.95	427.38	411.57	2.038		
13,800.00	7,213.78	13,964.55	7,212.70	225.91	192.32	-89.93	-1,999.87	-6,873.14	838.95	421.27	417.68	2.009		
13,900.00	7,213.25	14,064.55	7,212.11	229.20	195.13	-89.92	-2,000.45	-6,973.14	838.95	415.16	423.79	1.980		
14,000.00	7,212.72	14,164.55	7,211.51	232.49	197.94	-89.92	-2,001.04	-7,073.13	838.95	409.05	429.90	1.952		
14,100.00	7,212.19	14,264.55	7,210.92	235.79	200.75	-89.91	-2,001.62	-7,173.13	838.95	402.94	436.01	1.924		
14,200.00	7,211.66	14,364.55	7,210.32	239.08	203.56	-89.91	-2,002.21	-7,273.13	838.95	396.82	442.13	1.898		
14,300.00	7,211.13	14,464.55	7,209.72	242.38	206.38	-89.90	-2,002.79	-7,373.12	838.95	390.70	448.24	1.872		
14,400.00	7,210.61	14,564.55	7,209.13	245.67	209.19	-89.90	-2,003.37	-7,473.12	838.95	384.58	454.36	1.846		
14,500.00	7,210.08	14,664.55	7,208.53	248.97	212.01	-89.89	-2,003.96	-7,573.12	838.95	378.46	460.49	1.822		
14,600.00	7,209.55	14,764.55	7,207.94	252.27	214.83	-89.89	-2,004.54	-7,673.11	838.95	372.34	466.61	1.798		
14,700.00	7,209.02	14,864.55	7,207.34	255.57	217.65	-89.89	-2,005.12	-7,773.11	838.95	366.21	472.74	1.775		
14,800.00	7,208.49	14,964.55	7,206.75	258.87	220.47	-89.88	-2,005.71	-7,873.11	838.95	360.08	478.86	1.752		
14,900.00	7,207.96	15,064.55	7,206.15	262.17	223.29	-89.88	-2,006.29	-7,973.10	838.95	353.95	484.99	1.730		
15,000.00	7,207.43	15,164.55	7,205.55	265.47	226.11	-89.87	-2,006.88	-8,073.10	838.94	347.82	491.12	1.708		
15,081.89	7,207.00	15,246.44	7,205.07	268.17	228.42	-89.87	-2,007.35	-8,154.98	838.94	342.80	496.14	1.691 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	1.00	0.00	3.28	3.28	-179.52	-200.00	-1.67	200.01					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-200.00	-1.67	200.01	193.44	6.57	30.445		
200.00	200.00	199.00	200.00	3.34	3.34	-179.52	-200.00	-1.67	200.01	193.34	6.67	29.972		
300.00	299.98	292.54	293.53	3.44	3.43	-7.61	-201.50	-1.74	199.88	193.00	6.88	29.055		
400.00	399.84	386.03	386.90	3.59	3.57	-7.75	-206.04	-1.95	199.55	192.36	7.19	27.763		
500.00	499.45	479.53	480.08	3.80	3.75	-7.97	-213.62	-2.30	199.02	191.43	7.59	26.214		
600.00	598.70	573.04	572.99	4.06	3.97	-8.29	-224.23	-2.79	198.30	190.22	8.08	24.544		
700.00	697.49	666.57	665.51	4.38	4.22	-8.70	-237.87	-3.42	197.54	188.90	8.64	22.872		
700.85	698.32	667.37	666.29	4.38	4.22	-8.71	-238.00	-3.43	197.53	188.89	8.64	22.859 CC, ES		
800.00	796.13	760.09	757.53	4.74	4.51	-9.09	-254.52	-4.19	199.14	189.89	9.25	21.531		
900.00	894.78	853.42	848.77	5.15	4.83	-9.41	-274.12	-5.10	204.01	194.11	9.90	20.605		
1,000.00	993.43	946.36	938.95	5.58	5.18	-9.66	-296.58	-6.14	212.12	201.53	10.59	20.030		
1,100.00	1,092.07	1,038.72	1,027.79	6.03	5.56	-9.82	-321.77	-7.30	223.44	212.14	11.30	19.772		
1,200.00	1,190.72	1,130.32	1,115.05	6.50	5.97	-9.91	-349.58	-8.59	237.94	225.91	12.03	19.786		
1,300.00	1,289.36	1,220.97	1,200.50	6.98	6.40	-9.93	-379.82	-9.99	255.57	242.81	12.76	20.031		
1,400.00	1,388.01	1,310.52	1,283.92	7.47	6.85	-9.90	-412.34	-11.49	276.27	262.78	13.49	20.473		
1,500.00	1,486.65	1,398.82	1,365.14	7.97	7.32	-9.83	-446.94	-13.09	299.99	285.76	14.23	21.085		
1,600.00	1,585.30	1,485.73	1,444.00	8.48	7.81	-9.73	-483.41	-14.78	326.66	311.70	14.96	21.840		
1,700.00	1,683.94	1,571.12	1,520.37	9.00	8.32	-9.62	-521.56	-16.54	356.21	340.53	15.68	22.722		
1,800.00	1,782.59	1,654.88	1,594.15	9.52	8.84	-9.49	-561.18	-18.37	388.56	372.18	16.39	23.713		
1,900.00	1,881.24	1,736.93	1,665.26	10.05	9.38	-9.36	-602.05	-20.26	423.63	406.55	17.08	24.800		
2,000.00	1,979.88	1,817.18	1,733.65	10.58	9.92	-9.22	-643.99	-22.20	461.34	443.58	17.76	25.975		
2,100.00	2,078.53	1,907.01	1,809.34	11.11	10.54	-9.08	-692.31	-24.44	500.71	482.12	18.59	26.932		
2,200.00	2,177.17	2,001.08	1,886.77	11.64	11.21	-8.96	-741.78	-26.73	540.12	520.64	19.48	27.726		
2,300.00	2,275.82	2,109.18	1,964.19	12.18	11.99	-8.85	-791.24	-29.01	579.53	559.07	20.46	28.323		
2,400.00	2,374.46	2,182.72	2,041.61	12.72	12.53	-8.76	-840.70	-31.30	618.94	597.68	21.26	29.112		
2,500.00	2,473.11	2,274.62	2,119.03	13.26	13.21	-8.67	-890.16	-33.59	658.35	636.18	22.17	29.693		
2,600.00	2,571.76	2,366.52	2,196.45	13.80	13.89	-8.60	-939.63	-35.88	697.77	674.68	23.09	30.215		
2,700.00	2,670.40	2,458.42	2,273.87	14.35	14.58	-8.54	-989.09	-38.16	737.18	713.16	24.02	30.688		
2,800.00	2,769.05	2,550.32	2,351.30	14.89	15.27	-8.48	-1,038.55	-40.45	776.60	751.64	24.96	31.117		
2,900.00	2,867.69	2,642.23	2,428.72	15.44	15.97	-8.42	-1,088.01	-42.74	816.02	790.12	25.90	31.507		
3,000.00	2,966.34	2,734.13	2,506.14	15.99	16.67	-8.38	-1,137.48	-45.03	855.43	828.59	26.85	31.863		
3,100.00	3,064.98	2,826.03	2,583.56	16.53	17.37	-8.33	-1,186.94	-47.31	894.85	867.05	27.80	32.189		
3,200.00	3,163.63	2,917.93	2,660.98	17.08	18.07	-8.29	-1,236.40	-49.60	934.27	905.51	28.76	32.489		
3,300.00	3,262.27	3,009.83	2,738.40	17.63	18.78	-8.26	-1,285.86	-51.89	973.69	943.97	29.72	32.765		
3,400.00	3,360.92	3,101.73	2,815.82	18.18	19.49	-8.22	-1,335.33	-54.18	1,013.11	982.42	30.68	33.020		
3,500.00	3,459.57	3,206.37	2,893.25	18.74	20.30	-8.19	-1,384.79	-56.47	1,052.53	1,020.80	31.73	33.174		
3,600.00	3,558.21	3,285.54	2,970.67	19.29	20.91	-8.16	-1,434.25	-58.75	1,091.94	1,059.32	32.62	33.474		
3,700.00	3,656.86	3,377.44	3,048.09	19.84	21.62	-8.13	-1,483.71	-61.04	1,131.36	1,097.77	33.59	33.677		
3,800.00	3,755.50	3,469.34	3,125.51	20.39	22.34	-8.11	-1,533.18	-63.33	1,170.78	1,136.21	34.57	33.866		
3,900.00	3,854.15	3,561.24	3,202.93	20.95	23.05	-8.08	-1,582.64	-65.62	1,210.20	1,174.65	35.55	34.043		
4,000.00	3,952.79	3,653.14	3,280.35	21.50	23.77	-8.06	-1,632.10	-67.90	1,249.62	1,213.09	36.53	34.208		
4,100.00	4,051.44	3,745.04	3,357.78	22.05	24.49	-8.04	-1,681.57	-70.19	1,289.04	1,251.53	37.51	34.363		
4,200.00	4,150.08	3,836.95	3,435.20	22.61	25.20	-8.02	-1,731.03	-72.48	1,328.46	1,289.97	38.50	34.508		
4,300.00	4,248.73	3,928.85	3,512.62	23.16	25.92	-8.00	-1,780.49	-74.77	1,367.88	1,328.40	39.48	34.644		
4,400.00	4,347.38	4,020.75	3,590.04	23.72	26.64	-7.99	-1,829.95	-77.05	1,407.30	1,366.83	40.47	34.773		
4,500.00	4,446.02	4,112.65	3,667.46	24.27	27.36	-7.97	-1,879.42	-79.34	1,446.72	1,405.26	41.46	34.894		
4,600.00	4,544.67	4,204.55	3,744.88	24.83	28.09	-7.95	-1,928.88	-81.63	1,486.15	1,443.69	42.45	35.008		
4,700.00	4,643.31	4,303.55	3,822.30	25.39	28.86	-7.94	-1,978.34	-83.92	1,525.57	1,482.08	43.49	35.080		
4,800.00	4,741.96	4,388.35	3,899.73	25.94	29.53	-7.92	-2,027.80	-86.21	1,564.99	1,520.55	44.44	35.218		
4,900.00	4,840.60	4,480.26	3,977.15	26.50	30.25	-7.91	-2,077.27	-88.49	1,604.41	1,558.98	45.43	35.315		
5,000.00	4,939.25	4,572.16	4,054.57	27.05	30.98	-7.90	-2,126.73	-90.78	1,643.83	1,597.40	46.43	35.407		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	4,664.06	4,131.99	27.61	31.70	-7.89	-2,176.19	-93.07	1,683.25	1,635.83	47.42	35.494		
5,200.00	5,136.54	4,755.96	4,209.41	28.17	32.43	-7.87	-2,225.65	-95.36	1,722.67	1,674.25	48.42	35.577		
5,300.00	5,235.19	4,847.86	4,286.83	28.72	33.15	-7.86	-2,275.12	-97.64	1,762.09	1,712.67	49.42	35.656		
5,400.00	5,333.83	4,939.76	4,364.25	29.28	33.88	-7.85	-2,324.58	-99.93	1,801.51	1,751.10	50.42	35.732		
5,500.00	5,432.48	5,031.66	4,441.68	29.84	34.60	-7.84	-2,374.04	-102.22	1,840.93	1,789.52	51.42	35.803		
5,600.00	5,531.12	5,123.57	4,519.10	30.40	35.33	-7.83	-2,423.50	-104.51	1,880.36	1,827.94	52.42	35.872		
5,700.00	5,629.77	5,215.47	4,596.52	30.95	36.05	-7.82	-2,472.97	-106.79	1,919.78	1,866.36	53.42	35.937		
5,800.00	5,728.41	5,307.37	4,673.94	31.51	36.78	-7.82	-2,522.43	-109.08	1,959.20	1,904.78	54.42	36.000		
5,900.00	5,827.06	5,400.73	4,751.36	32.07	37.52	-7.81	-2,571.89	-111.37	1,998.62	1,943.19	55.43	36.054		
6,000.00	5,925.71	5,508.83	4,828.78	32.63	38.37	-7.80	-2,621.36	-113.66	2,038.04	1,981.50	56.54	36.046		
6,100.00	6,024.35	5,583.07	4,906.21	33.19	38.96	-7.79	-2,670.82	-115.94	2,077.46	2,020.03	57.43	36.172		
6,200.00	6,123.00	5,674.97	4,983.63	33.74	39.69	-7.78	-2,720.28	-118.23	2,116.88	2,058.45	58.44	36.224		
6,300.00	6,221.64	5,767.51	5,061.58	34.30	40.42	-7.78	-2,770.08	-120.54	2,156.31	2,096.85	59.45	36.270		
6,400.00	6,320.29	5,857.30	5,140.27	34.86	43.27	-7.78	-2,956.85	-129.17	2,189.44	2,125.88	63.56	34.444		
6,500.00	6,418.93	5,948.42	5,217.17	35.42	45.82	-7.85	-3,104.57	-136.01	2,208.93	2,142.53	66.40	33.268		
6,600.00	6,517.58	6,041.12	5,293.91	35.98	47.85	-8.01	-3,195.17	-140.20	2,213.55	2,146.07	67.48	32.804		
6,700.00	6,616.23	6,134.36	5,370.02	36.54	49.12	-8.21	-3,220.52	-141.48	2,203.09	2,136.16	66.93	32.915		
6,800.00	6,714.51	6,221.64	5,446.35	37.10	49.36	-44.17	-3,220.58	-150.59	2,186.93	2,119.23	67.70	32.304		
6,900.00	6,810.42	6,309.93	5,521.06	37.66	49.59	-64.27	-3,220.72	-174.15	2,171.15	2,102.67	68.47	31.708		
7,000.00	6,901.58	6,398.67	5,595.14	38.21	49.82	-73.83	-3,220.95	-211.64	2,156.13	2,086.87	69.26	31.132		
7,100.00	6,985.76	6,485.57	5,668.64	38.76	50.02	-79.42	-3,221.26	-262.27	2,142.25	2,072.17	70.08	30.569		
7,200.00	7,060.88	6,572.73	5,741.71	39.32	50.20	-83.11	-3,221.65	-325.01	2,129.85	2,058.85	71.00	29.998		
7,300.00	7,125.09	6,659.25	5,814.59	39.90	50.34	-85.71	-3,222.10	-398.57	2,119.24	2,047.13	72.11	29.389		
7,400.00	7,176.81	6,746.16	5,887.68	40.55	50.46	-87.56	-3,222.61	-481.36	2,110.68	2,037.18	73.50	28.716		
7,500.00	7,214.77	6,834.48	5,960.61	41.30	50.54	-88.82	-3,223.16	-571.54	2,104.37	2,029.12	75.25	27.964		
7,600.00	7,238.02	6,921.19	6,032.26	42.22	50.60	-89.57	-3,223.74	-667.01	2,100.48	2,023.08	77.40	27.139		
7,700.00	7,246.01	6,984.23	6,098.89	43.32	50.64	-89.86	-3,224.35	-765.48	2,099.11	2,019.20	79.91	26.269		
7,775.75	7,245.98	6,984.23	6,098.89	44.31	50.67	-89.86	-3,224.81	-841.10	2,099.07	2,016.98	82.09	25.571		
7,800.00	7,245.50	6,984.11	6,098.66	44.65	50.68	-89.87	-3,224.96	-865.36	2,099.13	2,016.34	82.79	25.355		
7,900.00	7,244.97	6,984.11	6,098.66	46.21	50.74	-89.87	-3,225.57	-965.35	2,099.16	2,013.14	86.01	24.405		
8,000.00	7,244.44	6,984.11	6,098.66	47.99	50.83	-89.87	-3,226.18	-1,065.35	2,099.19	2,009.64	89.55	23.443		
8,100.00	7,243.91	6,984.11	6,098.66	49.96	50.98	-89.88	-3,226.80	-1,165.35	2,099.21	2,005.86	93.35	22.487		
8,200.00	7,243.39	6,984.11	6,098.66	52.10	51.26	-89.88	-3,227.41	-1,265.34	2,099.24	2,001.84	97.40	21.553		
8,300.00	7,242.86	6,984.11	6,098.66	54.38	51.82	-89.88	-3,228.02	-1,365.34	2,099.27	1,997.61	101.66	20.650		
8,400.00	7,242.33	6,984.11	6,098.66	56.78	52.88	-89.89	-3,228.63	-1,465.34	2,099.30	1,993.19	106.11	19.784		
8,500.00	7,241.80	6,984.11	6,098.66	59.28	54.42	-89.89	-3,229.25	-1,565.34	2,099.32	1,988.60	110.72	18.960		
8,600.00	7,241.27	6,984.11	6,098.66	61.88	56.23	-89.89	-3,229.86	-1,665.33	2,099.35	1,983.87	115.48	18.179		
8,700.00	7,240.74	6,984.11	6,098.66	64.54	58.20	-89.90	-3,230.47	-1,765.33	2,099.38	1,979.01	120.37	17.441		
8,800.00	7,240.21	6,984.11	6,098.66	67.27	60.29	-89.90	-3,231.08	-1,865.33	2,099.41	1,974.04	125.37	16.745		
8,900.00	7,239.68	6,984.11	6,098.66	70.06	62.45	-89.90	-3,231.70	-1,965.32	2,099.44	1,968.96	130.48	16.091		
9,000.00	7,239.16	6,984.11	6,098.66	72.89	64.68	-89.91	-3,232.31	-2,065.32	2,099.46	1,963.80	135.67	15.475		
9,100.00	7,238.63	6,984.11	6,098.66	75.77	66.96	-89.91	-3,232.92	-2,165.32	2,099.49	1,958.55	140.94	14.896		
9,200.00	7,238.10	6,984.11	6,098.66	78.69	69.29	-89.91	-3,233.53	-2,265.32	2,099.52	1,953.24	146.28	14.352		
9,300.00	7,237.57	6,984.11	6,098.66	81.64	71.66	-89.92	-3,234.15	-2,365.31	2,099.55	1,947.86	151.69	13.841		
9,400.00	7,237.04	6,984.11	6,098.66	84.62	74.06	-89.92	-3,234.76	-2,465.31	2,099.58	1,942.42	157.15	13.360		
9,500.00	7,236.51	6,984.11	6,098.66	87.63	76.50	-89.92	-3,235.37	-2,565.31	2,099.60	1,936.93	162.67	12.907		
9,600.00	7,235.98	6,984.11	6,098.66	90.66	78.97	-89.93	-3,235.98	-2,665.31	2,099.63	1,931.40	168.23	12.480		
9,700.00	7,235.45	6,984.11	6,098.66	93.72	81.46	-89.93	-3,236.59	-2,765.30	2,099.66	1,925.82	173.84	12.078		
9,800.00	7,234.93	6,984.11	6,098.66	96.79	83.98	-89.93	-3,237.21	-2,865.30	2,099.69	1,920.21	179.48	11.699		
9,900.00	7,234.40	6,984.11	6,098.66	99.88	86.52	-89.94	-3,237.82	-2,965.30	2,099.72	1,914.56	185.16	11.340		
10,000.00	7,233.87	6,984.11	6,098.66	102.98	89.08	-89.94	-3,238.43	-3,065.29	2,099.74	1,908.87	190.87	11.001		
10,100.00	7,233.34	6,984.11	6,098.66	106.10	91.66	-89.95	-3,239.04	-3,165.29	2,099.77	1,903.16	196.61	10.680		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.81	10,884.11	7,230.92	109.23	94.25	-89.95	-3,239.66	-3,265.29	2,099.80	1,897.42	202.37	10.376		
10,300.00	7,232.28	10,984.11	7,230.52	112.38	96.86	-89.95	-3,240.27	-3,365.29	2,099.83	1,891.66	208.16	10.087		
10,400.00	7,231.75	11,084.11	7,230.11	115.53	99.49	-89.96	-3,240.88	-3,465.28	2,099.86	1,885.88	213.98	9.813		
10,500.00	7,231.23	11,184.11	7,229.71	118.70	102.12	-89.96	-3,241.49	-3,565.28	2,099.88	1,880.07	219.81	9.553		
10,600.00	7,230.70	11,284.11	7,229.30	121.87	104.77	-89.96	-3,242.11	-3,665.28	2,099.91	1,874.25	225.66	9.306		
10,700.00	7,230.17	11,384.11	7,228.89	125.05	107.43	-89.97	-3,242.72	-3,765.27	2,099.94	1,868.41	231.53	9.070		
10,800.00	7,229.64	11,484.11	7,228.49	128.25	110.10	-89.97	-3,243.33	-3,865.27	2,099.97	1,862.55	237.42	8.845		
10,900.00	7,229.11	11,584.11	7,228.08	131.44	112.78	-89.97	-3,243.94	-3,965.27	2,100.00	1,856.68	243.32	8.631		
11,000.00	7,228.58	11,684.11	7,227.68	134.65	115.46	-89.98	-3,244.56	-4,065.27	2,100.02	1,850.79	249.23	8.426		
11,100.00	7,228.05	11,784.11	7,227.27	137.86	118.16	-89.98	-3,245.17	-4,165.26	2,100.05	1,844.89	255.16	8.230		
11,200.00	7,227.52	11,884.11	7,226.87	141.08	120.86	-89.98	-3,245.78	-4,265.26	2,100.08	1,838.98	261.10	8.043		
11,300.00	7,227.00	11,984.11	7,226.46	144.30	123.57	-89.99	-3,246.39	-4,365.26	2,100.11	1,833.05	267.05	7.864		
11,400.00	7,226.47	12,084.11	7,226.05	147.52	126.29	-89.99	-3,247.01	-4,465.26	2,100.14	1,827.12	273.02	7.692		
11,500.00	7,225.94	12,184.11	7,225.65	150.76	129.01	-89.99	-3,247.62	-4,565.25	2,100.16	1,821.18	278.99	7.528		
11,600.00	7,225.41	12,284.11	7,225.24	153.99	131.74	-90.00	-3,248.23	-4,665.25	2,100.19	1,815.22	284.97	7.370		
11,700.00	7,224.88	12,384.11	7,224.84	157.23	134.47	-90.00	-3,248.84	-4,765.25	2,100.22	1,809.26	290.96	7.218		
11,800.00	7,224.35	12,484.11	7,224.43	160.48	137.21	-90.00	-3,249.46	-4,865.24	2,100.25	1,803.29	296.96	7.073		
11,900.00	7,223.82	12,584.11	7,224.03	163.72	139.96	-90.01	-3,250.07	-4,965.24	2,100.28	1,797.31	302.97	6.932		
12,000.00	7,223.29	12,684.11	7,223.62	166.98	142.70	-90.01	-3,250.68	-5,065.24	2,100.30	1,791.33	308.98	6.798		
12,100.00	7,222.77	12,784.11	7,223.21	170.23	145.46	-90.01	-3,251.29	-5,165.24	2,100.33	1,785.33	315.00	6.668		
12,200.00	7,222.24	12,884.11	7,222.81	173.49	148.21	-90.02	-3,251.91	-5,265.23	2,100.36	1,779.33	321.03	6.543		
12,300.00	7,221.71	12,984.11	7,222.40	176.75	150.97	-90.02	-3,252.52	-5,365.23	2,100.39	1,773.33	327.06	6.422		
12,400.00	7,221.18	13,084.11	7,222.00	180.01	153.74	-90.02	-3,253.13	-5,465.23	2,100.42	1,767.32	333.10	6.306		
12,500.00	7,220.65	13,184.11	7,221.59	183.28	156.50	-90.03	-3,253.74	-5,565.22	2,100.45	1,761.30	339.14	6.193		
12,600.00	7,220.12	13,284.11	7,221.19	186.54	159.27	-90.03	-3,254.36	-5,665.22	2,100.47	1,755.28	345.19	6.085		
12,700.00	7,219.59	13,384.11	7,220.78	189.81	162.05	-90.03	-3,254.97	-5,765.22	2,100.50	1,749.25	351.25	5.980		
12,800.00	7,219.06	13,484.11	7,220.37	193.09	164.83	-90.04	-3,255.58	-5,865.22	2,100.53	1,743.22	357.31	5.879		
12,900.00	7,218.54	13,584.11	7,219.97	196.36	167.60	-90.04	-3,256.19	-5,965.21	2,100.56	1,737.19	363.37	5.781		
13,000.00	7,218.01	13,684.11	7,219.56	199.64	170.39	-90.04	-3,256.81	-6,065.21	2,100.59	1,731.15	369.44	5.686		
13,100.00	7,217.48	13,784.11	7,219.16	202.92	173.17	-90.05	-3,257.42	-6,165.21	2,100.61	1,725.10	375.51	5.594		
13,200.00	7,216.95	13,884.11	7,218.75	206.20	175.96	-90.05	-3,258.03	-6,265.21	2,100.64	1,719.05	381.59	5.505		
13,300.00	7,216.42	13,984.11	7,218.34	209.48	178.75	-90.05	-3,258.64	-6,365.20	2,100.67	1,713.00	387.67	5.419		
13,400.00	7,215.89	14,084.11	7,217.94	212.76	181.54	-90.06	-3,259.26	-6,465.20	2,100.70	1,706.95	393.75	5.335		
13,500.00	7,215.36	14,184.11	7,217.53	216.05	184.33	-90.06	-3,259.87	-6,565.20	2,100.73	1,700.89	399.84	5.254		
13,600.00	7,214.84	14,284.11	7,217.13	219.33	187.13	-90.06	-3,260.48	-6,665.19	2,100.76	1,694.83	405.93	5.175		
13,700.00	7,214.31	14,384.11	7,216.72	222.62	189.92	-90.07	-3,261.09	-6,765.19	2,100.78	1,688.76	412.02	5.099		
13,800.00	7,213.78	14,484.11	7,216.32	225.91	192.72	-90.07	-3,261.71	-6,865.19	2,100.81	1,682.70	418.12	5.024		
13,900.00	7,213.25	14,584.11	7,215.91	229.20	195.52	-90.07	-3,262.32	-6,965.19	2,100.84	1,676.63	424.21	4.952		
14,000.00	7,212.72	14,684.11	7,215.50	232.49	198.33	-90.08	-3,262.93	-7,065.18	2,100.87	1,670.55	430.31	4.882		
14,100.00	7,212.19	14,784.11	7,215.10	235.79	201.13	-90.08	-3,263.54	-7,165.18	2,100.90	1,664.48	436.42	4.814		
14,200.00	7,211.66	14,884.11	7,214.69	239.08	203.94	-90.08	-3,264.16	-7,265.18	2,100.93	1,658.40	442.52	4.748		
14,300.00	7,211.13	14,984.11	7,214.29	242.38	206.74	-90.09	-3,264.77	-7,365.18	2,100.95	1,652.32	448.63	4.683		
14,400.00	7,210.61	15,084.11	7,213.88	245.67	209.55	-90.09	-3,265.38	-7,465.17	2,100.98	1,646.24	454.74	4.620		
14,500.00	7,210.08	15,184.11	7,213.48	248.97	212.36	-90.09	-3,265.99	-7,565.17	2,101.01	1,640.15	460.86	4.559		
14,600.00	7,209.55	15,284.11	7,213.07	252.27	215.17	-90.10	-3,266.61	-7,665.17	2,101.04	1,634.07	466.97	4.499		
14,700.00	7,209.02	15,384.11	7,212.66	255.57	217.99	-90.10	-3,267.22	-7,765.16	2,101.07	1,627.98	473.09	4.441		
14,800.00	7,208.49	15,484.11	7,212.26	258.87	220.80	-90.10	-3,267.83	-7,865.16	2,101.09	1,621.89	479.21	4.385		
14,900.00	7,207.96	15,584.11	7,211.85	262.17	223.61	-90.11	-3,268.44	-7,965.16	2,101.12	1,615.80	485.33	4.329		
15,000.00	7,207.43	15,684.11	7,211.45	265.47	226.43	-90.11	-3,269.06	-8,065.16	2,101.15	1,609.70	491.45	4.275		
15,081.89	7,207.00	15,765.99	7,211.11	268.17	228.74	-90.11	-3,269.56	-8,147.04	2,101.17	1,604.71	496.46	4.232 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	0.44	179.96	1.39	179.97					
100.00	100.00	101.00	100.00	3.28	3.28	0.44	179.96	1.39	179.97	173.40	6.57	27.394		
200.00	200.00	201.00	200.00	3.34	3.34	0.44	179.96	1.39	179.97	173.29	6.67	26.962	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	172.47	179.96	1.39	181.70	174.81	6.89	26.385		
400.00	399.84	400.84	399.84	3.59	3.60	172.67	179.96	1.39	186.89	179.69	7.20	25.967		
500.00	499.45	500.45	499.45	3.80	3.81	172.97	179.96	1.39	195.53	187.94	7.60	25.729		
600.00	598.70	599.70	598.70	4.06	4.05	173.35	179.96	1.39	207.64	199.56	8.08	25.696		
700.00	697.49	704.86	694.12	4.38	4.33	173.43	180.79	0.07	223.86	215.21	8.65	25.891		
800.00	796.13	806.46	792.48	4.74	4.63	173.26	182.34	-2.41	241.64	232.40	9.24	26.149		
900.00	894.78	908.05	890.85	5.15	4.95	173.12	183.88	-4.89	259.42	249.54	9.88	26.250		
1,000.00	993.43	1,009.65	989.21	5.58	5.29	173.00	185.43	-7.36	277.21	266.64	10.56	26.244		
1,100.00	1,092.07	1,088.76	1,087.57	6.03	5.56	172.90	186.98	-9.84	294.99	283.79	11.19	26.350		
1,200.00	1,190.72	1,187.16	1,185.93	6.50	5.91	172.80	188.53	-12.31	312.77	300.86	11.92	26.243		
1,300.00	1,289.36	1,285.57	1,284.29	6.98	6.28	172.72	190.07	-14.79	330.56	317.90	12.66	26.105		
1,400.00	1,388.01	1,383.97	1,382.65	7.47	6.65	172.64	191.62	-17.27	348.35	334.92	13.43	25.947		
1,500.00	1,486.65	1,482.38	1,481.01	7.97	7.03	172.57	193.17	-19.74	366.13	351.93	14.20	25.780		
1,600.00	1,585.30	1,580.78	1,579.37	8.48	7.41	172.51	194.71	-22.22	383.92	368.93	14.99	25.608		
1,700.00	1,683.94	1,679.19	1,677.74	9.00	7.80	172.46	196.26	-24.69	401.71	385.91	15.79	25.436		
1,800.00	1,782.59	1,777.59	1,776.10	9.52	8.19	172.40	197.81	-27.17	419.49	402.89	16.60	25.268		
1,900.00	1,881.24	1,875.99	1,874.46	10.05	8.59	172.36	199.36	-29.65	437.28	419.86	17.42	25.103		
2,000.00	1,979.88	1,974.40	1,972.82	10.58	8.99	172.31	200.90	-32.12	455.07	436.83	18.24	24.944		
2,100.00	2,078.53	2,072.80	2,071.18	11.11	9.40	172.27	202.45	-34.60	472.86	453.79	19.07	24.791		
2,200.00	2,177.17	2,171.21	2,169.54	11.64	9.80	172.23	204.00	-37.07	490.65	470.74	19.91	24.644		
2,300.00	2,275.82	2,269.61	2,267.90	12.18	10.21	172.20	205.55	-39.55	508.44	487.69	20.75	24.504		
2,400.00	2,374.46	2,368.02	2,366.26	12.72	10.62	172.17	207.09	-42.03	526.23	504.63	21.59	24.370		
2,500.00	2,473.11	2,466.42	2,464.63	13.26	11.03	172.14	208.64	-44.50	544.02	521.58	22.44	24.243		
2,600.00	2,571.76	2,564.83	2,562.99	13.80	11.45	172.11	210.19	-46.98	561.81	538.52	23.29	24.121		
2,700.00	2,670.40	2,663.23	2,661.35	14.35	11.86	172.08	211.73	-49.45	579.60	555.45	24.14	24.005		
2,800.00	2,769.05	2,761.64	2,759.71	14.89	12.28	172.06	213.28	-51.93	597.39	572.39	25.00	23.895		
2,900.00	2,867.69	2,860.04	2,858.07	15.44	12.70	172.03	214.83	-54.41	615.18	589.32	25.86	23.790		
3,000.00	2,966.34	2,958.45	2,956.43	15.99	13.11	172.01	216.38	-56.88	632.97	606.25	26.72	23.689		
3,100.00	3,064.98	3,056.85	3,054.79	16.53	13.53	171.99	217.92	-59.36	650.76	623.17	27.58	23.594		
3,200.00	3,163.63	3,155.25	3,153.15	17.08	13.95	171.97	219.47	-61.83	668.55	640.10	28.45	23.503		
3,300.00	3,262.27	3,253.66	3,251.52	17.63	14.37	171.95	221.02	-64.31	686.34	657.02	29.31	23.415		
3,400.00	3,360.92	3,352.06	3,349.88	18.18	14.80	171.93	222.56	-66.79	704.13	673.95	30.18	23.332		
3,500.00	3,459.57	3,450.47	3,448.24	18.74	15.22	171.91	224.11	-69.26	721.92	690.87	31.05	23.253		
3,600.00	3,558.21	3,548.87	3,546.60	19.29	15.64	171.90	225.66	-71.74	739.71	707.79	31.92	23.177		
3,700.00	3,656.86	3,647.28	3,644.96	19.84	16.06	171.88	227.21	-74.21	757.50	724.71	32.79	23.104		
3,800.00	3,755.50	3,745.68	3,743.32	20.39	16.49	171.87	228.75	-76.69	775.29	741.63	33.66	23.034		
3,900.00	3,854.15	3,844.09	3,841.68	20.95	16.91	171.85	230.30	-79.17	793.08	758.55	34.53	22.967		
4,000.00	3,952.79	3,942.49	3,940.04	21.50	17.34	171.84	231.85	-81.64	810.87	775.46	35.40	22.903		
4,100.00	4,051.44	4,040.90	4,038.41	22.05	17.76	171.83	233.39	-84.12	828.66	792.38	36.28	22.841		
4,200.00	4,150.08	4,139.30	4,136.77	22.61	18.19	171.81	234.94	-86.59	846.45	809.30	37.15	22.782		
4,300.00	4,248.73	4,237.70	4,235.13	23.16	18.61	171.80	236.49	-89.07	864.24	826.21	38.03	22.725		
4,400.00	4,347.38	4,336.11	4,333.49	23.72	19.04	171.79	238.04	-91.55	882.03	843.13	38.91	22.671		
4,500.00	4,446.02	4,434.51	4,431.85	24.27	19.47	171.78	239.58	-94.02	899.82	860.04	39.78	22.618		
4,600.00	4,544.67	4,532.92	4,530.21	24.83	19.89	171.77	241.13	-96.50	917.61	876.95	40.66	22.567		
4,700.00	4,643.31	4,631.32	4,628.57	25.39	20.32	171.76	242.68	-98.97	935.40	893.87	41.54	22.519		
4,800.00	4,741.96	4,729.73	4,726.93	25.94	20.75	171.75	244.22	-101.45	953.20	910.78	42.42	22.471		
4,900.00	4,840.60	4,828.13	4,825.30	26.50	21.18	171.74	245.77	-103.93	970.99	927.69	43.30	22.426		
5,000.00	4,939.25	4,926.54	4,923.66	27.05	21.60	171.73	247.32	-106.40	988.78	944.60	44.18	22.382		
5,100.00	5,037.90	5,024.94	5,022.02	27.61	22.03	171.72	248.87	-108.88	1,006.57	961.51	45.06	22.340		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,123.35	5,120.38	28.17	22.46	171.71	250.41	-111.35	1,024.36	978.42	45.94	22.299		
5,300.00	5,235.19	5,221.75	5,218.74	28.72	22.89	171.70	251.96	-113.83	1,042.15	995.33	46.82	22.259		
5,400.00	5,333.83	5,320.15	5,317.10	29.28	23.32	171.70	253.51	-116.31	1,059.94	1,012.24	47.70	22.221		
5,500.00	5,432.48	5,418.56	5,415.46	29.84	23.75	171.69	255.05	-118.78	1,077.73	1,029.15	48.58	22.184		
5,600.00	5,531.12	5,516.96	5,513.82	30.40	24.17	171.68	256.60	-121.26	1,095.52	1,046.06	49.46	22.148		
5,700.00	5,629.77	5,615.37	5,612.19	30.95	24.60	171.67	258.15	-123.73	1,113.31	1,062.97	50.35	22.114		
5,800.00	5,728.41	5,713.77	5,710.55	31.51	25.03	171.67	259.70	-126.21	1,131.11	1,079.88	51.23	22.080		
5,900.00	5,827.06	5,812.18	5,808.91	32.07	25.46	171.66	261.24	-128.69	1,148.90	1,096.79	52.11	22.047		
6,000.00	5,925.71	5,910.58	5,907.27	32.63	25.89	171.65	262.79	-131.16	1,166.69	1,113.69	52.99	22.016		
6,100.00	6,024.35	6,008.99	6,005.63	33.19	26.32	171.65	264.34	-133.64	1,184.48	1,130.60	53.88	21.985		
6,200.00	6,123.00	6,107.39	6,103.99	33.74	26.75	171.64	265.88	-136.11	1,202.27	1,147.51	54.76	21.955		
6,300.00	6,221.64	6,205.80	6,202.35	34.30	27.18	171.64	267.43	-138.59	1,220.06	1,164.42	55.64	21.926		
6,400.00	6,320.29	6,304.20	6,300.71	34.86	27.61	171.63	268.98	-141.07	1,237.85	1,181.32	56.53	21.898		
6,500.00	6,418.93	6,402.61	6,399.08	35.42	28.04	171.62	270.53	-143.54	1,255.64	1,198.23	57.41	21.870		
6,600.00	6,517.58	6,501.01	6,497.44	35.98	28.47	171.62	272.07	-146.02	1,273.44	1,215.14	58.30	21.844		
6,700.00	6,616.23	6,600.59	6,595.80	36.54	28.91	171.61	273.62	-148.49	1,291.23	1,232.04	59.19	21.816		
6,800.00	6,714.51	6,698.47	6,694.57	37.10	29.34	135.55	275.14	-154.87	1,308.95	1,248.88	60.08	21.787		
6,900.00	6,810.42	6,798.14	6,791.86	37.66	29.78	115.38	276.53	-176.03	1,326.25	1,265.25	61.00	21.742		
7,000.00	6,901.58	6,898.34	6,885.13	38.21	30.23	105.78	277.74	-212.32	1,342.67	1,280.73	61.95	21.675		
7,100.00	6,985.76	6,999.15	6,972.07	38.76	30.70	100.19	278.74	-263.14	1,357.83	1,294.89	62.95	21.572		
7,200.00	7,060.88	7,100.62	7,050.38	39.32	31.20	96.51	279.49	-327.48	1,371.35	1,307.29	64.06	21.406		
7,300.00	7,125.09	7,202.72	7,117.87	39.90	31.79	93.94	279.98	-403.95	1,382.89	1,317.50	65.39	21.147		
7,400.00	7,176.81	7,305.40	7,172.56	40.55	32.50	92.14	280.19	-490.73	1,392.17	1,325.13	67.04	20.766		
7,500.00	7,214.77	7,408.54	7,212.74	41.30	33.37	90.93	280.11	-585.59	1,398.94	1,329.86	69.08	20.251		
7,600.00	7,238.02	7,511.96	7,237.14	42.22	34.42	90.21	279.73	-685.97	1,403.06	1,331.52	71.53	19.614		
7,700.00	7,246.01	7,615.45	7,244.99	43.32	35.62	89.96	279.07	-789.06	1,404.40	1,330.05	74.35	18.889		
7,800.00	7,245.50	7,715.41	7,244.68	44.65	36.95	89.97	278.30	-889.01	1,404.22	1,326.75	77.47	18.125		
7,900.00	7,244.97	7,815.41	7,244.37	46.21	38.43	89.98	277.54	-989.00	1,404.04	1,323.10	80.94	17.347		
8,000.00	7,244.44	7,915.41	7,244.06	47.99	40.06	89.98	276.77	-1,089.00	1,403.85	1,319.14	84.72	16.571		
8,100.00	7,243.91	8,015.41	7,243.74	49.96	41.83	89.99	276.00	-1,189.00	1,403.67	1,314.91	88.76	15.814		
8,200.00	7,243.39	8,115.41	7,243.43	52.10	43.71	90.00	275.23	-1,288.99	1,403.49	1,310.44	93.05	15.084		
8,300.00	7,242.86	8,215.40	7,243.12	54.38	45.69	90.01	274.47	-1,388.99	1,403.30	1,305.77	97.53	14.388		
8,400.00	7,242.33	8,315.40	7,242.81	56.78	47.77	90.02	273.70	-1,488.98	1,403.12	1,300.92	102.20	13.729		
8,500.00	7,241.80	8,415.40	7,242.50	59.28	49.92	90.03	272.93	-1,588.98	1,402.94	1,295.92	107.02	13.109		
8,600.00	7,241.27	8,515.40	7,242.19	61.88	52.13	90.04	272.16	-1,688.98	1,402.75	1,290.78	111.97	12.527		
8,700.00	7,240.74	8,615.40	7,241.87	64.54	54.41	90.05	271.40	-1,788.97	1,402.57	1,285.52	117.05	11.983		
8,800.00	7,240.21	8,715.40	7,241.56	67.27	56.74	90.06	270.63	-1,888.97	1,402.39	1,280.16	122.22	11.474		
8,900.00	7,239.68	8,815.40	7,241.25	70.06	59.12	90.06	269.86	-1,988.97	1,402.20	1,274.72	127.49	10.999		
9,000.00	7,239.16	8,915.40	7,240.94	72.89	61.53	90.07	269.09	-2,088.96	1,402.02	1,269.19	132.84	10.555		
9,100.00	7,238.63	9,015.40	7,240.63	75.77	63.99	90.08	268.33	-2,188.96	1,401.84	1,263.59	138.25	10.140		
9,200.00	7,238.10	9,115.40	7,240.31	78.69	66.47	90.09	267.56	-2,288.95	1,401.66	1,257.93	143.73	9.752		
9,300.00	7,237.57	9,215.40	7,240.00	81.64	68.99	90.10	266.79	-2,388.95	1,401.47	1,252.21	149.27	9.389		
9,400.00	7,237.04	9,315.40	7,239.69	84.62	71.53	90.11	266.02	-2,488.95	1,401.29	1,246.44	154.85	9.049		
9,500.00	7,236.51	9,415.40	7,239.38	87.63	74.09	90.12	265.26	-2,588.94	1,401.11	1,240.63	160.48	8.731		
9,600.00	7,235.98	9,515.40	7,239.07	90.66	76.68	90.13	264.49	-2,688.94	1,400.92	1,234.78	166.15	8.432		
9,700.00	7,235.45	9,615.40	7,238.75	93.72	79.28	90.14	263.72	-2,788.93	1,400.74	1,228.89	171.85	8.151		
9,800.00	7,234.93	9,715.40	7,238.44	96.79	81.90	90.14	262.95	-2,888.93	1,400.56	1,222.97	177.59	7.886		
9,900.00	7,234.40	9,815.40	7,238.13	99.88	84.54	90.15	262.19	-2,988.93	1,400.38	1,217.02	183.36	7.637		
10,000.00	7,233.87	9,915.40	7,237.82	102.98	87.19	90.16	261.42	-3,088.92	1,400.19	1,211.04	189.15	7.402		
10,100.00	7,233.34	10,015.40	7,237.51	106.10	89.85	90.17	260.65	-3,188.92	1,400.01	1,205.04	194.97	7.181		
10,200.00	7,232.81	10,115.40	7,237.19	109.23	92.52	90.18	259.88	-3,288.92	1,399.83	1,199.02	200.81	6.971		
10,300.00	7,232.28	10,215.40	7,236.88	112.38	95.21	90.19	259.11	-3,388.91	1,399.65	1,192.97	206.67	6.772		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,315.40	7,236.57	115.53	97.90	90.20	258.35	-3,488.91	1,399.46	1,186.91	212.55	6.584		
10,500.00	7,231.23	10,415.40	7,236.26	118.70	100.61	90.21	257.58	-3,588.90	1,399.28	1,180.83	218.45	6.405		
10,600.00	7,230.70	10,515.40	7,235.95	121.87	103.32	90.22	256.81	-3,688.90	1,399.10	1,174.73	224.36	6.236		
10,700.00	7,230.17	10,615.40	7,235.63	125.05	106.04	90.22	256.04	-3,788.90	1,398.92	1,168.62	230.29	6.075		
10,800.00	7,229.64	10,715.39	7,235.32	128.25	108.77	90.23	255.28	-3,888.89	1,398.73	1,162.50	236.23	5.921		
10,900.00	7,229.11	10,815.39	7,235.01	131.44	111.50	90.24	254.51	-3,988.89	1,398.55	1,156.36	242.19	5.775		
11,000.00	7,228.58	10,915.39	7,234.70	134.65	114.24	90.25	253.74	-4,088.89	1,398.37	1,150.22	248.15	5.635		
11,100.00	7,228.05	11,015.39	7,234.39	137.86	116.99	90.26	252.97	-4,188.88	1,398.19	1,144.06	254.13	5.502		
11,200.00	7,227.52	11,115.39	7,234.08	141.08	119.74	90.27	252.21	-4,288.88	1,398.00	1,137.89	260.12	5.375		
11,300.00	7,227.00	11,215.39	7,233.76	144.30	122.49	90.28	251.44	-4,388.87	1,397.82	1,131.71	266.11	5.253		
11,400.00	7,226.47	11,315.39	7,233.45	147.52	125.25	90.29	250.67	-4,488.87	1,397.64	1,125.53	272.12	5.136		
11,500.00	7,225.94	11,415.39	7,233.14	150.76	128.02	90.30	249.90	-4,588.87	1,397.46	1,119.33	278.13	5.025		
11,600.00	7,225.41	11,515.39	7,232.83	153.99	130.79	90.30	249.14	-4,688.86	1,397.28	1,113.13	284.15	4.917		
11,700.00	7,224.88	11,615.39	7,232.52	157.23	133.56	90.31	248.37	-4,788.86	1,397.09	1,106.92	290.18	4.815		
11,800.00	7,224.35	11,715.39	7,232.20	160.48	136.33	90.32	247.60	-4,888.85	1,396.91	1,100.70	296.21	4.716		
11,900.00	7,223.82	11,815.39	7,231.89	163.72	139.11	90.33	246.83	-4,988.85	1,396.73	1,094.48	302.25	4.621		
12,000.00	7,223.29	11,915.39	7,231.58	166.98	141.90	90.34	246.07	-5,088.85	1,396.55	1,088.25	308.30	4.530		
12,100.00	7,222.77	12,015.39	7,231.27	170.23	144.68	90.35	245.30	-5,188.84	1,396.37	1,082.02	314.35	4.442		
12,200.00	7,222.24	12,115.39	7,230.96	173.49	147.47	90.36	244.53	-5,288.84	1,396.18	1,075.78	320.41	4.358		
12,300.00	7,221.71	12,215.39	7,230.64	176.75	150.26	90.37	243.76	-5,388.84	1,396.00	1,069.53	326.47	4.276		
12,400.00	7,221.18	12,315.39	7,230.33	180.01	153.05	90.38	243.00	-5,488.83	1,395.82	1,063.28	332.54	4.197		
12,500.00	7,220.65	12,415.39	7,230.02	183.28	155.85	90.39	242.23	-5,588.83	1,395.64	1,057.03	338.61	4.122		
12,600.00	7,220.12	12,515.39	7,229.71	186.54	158.65	90.39	241.46	-5,688.82	1,395.46	1,050.77	344.68	4.049		
12,700.00	7,219.59	12,615.39	7,229.40	189.81	161.45	90.40	240.69	-5,788.82	1,395.28	1,044.51	350.76	3.978		
12,800.00	7,219.06	12,715.39	7,229.08	193.09	164.25	90.41	239.93	-5,888.82	1,395.09	1,038.25	356.85	3.909		
12,900.00	7,218.54	12,815.39	7,228.77	196.36	167.05	90.42	239.16	-5,988.81	1,394.91	1,031.98	362.94	3.843		
13,000.00	7,218.01	12,915.39	7,228.46	199.64	169.86	90.43	238.39	-6,088.81	1,394.73	1,025.70	369.03	3.779		
13,100.00	7,217.48	13,015.39	7,228.15	202.92	172.66	90.44	237.62	-6,188.80	1,394.55	1,019.43	375.12	3.718		
13,200.00	7,216.95	13,115.39	7,227.84	206.20	175.47	90.45	236.85	-6,288.80	1,394.37	1,013.15	381.22	3.658		
13,300.00	7,216.42	13,215.38	7,227.53	209.48	178.28	90.46	236.09	-6,388.80	1,394.19	1,006.87	387.32	3.600		
13,400.00	7,215.89	13,315.38	7,227.21	212.76	181.10	90.47	235.32	-6,488.79	1,394.00	1,000.58	393.42	3.543		
13,500.00	7,215.36	13,415.38	7,226.90	216.05	183.91	90.47	234.55	-6,588.79	1,393.82	994.30	399.53	3.489		
13,600.00	7,214.84	13,515.38	7,226.59	219.33	186.72	90.48	233.78	-6,688.79	1,393.64	988.01	405.64	3.436		
13,700.00	7,214.31	13,615.38	7,226.28	222.62	189.54	90.49	233.02	-6,788.78	1,393.46	981.71	411.75	3.384		
13,800.00	7,213.78	13,715.38	7,225.97	225.91	192.36	90.50	232.25	-6,888.78	1,393.28	975.42	417.86	3.334		
13,900.00	7,213.25	13,815.38	7,225.65	229.20	195.18	90.51	231.48	-6,988.77	1,393.10	969.12	423.97	3.286		
14,000.00	7,212.72	13,915.38	7,225.34	232.49	198.00	90.52	230.71	-7,088.77	1,392.92	962.82	430.09	3.239		
14,100.00	7,212.19	14,015.38	7,225.03	235.79	200.82	90.53	229.95	-7,188.77	1,392.74	956.52	436.21	3.193		
14,200.00	7,211.66	14,115.38	7,224.72	239.08	203.64	90.54	229.18	-7,288.76	1,392.55	950.22	442.33	3.148		
14,300.00	7,211.13	14,215.38	7,224.41	242.38	206.46	90.55	228.41	-7,388.76	1,392.37	943.92	448.46	3.105		
14,400.00	7,210.61	14,315.38	7,224.09	245.67	209.29	90.56	227.64	-7,488.75	1,392.19	937.61	454.58	3.063		
14,500.00	7,210.08	14,415.38	7,223.78	248.97	212.11	90.56	226.88	-7,588.75	1,392.01	931.30	460.71	3.021		
14,600.00	7,209.55	14,515.38	7,223.47	252.27	214.94	90.57	226.11	-7,688.75	1,391.83	924.99	466.84	2.981		
14,700.00	7,209.02	14,615.38	7,223.16	255.57	217.76	90.58	225.34	-7,788.74	1,391.65	918.68	472.97	2.942		
14,800.00	7,208.49	14,715.38	7,222.85	258.87	220.59	90.59	224.57	-7,888.74	1,391.47	912.37	479.10	2.904		
14,900.00	7,207.96	14,815.38	7,222.53	262.17	223.42	90.60	223.81	-7,988.74	1,391.29	906.06	485.23	2.867		
15,000.00	7,207.43	14,915.38	7,222.22	265.47	226.25	90.61	223.04	-8,088.73	1,391.11	899.74	491.37	2.831		
15,078.13	7,207.02	14,993.50	7,221.98	268.05	228.46	90.62	222.44	-8,166.85	1,390.96	894.81	496.16	2.803 SF		
15,081.89	7,207.00	14,987.41	7,222.00	268.17	228.28	90.62	222.49	-8,160.76	1,390.99	894.99	496.01	2.804		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	-179.20	-40.08	-0.56	40.09					
100.00	100.00	100.00	100.00	3.28	3.28	-179.20	-40.08	-0.56	40.09	33.52	6.57	6.102		
200.00	200.00	200.00	200.00	3.34	3.34	-179.20	-40.08	-0.56	40.09	33.41	6.67	6.006		
300.00	299.98	298.63	298.61	3.44	3.44	-7.33	-41.77	-0.74	40.07	33.18	6.89	5.817		
400.00	399.84	397.25	397.10	3.59	3.59	-7.59	-46.83	-1.28	40.02	32.81	7.21	5.551		
500.00	499.45	495.88	495.36	3.80	3.78	-8.03	-55.26	-2.18	39.93	32.30	7.63	5.232		
600.00	598.70	594.52	593.27	4.06	4.02	-8.64	-67.05	-3.43	39.82	31.68	8.14	4.891		
613.48	612.05	607.82	606.44	4.10	4.06	-8.73	-68.90	-3.63	39.81	31.59	8.22	4.845 CC		
700.00	697.49	693.16	690.73	4.38	4.29	-9.40	-82.19	-5.05	39.82	31.09	8.72	4.565		
800.00	796.13	791.73	787.53	4.74	4.61	-9.71	-100.63	-7.01	42.34	32.98	9.36	4.524		
900.00	894.78	909.31	884.09	5.15	5.03	-9.46	-122.19	-9.31	47.97	37.89	10.08	4.757		
1,000.00	993.43	1,009.50	981.34	5.58	5.42	-9.19	-144.50	-11.69	54.19	43.42	10.77	5.031		
1,100.00	1,092.07	1,109.70	1,078.59	6.03	5.83	-8.97	-166.81	-14.07	60.42	48.92	11.50	5.255		
1,200.00	1,190.72	1,190.11	1,175.84	6.50	6.17	-8.79	-189.12	-16.45	66.65	54.47	12.17	5.474		
1,300.00	1,289.36	1,289.92	1,273.09	6.98	6.61	-8.64	-211.43	-18.83	72.87	59.92	12.95	5.627		
1,400.00	1,388.01	1,389.72	1,370.34	7.47	7.06	-8.52	-233.75	-21.21	79.10	65.35	13.75	5.754		
1,500.00	1,486.65	1,489.53	1,467.59	7.97	7.51	-8.41	-256.06	-23.59	85.33	70.77	14.56	5.861		
1,600.00	1,585.30	1,589.33	1,564.84	8.48	7.98	-8.32	-278.37	-25.97	91.55	76.17	15.39	5.950		
1,700.00	1,683.94	1,689.14	1,662.10	9.00	8.45	-8.24	-300.68	-28.35	97.78	81.55	16.23	6.026		
1,800.00	1,782.59	1,788.94	1,759.35	9.52	8.93	-8.17	-322.99	-30.73	104.01	86.93	17.08	6.090		
1,900.00	1,881.24	1,888.75	1,856.60	10.05	9.41	-8.11	-345.30	-33.10	110.24	92.30	17.94	6.145		
2,000.00	1,979.88	1,988.56	1,953.85	10.58	9.89	-8.05	-367.61	-35.48	116.46	97.66	18.81	6.193		
2,100.00	2,078.53	2,088.36	2,051.10	11.11	10.38	-8.00	-389.92	-37.86	122.69	103.01	19.68	6.234		
2,200.00	2,177.17	2,188.17	2,148.35	11.64	10.87	-7.96	-412.24	-40.24	128.92	108.36	20.56	6.270		
2,300.00	2,275.82	2,287.97	2,245.60	12.18	11.36	-7.92	-434.55	-42.62	135.15	113.70	21.45	6.301		
2,400.00	2,374.46	2,387.78	2,342.85	12.72	11.86	-7.88	-456.86	-45.00	141.38	119.04	22.34	6.329		
2,500.00	2,473.11	2,487.59	2,440.10	13.26	12.36	-7.85	-479.17	-47.38	147.60	124.37	23.23	6.353		
2,600.00	2,571.76	2,587.39	2,537.35	13.80	12.86	-7.82	-501.48	-49.76	153.83	129.70	24.13	6.375		
2,700.00	2,670.40	2,687.20	2,634.61	14.35	13.36	-7.79	-523.79	-52.14	160.06	135.03	25.03	6.394		
2,800.00	2,769.05	2,787.00	2,731.86	14.89	13.86	-7.76	-546.10	-54.52	166.29	140.35	25.94	6.411		
2,900.00	2,867.69	2,886.81	2,829.11	15.44	14.36	-7.73	-568.42	-56.90	172.52	145.67	26.84	6.427		
3,000.00	2,966.34	2,986.61	2,926.36	15.99	14.87	-7.71	-590.73	-59.28	178.75	150.99	27.75	6.441		
3,100.00	3,064.98	3,086.42	3,023.61	16.53	15.37	-7.69	-613.04	-61.66	184.97	156.31	28.66	6.453		
3,200.00	3,163.63	3,186.23	3,120.86	17.08	15.88	-7.67	-635.35	-64.04	191.20	161.63	29.58	6.465		
3,300.00	3,262.27	3,286.03	3,218.11	17.63	16.39	-7.65	-657.66	-66.41	197.43	166.94	30.49	6.475		
3,400.00	3,360.92	3,385.84	3,315.36	18.18	16.89	-7.63	-679.97	-68.79	203.66	172.25	31.41	6.484		
3,500.00	3,459.57	3,485.64	3,412.61	18.74	17.40	-7.62	-702.28	-71.17	209.89	177.56	32.33	6.493		
3,600.00	3,558.21	3,585.45	3,509.86	19.29	17.91	-7.60	-724.60	-73.55	216.12	182.87	33.25	6.501		
3,700.00	3,656.86	3,685.26	3,607.11	19.84	18.42	-7.59	-746.91	-75.93	222.35	188.18	34.17	6.508		
3,800.00	3,755.50	3,785.06	3,704.37	20.39	18.93	-7.57	-769.22	-78.31	228.57	193.49	35.09	6.514		
3,900.00	3,854.15	3,884.87	3,801.62	20.95	19.44	-7.56	-791.53	-80.69	234.80	198.79	36.01	6.520		
4,000.00	3,952.79	3,984.67	3,898.87	21.50	19.95	-7.55	-813.84	-83.07	241.03	204.10	36.93	6.526		
4,100.00	4,051.44	4,084.48	3,996.12	22.05	20.47	-7.53	-836.15	-85.45	247.26	209.40	37.86	6.531		
4,200.00	4,150.08	4,184.28	4,093.37	22.61	20.98	-7.52	-858.46	-87.83	253.49	214.70	38.78	6.536		
4,300.00	4,248.73	4,284.09	4,190.62	23.16	21.49	-7.51	-880.77	-90.21	259.72	220.01	39.71	6.540		
4,400.00	4,347.38	4,383.90	4,287.87	23.72	22.00	-7.50	-903.09	-92.59	265.95	225.31	40.64	6.544		
4,500.00	4,446.02	4,483.70	4,385.12	24.27	22.52	-7.49	-925.40	-94.97	272.17	230.61	41.57	6.548		
4,600.00	4,544.67	4,583.51	4,482.37	24.83	23.03	-7.48	-947.71	-97.35	278.40	235.91	42.49	6.552		
4,700.00	4,643.31	4,683.31	4,579.62	25.39	23.54	-7.47	-970.02	-99.72	284.63	241.21	43.42	6.555		
4,800.00	4,741.96	4,783.12	4,676.87	25.94	24.06	-7.46	-992.33	-102.10	290.86	246.51	44.35	6.558		
4,900.00	4,840.60	4,882.93	4,774.13	26.50	24.57	-7.46	-1,014.64	-104.48	297.09	251.81	45.28	6.561		
5,000.00	4,939.25	4,982.73	4,871.38	27.05	25.08	-7.45	-1,036.95	-106.86	303.32	257.11	46.21	6.564		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	5,082.54	4,968.63	27.61	25.60	-7.44	-1,059.27	-109.24	309.55	262.40	47.14	6.566		
5,200.00	5,136.54	5,182.34	5,065.88	28.17	26.11	-7.43	-1,081.58	-111.62	315.78	267.70	48.07	6.569		
5,300.00	5,235.19	5,282.15	5,163.13	28.72	26.63	-7.43	-1,103.89	-114.00	322.00	273.00	49.01	6.571		
5,400.00	5,333.83	5,381.95	5,260.38	29.28	27.14	-7.42	-1,126.20	-116.38	328.23	278.30	49.94	6.573		
5,500.00	5,432.48	5,481.76	5,357.63	29.84	27.66	-7.41	-1,148.51	-118.76	334.46	283.59	50.87	6.575		
5,600.00	5,531.12	5,581.57	5,454.88	30.40	28.17	-7.41	-1,170.82	-121.14	340.69	288.89	51.80	6.577		
5,700.00	5,629.77	5,681.37	5,552.13	30.95	28.69	-7.40	-1,193.13	-123.52	346.92	294.18	52.74	6.578		
5,800.00	5,728.41	5,781.18	5,649.38	31.51	29.20	-7.39	-1,215.44	-125.90	353.15	299.48	53.67	6.580		
5,900.00	5,827.06	5,880.98	5,746.64	32.07	29.72	-7.39	-1,237.76	-128.28	359.38	304.77	54.60	6.582		
6,000.00	5,925.71	5,980.79	5,843.89	32.63	30.24	-7.38	-1,260.07	-130.66	365.61	310.07	55.54	6.583		
6,100.00	6,024.35	6,080.60	5,941.14	33.19	30.75	-7.38	-1,282.38	-133.03	371.83	315.36	56.47	6.584		
6,200.00	6,123.00	6,180.40	6,038.39	33.74	31.27	-7.37	-1,304.69	-135.41	378.06	320.66	57.41	6.586		
6,300.00	6,221.64	6,280.21	6,135.64	34.30	31.78	-7.37	-1,327.00	-137.79	384.29	325.95	58.34	6.587		
6,400.00	6,320.29	6,380.01	6,232.89	34.86	32.30	-7.36	-1,349.31	-140.17	390.52	331.24	59.28	6.588		
6,500.00	6,418.93	6,479.82	6,330.14	35.42	32.82	-7.36	-1,371.62	-142.55	396.75	336.54	60.21	6.589		
6,600.00	6,517.58	6,579.62	6,427.39	35.98	33.33	-7.35	-1,393.94	-144.93	402.98	341.83	61.15	6.590		
6,700.00	6,616.23	6,678.56	6,523.61	36.54	33.84	-6.88	-1,416.03	-150.63	409.27	347.22	62.05	6.595		
6,800.00	6,714.51	6,775.19	6,615.75	37.10	34.32	-39.51	-1,437.28	-170.03	415.95	353.07	62.89	6.614		
6,900.00	6,810.42	6,870.08	6,702.42	37.66	34.76	-56.07	-1,457.37	-202.77	422.79	359.12	63.67	6.640		
7,000.00	6,901.58	6,963.47	6,782.14	38.21	35.15	-62.34	-1,475.93	-247.55	429.55	365.14	64.41	6.669		
7,100.00	6,985.76	7,055.56	6,853.66	38.76	35.50	-64.96	-1,492.69	-302.96	435.97	370.84	65.13	6.694		
7,200.00	7,060.88	7,146.55	6,915.94	39.32	35.81	-66.06	-1,507.39	-367.54	441.83	375.92	65.91	6.703		
7,300.00	7,125.09	7,236.66	6,968.14	39.90	36.10	-66.47	-1,519.83	-439.84	446.90	380.03	66.87	6.683		
7,400.00	7,176.81	7,326.08	7,009.59	40.55	36.39	-66.58	-1,529.84	-518.35	451.02	382.88	68.14	6.619		
7,500.00	7,214.77	7,415.00	7,039.77	41.30	36.72	-66.59	-1,537.31	-601.58	454.03	384.22	69.81	6.504		
7,600.00	7,238.02	7,503.61	7,058.32	42.22	37.15	-66.59	-1,542.12	-688.03	455.84	383.89	71.95	6.335		
7,700.00	7,246.01	7,592.10	7,064.99	43.32	37.77	-66.63	-1,544.22	-776.16	456.38	381.83	74.55	6.122		
7,800.00	7,245.50	7,708.75	7,064.79	44.65	38.92	-66.67	-1,544.83	-875.31	456.27	378.61	77.66	5.875		
7,900.00	7,244.97	7,808.76	7,064.56	46.21	40.19	-66.70	-1,545.42	-975.30	456.17	375.30	80.86	5.641		
8,000.00	7,244.44	7,908.76	7,064.33	47.99	41.66	-66.74	-1,546.02	-1,075.30	456.06	371.73	84.34	5.408		
8,100.00	7,243.91	8,008.76	7,064.10	49.96	43.29	-66.77	-1,546.62	-1,175.30	455.96	367.91	88.05	5.179		
8,200.00	7,243.39	8,108.76	7,063.87	52.10	45.06	-66.81	-1,547.22	-1,275.30	455.86	363.89	91.97	4.957		
8,300.00	7,242.86	8,208.76	7,063.64	54.38	46.95	-66.84	-1,547.82	-1,375.29	455.75	359.68	96.08	4.744		
8,400.00	7,242.33	8,308.76	7,063.41	56.78	48.94	-66.88	-1,548.42	-1,475.29	455.65	355.30	100.34	4.541		
8,500.00	7,241.80	8,408.76	7,063.18	59.28	51.02	-66.91	-1,549.02	-1,575.29	455.54	350.79	104.76	4.349		
8,600.00	7,241.27	8,508.76	7,062.95	61.88	53.17	-66.95	-1,549.62	-1,675.29	455.44	346.15	109.29	4.167		
8,700.00	7,240.74	8,608.76	7,062.72	64.54	55.38	-66.98	-1,550.22	-1,775.28	455.34	341.39	113.94	3.996		
8,800.00	7,240.21	8,708.76	7,062.49	67.27	57.66	-67.02	-1,550.81	-1,875.28	455.23	336.54	118.69	3.835		
8,900.00	7,239.68	8,808.76	7,062.26	70.06	59.98	-67.06	-1,551.41	-1,975.28	455.13	331.60	123.53	3.684		
9,000.00	7,239.16	8,908.76	7,062.03	72.89	62.36	-67.09	-1,552.01	-2,075.28	455.03	326.58	128.44	3.543		
9,100.00	7,238.63	9,008.76	7,061.80	75.77	64.77	-67.13	-1,552.61	-2,175.27	454.92	321.50	133.43	3.409		
9,200.00	7,238.10	9,108.76	7,061.57	78.69	67.21	-67.16	-1,553.21	-2,275.27	454.82	316.34	138.48	3.284		
9,300.00	7,237.57	9,208.76	7,061.33	81.64	69.69	-67.20	-1,553.81	-2,375.27	454.72	311.14	143.58	3.167		
9,400.00	7,237.04	9,308.76	7,061.10	84.62	72.20	-67.23	-1,554.41	-2,475.27	454.62	305.88	148.74	3.056		
9,500.00	7,236.51	9,408.76	7,060.87	87.63	74.73	-67.27	-1,555.01	-2,575.26	454.52	300.57	153.94	2.953		
9,600.00	7,235.98	9,508.76	7,060.64	90.66	77.29	-67.30	-1,555.60	-2,675.26	454.41	295.23	159.19	2.855		
9,700.00	7,235.45	9,608.76	7,060.41	93.72	79.86	-67.34	-1,556.20	-2,775.26	454.31	289.84	164.47	2.762		
9,800.00	7,234.93	9,708.76	7,060.18	96.79	82.46	-67.37	-1,556.80	-2,875.26	454.21	284.42	169.79	2.675		
9,900.00	7,234.40	9,791.24	7,059.95	99.88	84.61	-67.41	-1,557.40	-2,975.25	454.11	279.40	174.71	2.599		
10,000.00	7,233.87	9,908.76	7,059.72	102.98	87.70	-67.44	-1,558.00	-3,075.25	454.01	273.49	180.52	2.515		
10,100.00	7,233.34	10,008.77	7,059.49	106.10	90.34	-67.48	-1,558.60	-3,175.25	453.91	267.99	185.92	2.441		
10,200.00	7,232.81	10,091.23	7,059.26	109.23	92.53	-67.52	-1,559.20	-3,275.25	453.81	262.89	190.92	2.377		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,208.77	7,059.03	112.38	95.66	-67.55	-1,559.80	-3,375.24	453.71	256.90	196.81	2.305		
10,400.00	7,231.75	10,308.77	7,058.80	115.53	98.34	-67.59	-1,560.40	-3,475.24	453.61	251.32	202.28	2.242		
10,500.00	7,231.23	10,408.77	7,058.57	118.70	101.02	-67.62	-1,560.99	-3,575.24	453.50	245.72	207.78	2.183		
10,600.00	7,230.70	10,508.77	7,058.34	121.87	103.72	-67.66	-1,561.59	-3,675.24	453.40	240.11	213.30	2.126		
10,700.00	7,230.17	10,608.77	7,058.11	125.05	106.43	-67.69	-1,562.19	-3,775.23	453.30	234.47	218.83	2.071		
10,800.00	7,229.64	10,691.23	7,057.88	128.25	108.66	-67.73	-1,562.79	-3,875.23	453.21	229.27	223.94	2.024		
10,900.00	7,229.11	10,808.77	7,057.65	131.44	111.86	-67.76	-1,563.39	-3,975.23	453.11	223.16	229.94	1.970		
11,000.00	7,228.58	10,908.77	7,057.42	134.65	114.59	-67.80	-1,563.99	-4,075.23	453.01	217.48	235.52	1.923		
11,100.00	7,228.05	11,008.77	7,057.19	137.86	117.32	-67.84	-1,564.59	-4,175.22	452.91	211.79	241.12	1.878		
11,200.00	7,227.52	11,108.77	7,056.96	141.08	120.06	-67.87	-1,565.19	-4,275.22	452.81	206.08	246.72	1.835		
11,300.00	7,227.00	11,191.23	7,056.73	144.30	122.32	-67.91	-1,565.78	-4,375.22	452.71	200.82	251.89	1.797		
11,400.00	7,226.47	11,308.77	7,056.50	147.52	125.55	-67.94	-1,566.38	-4,475.22	452.61	194.64	257.97	1.754		
11,500.00	7,225.94	11,408.77	7,056.27	150.76	128.31	-67.98	-1,566.98	-4,575.21	452.51	188.90	263.61	1.717		
11,600.00	7,225.41	11,508.77	7,056.04	153.99	131.06	-68.01	-1,567.58	-4,675.21	452.41	183.15	269.26	1.680		
11,700.00	7,224.88	11,608.77	7,055.81	157.23	133.83	-68.05	-1,568.18	-4,775.21	452.32	177.39	274.93	1.645		
11,800.00	7,224.35	11,708.77	7,055.58	160.48	136.60	-68.09	-1,568.78	-4,875.21	452.22	171.62	280.60	1.612		
11,900.00	7,223.82	11,808.77	7,055.34	163.72	139.37	-68.12	-1,569.38	-4,975.20	452.12	165.84	286.28	1.579		
12,000.00	7,223.29	11,891.23	7,055.11	166.98	141.65	-68.16	-1,569.98	-5,075.20	452.02	160.51	291.51	1.551		
12,100.00	7,222.77	12,008.77	7,054.88	170.23	144.92	-68.19	-1,570.58	-5,175.20	451.92	154.26	297.67	1.518		
12,200.00	7,222.24	12,108.77	7,054.65	173.49	147.70	-68.23	-1,571.17	-5,275.20	451.83	148.46	303.37	1.489 Level 3		
12,300.00	7,221.71	12,208.78	7,054.42	176.75	150.48	-68.26	-1,571.77	-5,375.19	451.73	142.64	309.09	1.462 Level 3		
12,400.00	7,221.18	12,308.78	7,054.19	180.01	153.27	-68.30	-1,572.37	-5,475.19	451.63	136.83	314.81	1.435 Level 3		
12,500.00	7,220.65	12,408.78	7,053.96	183.28	156.06	-68.34	-1,572.97	-5,575.19	451.54	131.00	320.53	1.409 Level 3		
12,600.00	7,220.12	12,508.78	7,053.73	186.54	158.85	-68.37	-1,573.57	-5,675.19	451.44	125.17	326.27	1.384 Level 3		
12,700.00	7,219.59	12,608.78	7,053.50	189.81	161.64	-68.41	-1,574.17	-5,775.18	451.34	119.33	332.01	1.359 Level 3		
12,800.00	7,219.06	12,708.78	7,053.27	193.09	164.44	-68.44	-1,574.77	-5,875.18	451.25	113.49	337.76	1.336 Level 3		
12,900.00	7,218.54	12,808.78	7,053.04	196.36	167.24	-68.48	-1,575.37	-5,975.18	451.15	107.63	343.52	1.313 Level 3		
13,000.00	7,218.01	12,908.78	7,052.81	199.64	170.04	-68.52	-1,575.96	-6,075.18	451.05	101.78	349.28	1.291 Level 3		
13,100.00	7,217.48	13,008.78	7,052.58	202.92	172.84	-68.55	-1,576.56	-6,175.17	450.96	95.92	355.04	1.270 Level 3		
13,200.00	7,216.95	13,108.78	7,052.35	206.20	175.64	-68.59	-1,577.16	-6,275.17	450.86	90.05	360.82	1.250 Level 2		
13,300.00	7,216.42	13,208.78	7,052.12	209.48	178.45	-68.62	-1,577.76	-6,375.17	450.77	84.17	366.60	1.230 Level 2		
13,400.00	7,215.89	13,308.78	7,051.89	212.76	181.26	-68.66	-1,578.36	-6,475.17	450.67	78.29	372.38	1.210 Level 2		
13,500.00	7,215.36	13,408.78	7,051.66	216.05	184.07	-68.70	-1,578.96	-6,575.16	450.58	72.41	378.17	1.191 Level 2		
13,600.00	7,214.84	13,508.78	7,051.43	219.33	186.88	-68.73	-1,579.56	-6,675.16	450.48	66.52	383.96	1.173 Level 2		
13,700.00	7,214.31	13,608.78	7,051.20	222.62	189.69	-68.77	-1,580.16	-6,775.16	450.39	60.63	389.76	1.156 Level 2		
13,800.00	7,213.78	13,691.22	7,050.97	225.91	192.01	-68.80	-1,580.76	-6,875.16	450.29	55.19	395.10	1.140 Level 2		
13,900.00	7,213.25	13,808.78	7,050.74	229.20	195.32	-68.84	-1,581.35	-6,975.15	450.20	48.82	401.38	1.122 Level 2		
14,000.00	7,212.72	13,908.78	7,050.51	232.49	198.13	-68.88	-1,581.95	-7,075.15	450.11	42.92	407.19	1.105 Level 2		
14,100.00	7,212.19	14,008.78	7,050.28	235.79	200.95	-68.91	-1,582.55	-7,175.15	450.01	37.00	413.01	1.090 Level 2		
14,200.00	7,211.66	14,108.78	7,050.05	239.08	203.77	-68.95	-1,583.15	-7,275.15	449.92	31.09	418.83	1.074 Level 2		
14,300.00	7,211.13	14,208.78	7,049.82	242.38	206.59	-68.98	-1,583.75	-7,375.14	449.82	25.16	424.66	1.059 Level 2		
14,400.00	7,210.61	14,308.78	7,049.59	245.67	209.41	-69.02	-1,584.35	-7,475.14	449.73	19.24	430.49	1.045 Level 2		
14,500.00	7,210.08	14,408.78	7,049.35	248.97	212.23	-69.06	-1,584.95	-7,575.14	449.64	13.31	436.33	1.031 Level 2		
14,600.00	7,209.55	14,508.79	7,049.12	252.27	215.05	-69.09	-1,585.55	-7,675.14	449.54	7.38	442.17	1.017 Level 2		
14,700.00	7,209.02	14,608.79	7,048.89	255.57	217.87	-69.13	-1,586.15	-7,775.13	449.45	1.44	448.01	1.003 Level 2		
14,800.00	7,208.49	14,708.79	7,048.66	258.87	220.70	-69.17	-1,586.74	-7,875.13	449.36	-4.50	453.86	0.990 Level 1		
14,900.00	7,207.96	14,808.79	7,048.43	262.17	223.52	-69.20	-1,587.34	-7,975.13	449.27	-10.45	459.72	0.977 Level 1		
15,000.00	7,207.43	14,891.21	7,048.20	265.47	226.35	-69.24	-1,587.94	-8,075.13	449.17	-15.93	465.11	0.966 Level 1		
15,081.89	7,207.00	14,973.10	7,048.01	268.17	228.17	-69.27	-1,588.43	-8,157.01	449.10	-20.80	469.90	0.956 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.43	-139.90	-1.39	139.91					
100.00	100.00	101.00	100.00	3.28	3.28	-179.43	-139.90	-1.39	139.91	133.34	6.57	21.296		
200.00	200.00	199.00	200.00	3.34	3.34	-179.43	-139.90	-1.39	139.91	133.23	6.67	20.966		
300.00	299.98	294.40	295.38	3.44	3.43	-7.53	-141.45	-1.49	139.81	132.92	6.88	20.315		
400.00	399.84	389.75	390.62	3.59	3.57	-7.69	-146.17	-1.79	139.57	132.37	7.19	19.399		
500.00	499.45	485.12	485.65	3.80	3.76	-7.96	-154.05	-2.29	139.20	131.59	7.61	18.301		
600.00	598.70	580.50	580.38	4.06	3.98	-8.35	-165.08	-2.99	138.69	130.59	8.10	17.121		
689.67	687.36	666.04	664.99	4.34	4.21	-8.76	-177.65	-3.79	138.53	129.92	8.61	16.098		
700.00	697.49	675.89	674.71	4.38	4.24	-8.83	-179.26	-3.89	138.20	129.54	8.67	15.948 CC, ES		
800.00	796.13	771.25	768.48	4.74	4.54	-9.27	-196.55	-4.99	140.15	130.86	9.29	15.089		
900.00	894.78	866.39	861.40	5.15	4.87	-9.57	-216.90	-6.28	145.41	135.46	9.95	14.617		
1,000.00	993.43	961.10	953.18	5.58	5.24	-9.74	-240.21	-7.77	153.97	143.32	10.65	14.461		
1,100.00	1,092.07	1,055.18	1,043.54	6.03	5.63	-9.79	-266.34	-9.43	165.79	154.42	11.37	14.586		
1,200.00	1,190.72	1,148.43	1,132.20	6.50	6.05	-9.73	-295.16	-11.26	180.83	168.73	12.10	14.946		
1,300.00	1,289.36	1,241.32	1,219.55	6.98	6.49	-9.60	-326.69	-13.26	199.04	186.20	12.84	15.501		
1,400.00	1,388.01	1,339.40	1,311.34	7.47	6.99	-9.46	-361.17	-15.45	218.52	204.90	13.62	16.040		
1,500.00	1,486.65	1,437.49	1,403.14	7.97	7.50	-9.34	-395.65	-17.65	238.00	223.57	14.43	16.492		
1,600.00	1,585.30	1,535.57	1,494.93	8.48	8.03	-9.23	-430.13	-19.84	257.48	242.22	15.26	16.874		
1,700.00	1,683.94	1,633.65	1,586.73	9.00	8.56	-9.15	-464.62	-22.03	276.96	260.85	16.10	17.198		
1,800.00	1,782.59	1,731.74	1,678.53	9.52	9.10	-9.07	-499.10	-24.22	296.44	279.48	16.96	17.475		
1,900.00	1,881.24	1,829.82	1,770.32	10.05	9.65	-9.00	-533.58	-26.41	315.92	298.08	17.84	17.713		
2,000.00	1,979.88	1,927.90	1,862.12	10.58	10.21	-8.94	-568.06	-28.60	335.40	316.68	18.72	17.918		
2,100.00	2,078.53	2,025.99	1,953.91	11.11	10.77	-8.89	-602.54	-30.80	354.88	335.27	19.61	18.096		
2,200.00	2,177.17	2,124.07	2,045.71	11.64	11.34	-8.84	-637.03	-32.99	374.37	353.86	20.51	18.252		
2,300.00	2,275.82	2,222.15	2,137.51	12.18	11.91	-8.80	-671.51	-35.18	393.85	372.43	21.42	18.388		
2,400.00	2,374.46	2,320.24	2,229.30	12.72	12.48	-8.76	-705.99	-37.37	413.33	391.00	22.33	18.509		
2,500.00	2,473.11	2,418.32	2,321.10	13.26	13.06	-8.73	-740.47	-39.56	432.82	409.57	23.25	18.615		
2,600.00	2,571.76	2,516.40	2,412.90	13.80	13.64	-8.69	-774.95	-41.75	452.30	428.12	24.17	18.710		
2,700.00	2,670.40	2,614.49	2,504.69	14.35	14.22	-8.66	-809.44	-43.94	471.78	446.68	25.10	18.794		
2,800.00	2,769.05	2,712.57	2,596.49	14.89	14.80	-8.64	-843.92	-46.14	491.27	465.23	26.03	18.870		
2,900.00	2,867.69	2,810.65	2,688.28	15.44	15.39	-8.61	-878.40	-48.33	510.75	483.78	26.97	18.938		
3,000.00	2,966.34	2,908.74	2,780.08	15.99	15.97	-8.59	-912.88	-50.52	530.23	502.32	27.91	18.999		
3,100.00	3,064.98	3,006.82	2,871.88	16.53	16.56	-8.57	-947.36	-52.71	549.72	520.87	28.85	19.055		
3,200.00	3,163.63	3,104.90	2,963.67	17.08	17.15	-8.55	-981.85	-54.90	569.20	539.41	29.79	19.105		
3,300.00	3,262.27	3,202.99	3,055.47	17.63	17.74	-8.53	-1,016.33	-57.09	588.68	557.95	30.74	19.151		
3,400.00	3,360.92	3,301.07	3,147.26	18.18	18.33	-8.51	-1,050.81	-59.29	608.17	576.48	31.69	19.193		
3,500.00	3,459.57	3,400.85	3,239.06	18.74	18.93	-8.49	-1,085.29	-61.48	627.65	595.01	32.65	19.226		
3,600.00	3,558.21	3,502.76	3,330.86	19.29	19.55	-8.48	-1,119.77	-63.67	647.14	613.52	33.62	19.250		
3,700.00	3,656.86	3,604.68	3,422.65	19.84	20.16	-8.46	-1,154.26	-65.86	666.62	632.03	34.59	19.272		
3,800.00	3,755.50	3,693.40	3,514.45	20.39	20.70	-8.45	-1,188.74	-68.05	686.10	650.61	35.50	19.329		
3,900.00	3,854.15	3,808.51	3,606.25	20.95	21.40	-8.44	-1,223.22	-70.24	705.59	669.05	36.54	19.309		
4,000.00	3,952.79	3,889.57	3,698.04	21.50	21.89	-8.43	-1,257.70	-72.44	725.07	687.66	37.41	19.382		
4,100.00	4,051.44	3,987.65	3,789.84	22.05	22.48	-8.41	-1,292.19	-74.63	744.56	706.19	38.37	19.406		
4,200.00	4,150.08	4,085.74	3,881.63	22.61	23.08	-8.40	-1,326.67	-76.82	764.04	724.71	39.33	19.427		
4,300.00	4,248.73	4,183.82	3,973.43	23.16	23.67	-8.39	-1,361.15	-79.01	783.52	743.24	40.29	19.448		
4,400.00	4,347.38	4,281.90	4,065.23	23.72	24.27	-8.38	-1,395.63	-81.20	803.01	761.76	41.25	19.467		
4,500.00	4,446.02	4,379.99	4,157.02	24.27	24.87	-8.37	-1,430.11	-83.39	822.49	780.28	42.21	19.485		
4,600.00	4,544.67	4,478.07	4,248.82	24.83	25.47	-8.36	-1,464.60	-85.59	841.98	798.80	43.18	19.501		
4,700.00	4,643.31	4,576.15	4,340.61	25.39	26.06	-8.36	-1,499.08	-87.78	861.46	817.32	44.14	19.517		
4,800.00	4,741.96	4,674.24	4,432.41	25.94	26.66	-8.35	-1,533.56	-89.97	880.95	835.84	45.10	19.531		
4,900.00	4,840.60	4,772.32	4,524.21	26.50	27.26	-8.34	-1,568.04	-92.16	900.43	854.36	46.07	19.545		
5,000.00	4,939.25	4,870.40	4,616.00	27.05	27.86	-8.33	-1,602.52	-94.35	919.91	872.88	47.04	19.558		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	4,968.49	4,707.80	27.61	28.46	-8.32	-1,637.01	-96.54	939.40	891.40	48.00	19.570		
5,200.00	5,136.54	5,066.57	4,799.60	28.17	29.06	-8.32	-1,671.49	-98.73	958.88	909.91	48.97	19.581		
5,300.00	5,235.19	5,164.65	4,891.39	28.72	29.65	-8.31	-1,705.97	-100.93	978.37	928.43	49.94	19.592		
5,400.00	5,333.83	5,262.74	4,983.19	29.28	30.25	-8.30	-1,740.45	-103.12	997.85	946.95	50.91	19.602		
5,500.00	5,432.48	5,360.82	5,074.98	29.84	30.85	-8.30	-1,774.93	-105.31	1,017.34	965.46	51.87	19.612		
5,600.00	5,531.12	5,458.90	5,166.78	30.40	31.45	-8.29	-1,809.42	-107.50	1,036.82	983.98	52.84	19.621		
5,700.00	5,629.77	5,556.99	5,258.58	30.95	32.05	-8.29	-1,843.90	-109.69	1,056.31	1,002.49	53.81	19.629		
5,800.00	5,728.41	5,655.07	5,350.37	31.51	32.65	-8.28	-1,878.38	-111.88	1,075.79	1,021.01	54.78	19.637		
5,900.00	5,827.06	5,753.15	5,442.17	32.07	33.25	-8.28	-1,912.86	-114.08	1,095.27	1,039.52	55.75	19.645		
6,000.00	5,925.71	5,851.24	5,533.96	32.63	33.85	-8.27	-1,947.34	-116.27	1,114.76	1,058.03	56.72	19.652		
6,100.00	6,024.35	5,949.32	5,625.76	33.19	34.46	-8.27	-1,981.83	-118.46	1,134.24	1,076.55	57.69	19.659		
6,200.00	6,123.00	6,047.40	5,717.56	33.74	35.06	-8.26	-2,016.31	-120.65	1,153.73	1,095.06	58.67	19.666		
6,300.00	6,221.64	6,145.49	5,809.35	34.30	35.66	-8.26	-2,050.79	-122.84	1,173.21	1,113.57	59.64	19.672		
6,400.00	6,320.29	6,243.57	5,901.15	34.86	36.26	-8.25	-2,085.27	-125.03	1,192.70	1,132.09	60.61	19.678		
6,500.00	6,418.93	6,341.65	5,992.95	35.42	36.86	-8.25	-2,119.75	-127.23	1,212.18	1,150.60	61.58	19.684		
6,600.00	6,517.58	6,439.74	6,084.74	35.98	37.46	-8.24	-2,154.24	-129.42	1,231.67	1,169.11	62.56	19.689		
6,700.00	6,616.23	6,537.82	6,176.54	36.54	38.06	-8.24	-2,188.72	-131.61	1,251.15	1,187.62	63.53	19.694		
6,800.00	6,714.51	6,635.68	6,268.12	37.10	38.66	-41.78	-2,223.12	-133.80	1,270.59	1,206.07	64.52	19.693		
6,900.00	6,810.42	6,731.55	6,357.85	37.66	39.25	-59.62	-2,256.83	-135.94	1,289.86	1,224.30	65.56	19.675		
7,000.00	6,901.58	6,823.08	6,443.51	38.21	39.81	-67.52	-2,289.00	-137.98	1,309.18	1,242.52	66.66	19.640		
7,100.00	6,985.76	6,908.01	6,523.00	38.76	40.33	-71.87	-2,318.86	-139.88	1,329.21	1,261.33	67.87	19.584		
7,200.00	7,060.88	6,984.26	6,594.36	39.32	40.80	-74.51	-2,345.67	-141.58	1,350.86	1,281.60	69.26	19.505		
7,300.00	7,125.09	7,049.94	6,655.83	39.90	41.20	-75.96	-2,368.76	-143.05	1,375.13	1,304.26	70.87	19.403		
7,400.00	7,176.81	7,151.51	6,750.43	40.55	41.82	-77.94	-2,404.35	-151.92	1,402.14	1,328.94	73.20	19.155		
7,500.00	7,214.77	7,301.27	6,884.60	41.30	42.65	-80.80	-2,455.05	-193.82	1,429.99	1,354.12	75.88	18.847		
7,600.00	7,238.02	7,547.54	7,073.96	42.22	43.71	-85.36	-2,527.21	-331.04	1,455.58	1,377.71	77.87	18.692		
7,700.00	7,246.01	7,984.71	7,243.45	43.32	44.94	-89.90	-2,593.85	-719.06	1,469.76	1,391.06	78.70	18.676		
7,800.00	7,245.50	8,135.33	7,245.56	44.65	45.43	-90.00	-2,595.81	-869.59	1,469.96	1,388.33	81.64	18.006		
7,900.00	7,244.97	8,235.33	7,245.06	46.21	45.94	-90.00	-2,596.40	-969.58	1,469.97	1,385.08	84.89	17.317		
8,000.00	7,244.44	8,335.33	7,244.55	47.99	46.68	-90.00	-2,596.99	-1,069.58	1,469.97	1,381.53	88.45	16.620		
8,100.00	7,243.91	8,435.33	7,244.05	49.96	47.68	-90.01	-2,597.58	-1,169.58	1,469.98	1,377.69	92.28	15.929		
8,200.00	7,243.39	8,535.33	7,243.55	52.10	48.94	-90.01	-2,598.16	-1,269.57	1,469.98	1,373.62	96.36	15.255		
8,300.00	7,242.86	8,635.33	7,243.05	54.38	50.43	-90.01	-2,598.75	-1,369.57	1,469.98	1,369.33	100.65	14.605		
8,400.00	7,242.33	8,735.33	7,242.55	56.78	52.09	-90.01	-2,599.34	-1,469.57	1,469.99	1,364.86	105.13	13.983		
8,500.00	7,241.80	8,835.33	7,242.05	59.28	53.90	-90.01	-2,599.93	-1,569.56	1,469.99	1,360.22	109.77	13.392		
8,600.00	7,241.27	8,935.33	7,241.55	61.88	55.82	-90.01	-2,600.52	-1,669.56	1,469.99	1,355.44	114.56	12.832		
8,700.00	7,240.74	9,035.33	7,241.05	64.54	57.84	-90.01	-2,601.11	-1,769.56	1,470.00	1,350.53	119.47	12.304		
8,800.00	7,240.21	9,135.33	7,240.55	67.27	59.94	-90.01	-2,601.69	-1,869.56	1,470.00	1,345.50	124.50	11.807		
8,900.00	7,239.68	9,235.33	7,240.05	70.06	62.12	-90.01	-2,602.28	-1,969.55	1,470.01	1,340.38	129.63	11.340		
9,000.00	7,239.16	9,335.33	7,239.55	72.89	64.35	-90.02	-2,602.87	-2,069.55	1,470.01	1,335.16	134.85	10.901		
9,100.00	7,238.63	9,435.33	7,239.05	75.77	66.63	-90.02	-2,603.46	-2,169.55	1,470.01	1,329.87	140.14	10.490		
9,200.00	7,238.10	9,535.33	7,238.55	78.69	68.96	-90.02	-2,604.05	-2,269.54	1,470.02	1,324.51	145.51	10.103		
9,300.00	7,237.57	9,635.33	7,238.05	81.64	71.33	-90.02	-2,604.63	-2,369.54	1,470.02	1,319.09	150.94	9.739		
9,400.00	7,237.04	9,735.33	7,237.55	84.62	73.74	-90.02	-2,605.22	-2,469.54	1,470.02	1,313.60	156.42	9.398		
9,500.00	7,236.51	9,835.33	7,237.04	87.63	76.18	-90.02	-2,605.81	-2,569.54	1,470.03	1,308.07	161.96	9.077		
9,600.00	7,235.98	9,935.33	7,236.54	90.66	78.65	-90.02	-2,606.40	-2,669.53	1,470.03	1,302.50	167.54	8.774		
9,700.00	7,235.45	10,035.33	7,236.04	93.72	81.15	-90.02	-2,606.99	-2,769.53	1,470.04	1,296.88	173.16	8.489		
9,800.00	7,234.93	10,135.33	7,235.54	96.79	83.67	-90.02	-2,607.58	-2,869.53	1,470.04	1,291.22	178.82	8.221		
9,900.00	7,234.40	10,235.33	7,235.04	99.88	86.21	-90.03	-2,608.16	-2,969.52	1,470.04	1,285.53	184.51	7.967		
10,000.00	7,233.87	10,335.33	7,234.54	102.98	88.77	-90.03	-2,608.75	-3,069.52	1,470.05	1,279.81	190.24	7.727		
10,100.00	7,233.34	10,435.33	7,234.04	106.10	91.35	-90.03	-2,609.34	-3,169.52	1,470.05	1,274.06	195.99	7.501		
10,200.00	7,232.81	10,535.33	7,233.54	109.23	93.95	-90.03	-2,609.93	-3,269.51	1,470.06	1,268.28	201.77	7.286		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,635.33	7,233.04	112.38	96.56	-90.03	-2,610.52	-3,369.51	1,470.06	1,262.48	207.57	7.082		
10,400.00	7,231.75	10,735.33	7,232.54	115.53	99.19	-90.03	-2,611.10	-3,469.51	1,470.06	1,256.66	213.40	6.889		
10,500.00	7,231.23	10,835.33	7,232.04	118.70	101.83	-90.03	-2,611.69	-3,569.51	1,470.07	1,250.82	219.24	6.705		
10,600.00	7,230.70	10,935.33	7,231.54	121.87	104.48	-90.03	-2,612.28	-3,669.50	1,470.07	1,244.96	225.11	6.531		
10,700.00	7,230.17	11,035.33	7,231.04	125.05	107.14	-90.03	-2,612.87	-3,769.50	1,470.07	1,239.09	230.99	6.364		
10,800.00	7,229.64	11,135.33	7,230.54	128.25	109.81	-90.03	-2,613.46	-3,869.50	1,470.08	1,233.19	236.88	6.206		
10,900.00	7,229.11	11,235.33	7,230.04	131.44	112.49	-90.04	-2,614.05	-3,969.49	1,470.08	1,227.29	242.80	6.055		
11,000.00	7,228.58	11,335.33	7,229.53	134.65	115.18	-90.04	-2,614.63	-4,069.49	1,470.09	1,221.37	248.72	5.911		
11,100.00	7,228.05	11,435.33	7,229.03	137.86	117.88	-90.04	-2,615.22	-4,169.49	1,470.09	1,215.43	254.66	5.773		
11,200.00	7,227.52	11,535.33	7,228.53	141.08	120.59	-90.04	-2,615.81	-4,269.48	1,470.09	1,209.49	260.61	5.641		
11,300.00	7,227.00	11,635.33	7,228.03	144.30	123.30	-90.04	-2,616.40	-4,369.48	1,470.10	1,203.53	266.57	5.515		
11,400.00	7,226.47	11,735.33	7,227.53	147.52	126.02	-90.04	-2,616.99	-4,469.48	1,470.10	1,197.56	272.54	5.394		
11,500.00	7,225.94	11,835.33	7,227.03	150.76	128.74	-90.04	-2,617.57	-4,569.48	1,470.11	1,191.59	278.52	5.278		
11,600.00	7,225.41	11,935.33	7,226.53	153.99	131.47	-90.04	-2,618.16	-4,669.47	1,470.11	1,185.60	284.51	5.167		
11,700.00	7,224.88	12,035.33	7,226.03	157.23	134.21	-90.04	-2,618.75	-4,769.47	1,470.11	1,179.61	290.51	5.061		
11,800.00	7,224.35	12,135.33	7,225.53	160.48	136.95	-90.05	-2,619.34	-4,869.47	1,470.12	1,173.61	296.51	4.958		
11,900.00	7,223.82	12,235.33	7,225.03	163.72	139.70	-90.05	-2,619.93	-4,969.46	1,470.12	1,167.60	302.53	4.860		
12,000.00	7,223.29	12,335.33	7,224.53	166.98	142.45	-90.05	-2,620.52	-5,069.46	1,470.12	1,161.58	308.55	4.765		
12,100.00	7,222.77	12,435.33	7,224.03	170.23	145.20	-90.05	-2,621.10	-5,169.46	1,470.13	1,155.56	314.57	4.673		
12,200.00	7,222.24	12,535.33	7,223.53	173.49	147.96	-90.05	-2,621.69	-5,269.45	1,470.13	1,149.53	320.61	4.585		
12,300.00	7,221.71	12,635.33	7,223.03	176.75	150.72	-90.05	-2,622.28	-5,369.45	1,470.14	1,143.49	326.65	4.501		
12,400.00	7,221.18	12,735.33	7,222.53	180.01	153.49	-90.05	-2,622.87	-5,469.45	1,470.14	1,137.45	332.69	4.419		
12,500.00	7,220.65	12,835.33	7,222.02	183.28	156.26	-90.05	-2,623.46	-5,569.45	1,470.14	1,131.40	338.74	4.340		
12,600.00	7,220.12	12,935.33	7,221.52	186.54	159.03	-90.05	-2,624.04	-5,669.44	1,470.15	1,125.35	344.80	4.264		
12,700.00	7,219.59	13,035.33	7,221.02	189.81	161.81	-90.06	-2,624.63	-5,769.44	1,470.15	1,119.30	350.86	4.190		
12,800.00	7,219.06	13,135.33	7,220.52	193.09	164.58	-90.06	-2,625.22	-5,869.44	1,470.16	1,113.24	356.92	4.119		
12,900.00	7,218.54	13,235.33	7,220.02	196.36	167.36	-90.06	-2,625.81	-5,969.43	1,470.16	1,107.17	362.99	4.050		
13,000.00	7,218.01	13,335.33	7,219.52	199.64	170.15	-90.06	-2,626.40	-6,069.43	1,470.16	1,101.10	369.06	3.984		
13,100.00	7,217.48	13,435.33	7,219.02	202.92	172.93	-90.06	-2,626.99	-6,169.43	1,470.17	1,095.03	375.14	3.919		
13,200.00	7,216.95	13,535.33	7,218.52	206.20	175.72	-90.06	-2,627.57	-6,269.42	1,470.17	1,088.95	381.22	3.856		
13,300.00	7,216.42	13,635.33	7,218.02	209.48	178.51	-90.06	-2,628.16	-6,369.42	1,470.17	1,082.87	387.30	3.796		
13,400.00	7,215.89	13,735.33	7,217.52	212.76	181.31	-90.06	-2,628.75	-6,469.42	1,470.18	1,076.79	393.39	3.737		
13,500.00	7,215.36	13,835.33	7,217.02	216.05	184.10	-90.06	-2,629.34	-6,569.42	1,470.18	1,070.70	399.48	3.680		
13,600.00	7,214.84	13,935.33	7,216.52	219.33	186.90	-90.07	-2,629.93	-6,669.41	1,470.19	1,064.61	405.58	3.625		
13,700.00	7,214.31	14,035.33	7,216.02	222.62	189.70	-90.07	-2,630.51	-6,769.41	1,470.19	1,058.52	411.67	3.571		
13,800.00	7,213.78	14,135.33	7,215.52	225.91	192.50	-90.07	-2,631.10	-6,869.41	1,470.19	1,052.42	417.77	3.519		
13,900.00	7,213.25	14,235.33	7,215.01	229.20	195.30	-90.07	-2,631.69	-6,969.40	1,470.20	1,046.32	423.87	3.468		
14,000.00	7,212.72	14,335.33	7,214.51	232.49	198.10	-90.07	-2,632.28	-7,069.40	1,470.20	1,040.22	429.98	3.419		
14,100.00	7,212.19	14,435.33	7,214.01	235.79	200.91	-90.07	-2,632.87	-7,169.40	1,470.21	1,034.12	436.09	3.371		
14,200.00	7,211.66	14,535.33	7,213.51	239.08	203.72	-90.07	-2,633.46	-7,269.39	1,470.21	1,028.01	442.20	3.325		
14,300.00	7,211.13	14,635.33	7,213.01	242.38	206.53	-90.07	-2,634.04	-7,369.39	1,470.21	1,021.91	448.31	3.279		
14,400.00	7,210.61	14,735.33	7,212.51	245.67	209.33	-90.07	-2,634.63	-7,469.39	1,470.22	1,015.79	454.42	3.235		
14,500.00	7,210.08	14,835.33	7,212.01	248.97	212.15	-90.08	-2,635.22	-7,569.39	1,470.22	1,009.68	460.54	3.192		
14,600.00	7,209.55	14,935.33	7,211.51	252.27	214.96	-90.08	-2,635.81	-7,669.38	1,470.22	1,003.57	466.66	3.151		
14,700.00	7,209.02	15,035.33	7,211.01	255.57	217.77	-90.08	-2,636.40	-7,769.38	1,470.23	997.45	472.78	3.110		
14,800.00	7,208.49	15,135.33	7,210.51	258.87	220.59	-90.08	-2,636.98	-7,869.38	1,470.23	991.33	478.90	3.070		
14,900.00	7,207.96	15,235.33	7,210.01	262.17	223.40	-90.08	-2,637.57	-7,969.37	1,470.24	985.21	485.02	3.031		
15,000.00	7,207.43	15,335.33	7,209.51	265.47	226.22	-90.08	-2,638.16	-8,069.37	1,470.24	979.09	491.15	2.993		
15,081.89	7,207.00	15,417.22	7,209.10	268.17	228.53	-90.08	-2,638.64	-8,151.26	1,470.24	974.08	496.16	2.963 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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	18.246		
200.00	200.00	199.00	200.00	3.34	3.34	-179.47	-119.86	-1.11	119.87	113.20	6.67	17.963		
300.00	299.98	295.03	296.01	3.44	3.43	-7.57	-121.44	-1.22	119.78	112.90	6.88	17.403		
400.00	399.84	391.03	391.89	3.59	3.58	-7.75	-126.22	-1.55	119.57	112.37	7.20	16.614		
500.00	499.45	487.03	487.55	3.80	3.76	-8.04	-134.20	-2.10	119.25	111.64	7.61	15.669		
600.00	598.70	583.05	582.91	4.06	3.99	-8.46	-145.37	-2.88	118.83	110.72	8.11	14.655		
685.38	683.12	665.03	664.00	4.33	4.21	-8.89	-157.44	-3.71	118.73	110.14	8.59	13.822		
700.00	697.49	679.08	677.85	4.38	4.25	-8.99	-159.73	-3.87	118.43	109.76	8.68	13.650 CC, ES		
800.00	796.13	775.07	772.22	4.74	4.55	-9.45	-177.25	-5.08	120.49	111.19	9.30	12.954		
900.00	894.78	870.83	865.72	5.15	4.89	-9.73	-197.86	-6.51	125.89	115.92	9.96	12.633		
1,000.00	993.43	966.14	958.04	5.58	5.26	-9.86	-221.46	-8.14	134.60	123.93	10.67	12.618		
1,100.00	1,092.07	1,060.81	1,048.91	6.03	5.66	-9.84	-247.91	-9.97	146.59	135.20	11.39	12.871		
1,200.00	1,190.72	1,154.62	1,138.05	6.50	6.08	-9.70	-277.07	-11.99	161.82	149.69	12.12	13.347		
1,300.00	1,289.36	1,252.51	1,230.44	6.98	6.55	-9.53	-309.35	-14.22	179.01	166.13	12.88	13.894		
1,400.00	1,388.01	1,351.01	1,323.40	7.47	7.04	-9.38	-341.85	-16.47	196.23	182.56	13.67	14.352		
1,500.00	1,486.65	1,449.52	1,416.36	7.97	7.54	-9.26	-374.35	-18.72	213.45	198.96	14.48	14.737		
1,600.00	1,585.30	1,548.02	1,509.32	8.48	8.05	-9.16	-406.85	-20.96	230.67	215.35	15.31	15.062		
1,700.00	1,683.94	1,646.53	1,602.29	9.00	8.58	-9.07	-439.35	-23.21	247.88	231.72	16.16	15.339		
1,800.00	1,782.59	1,745.03	1,695.25	9.52	9.11	-8.99	-471.85	-25.46	265.10	248.08	17.02	15.575		
1,900.00	1,881.24	1,843.54	1,788.21	10.05	9.65	-8.92	-504.35	-27.71	282.33	264.43	17.89	15.779		
2,000.00	1,979.88	1,942.04	1,881.17	10.58	10.20	-8.86	-536.85	-29.96	299.55	280.77	18.77	15.955		
2,100.00	2,078.53	2,040.55	1,974.14	11.11	10.75	-8.80	-569.35	-32.20	316.77	297.10	19.67	16.108		
2,200.00	2,177.17	2,139.06	2,067.10	11.64	11.30	-8.75	-601.85	-34.45	333.99	313.43	20.56	16.242		
2,300.00	2,275.82	2,237.56	2,160.06	12.18	11.86	-8.71	-634.35	-36.70	351.21	329.74	21.47	16.359		
2,400.00	2,374.46	2,336.07	2,253.02	12.72	12.42	-8.67	-666.85	-38.95	368.43	346.05	22.38	16.463		
2,500.00	2,473.11	2,434.57	2,345.99	13.26	12.98	-8.63	-699.35	-41.20	385.65	362.36	23.30	16.555		
2,600.00	2,571.76	2,533.08	2,438.95	13.80	13.54	-8.60	-731.85	-43.45	402.88	378.66	24.22	16.637		
2,700.00	2,670.40	2,631.58	2,531.91	14.35	14.11	-8.57	-764.35	-45.69	420.10	394.96	25.14	16.711		
2,800.00	2,769.05	2,730.09	2,624.87	14.89	14.68	-8.54	-796.85	-47.94	437.32	411.25	26.07	16.776		
2,900.00	2,867.69	2,828.59	2,717.84	15.44	15.25	-8.52	-829.35	-50.19	454.54	427.54	27.00	16.836		
3,000.00	2,966.34	2,927.10	2,810.80	15.99	15.82	-8.49	-861.85	-52.44	471.77	443.83	27.93	16.889		
3,100.00	3,064.98	3,025.61	2,903.76	16.53	16.39	-8.47	-894.35	-54.69	488.99	460.12	28.87	16.938		
3,200.00	3,163.63	3,124.11	2,996.72	17.08	16.97	-8.45	-926.85	-56.93	506.21	476.40	29.81	16.982		
3,300.00	3,262.27	3,222.62	3,089.69	17.63	17.54	-8.43	-959.35	-59.18	523.43	492.68	30.75	17.022		
3,400.00	3,360.92	3,321.12	3,182.65	18.18	18.12	-8.41	-991.85	-61.43	540.66	508.96	31.69	17.059		
3,500.00	3,459.57	3,419.63	3,275.61	18.74	18.70	-8.40	-1,024.35	-63.68	557.88	525.24	32.64	17.093		
3,600.00	3,558.21	3,518.13	3,368.57	19.29	19.27	-8.38	-1,056.85	-65.93	575.10	541.52	33.59	17.124		
3,700.00	3,656.86	3,616.64	3,461.54	19.84	19.85	-8.36	-1,089.35	-68.17	592.33	557.79	34.53	17.152		
3,800.00	3,755.50	3,715.14	3,554.50	20.39	20.43	-8.35	-1,121.85	-70.42	609.55	574.07	35.48	17.179		
3,900.00	3,854.15	3,813.65	3,647.46	20.95	21.01	-8.34	-1,154.35	-72.67	626.77	590.34	36.43	17.203		
4,000.00	3,952.79	3,912.16	3,740.42	21.50	21.59	-8.32	-1,186.85	-74.92	643.99	606.61	37.39	17.225		
4,100.00	4,051.44	4,010.66	3,833.39	22.05	22.17	-8.31	-1,219.35	-77.17	661.22	622.88	38.34	17.246		
4,200.00	4,150.08	4,109.17	3,926.35	22.61	22.75	-8.30	-1,251.85	-79.42	678.44	639.15	39.29	17.266		
4,300.00	4,248.73	4,207.67	4,019.31	23.16	23.33	-8.29	-1,284.35	-81.66	695.66	655.41	40.25	17.284		
4,400.00	4,347.38	4,306.18	4,112.27	23.72	23.91	-8.28	-1,316.85	-83.91	712.89	671.68	41.20	17.301		
4,500.00	4,446.02	4,404.68	4,205.24	24.27	24.50	-8.27	-1,349.35	-86.16	730.11	687.95	42.16	17.317		
4,600.00	4,544.67	4,503.19	4,298.20	24.83	25.08	-8.26	-1,381.85	-88.41	747.33	704.21	43.12	17.332		
4,700.00	4,643.31	4,601.69	4,391.16	25.39	25.66	-8.25	-1,414.35	-90.66	764.56	720.48	44.08	17.346		
4,800.00	4,741.96	4,700.20	4,484.12	25.94	26.24	-8.24	-1,446.85	-92.90	781.78	736.74	45.04	17.359		
4,900.00	4,840.60	4,801.29	4,577.09	26.50	26.84	-8.23	-1,479.35	-95.15	799.00	752.99	46.01	17.366		
5,000.00	4,939.25	4,902.79	4,670.05	27.05	27.44	-8.23	-1,511.85	-97.40	816.23	769.24	46.99	17.372		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	5,004.28	4,763.01	27.61	28.04	-8.22	-1,544.35	-99.65	833.45	785.49	47.96	17.377		
5,200.00	5,136.54	5,105.78	4,855.97	28.17	28.65	-8.21	-1,576.86	-101.90	850.67	801.73	48.94	17.382		
5,300.00	5,235.19	5,192.73	4,948.94	28.72	29.16	-8.20	-1,609.36	-104.14	867.90	818.05	49.84	17.413		
5,400.00	5,333.83	5,308.77	5,041.90	29.28	29.85	-8.20	-1,641.86	-106.39	885.12	834.22	50.89	17.391		
5,500.00	5,432.48	5,389.74	5,134.86	29.84	30.33	-8.19	-1,674.36	-108.64	902.34	850.58	51.77	17.431		
5,600.00	5,531.12	5,488.25	5,227.83	30.40	30.92	-8.18	-1,706.86	-110.89	919.56	866.84	52.73	17.439		
5,700.00	5,629.77	5,586.75	5,320.79	30.95	31.50	-8.18	-1,739.36	-113.14	936.79	883.09	53.69	17.447		
5,800.00	5,728.41	5,685.26	5,413.75	31.51	32.09	-8.17	-1,771.86	-115.39	954.01	899.35	54.66	17.454		
5,900.00	5,827.06	5,783.76	5,506.71	32.07	32.67	-8.17	-1,804.36	-117.63	971.23	915.61	55.62	17.461		
6,000.00	5,925.71	5,882.27	5,599.68	32.63	33.26	-8.16	-1,836.86	-119.88	988.46	931.87	56.59	17.468		
6,100.00	6,024.35	5,980.77	5,692.64	33.19	33.84	-8.16	-1,869.36	-122.13	1,005.68	948.13	57.55	17.474		
6,200.00	6,123.00	6,079.28	5,785.60	33.74	34.43	-8.15	-1,901.86	-124.38	1,022.90	964.39	58.52	17.480		
6,300.00	6,221.64	6,177.78	5,878.56	34.30	35.01	-8.15	-1,934.36	-126.63	1,040.13	980.65	59.48	17.486		
6,400.00	6,320.29	6,276.29	5,971.53	34.86	35.60	-8.14	-1,966.86	-128.87	1,057.35	996.90	60.45	17.492		
6,500.00	6,418.93	6,374.80	6,064.49	35.42	36.18	-8.14	-1,999.36	-131.12	1,074.57	1,013.16	61.42	17.497		
6,600.00	6,517.58	6,473.30	6,157.45	35.98	36.77	-8.13	-2,031.86	-133.37	1,091.80	1,029.42	62.38	17.502		
6,700.00	6,616.23	6,571.81	6,250.41	36.54	37.36	-8.13	-2,064.36	-135.62	1,109.02	1,045.67	63.35	17.507		
6,800.00	6,714.51	6,670.09	6,343.16	37.10	37.94	-41.88	-2,096.78	-137.86	1,126.20	1,061.86	64.34	17.505		
6,900.00	6,810.42	6,766.38	6,434.04	37.66	38.51	-60.04	-2,128.55	-140.06	1,143.25	1,077.88	65.37	17.488		
7,000.00	6,901.58	6,858.31	6,520.79	38.21	39.06	-68.31	-2,158.88	-142.16	1,160.55	1,094.06	66.48	17.456		
7,100.00	6,985.76	6,952.89	6,609.94	38.76	39.62	-73.21	-2,190.07	-144.58	1,178.76	1,110.95	67.81	17.383		
7,200.00	7,060.88	7,062.04	6,710.89	39.32	40.24	-76.64	-2,225.51	-167.49	1,197.40	1,127.95	69.45	17.242		
7,300.00	7,125.09	7,184.73	6,818.38	39.90	40.86	-79.28	-2,263.43	-212.36	1,215.67	1,144.43	71.24	17.064		
7,400.00	7,176.81	7,324.70	6,928.40	40.55	41.46	-81.50	-2,302.50	-289.06	1,232.57	1,159.53	73.04	16.875		
7,500.00	7,214.77	7,485.23	7,031.51	41.30	42.03	-83.37	-2,339.47	-405.83	1,246.78	1,172.03	74.75	16.679		
7,600.00	7,238.02	7,666.69	7,110.67	42.22	42.55	-84.76	-2,368.43	-565.83	1,256.70	1,180.15	76.55	16.417		
7,700.00	7,246.01	7,863.30	7,144.72	43.32	43.12	-85.39	-2,381.89	-758.20	1,260.84	1,181.92	78.91	15.977		
7,800.00	7,245.50	7,975.05	7,144.49	44.65	43.59	-85.41	-2,382.72	-869.95	1,260.92	1,179.05	81.87	15.401		
7,900.00	7,244.97	8,075.05	7,143.93	46.21	44.22	-85.40	-2,383.33	-969.95	1,260.95	1,175.81	85.15	14.809		
8,000.00	7,244.44	8,175.05	7,143.36	47.99	45.13	-85.40	-2,383.94	-1,069.95	1,260.99	1,172.25	88.73	14.211		
8,100.00	7,243.91	8,275.05	7,142.79	49.96	46.30	-85.40	-2,384.56	-1,169.94	1,261.02	1,168.43	92.59	13.620		
8,200.00	7,243.39	8,375.05	7,142.22	52.10	47.71	-85.40	-2,385.17	-1,269.94	1,261.05	1,164.37	96.68	13.043		
8,300.00	7,242.86	8,475.05	7,141.65	54.38	49.32	-85.40	-2,385.78	-1,369.94	1,261.08	1,160.10	100.99	12.488		
8,400.00	7,242.33	8,575.05	7,141.08	56.78	51.08	-85.40	-2,386.39	-1,469.93	1,261.11	1,155.64	105.47	11.957		
8,500.00	7,241.80	8,675.05	7,140.52	59.28	52.96	-85.39	-2,387.01	-1,569.93	1,261.14	1,151.02	110.12	11.452		
8,600.00	7,241.27	8,775.05	7,139.95	61.88	54.95	-85.39	-2,387.62	-1,669.93	1,261.18	1,146.26	114.91	10.975		
8,700.00	7,240.74	8,875.05	7,139.38	64.54	57.02	-85.39	-2,388.23	-1,769.92	1,261.21	1,141.38	119.83	10.525		
8,800.00	7,240.21	8,975.05	7,138.81	67.27	59.17	-85.39	-2,388.85	-1,869.92	1,261.24	1,136.39	124.85	10.102		
8,900.00	7,239.68	9,075.05	7,138.24	70.06	61.38	-85.39	-2,389.46	-1,969.91	1,261.27	1,131.29	129.98	9.704		
9,000.00	7,239.16	9,175.05	7,137.67	72.89	63.65	-85.38	-2,390.07	-2,069.91	1,261.30	1,126.11	135.19	9.330		
9,100.00	7,238.63	9,275.05	7,137.10	75.77	65.97	-85.38	-2,390.69	-2,169.91	1,261.33	1,120.86	140.48	8.979		
9,200.00	7,238.10	9,375.05	7,136.54	78.69	68.33	-85.38	-2,391.30	-2,269.90	1,261.37	1,115.53	145.84	8.649		
9,300.00	7,237.57	9,475.05	7,135.97	81.64	70.73	-85.38	-2,391.91	-2,369.90	1,261.40	1,110.14	151.26	8.339		
9,400.00	7,237.04	9,575.05	7,135.40	84.62	73.16	-85.38	-2,392.52	-2,469.90	1,261.43	1,104.70	156.73	8.048		
9,500.00	7,236.51	9,675.05	7,134.83	87.63	75.63	-85.38	-2,393.14	-2,569.89	1,261.46	1,099.21	162.26	7.775		
9,600.00	7,235.98	9,775.05	7,134.26	90.66	78.12	-85.37	-2,393.75	-2,669.89	1,261.49	1,093.67	167.83	7.517		
9,700.00	7,235.45	9,875.05	7,133.69	93.72	80.64	-85.37	-2,394.36	-2,769.89	1,261.52	1,088.09	173.44	7.274		
9,800.00	7,234.93	9,975.05	7,133.13	96.79	83.18	-85.37	-2,394.98	-2,869.88	1,261.56	1,082.47	179.08	7.045		
9,900.00	7,234.40	10,075.05	7,132.56	99.88	85.74	-85.37	-2,395.59	-2,969.88	1,261.59	1,076.82	184.76	6.828		
10,000.00	7,233.87	10,175.05	7,131.99	102.98	88.32	-85.37	-2,396.20	-3,069.88	1,261.62	1,071.15	190.47	6.624		
10,100.00	7,233.34	10,275.05	7,131.42	106.10	90.91	-85.37	-2,396.81	-3,169.87	1,261.65	1,065.44	196.21	6.430		
10,200.00	7,232.81	10,375.05	7,130.85	109.23	93.52	-85.36	-2,397.43	-3,269.87	1,261.68	1,059.71	201.98	6.247		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,475.05	7,130.28	112.38	96.15	-85.36	-2,398.04	-3,369.87	1,261.72	1,053.95	207.77	6.073		
10,400.00	7,231.75	10,575.05	7,129.71	115.53	98.79	-85.36	-2,398.65	-3,469.86	1,261.75	1,048.17	213.58	5.908		
10,500.00	7,231.23	10,675.05	7,129.15	118.70	101.44	-85.36	-2,399.27	-3,569.86	1,261.78	1,042.37	219.40	5.751		
10,600.00	7,230.70	10,775.05	7,128.58	121.87	104.11	-85.36	-2,399.88	-3,669.86	1,261.81	1,036.56	225.25	5.602		
10,700.00	7,230.17	10,875.05	7,128.01	125.05	106.78	-85.36	-2,400.49	-3,769.85	1,261.84	1,030.73	231.12	5.460		
10,800.00	7,229.64	10,975.05	7,127.44	128.25	109.46	-85.35	-2,401.11	-3,869.85	1,261.87	1,024.88	237.00	5.324		
10,900.00	7,229.11	11,075.05	7,126.87	131.44	112.15	-85.35	-2,401.72	-3,969.84	1,261.91	1,019.02	242.89	5.195		
11,000.00	7,228.58	11,175.05	7,126.30	134.65	114.85	-85.35	-2,402.33	-4,069.84	1,261.94	1,013.14	248.80	5.072		
11,100.00	7,228.05	11,275.05	7,125.74	137.86	117.56	-85.35	-2,402.94	-4,169.84	1,261.97	1,007.25	254.72	4.954		
11,200.00	7,227.52	11,375.05	7,125.17	141.08	120.27	-85.35	-2,403.56	-4,269.83	1,262.00	1,001.35	260.65	4.842		
11,300.00	7,227.00	11,475.05	7,124.60	144.30	122.99	-85.35	-2,404.17	-4,369.83	1,262.03	995.44	266.59	4.734		
11,400.00	7,226.47	11,575.05	7,124.03	147.52	125.72	-85.34	-2,404.78	-4,469.83	1,262.06	989.52	272.55	4.631		
11,500.00	7,225.94	11,675.05	7,123.46	150.76	128.45	-85.34	-2,405.40	-4,569.82	1,262.10	983.59	278.51	4.532		
11,600.00	7,225.41	11,775.05	7,122.89	153.99	131.19	-85.34	-2,406.01	-4,669.82	1,262.13	977.65	284.48	4.437		
11,700.00	7,224.88	11,875.05	7,122.32	157.23	133.94	-85.34	-2,406.62	-4,769.82	1,262.16	971.70	290.46	4.345		
11,800.00	7,224.35	11,975.05	7,121.76	160.48	136.68	-85.34	-2,407.24	-4,869.81	1,262.19	965.75	296.45	4.258		
11,900.00	7,223.82	12,075.05	7,121.19	163.72	139.44	-85.34	-2,407.85	-4,969.81	1,262.22	959.78	302.44	4.173		
12,000.00	7,223.29	12,175.05	7,120.62	166.98	142.19	-85.33	-2,408.46	-5,069.81	1,262.25	953.81	308.44	4.092		
12,100.00	7,222.77	12,275.05	7,120.05	170.23	144.95	-85.33	-2,409.07	-5,169.80	1,262.29	947.84	314.45	4.014		
12,200.00	7,222.24	12,375.05	7,119.48	173.49	147.72	-85.33	-2,409.69	-5,269.80	1,262.32	941.85	320.47	3.939		
12,300.00	7,221.71	12,475.05	7,118.91	176.75	150.49	-85.33	-2,410.30	-5,369.80	1,262.35	935.86	326.49	3.866		
12,400.00	7,221.18	12,575.05	7,118.35	180.01	153.26	-85.33	-2,410.91	-5,469.79	1,262.38	929.87	332.51	3.796		
12,500.00	7,220.65	12,675.05	7,117.78	183.28	156.03	-85.33	-2,411.53	-5,569.79	1,262.41	923.87	338.54	3.729		
12,600.00	7,220.12	12,775.05	7,117.21	186.54	158.81	-85.32	-2,412.14	-5,669.78	1,262.45	917.87	344.58	3.664		
12,700.00	7,219.59	12,875.05	7,116.64	189.81	161.59	-85.32	-2,412.75	-5,769.78	1,262.48	911.86	350.62	3.601		
12,800.00	7,219.06	12,975.05	7,116.07	193.09	164.38	-85.32	-2,413.37	-5,869.78	1,262.51	905.84	356.67	3.540		
12,900.00	7,218.54	13,075.05	7,115.50	196.36	167.16	-85.32	-2,413.98	-5,969.77	1,262.54	899.82	362.72	3.481		
13,000.00	7,218.01	13,175.05	7,114.93	199.64	169.95	-85.32	-2,414.59	-6,069.77	1,262.57	893.80	368.77	3.424		
13,100.00	7,217.48	13,275.05	7,114.37	202.92	172.74	-85.32	-2,415.20	-6,169.77	1,262.60	887.78	374.83	3.368		
13,200.00	7,216.95	13,375.05	7,113.80	206.20	175.53	-85.31	-2,415.82	-6,269.76	1,262.64	881.75	380.89	3.315		
13,300.00	7,216.42	13,475.05	7,113.23	209.48	178.33	-85.31	-2,416.43	-6,369.76	1,262.67	875.71	386.95	3.263		
13,400.00	7,215.89	13,575.05	7,112.66	212.76	181.12	-85.31	-2,417.04	-6,469.76	1,262.70	869.68	393.02	3.213		
13,500.00	7,215.36	13,675.05	7,112.09	216.05	183.92	-85.31	-2,417.66	-6,569.75	1,262.73	863.64	399.09	3.164		
13,600.00	7,214.84	13,775.05	7,111.52	219.33	186.72	-85.31	-2,418.27	-6,669.75	1,262.76	857.60	405.17	3.117		
13,700.00	7,214.31	13,875.05	7,110.96	222.62	189.53	-85.31	-2,418.88	-6,769.75	1,262.79	851.55	411.24	3.071		
13,800.00	7,213.78	13,975.05	7,110.39	225.91	192.33	-85.30	-2,419.49	-6,869.74	1,262.83	845.50	417.32	3.026		
13,900.00	7,213.25	14,075.05	7,109.82	229.20	195.14	-85.30	-2,420.11	-6,969.74	1,262.86	839.45	423.40	2.983		
14,000.00	7,212.72	14,175.05	7,109.25	232.49	197.94	-85.30	-2,420.72	-7,069.74	1,262.89	833.40	429.49	2.940		
14,100.00	7,212.19	14,275.05	7,108.68	235.79	200.75	-85.30	-2,421.33	-7,169.73	1,262.92	827.35	435.58	2.899		
14,200.00	7,211.66	14,375.05	7,108.11	239.08	203.56	-85.30	-2,421.95	-7,269.73	1,262.95	821.29	441.67	2.860		
14,300.00	7,211.13	14,475.05	7,107.55	242.38	206.37	-85.30	-2,422.56	-7,369.73	1,262.99	815.23	447.76	2.821		
14,400.00	7,210.61	14,575.05	7,106.98	245.67	209.18	-85.29	-2,423.17	-7,469.72	1,263.02	809.17	453.85	2.783		
14,500.00	7,210.08	14,675.05	7,106.41	248.97	212.00	-85.29	-2,423.79	-7,569.72	1,263.05	803.10	459.95	2.746		
14,600.00	7,209.55	14,775.05	7,105.84	252.27	214.81	-85.29	-2,424.40	-7,669.71	1,263.08	797.03	466.05	2.710		
14,700.00	7,209.02	14,875.05	7,105.27	255.57	217.63	-85.29	-2,425.01	-7,769.71	1,263.11	790.97	472.15	2.675		
14,800.00	7,208.49	14,975.05	7,104.70	258.87	220.45	-85.29	-2,425.62	-7,869.71	1,263.14	784.90	478.25	2.641		
14,900.00	7,207.96	15,075.05	7,104.13	262.17	223.27	-85.29	-2,426.24	-7,969.70	1,263.18	778.83	484.35	2.608		
15,000.00	7,207.43	15,175.05	7,103.57	265.47	226.09	-85.28	-2,426.85	-8,069.70	1,263.21	772.75	490.46	2.576		
15,081.89	7,207.00	15,256.94	7,103.10	268.17	228.39	-85.28	-2,427.35	-8,151.59	1,263.23	767.78	495.46	2.550 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	0.00	0.46	280.15	2.23	280.16					
100.00	100.00	102.00	100.00	3.28	0.18	0.46	280.15	2.23	280.16	276.69	3.47	80.761		
200.00	200.00	202.00	200.00	3.34	0.62	0.46	280.15	2.23	280.16	276.20	3.96	70.746 CC, ES		
300.00	299.98	301.98	299.98	3.44	1.06	172.46	280.15	2.23	281.89	277.39	4.50	62.617		
400.00	399.84	401.84	399.84	3.59	1.50	172.58	280.15	2.23	287.08	281.99	5.09	56.376		
500.00	499.45	501.45	499.45	3.80	1.94	172.78	280.15	2.23	295.72	289.99	5.73	51.613		
600.00	598.70	591.01	588.99	4.06	2.33	172.96	281.58	2.03	309.40	303.02	6.38	48.505		
700.00	697.49	679.26	677.15	4.38	2.72	173.11	285.71	1.47	329.38	322.31	7.07	46.589		
800.00	796.13	766.17	763.78	4.74	3.11	173.22	292.39	0.56	353.19	345.43	7.77	45.478		
900.00	894.78	851.74	848.85	5.15	3.49	173.25	301.52	-0.68	379.88	371.41	8.47	44.833		
1,000.00	993.43	935.85	932.17	5.58	3.86	173.22	312.94	-2.24	409.38	400.19	9.18	44.578		
1,100.00	1,092.07	1,018.41	1,013.59	6.03	4.24	173.14	326.50	-4.08	441.60	431.71	9.89	44.656		
1,200.00	1,190.72	1,110.30	1,103.90	6.50	4.65	173.02	343.29	-6.37	475.59	464.95	10.63	44.730		
1,300.00	1,289.36	1,204.33	1,196.31	6.98	5.07	172.92	360.51	-8.71	509.61	498.21	11.40	44.700		
1,400.00	1,388.01	1,298.36	1,288.72	7.47	5.49	172.83	377.73	-11.05	543.64	531.46	12.18	44.624		
1,500.00	1,486.65	1,407.61	1,381.13	7.97	6.00	172.75	394.95	-13.39	577.67	564.63	13.04	44.283		
1,600.00	1,585.30	1,486.42	1,473.54	8.48	6.36	172.69	412.17	-15.73	611.70	597.92	13.78	44.393		
1,700.00	1,683.94	1,580.44	1,565.95	9.00	6.80	172.62	429.39	-18.08	645.73	631.14	14.59	44.257		
1,800.00	1,782.59	1,674.47	1,658.35	9.52	7.24	172.57	446.61	-20.42	679.76	664.35	15.41	44.115		
1,900.00	1,881.24	1,768.50	1,750.76	10.05	7.68	172.52	463.83	-22.76	713.79	697.56	16.23	43.971		
2,000.00	1,979.88	1,862.53	1,843.17	10.58	8.13	172.47	481.05	-25.10	747.82	730.76	17.06	43.829		
2,100.00	2,078.53	1,956.56	1,935.58	11.11	8.57	172.43	498.26	-27.45	781.86	763.96	17.90	43.688		
2,200.00	2,177.17	2,050.59	2,027.99	11.64	9.01	172.39	515.48	-29.79	815.89	797.15	18.73	43.551		
2,300.00	2,275.82	2,144.62	2,120.40	12.18	9.46	172.35	532.70	-32.13	849.92	830.35	19.58	43.418		
2,400.00	2,374.46	2,238.65	2,212.81	12.72	9.90	172.32	549.92	-34.47	883.95	863.54	20.42	43.290		
2,500.00	2,473.11	2,332.68	2,305.22	13.26	10.35	172.29	567.14	-36.82	917.99	896.72	21.27	43.167		
2,600.00	2,571.76	2,426.71	2,397.63	13.80	10.79	172.26	584.36	-39.16	952.02	929.91	22.12	43.048		
2,700.00	2,670.40	2,520.74	2,490.04	14.35	11.24	172.24	601.58	-41.50	986.06	963.09	22.97	42.935		
2,800.00	2,769.05	2,614.77	2,582.45	14.89	11.68	172.21	618.80	-43.84	1,020.09	996.27	23.82	42.826		
2,900.00	2,867.69	2,708.80	2,674.86	15.44	12.13	172.19	636.02	-46.19	1,054.12	1,029.45	24.67	42.721		
3,000.00	2,966.34	2,802.83	2,767.27	15.99	12.57	172.17	653.23	-48.53	1,088.16	1,062.63	25.53	42.621		
3,100.00	3,064.98	2,903.14	2,859.68	16.53	13.05	172.15	670.45	-50.87	1,122.19	1,095.77	26.42	42.479		
3,200.00	3,163.63	3,009.11	2,952.09	17.08	13.55	172.13	687.67	-53.21	1,156.23	1,128.89	27.33	42.303		
3,300.00	3,262.27	3,084.92	3,044.50	17.63	13.91	172.11	704.89	-55.56	1,190.26	1,162.15	28.11	42.346		
3,400.00	3,360.92	3,178.94	3,136.91	18.18	14.36	172.09	722.11	-57.90	1,224.30	1,195.33	28.97	42.262		
3,500.00	3,459.57	3,272.97	3,229.32	18.74	14.81	172.08	739.33	-60.24	1,258.33	1,228.50	29.83	42.182		
3,600.00	3,558.21	3,367.00	3,321.73	19.29	15.26	172.06	756.55	-62.58	1,292.36	1,261.67	30.69	42.104		
3,700.00	3,656.86	3,461.03	3,414.14	19.84	15.70	172.05	773.77	-64.93	1,326.40	1,294.84	31.56	42.030		
3,800.00	3,755.50	3,555.06	3,506.55	20.39	16.15	172.04	790.99	-67.27	1,360.43	1,328.01	32.42	41.959		
3,900.00	3,854.15	3,649.09	3,598.96	20.95	16.60	172.02	808.20	-69.61	1,394.47	1,361.18	33.29	41.890		
4,000.00	3,952.79	3,743.12	3,691.37	21.50	17.05	172.01	825.42	-71.95	1,428.50	1,394.35	34.15	41.825		
4,100.00	4,051.44	3,837.15	3,783.78	22.05	17.49	172.00	842.64	-74.30	1,462.54	1,427.52	35.02	41.761		
4,200.00	4,150.08	3,931.18	3,876.19	22.61	17.94	171.99	859.86	-76.64	1,496.58	1,460.69	35.89	41.701		
4,300.00	4,248.73	4,025.21	3,968.60	23.16	18.39	171.98	877.08	-78.98	1,530.61	1,493.85	36.76	41.642		
4,400.00	4,347.38	4,119.24	4,061.01	23.72	18.84	171.97	894.30	-81.32	1,564.65	1,527.02	37.62	41.586		
4,500.00	4,446.02	4,213.27	4,153.42	24.27	19.29	171.96	911.52	-83.67	1,598.68	1,560.19	38.49	41.531		
4,600.00	4,544.67	4,307.30	4,245.83	24.83	19.73	171.95	928.74	-86.01	1,632.72	1,593.35	39.36	41.479		
4,700.00	4,643.31	4,401.33	4,338.24	25.39	20.18	171.94	945.96	-88.35	1,666.75	1,626.52	40.23	41.428		
4,800.00	4,741.96	4,504.64	4,430.65	25.94	20.67	171.93	963.17	-90.69	1,700.79	1,659.64	41.15	41.335		
4,900.00	4,840.60	4,589.39	4,523.06	26.50	21.08	171.92	980.39	-93.04	1,734.82	1,692.85	41.97	41.332		
5,000.00	4,939.25	4,683.42	4,615.47	27.05	21.53	171.91	997.61	-95.38	1,768.86	1,726.01	42.84	41.286		
5,100.00	5,037.90	4,777.45	4,707.88	27.61	21.98	171.91	1,014.83	-97.72	1,802.89	1,759.18	43.72	41.242		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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+HFR1													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	5,136.54	4,871.47	4,800.29	28.17	22.42	171.90	1,032.05	-100.06	1,836.93	1,792.34	44.59	41.199		
5,300.00	5,235.19	4,965.50	4,892.69	28.72	22.87	171.89	1,049.27	-102.41	1,870.96	1,825.51	45.46	41.158		
5,400.00	5,333.83	5,059.53	4,985.10	29.28	23.32	171.88	1,066.49	-104.75	1,905.00	1,858.67	46.33	41.117		
5,500.00	5,432.48	5,153.56	5,077.51	29.84	23.77	171.88	1,083.71	-107.09	1,939.04	1,891.83	47.20	41.078		
5,600.00	5,531.12	5,247.59	5,169.92	30.40	24.22	171.87	1,100.93	-109.43	1,973.07	1,925.00	48.08	41.041		
5,700.00	5,629.77	5,341.62	5,262.33	30.95	24.67	171.86	1,118.14	-111.78	2,007.11	1,958.16	48.95	41.004		
5,800.00	5,728.41	5,435.65	5,354.74	31.51	25.11	171.86	1,135.36	-114.12	2,041.14	1,991.32	49.82	40.968		
5,900.00	5,827.06	5,529.68	5,447.15	32.07	25.56	171.85	1,152.58	-116.46	2,075.18	2,024.48	50.70	40.934		
6,000.00	5,925.71	5,623.71	5,539.56	32.63	26.01	171.85	1,169.80	-118.80	2,109.21	2,057.64	51.57	40.900		
6,100.00	6,024.35	5,717.74	5,631.97	33.19	26.46	171.84	1,187.02	-121.15	2,143.25	2,090.81	52.44	40.867		
6,200.00	6,123.00	5,811.77	5,724.38	33.74	26.91	171.84	1,204.24	-123.49	2,177.29	2,123.97	53.32	40.836		
6,300.00	6,221.64	5,905.80	5,816.79	34.30	27.36	171.83	1,221.46	-125.83	2,211.32	2,157.13	54.19	40.805		
6,400.00	6,320.29	6,000.17	5,909.20	34.86	27.81	171.83	1,238.68	-128.17	2,245.36	2,190.29	55.07	40.773		
6,500.00	6,418.93	6,093.86	6,001.61	35.42	28.26	171.82	1,255.90	-130.52	2,279.39	2,223.45	55.94	40.745		
6,600.00	6,517.58	6,187.89	6,094.02	35.98	28.70	171.82	1,273.11	-132.86	2,313.43	2,256.61	56.82	40.716		
6,700.00	6,616.23	6,281.92	6,186.43	36.54	29.15	171.81	1,290.33	-135.20	2,347.47	2,289.77	57.69	40.688		
6,800.00	6,714.51	6,375.73	6,278.63	37.10	29.60	134.46	1,307.51	-137.54	2,381.44	2,322.87	58.57	40.659		
6,900.00	6,810.42	6,467.64	6,368.96	37.66	30.04	113.09	1,324.34	-139.83	2,414.87	2,355.44	59.44	40.629		
7,000.00	6,901.58	6,555.39	6,455.19	38.21	30.46	102.62	1,340.41	-142.01	2,447.33	2,387.05	60.28	40.602		
7,100.00	6,985.76	6,636.81	6,535.21	38.76	30.85	96.39	1,355.32	-144.04	2,478.61	2,417.52	61.09	40.574		
7,200.00	7,060.88	6,709.90	6,607.04	39.32	31.20	92.16	1,368.71	-145.86	2,508.71	2,446.81	61.89	40.533		
7,300.00	7,125.09	6,791.37	6,687.06	39.90	31.58	89.33	1,383.60	-149.14	2,537.65	2,474.76	62.89	40.349		
7,400.00	7,176.81	6,927.28	6,817.97	40.55	32.23	88.20	1,407.63	-175.31	2,564.34	2,499.78	64.56	39.722		
7,500.00	7,214.77	7,128.65	6,994.94	41.30	33.11	88.54	1,439.27	-264.17	2,587.08	2,520.13	66.95	38.641		
7,600.00	7,238.02	7,454.29	7,199.08	42.22	34.74	90.03	1,473.49	-510.95	2,602.50	2,531.63	70.86	36.725		
7,700.00	7,246.01	7,773.96	7,259.86	43.32	37.91	90.30	1,479.93	-821.51	2,605.61	2,529.34	76.27	34.163		
7,800.00	7,245.50	7,873.96	7,259.44	44.65	39.23	90.31	1,478.27	-921.49	2,604.54	2,525.13	79.41	32.797		
7,900.00	7,244.97	7,973.95	7,259.02	46.21	40.70	90.31	1,476.61	-1,021.47	2,603.47	2,520.58	82.89	31.407		
8,000.00	7,244.44	8,073.94	7,258.60	47.99	42.32	90.31	1,474.96	-1,121.45	2,602.40	2,515.72	86.67	30.025		
8,100.00	7,243.91	8,173.94	7,258.18	49.96	44.06	90.32	1,473.30	-1,221.43	2,601.32	2,510.60	90.72	28.674		
8,200.00	7,243.39	8,273.93	7,257.76	52.10	45.92	90.32	1,471.64	-1,321.41	2,600.25	2,505.25	95.00	27.372		
8,300.00	7,242.86	8,373.93	7,257.34	54.38	47.87	90.32	1,469.98	-1,421.39	2,599.17	2,499.70	99.47	26.129		
8,400.00	7,242.33	8,473.92	7,256.92	56.78	49.91	90.33	1,468.32	-1,521.37	2,598.10	2,493.98	104.12	24.952		
8,500.00	7,241.80	8,573.92	7,256.50	59.28	52.03	90.33	1,466.66	-1,621.35	2,597.03	2,488.10	108.93	23.842		
8,600.00	7,241.27	8,673.91	7,256.08	61.88	54.22	90.33	1,465.00	-1,721.33	2,595.95	2,482.09	113.87	22.798		
8,700.00	7,240.74	8,773.90	7,255.66	64.54	56.46	90.33	1,463.35	-1,821.31	2,594.88	2,475.96	118.92	21.820		
8,800.00	7,240.21	8,873.90	7,255.24	67.27	58.76	90.34	1,461.69	-1,921.29	2,593.81	2,469.73	124.08	20.905		
8,900.00	7,239.68	8,973.89	7,254.82	70.06	61.11	90.34	1,460.03	-2,021.26	2,592.73	2,463.41	129.32	20.049		
9,000.00	7,239.16	9,073.89	7,254.40	72.89	63.49	90.34	1,458.37	-2,121.24	2,591.66	2,457.01	134.65	19.248		
9,100.00	7,238.63	9,173.88	7,253.98	75.77	65.92	90.34	1,456.71	-2,221.22	2,590.58	2,450.54	140.05	18.498		
9,200.00	7,238.10	9,273.87	7,253.56	78.69	68.38	90.35	1,455.05	-2,321.20	2,589.51	2,444.01	145.51	17.797		
9,300.00	7,237.57	9,373.87	7,253.14	81.64	70.87	90.35	1,453.39	-2,421.18	2,588.44	2,437.42	151.02	17.140		
9,400.00	7,237.04	9,473.86	7,252.72	84.62	73.38	90.35	1,451.74	-2,521.16	2,587.36	2,430.78	156.59	16.523		
9,500.00	7,236.51	9,573.86	7,252.30	87.63	75.92	90.35	1,450.08	-2,621.14	2,586.29	2,424.09	162.20	15.945		
9,600.00	7,235.98	9,673.85	7,251.88	90.66	78.48	90.36	1,448.42	-2,721.12	2,585.22	2,417.37	167.85	15.402		
9,700.00	7,235.45	9,773.85	7,251.45	93.72	81.06	90.36	1,446.76	-2,821.10	2,584.14	2,410.60	173.54	14.891		
9,800.00	7,234.93	9,873.84	7,251.03	96.79	83.66	90.36	1,445.10	-2,921.08	2,583.07	2,403.81	179.26	14.410		
9,900.00	7,234.40	9,973.83	7,250.61	99.88	86.27	90.36	1,443.44	-3,021.06	2,582.00	2,396.99	185.01	13.956		
10,000.00	7,233.87	10,073.83	7,250.19	102.98	88.90	90.37	1,441.78	-3,121.04	2,580.92	2,390.13	190.79	13.528		
10,100.00	7,233.34	10,173.82	7,249.77	106.10	91.54	90.37	1,440.13	-3,221.02	2,579.85	2,383.26	196.59	13.123		
10,200.00	7,232.81	10,273.82	7,249.35	109.23	94.20	90.37	1,438.47	-3,321.00	2,578.77	2,376.36	202.42	12.740		
10,300.00	7,232.28	10,373.81	7,248.93	112.38	96.87	90.37	1,436.81	-3,420.98	2,577.70	2,369.44	208.26	12.377		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	10,473.80	7,248.51	115.53	99.54	90.38	1,435.15	-3,520.96	2,576.63	2,362.50	214.13	12.033		
10,500.00	7,231.23	10,573.80	7,248.09	118.70	102.23	90.38	1,433.49	-3,620.94	2,575.55	2,355.54	220.01	11.706		
10,600.00	7,230.70	10,673.79	7,247.67	121.87	104.93	90.38	1,431.83	-3,720.92	2,574.48	2,348.57	225.91	11.396		
10,700.00	7,230.17	10,773.79	7,247.25	125.05	107.63	90.38	1,430.17	-3,820.90	2,573.41	2,341.58	231.83	11.100		
10,800.00	7,229.64	10,873.78	7,246.83	128.25	110.34	90.39	1,428.52	-3,920.88	2,572.33	2,334.58	237.76	10.819		
10,900.00	7,229.11	10,973.78	7,246.41	131.44	113.06	90.39	1,426.86	-4,020.86	2,571.26	2,327.56	243.70	10.551		
11,000.00	7,228.58	11,073.77	7,245.99	134.65	115.78	90.39	1,425.20	-4,120.83	2,570.19	2,320.53	249.65	10.295		
11,100.00	7,228.05	11,173.76	7,245.57	137.86	118.52	90.39	1,423.54	-4,220.81	2,569.11	2,313.49	255.62	10.051		
11,200.00	7,227.52	11,273.76	7,245.15	141.08	121.25	90.40	1,421.88	-4,320.79	2,568.04	2,306.45	261.59	9.817		
11,300.00	7,227.00	11,373.75	7,244.73	144.30	124.00	90.40	1,420.22	-4,420.77	2,566.97	2,299.39	267.58	9.593		
11,400.00	7,226.47	11,473.75	7,244.31	147.52	126.74	90.40	1,418.57	-4,520.75	2,565.89	2,292.32	273.57	9.379		
11,500.00	7,225.94	11,573.74	7,243.89	150.76	129.49	90.40	1,416.91	-4,620.73	2,564.82	2,285.24	279.57	9.174		
11,600.00	7,225.41	11,673.73	7,243.47	153.99	132.25	90.41	1,415.25	-4,720.71	2,563.74	2,278.16	285.58	8.977		
11,700.00	7,224.88	11,773.73	7,243.05	157.23	135.01	90.41	1,413.59	-4,820.69	2,562.67	2,271.07	291.60	8.788		
11,800.00	7,224.35	11,873.72	7,242.63	160.48	137.78	90.41	1,411.93	-4,920.67	2,561.60	2,263.97	297.63	8.607		
11,900.00	7,223.82	11,973.72	7,242.21	163.72	140.54	90.41	1,410.27	-5,020.65	2,560.52	2,256.87	303.66	8.432		
12,000.00	7,223.29	12,073.71	7,241.79	166.98	143.32	90.42	1,408.61	-5,120.63	2,559.45	2,249.76	309.69	8.264		
12,100.00	7,222.77	12,173.71	7,241.37	170.23	146.09	90.42	1,406.96	-5,220.61	2,558.38	2,242.64	315.74	8.103		
12,200.00	7,222.24	12,273.70	7,240.95	173.49	148.87	90.42	1,405.30	-5,320.59	2,557.30	2,235.52	321.79	7.947		
12,300.00	7,221.71	12,373.69	7,240.53	176.75	151.65	90.43	1,403.64	-5,420.57	2,556.23	2,228.39	327.84	7.797		
12,400.00	7,221.18	12,473.69	7,240.11	180.01	154.43	90.43	1,401.98	-5,520.55	2,555.16	2,221.26	333.90	7.652		
12,500.00	7,220.65	12,573.68	7,239.69	183.28	157.22	90.43	1,400.32	-5,620.53	2,554.08	2,214.12	339.96	7.513		
12,600.00	7,220.12	12,673.68	7,239.27	186.54	160.01	90.43	1,398.66	-5,720.51	2,553.01	2,206.98	346.03	7.378		
12,700.00	7,219.59	12,773.67	7,238.85	189.81	162.80	90.44	1,397.00	-5,820.49	2,551.94	2,199.83	352.10	7.248		
12,800.00	7,219.06	12,873.66	7,238.43	193.09	165.59	90.44	1,395.35	-5,920.47	2,550.86	2,192.68	358.18	7.122		
12,900.00	7,218.54	12,973.66	7,238.01	196.36	168.38	90.44	1,393.69	-6,020.45	2,549.79	2,185.53	364.26	7.000		
13,000.00	7,218.01	13,073.65	7,237.59	199.64	171.18	90.44	1,392.03	-6,120.43	2,548.72	2,178.37	370.34	6.882		
13,100.00	7,217.48	13,173.65	7,237.17	202.92	173.98	90.45	1,390.37	-6,220.41	2,547.64	2,171.21	376.43	6.768		
13,200.00	7,216.95	13,273.64	7,236.74	206.20	176.78	90.45	1,388.71	-6,320.38	2,546.57	2,164.05	382.52	6.657		
13,300.00	7,216.42	13,373.64	7,236.32	209.48	179.58	90.45	1,387.05	-6,420.36	2,545.50	2,156.88	388.61	6.550		
13,400.00	7,215.89	13,473.63	7,235.90	212.76	182.39	90.45	1,385.39	-6,520.34	2,544.42	2,149.72	394.71	6.446		
13,500.00	7,215.36	13,573.62	7,235.48	216.05	185.19	90.46	1,383.74	-6,620.32	2,543.35	2,142.54	400.81	6.346		
13,600.00	7,214.84	13,673.62	7,235.06	219.33	188.00	90.46	1,382.08	-6,720.30	2,542.28	2,135.37	406.91	6.248		
13,700.00	7,214.31	13,773.61	7,234.64	222.62	190.81	90.46	1,380.42	-6,820.28	2,541.20	2,128.19	413.01	6.153		
13,800.00	7,213.78	13,873.61	7,234.22	225.91	193.62	90.46	1,378.76	-6,920.26	2,540.13	2,121.01	419.12	6.061		
13,900.00	7,213.25	13,973.60	7,233.80	229.20	196.43	90.47	1,377.10	-7,020.24	2,539.06	2,113.83	425.23	5.971		
14,000.00	7,212.72	14,073.59	7,233.38	232.49	199.24	90.47	1,375.44	-7,120.22	2,537.98	2,106.64	431.34	5.884		
14,100.00	7,212.19	14,173.59	7,232.96	235.79	202.05	90.47	1,373.78	-7,220.20	2,536.91	2,099.46	437.45	5.799		
14,200.00	7,211.66	14,273.58	7,232.54	239.08	204.87	90.48	1,372.13	-7,320.18	2,535.83	2,092.27	443.57	5.717		
14,300.00	7,211.13	14,373.58	7,232.12	242.38	207.68	90.48	1,370.47	-7,420.16	2,534.76	2,085.08	449.68	5.637		
14,400.00	7,210.61	14,473.57	7,231.70	245.67	210.50	90.48	1,368.81	-7,520.14	2,533.69	2,077.89	455.80	5.559		
14,500.00	7,210.08	14,573.57	7,231.28	248.97	213.32	90.48	1,367.15	-7,620.12	2,532.61	2,070.69	461.92	5.483		
14,600.00	7,209.55	14,673.56	7,230.86	252.27	216.14	90.49	1,365.49	-7,720.10	2,531.54	2,063.50	468.05	5.409		
14,700.00	7,209.02	14,773.55	7,230.44	255.57	218.96	90.49	1,363.83	-7,820.08	2,530.47	2,056.30	474.17	5.337		
14,800.00	7,208.49	14,873.55	7,230.02	258.87	221.78	90.49	1,362.17	-7,920.06	2,529.39	2,049.10	480.30	5.266		
14,900.00	7,207.96	14,973.54	7,229.60	262.17	224.60	90.49	1,360.52	-8,020.04	2,528.32	2,041.90	486.42	5.198		
15,000.00	7,207.43	15,073.54	7,229.18	265.47	227.42	90.50	1,358.86	-8,120.02	2,527.25	2,034.70	492.55	5.131		
15,069.80	7,207.06	15,116.21	7,229.00	267.78	228.63	90.50	1,358.15	-8,162.69	2,526.64	2,030.67	495.98	5.094		
15,081.89	7,207.00	15,116.21	7,229.00	268.17	228.63	90.50	1,358.15	-8,162.69	2,526.67	2,030.35	496.32	5.091 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	0.00	3.28	3.28	8.79	1,590.55	245.86	1,609.44					
100.00	100.00	110.01	110.00	3.28	3.29	8.79	1,590.20	245.92	1,609.13	1,602.56	6.57	244.782		
200.00	200.00	215.99	215.98	3.34	3.34	8.80	1,589.28	246.00	1,608.29	1,601.61	6.68	240.866		
230.68	230.68	247.90	247.89	3.36	3.37	-179.24	1,588.95	245.97	1,608.13	1,601.40	6.73	238.860		
300.00	299.98	319.17	319.16	3.44	3.45	-179.24	1,588.15	245.91	1,608.93	1,602.04	6.89	233.390		
400.00	399.84	410.81	410.80	3.59	3.60	-179.24	1,587.27	245.74	1,613.19	1,606.00	7.19	224.354		
500.00	499.45	505.88	505.86	3.80	3.79	-179.26	1,586.83	245.34	1,621.39	1,613.81	7.58	213.926		
600.00	598.70	613.50	613.48	4.06	4.04	-179.27	1,586.21	244.97	1,632.96	1,624.88	8.08	202.197		
700.00	697.49	708.14	708.11	4.38	4.30	-179.29	1,585.60	244.35	1,647.74	1,639.13	8.61	191.370		
800.00	796.13	806.29	806.26	4.74	4.59	-179.33	1,585.19	243.29	1,663.57	1,654.37	9.19	180.949		
900.00	894.78	909.66	909.62	5.15	4.91	-179.37	1,584.48	242.12	1,679.13	1,669.29	9.84	170.641		
1,000.00	993.43	995.88	995.83	5.58	5.20	-179.42	1,584.10	240.94	1,694.91	1,684.45	10.46	161.969		
1,100.00	1,092.07	1,071.22	1,071.13	6.03	5.45	-179.49	1,584.83	238.90	1,711.86	1,700.79	11.07	154.619		
1,200.00	1,190.72	1,149.89	1,149.70	6.50	5.72	-179.62	1,586.78	235.42	1,730.03	1,718.33	11.71	147.786		
1,300.00	1,289.36	1,222.04	1,221.65	6.98	5.98	-179.79	1,589.69	230.98	1,749.50	1,737.16	12.33	141.858		
1,400.00	1,388.01	1,302.37	1,301.59	7.47	6.27	179.98	1,594.25	224.49	1,770.29	1,757.28	13.01	136.110		
1,500.00	1,486.65	1,382.95	1,381.54	7.97	6.57	179.68	1,599.69	216.08	1,791.91	1,778.21	13.70	130.825		
1,600.00	1,585.30	1,462.43	1,460.20	8.48	6.89	179.35	1,606.09	206.63	1,814.64	1,800.24	14.40	126.037		
1,700.00	1,683.94	1,552.25	1,548.97	9.00	7.26	178.96	1,613.93	195.38	1,838.06	1,822.89	15.16	121.224		
1,800.00	1,782.59	1,655.22	1,650.70	9.52	7.70	178.53	1,623.03	182.33	1,861.66	1,845.65	16.01	116.278		
1,900.00	1,881.24	1,767.76	1,761.97	10.05	8.20	178.07	1,631.97	168.02	1,884.45	1,867.52	16.93	111.336		
2,000.00	1,979.88	1,879.64	1,872.70	10.58	8.71	177.64	1,640.25	154.36	1,906.89	1,889.04	17.85	106.814		
2,100.00	2,078.53	1,992.14	1,984.14	11.11	9.22	177.23	1,647.36	140.71	1,928.34	1,909.55	18.79	102.603		
2,200.00	2,177.17	2,077.81	2,069.05	11.64	9.62	176.93	1,652.65	130.65	1,949.77	1,930.17	19.60	99.489		
2,300.00	2,275.82	2,158.97	2,149.43	12.18	10.00	176.65	1,658.31	120.91	1,972.01	1,951.63	20.38	96.757		
2,400.00	2,374.46	2,252.70	2,242.19	12.72	10.45	176.32	1,665.48	109.45	1,994.94	1,973.70	21.24	93.921		
2,500.00	2,473.11	2,343.46	2,332.04	13.26	10.89	176.02	1,672.29	98.69	2,017.84	1,995.75	22.09	91.361		
2,600.00	2,571.76	2,435.70	2,423.36	13.80	11.33	175.73	1,679.73	88.00	2,041.34	2,018.40	22.94	88.974		
2,700.00	2,670.40	2,528.54	2,515.32	14.35	11.78	175.45	1,687.11	77.62	2,064.81	2,041.01	23.81	86.738		
2,800.00	2,769.05	2,626.26	2,612.08	14.89	12.26	175.16	1,695.28	66.69	2,088.73	2,064.03	24.70	84.564		
2,900.00	2,867.69	2,733.38	2,718.19	15.44	12.78	174.85	1,703.62	54.64	2,112.12	2,086.46	25.66	82.320		
3,000.00	2,966.34	2,827.00	2,810.89	15.99	13.24	174.58	1,710.81	43.64	2,135.45	2,108.91	26.54	80.469		
3,100.00	3,064.98	2,917.21	2,900.13	16.53	13.70	174.31	1,717.99	32.58	2,159.09	2,131.69	27.40	78.796		
3,200.00	3,163.63	3,025.40	3,007.14	17.08	14.24	173.98	1,726.67	19.26	2,182.84	2,154.46	28.38	76.908		
3,300.00	3,262.27	3,121.25	3,102.05	17.63	14.72	173.72	1,733.81	7.90	2,206.10	2,176.82	29.28	75.333		
3,400.00	3,360.92	3,213.95	3,193.80	18.18	15.19	173.46	1,740.98	-3.26	2,229.67	2,199.50	30.17	73.903		
3,500.00	3,459.57	3,351.56	3,330.04	18.74	15.88	173.08	1,750.60	-20.03	2,252.61	2,221.26	31.35	71.858		
3,600.00	3,558.21	3,452.50	3,430.13	19.29	16.38	172.83	1,756.52	-31.62	2,274.45	2,242.17	32.29	70.449		
3,700.00	3,656.86	3,542.86	3,519.86	19.84	16.83	172.64	1,761.80	-40.91	2,296.34	2,263.19	33.15	69.271		
3,800.00	3,755.50	3,615.04	3,591.53	20.39	17.18	172.49	1,766.58	-48.03	2,319.00	2,285.11	33.89	68.419		
3,900.00	3,854.15	3,696.15	3,672.01	20.95	17.58	172.33	1,772.68	-56.11	2,342.57	2,307.87	34.69	67.520		
4,000.00	3,952.79	3,798.41	3,773.46	21.50	18.08	172.13	1,780.68	-66.18	2,366.46	2,330.82	35.63	66.410		
4,100.00	4,051.44	3,873.54	3,848.00	22.05	18.45	172.00	1,786.65	-73.41	2,390.51	2,354.12	36.39	65.690		
4,200.00	4,150.08	3,958.72	3,932.46	22.61	18.88	171.85	1,794.25	-81.41	2,415.48	2,378.27	37.21	64.908		
4,300.00	4,248.73	4,049.27	4,022.17	23.16	19.33	171.67	1,802.42	-90.66	2,440.60	2,402.53	38.08	64.094		
4,400.00	4,347.38	4,135.01	4,107.00	23.72	19.77	171.50	1,810.53	-100.02	2,466.17	2,427.26	38.91	63.378		
4,500.00	4,446.02	4,254.39	4,225.16	24.27	20.38	171.27	1,821.89	-112.67	2,491.90	2,451.92	39.99	62.320		
4,600.00	4,544.67	4,386.58	4,356.23	24.83	21.04	171.03	1,832.35	-126.31	2,515.97	2,474.83	41.14	61.153		
4,700.00	4,643.31	4,530.27	4,498.89	25.39	21.75	170.79	1,841.84	-140.55	2,538.92	2,496.56	42.36	59.933		
4,800.00	4,741.96	4,623.29	4,591.69	25.94	22.50	170.52	1,851.35	-155.00	2,562.80	2,518.24	43.63	58.663		
4,900.00	4,840.60	4,717.82	4,685.82	26.50	23.27	170.20	1,861.86	-170.12	2,587.64	2,538.80	44.94	57.353		
5,000.00	4,939.25	4,816.52	4,784.25	27.05	24.05	169.95	1,873.37	-185.84	2,613.44	2,562.31	46.28	56.003		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,037.90	9,483.56	7,198.06	27.61	62.01	169.87	-751.75	-169.62	2,161.08	2,132.18	28.90	74.786		
5,200.00	5,136.54	9,509.63	7,198.06	28.17	62.50	169.75	-777.82	-169.43	2,062.40	2,033.27	29.13	70.803		
5,300.00	5,235.19	9,525.63	7,198.03	28.72	62.80	169.66	-793.82	-169.33	1,963.70	1,934.34	29.36	66.877		
5,400.00	5,333.83	9,540.73	7,198.01	29.28	63.08	169.57	-808.92	-169.24	1,865.00	1,835.40	29.60	62.997		
5,500.00	5,432.48	9,554.34	7,198.00	29.84	63.34	169.48	-822.53	-169.15	1,766.32	1,736.46	29.86	59.158		
5,600.00	5,531.12	9,568.18	7,198.02	30.40	63.60	169.39	-836.37	-169.02	1,667.66	1,637.54	30.12	55.366		
5,700.00	5,629.77	9,581.18	7,198.05	30.95	63.84	169.30	-849.37	-168.87	1,569.03	1,538.63	30.40	51.616		
5,800.00	5,728.41	9,594.54	7,198.12	31.51	64.09	169.20	-862.73	-168.70	1,470.44	1,439.75	30.69	47.917		
5,900.00	5,827.06	9,612.31	7,198.24	32.07	64.43	169.06	-880.49	-168.46	1,371.87	1,340.91	30.96	44.310		
6,000.00	5,925.71	9,631.71	7,198.32	32.63	64.80	168.88	-899.90	-168.21	1,273.27	1,242.04	31.22	40.779		
6,100.00	6,024.35	9,642.84	7,198.39	33.19	65.01	168.75	-911.02	-168.08	1,174.69	1,143.12	31.56	37.215		
6,200.00	6,123.00	9,654.88	7,198.51	33.74	65.24	168.60	-923.06	-167.94	1,076.19	1,044.26	31.92	33.711		
6,300.00	6,221.64	9,679.08	7,198.80	34.30	65.70	168.22	-947.26	-167.67	977.73	945.60	32.14	30.425		
6,400.00	6,320.29	9,706.25	7,198.76	34.86	66.22	167.66	-974.43	-167.33	879.02	846.74	32.27	27.237		
6,500.00	6,418.93	9,724.86	7,198.60	35.42	66.58	167.07	-993.03	-167.20	780.22	747.70	32.52	23.995		
6,600.00	6,517.58	9,747.79	7,198.24	35.98	67.02	166.00	-1,015.96	-167.11	681.31	648.66	32.65	20.869		
6,700.00	6,616.23	9,766.08	7,197.78	36.54	67.37	164.72	-1,034.25	-167.01	582.26	549.42	32.84	17.732		
6,800.00	6,714.51	9,781.49	7,197.30	37.10	67.66	179.84	-1,049.65	-166.90	483.30	450.27	33.03	14.631		
6,900.00	6,810.42	9,794.86	7,196.84	37.66	67.92	-173.40	-1,063.01	-166.79	386.73	353.03	33.70	11.476		
7,000.00	6,901.58	9,806.59	7,196.43	38.21	68.15	-172.33	-1,074.73	-166.69	298.52	259.55	38.97	7.661		
7,100.00	6,985.76	9,817.38	7,196.06	38.76	68.36	-171.98	-1,085.52	-166.59	231.92	174.11	57.81	4.012		
7,185.17	7,050.39	9,825.72	7,195.77	39.23	68.52	-171.70	-1,093.85	-166.52	210.31	126.60	83.72	2.512 CC		
7,200.00	7,060.88	9,827.09	7,195.72	39.32	68.54	-171.64	-1,095.22	-166.51	211.00	123.12	87.88	2.401 ES		
7,300.00	7,125.09	9,835.53	7,195.42	39.90	68.71	-171.13	-1,103.65	-166.44	248.22	143.40	104.83	2.368 SF		
7,400.00	7,176.81	9,842.44	7,195.18	40.55	68.84	-170.31	-1,110.56	-166.40	323.60	215.56	108.04	2.995		
7,500.00	7,214.77	9,847.64	7,195.00	41.30	68.94	-168.67	-1,115.75	-166.37	415.74	307.85	107.89	3.853		
7,600.00	7,238.02	9,850.93	7,194.89	42.22	69.00	-161.58	-1,119.05	-166.35	514.16	406.51	107.65	4.776		
7,700.00	7,246.01	9,852.19	7,194.84	43.32	69.03	0.72	-1,120.30	-166.34	614.05	506.34	107.71	5.701		
7,800.00	7,245.50	9,852.28	7,194.84	44.65	69.03	1.39	-1,120.39	-166.34	713.71	605.85	107.86	6.617		
7,900.00	7,244.97	9,852.37	7,194.84	46.21	69.03	1.30	-1,120.48	-166.34	813.46	705.48	107.97	7.534		
8,000.00	7,244.44	9,852.46	7,194.83	47.99	69.03	1.20	-1,120.57	-166.34	913.26	805.20	108.06	8.452		
8,100.00	7,243.91	9,852.55	7,194.83	49.96	69.04	1.10	-1,120.67	-166.34	1,013.10	904.97	108.12	9.370		
8,200.00	7,243.39	9,852.65	7,194.83	52.10	69.04	1.00	-1,120.76	-166.34	1,112.96	1,004.78	108.18	10.288		
8,300.00	7,242.86	9,852.75	7,194.82	54.38	69.04	0.90	-1,120.86	-166.34	1,212.85	1,104.62	108.23	11.206		
8,400.00	7,242.33	9,852.85	7,194.82	56.78	69.04	0.79	-1,120.96	-166.34	1,312.76	1,204.49	108.27	12.124		
8,500.00	7,241.80	9,852.95	7,194.82	59.28	69.04	0.68	-1,121.07	-166.34	1,412.68	1,304.37	108.31	13.042		
8,600.00	7,241.27	9,853.06	7,194.81	61.88	69.05	0.57	-1,121.18	-166.34	1,512.61	1,404.26	108.35	13.960		
8,700.00	7,240.74	9,853.17	7,194.81	64.54	69.05	0.45	-1,121.29	-166.34	1,612.55	1,504.16	108.39	14.878		
8,800.00	7,240.21	9,853.28	7,194.80	67.27	69.05	0.33	-1,121.40	-166.34	1,712.50	1,604.08	108.42	15.795		
8,900.00	7,239.68	9,853.40	7,194.80	70.06	69.05	0.21	-1,121.51	-166.34	1,812.45	1,704.00	108.45	16.712		
9,000.00	7,239.16	9,853.52	7,194.80	72.89	69.05	0.08	-1,121.63	-166.34	1,912.41	1,803.92	108.49	17.628		
9,100.00	7,238.63	9,853.64	7,194.79	75.77	69.06	-0.05	-1,121.76	-166.33	2,012.37	1,903.85	108.52	18.544		
9,200.00	7,238.10	9,853.77	7,194.79	78.69	69.06	-0.18	-1,121.88	-166.33	2,112.33	2,003.78	108.55	19.459		
9,300.00	7,237.57	9,853.90	7,194.78	81.64	69.06	-0.32	-1,122.01	-166.33	2,212.30	2,103.72	108.59	20.374		
9,400.00	7,237.04	9,854.04	7,194.78	84.62	69.06	-0.46	-1,122.15	-166.33	2,312.27	2,203.65	108.62	21.288		
9,500.00	7,236.51	9,854.18	7,194.77	87.63	69.07	-0.60	-1,122.29	-166.33	2,412.25	2,303.59	108.65	22.202		
9,600.00	7,235.98	9,854.32	7,194.77	90.66	69.07	-0.75	-1,122.43	-166.33	2,512.22	2,403.54	108.69	23.115		
9,700.00	7,235.45	9,854.47	7,194.76	93.72	69.07	-0.91	-1,122.58	-166.33	2,612.20	2,503.48	108.72	24.027		
9,800.00	7,234.93	9,854.62	7,194.76	96.79	69.08	-1.07	-1,122.73	-166.33	2,712.18	2,603.42	108.76	24.938		
9,900.00	7,234.40	9,854.78	7,194.75	99.88	69.08	-1.23	-1,122.89	-166.33	2,812.16	2,703.37	108.79	25.849		
10,000.00	7,233.87	9,854.94	7,194.75	102.98	69.08	-1.41	-1,123.05	-166.33	2,912.14	2,803.31	108.83	26.759		
10,100.00	7,233.34	9,855.11	7,194.74	106.10	69.09	-1.58	-1,123.22	-166.33	3,012.12	2,903.26	108.87	27.668		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.81	9,855.28	7,194.73	109.23	69.09	-1.76	-1,123.39	-166.33	3,112.11	3,003.20	108.90	28.577		
10,300.00	7,232.28	9,855.46	7,194.73	112.38	69.09	-1.95	-1,123.57	-166.33	3,212.09	3,103.15	108.94	29.484		
10,400.00	7,231.75	9,855.65	7,194.72	115.53	69.10	-2.15	-1,123.76	-166.32	3,312.08	3,203.10	108.98	30.391		
10,500.00	7,231.23	9,855.84	7,194.71	118.70	69.10	-2.35	-1,123.95	-166.32	3,412.07	3,303.04	109.02	31.297		
10,600.00	7,230.70	9,856.04	7,194.71	121.87	69.10	-2.56	-1,124.15	-166.32	3,512.05	3,402.99	109.07	32.201		
10,700.00	7,230.17	9,856.25	7,194.70	125.05	69.11	-2.78	-1,124.36	-166.32	3,612.04	3,502.93	109.11	33.105		
10,800.00	7,229.64	9,856.47	7,194.69	128.25	69.11	-3.01	-1,124.58	-166.32	3,712.03	3,602.88	109.15	34.008		
10,900.00	7,229.11	9,856.69	7,194.68	131.44	69.12	-3.24	-1,124.80	-166.32	3,812.02	3,702.82	109.20	34.910		
11,000.00	7,228.58	9,856.93	7,194.68	134.65	69.12	-3.48	-1,125.04	-166.32	3,912.01	3,802.77	109.24	35.810		
11,100.00	7,228.05	9,857.17	7,194.67	137.86	69.13	-3.74	-1,125.28	-166.32	4,012.00	3,902.71	109.29	36.710		
11,200.00	7,227.52	9,857.42	7,194.66	141.08	69.13	-4.00	-1,125.53	-166.32	4,111.99	4,002.65	109.34	37.608		
11,300.00	7,227.00	9,857.69	7,194.65	144.30	69.14	-4.28	-1,125.80	-166.31	4,211.98	4,102.60	109.39	38.506		
11,400.00	7,226.47	9,857.96	7,194.64	147.52	69.14	-4.57	-1,126.08	-166.31	4,311.97	4,202.54	109.44	39.402		
11,500.00	7,225.94	9,858.25	7,194.63	150.76	69.15	-4.87	-1,126.36	-166.31	4,411.97	4,302.48	109.49	40.296		
11,600.00	7,225.41	11,600.00	7,195.01	153.99	102.90	6.56	-1,115.47	-166.38	4,511.96	4,368.77	143.19	31.510		
11,700.00	7,224.88	11,700.00	7,195.01	157.23	104.84	6.66	-1,115.38	-166.38	4,611.95	4,466.78	145.17	31.769		
11,800.00	7,224.35	11,800.00	7,195.02	160.48	106.78	6.76	-1,115.28	-166.38	4,711.94	4,564.79	147.16	32.020		
11,900.00	7,223.82	11,900.00	7,195.02	163.72	108.72	6.86	-1,115.19	-166.38	4,811.94	4,662.79	149.14	32.264		
12,000.00	7,223.29	12,000.00	7,195.02	166.98	110.67	6.96	-1,115.09	-166.38	4,911.93	4,760.80	151.13	32.501		
12,100.00	7,222.77	12,100.00	7,195.03	170.23	112.61	7.06	-1,114.99	-166.38	5,011.93	4,858.81	153.12	32.733		
12,200.00	7,222.24	12,200.00	7,195.03	173.49	114.55	7.16	-1,114.90	-166.38	5,111.92	4,956.81	155.11	32.958		
12,300.00	7,221.71	12,300.00	7,195.03	176.75	116.49	7.26	-1,114.80	-166.38	5,211.91	5,054.82	157.09	33.177		
12,400.00	7,221.18	12,400.00	7,195.04	180.01	118.43	7.36	-1,114.70	-166.38	5,311.91	5,152.83	159.08	33.391		
12,500.00	7,220.65	12,500.00	7,195.04	183.28	120.37	7.46	-1,114.61	-166.38	5,411.90	5,250.83	161.07	33.599		
12,600.00	7,220.12	12,600.00	7,195.04	186.54	122.31	7.57	-1,114.51	-166.38	5,511.90	5,348.83	163.07	33.802		
12,700.00	7,219.59	12,700.00	7,195.05	189.81	124.25	7.67	-1,114.42	-166.38	5,611.89	5,446.84	165.06	34.000		
12,800.00	7,219.06	12,800.00	7,195.05	193.09	126.20	7.77	-1,114.32	-166.38	5,711.89	5,544.84	167.05	34.193		
12,900.00	7,218.54	12,900.00	7,195.05	196.36	128.14	7.87	-1,114.22	-166.38	5,811.88	5,642.84	169.04	34.381		
13,000.00	7,218.01	13,000.00	7,195.06	199.64	130.08	7.97	-1,114.13	-166.38	5,911.88	5,740.84	171.04	34.565		
13,100.00	7,217.48	10,017.19	7,193.59	202.92	72.23	-71.20	-1,285.25	-167.61	6,011.88	5,896.30	115.58	52.015		
13,200.00	7,216.95	13,200.00	7,193.48	206.20	134.33	-70.64	-1,280.44	-167.51	6,111.84	5,934.16	177.68	34.399		
13,300.00	7,216.42	10,016.54	7,193.57	209.48	72.22	-71.13	-1,284.60	-167.59	6,211.80	6,096.14	115.66	53.707		
13,400.00	7,215.89	10,018.06	7,193.60	212.76	72.25	-71.30	-1,286.12	-167.62	6,311.76	6,196.00	115.77	54.522		
13,500.00	7,215.36	10,019.55	7,193.63	216.05	72.28	-71.46	-1,287.61	-167.65	6,411.72	6,295.85	115.87	55.335		
13,600.00	7,214.84	10,021.03	7,193.65	219.33	72.31	-71.62	-1,289.09	-167.68	6,511.69	6,395.71	115.98	56.146		
13,700.00	7,214.31	10,022.49	7,193.68	222.62	72.34	-71.78	-1,290.55	-167.71	6,611.65	6,495.57	116.08	56.956		
13,800.00	7,213.78	10,023.93	7,193.70	225.91	72.37	-71.93	-1,291.99	-167.74	6,711.61	6,595.43	116.19	57.765		
13,900.00	7,213.25	10,025.35	7,193.73	229.20	72.39	-72.08	-1,293.41	-167.77	6,811.58	6,695.28	116.29	58.572		
14,000.00	7,212.72	10,026.76	7,193.75	232.49	72.42	-72.22	-1,294.81	-167.80	6,911.54	6,795.14	116.40	59.377		
14,100.00	7,212.19	10,028.15	7,193.77	235.79	72.45	-72.36	-1,296.20	-167.82	7,011.51	6,895.00	116.51	60.181		
14,200.00	7,211.66	10,029.52	7,193.79	239.08	72.48	-72.50	-1,297.57	-167.85	7,111.48	6,994.86	116.61	60.983		
14,300.00	7,211.13	10,030.87	7,193.81	242.38	72.50	-72.63	-1,298.92	-167.87	7,211.44	7,094.72	116.72	61.784		
14,400.00	7,210.61	10,032.21	7,193.83	245.67	72.53	-72.75	-1,300.26	-167.90	7,311.41	7,194.58	116.83	62.584		
14,500.00	7,210.08	10,033.53	7,193.85	248.97	72.55	-72.88	-1,301.58	-167.92	7,411.38	7,294.44	116.93	63.381		
14,600.00	7,209.55	10,034.83	7,193.86	252.27	72.58	-73.00	-1,302.89	-167.95	7,511.35	7,394.31	117.04	64.177		
14,700.00	7,209.02	10,036.12	7,193.88	255.57	72.60	-73.12	-1,304.18	-167.97	7,611.31	7,494.17	117.15	64.972		
14,800.00	7,208.49	10,042.00	7,193.95	258.87	72.72	-73.64	-1,310.05	-168.07	7,711.29	7,593.87	117.42	65.675		
14,900.00	7,207.96	10,042.00	7,193.95	262.17	72.72	-73.64	-1,310.05	-168.07	7,811.25	7,693.77	117.48	66.491		
15,000.00	7,207.43	10,042.00	7,193.95	265.47	72.72	-73.64	-1,310.05	-168.07	7,911.22	7,793.68	117.54	67.305		
15,081.89	7,207.00	10,042.00	7,193.95	268.17	72.72	-73.64	-1,310.05	-168.07	7,993.09	7,875.49	117.60	67.971		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	0.00	3.28	3.28	9.87	1,592.01	277.01	1,615.93					
100.00	100.00	103.83	103.83	3.28	3.29	9.88	1,591.85	277.21	1,615.81	1,609.24	6.57	245.840		
200.00	200.00	212.06	212.06	3.34	3.34	9.90	1,591.28	277.72	1,615.38	1,608.70	6.67	242.053		
226.72	226.72	241.79	241.78	3.36	3.36	-178.14	1,591.01	277.84	1,615.28	1,608.56	6.72	240.271		
300.00	299.98	315.68	315.67	3.44	3.45	-178.14	1,590.35	277.53	1,616.21	1,609.32	6.89	234.710		
400.00	399.84	419.43	419.41	3.59	3.61	-178.17	1,589.38	276.57	1,620.36	1,613.16	7.20	225.074		
500.00	499.45	523.96	523.93	3.80	3.82	-178.17	1,587.95	276.58	1,627.72	1,620.11	7.61	213.834		
600.00	598.70	614.88	614.84	4.06	4.04	-178.16	1,586.83	276.80	1,638.74	1,630.67	8.07	203.000		
700.00	697.49	717.29	717.24	4.38	4.32	-178.15	1,585.64	277.31	1,653.19	1,644.56	8.63	191.568		
800.00	796.13	819.82	819.76	4.74	4.63	-178.14	1,584.08	277.94	1,668.21	1,658.98	9.23	180.689		
900.00	894.78	914.46	914.39	5.15	4.93	-178.12	1,582.73	278.67	1,683.34	1,673.49	9.86	170.808		
1,000.00	993.43	1,006.55	1,006.47	5.58	5.23	-178.09	1,581.56	279.80	1,698.71	1,688.21	10.50	161.743		
1,100.00	1,092.07	1,096.48	1,096.38	6.03	5.54	-178.08	1,581.01	280.70	1,714.67	1,703.50	11.17	153.531		
1,200.00	1,190.72	1,193.88	1,193.79	6.50	5.89	-178.07	1,580.69	281.39	1,730.87	1,718.99	11.88	145.642		
1,300.00	1,289.36	1,294.46	1,294.36	6.98	6.26	-178.06	1,580.35	282.14	1,747.06	1,734.42	12.63	138.276		
1,400.00	1,388.01	1,390.66	1,390.56	7.47	6.62	-178.06	1,579.95	282.68	1,763.15	1,749.76	13.38	131.729		
1,500.00	1,486.65	1,484.16	1,484.06	7.97	6.97	-178.06	1,579.91	283.31	1,779.61	1,765.47	14.13	125.904		
1,600.00	1,585.30	1,582.34	1,582.24	8.48	7.35	-178.05	1,579.93	284.01	1,796.14	1,781.23	14.91	120.429		
1,700.00	1,683.94	1,681.92	1,681.81	9.00	7.73	-178.04	1,579.97	284.81	1,812.71	1,797.00	15.71	115.369		
1,800.00	1,782.59	1,787.72	1,787.61	9.52	8.15	-178.04	1,579.81	285.46	1,829.07	1,812.52	16.55	110.519		
1,900.00	1,881.24	1,879.56	1,879.45	10.05	8.51	-178.04	1,579.50	285.96	1,845.23	1,827.91	17.33	106.507		
2,000.00	1,979.88	1,962.24	1,962.13	10.58	8.83	-178.08	1,580.02	285.40	1,862.13	1,844.08	18.05	103.153		
2,100.00	2,078.53	2,041.02	2,040.87	11.11	9.12	-178.14	1,581.39	284.06	1,879.94	1,861.18	18.76	100.215		
2,200.00	2,177.17	2,114.72	2,114.52	11.64	9.40	-178.22	1,583.68	282.27	1,898.93	1,879.49	19.44	97.661		
2,300.00	2,275.82	2,184.40	2,184.10	12.18	9.67	-178.30	1,586.87	280.30	1,919.30	1,899.19	20.11	95.439		
2,400.00	2,374.46	2,263.06	2,262.59	12.72	9.98	-178.41	1,591.52	278.03	1,940.93	1,920.11	20.82	93.219		
2,500.00	2,473.11	2,344.58	2,343.90	13.26	10.30	-178.51	1,596.98	275.84	1,963.39	1,941.84	21.55	91.113		
2,600.00	2,571.76	2,428.21	2,427.26	13.80	10.64	-178.62	1,603.26	273.58	1,986.61	1,964.32	22.29	89.125		
2,700.00	2,670.40	2,512.89	2,511.60	14.35	10.98	-178.74	1,610.20	270.71	2,010.42	1,987.38	23.04	87.261		
2,800.00	2,769.05	2,593.23	2,591.57	14.89	11.31	-178.87	1,617.43	267.86	2,034.96	2,011.20	23.77	85.625		
2,900.00	2,867.69	2,675.42	2,673.31	15.44	11.65	-179.00	1,625.45	264.88	2,060.25	2,035.74	24.50	84.076		
3,000.00	2,966.34	2,751.44	2,748.84	15.99	11.97	-179.12	1,633.55	261.84	2,086.36	2,061.15	25.21	82.767		
3,100.00	3,064.98	2,845.08	2,841.76	16.53	12.37	-179.30	1,644.26	257.55	2,113.14	2,087.12	26.02	81.213		
3,200.00	3,163.63	2,961.60	2,957.44	17.08	12.87	-179.51	1,657.08	251.91	2,139.50	2,112.53	26.98	79.305		
3,300.00	3,262.27	3,058.97	3,054.13	17.63	13.30	-179.70	1,667.29	246.75	2,165.32	2,137.50	27.82	77.826		
3,400.00	3,360.92	3,162.01	3,156.44	18.18	13.75	-179.90	1,678.01	240.78	2,191.01	2,162.31	28.71	76.323		
3,500.00	3,459.57	3,270.60	3,264.35	18.74	14.23	179.90	1,688.64	234.94	2,216.18	2,186.55	29.63	74.797		
3,600.00	3,558.21	3,358.20	3,351.44	19.29	14.62	179.77	1,697.17	230.83	2,241.41	2,210.99	30.42	73.677		
3,700.00	3,656.86	3,445.71	3,438.40	19.84	15.01	179.63	1,706.04	226.82	2,267.05	2,235.83	31.22	72.627		
3,800.00	3,755.50	3,537.87	3,529.97	20.39	15.43	179.50	1,715.63	222.73	2,292.98	2,260.95	32.04	71.567		
3,900.00	3,854.15	3,638.18	3,629.64	20.95	15.88	179.35	1,726.08	218.28	2,318.94	2,286.02	32.92	70.443		
4,000.00	3,952.79	3,741.31	3,732.09	21.50	16.35	179.19	1,736.66	213.10	2,344.69	2,310.87	33.82	69.328		
4,100.00	4,051.44	3,837.95	3,828.12	22.05	16.79	179.04	1,746.33	208.04	2,370.18	2,335.50	34.68	68.342		
4,200.00	4,150.08	3,933.00	3,920.60	22.61	17.14	178.91	1,754.34	203.62	2,396.27	2,360.87	35.40	67.691		
4,300.00	4,248.73	4,002.57	3,991.41	23.16	17.56	178.75	1,764.49	197.84	2,422.93	2,386.72	36.22	66.898		
4,400.00	4,347.38	4,083.52	4,071.61	23.72	17.94	178.60	1,774.00	192.49	2,450.01	2,413.03	36.98	66.256		
4,500.00	4,446.02	4,180.29	4,167.48	24.27	18.40	178.43	1,785.71	186.44	2,477.48	2,439.63	37.85	65.458		
4,600.00	4,544.67	4,293.99	4,280.24	24.83	18.94	178.26	1,798.89	180.17	2,504.57	2,465.73	38.84	64.489		
4,700.00	4,643.31	4,407.26	4,392.68	25.39	19.47	178.10	1,811.20	174.10	2,530.97	2,491.15	39.82	63.556		
4,800.00	4,741.96	4,506.23	4,491.52	25.94	20.04	-155.75	-701.34	103.11	2,501.84	2,472.50	29.35	85.250		
4,900.00	4,840.60	4,605.00	4,590.55	26.50	20.60	-155.19	-710.12	103.13	2,403.80	2,374.13	29.66	81.035		
5,000.00	4,939.25	4,703.77	4,689.61	27.05	21.13	-154.37	-722.58	103.25	2,305.84	2,275.82	30.02	76.808		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,037.90	9,537.12	7,235.69	27.61	61.41	-153.69	-732.23	103.42	2,208.00	2,177.60	30.40	72.632		
5,200.00	5,136.54	9,547.23	7,235.80	28.17	61.60	-152.96	-742.33	103.67	2,110.27	2,079.46	30.82	68.481		
5,300.00	5,235.19	9,500.00	7,236.00	28.72	29.88	-150.95	-767.92	104.43	2,012.57	1,990.85	21.72	92.665		
5,400.00	5,333.83	9,594.25	7,236.11	29.28	62.49	-149.13	-789.33	105.15	1,914.92	1,883.10	31.83	60.168		
5,500.00	5,432.48	9,607.97	7,236.17	29.84	62.75	-147.87	-803.04	105.74	1,817.40	1,785.03	32.38	56.134		
5,600.00	5,531.12	9,626.91	7,236.26	30.40	63.11	-146.01	-821.96	106.65	1,720.02	1,687.02	33.00	52.129		
5,700.00	5,629.77	9,646.26	7,236.30	30.95	63.48	-143.98	-841.28	107.62	1,622.75	1,589.06	33.68	48.176		
5,800.00	5,728.41	9,663.83	7,236.31	31.51	63.81	-142.01	-858.83	108.58	1,525.64	1,491.19	34.45	44.284		
5,900.00	5,827.06	9,680.08	7,236.29	32.07	64.12	-140.06	-875.05	109.56	1,428.73	1,393.41	35.32	40.452		
6,000.00	5,925.71	9,694.65	7,236.26	32.63	64.40	-138.21	-889.58	110.53	1,332.10	1,295.79	36.31	36.684		
6,100.00	6,024.35	9,710.08	7,236.23	33.19	64.70	-136.14	-904.98	111.63	1,235.82	1,198.35	37.47	32.979		
6,200.00	6,123.00	9,728.45	7,236.17	33.74	65.05	-133.54	-923.30	112.97	1,139.94	1,101.09	38.85	29.343		
6,300.00	6,221.64	9,743.41	7,236.10	34.30	65.34	-131.32	-938.22	114.05	1,044.57	1,004.09	40.48	25.802		
6,400.00	6,320.29	9,755.72	7,236.05	34.86	65.57	-129.40	-950.49	115.03	949.95	907.48	42.47	22.367		
6,500.00	6,418.93	9,768.19	7,236.02	35.42	65.81	-127.38	-962.91	116.13	856.32	811.38	44.94	19.054		
6,600.00	6,517.58	9,782.62	7,236.00	35.98	66.09	-124.96	-977.28	117.47	764.03	715.94	48.09	15.887		
6,700.00	6,616.23	9,797.31	7,235.99	36.54	66.38	-122.41	-991.90	118.88	673.60	621.43	52.16	12.913		
6,800.00	6,714.51	9,813.83	7,235.98	37.10	66.70	-120.34	-1,008.34	120.49	588.65	530.56	58.09	10.133		
6,900.00	6,810.42	9,828.46	7,235.93	37.66	66.98	-118.43	-1,022.91	121.90	519.20	451.81	67.38	7.705		
7,000.00	6,901.58	9,838.27	7,235.88	38.21	67.17	-117.03	-1,032.67	122.85	474.46	394.99	79.46	5.971		
7,081.24	6,970.60	9,843.64	7,235.86	38.66	67.28	-117.45	-1,038.01	123.40	462.43	373.04	89.39	5.173 CC		
7,100.00	6,985.76	9,844.68	7,235.86	38.76	67.30	-117.97	-1,039.04	123.51	463.08	371.63	91.45	5.064 ES		
7,200.00	7,060.88	9,848.82	7,235.84	39.32	67.38	-116.39	-1,043.16	123.95	487.79	387.88	99.90	4.883 SF		
7,300.00	7,125.09	9,850.69	7,235.84	39.90	67.41	-117.80	-1,045.02	124.15	543.21	439.15	104.06	5.220		
7,400.00	7,176.81	9,850.43	7,235.84	40.55	67.41	177.93	-1,044.76	124.12	620.09	514.59	105.50	5.878		
7,500.00	7,214.77	9,848.28	7,235.85	41.30	67.37	171.90	-1,042.62	123.89	709.94	604.18	105.76	6.713		
7,600.00	7,238.02	9,844.54	7,235.86	42.22	67.29	154.94	-1,038.91	123.49	806.60	700.94	105.67	7.633		
7,700.00	7,246.01	9,839.53	7,235.88	43.32	67.19	84.72	-1,033.92	122.98	905.89	800.36	105.53	8.584		
7,800.00	7,245.50	9,835.15	7,235.90	44.65	67.11	80.65	-1,029.56	122.54	1,005.44	900.00	105.45	9.535		
7,900.00	7,244.97	9,825.61	7,235.94	46.21	66.92	81.55	-1,020.07	121.63	1,105.03	999.85	105.18	10.506		
8,000.00	7,244.44	9,815.97	7,235.97	47.99	66.74	82.30	-1,010.47	120.70	1,204.61	1,099.70	104.91	11.483		
8,100.00	7,243.91	9,806.22	7,235.99	49.96	66.55	82.93	-1,000.77	119.75	1,304.18	1,199.55	104.64	12.464		
8,200.00	7,243.39	9,797.27	7,235.99	52.10	66.38	83.42	-991.86	118.88	1,403.76	1,299.36	104.39	13.447		
8,300.00	7,242.86	9,789.98	7,236.00	54.38	66.23	83.77	-984.61	118.18	1,503.34	1,399.13	104.21	14.426		
8,400.00	7,242.33	9,782.89	7,236.00	56.78	66.10	84.08	-977.55	117.50	1,602.93	1,498.90	104.04	15.408		
8,500.00	7,241.80	9,775.99	7,236.01	59.28	65.96	84.36	-970.67	116.85	1,702.54	1,598.67	103.87	16.392		
8,600.00	7,241.27	9,769.00	7,236.02	61.88	65.83	84.61	-963.72	116.20	1,802.15	1,698.46	103.70	17.379		
8,700.00	7,240.74	9,769.00	7,236.02	64.54	65.83	84.61	-963.72	116.20	1,901.79	1,798.05	103.74	18.331		
8,800.00	7,240.21	9,769.00	7,236.02	67.27	65.83	84.61	-963.72	116.20	2,001.47	1,897.68	103.79	19.284		
8,900.00	7,239.68	9,758.21	7,236.05	70.06	65.62	84.97	-952.97	115.24	2,101.11	1,997.60	103.51	20.300		
9,000.00	7,239.16	9,754.95	7,236.06	72.89	65.56	85.07	-949.72	114.97	2,200.80	2,097.35	103.45	21.274		
9,100.00	7,238.63	9,751.86	7,236.07	75.77	65.50	85.16	-946.64	114.71	2,300.51	2,197.10	103.40	22.248		
9,200.00	7,238.10	9,748.93	7,236.08	78.69	65.44	85.24	-943.72	114.48	2,400.23	2,296.87	103.36	23.223		
9,300.00	7,237.57	9,746.14	7,236.09	81.64	65.39	85.32	-940.94	114.26	2,499.96	2,396.64	103.32	24.197		
9,400.00	7,237.04	9,737.00	7,236.13	84.62	65.21	85.56	-931.83	113.58	2,599.73	2,496.64	103.09	25.218		
9,500.00	7,236.51	9,737.00	7,236.13	87.63	65.21	85.56	-931.83	113.58	2,699.48	2,596.34	103.13	26.175		
9,600.00	7,235.98	9,742.23	7,236.10	90.66	65.31	85.42	-937.05	113.95	2,799.24	2,695.91	103.32	27.092		
9,700.00	7,235.45	9,734.42	7,236.15	93.72	65.16	85.62	-929.26	113.39	2,899.02	2,795.88	103.14	28.107		
9,800.00	7,234.93	9,726.50	7,236.18	96.79	65.01	85.81	-921.36	112.83	2,998.80	2,895.84	102.96	29.126		
9,900.00	7,234.40	9,718.48	7,236.21	99.88	64.86	85.98	-913.35	112.24	3,098.58	2,995.80	102.78	30.149		
10,000.00	7,233.87	9,710.34	7,236.23	102.98	64.70	86.14	-905.24	111.65	3,198.35	3,095.76	102.59	31.175		
10,100.00	7,233.34	9,706.00	7,236.24	106.10	64.62	86.22	-900.91	111.34	3,298.12	3,195.61	102.52	32.171		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.81	9,706.00	7,236.24	109.23	64.62	86.22	-900.91	111.34	3,397.91	3,295.35	102.56	33.131		
10,300.00	7,232.28	9,706.00	7,236.24	112.38	64.62	86.22	-900.91	111.34	3,497.71	3,395.10	102.60	34.090		
10,400.00	7,231.75	9,696.14	7,236.26	115.53	64.43	86.38	-891.07	110.63	3,597.48	3,495.10	102.38	35.138		
10,500.00	7,231.23	9,693.50	7,236.26	118.70	64.38	86.43	-888.44	110.45	3,697.28	3,594.93	102.36	36.122		
10,600.00	7,230.70	9,690.94	7,236.27	121.87	64.33	86.47	-885.89	110.28	3,797.09	3,694.75	102.33	37.105		
10,700.00	7,230.17	9,688.46	7,236.27	125.05	64.28	86.50	-883.41	110.11	3,896.90	3,794.59	102.31	38.088		
10,800.00	7,229.64	9,686.06	7,236.28	128.25	64.24	86.54	-881.01	109.95	3,996.72	3,894.42	102.30	39.070		
10,900.00	7,229.11	9,683.73	7,236.28	131.44	64.19	86.57	-878.69	109.80	4,096.54	3,994.26	102.28	40.052		
11,000.00	7,228.58	9,674.00	7,236.30	134.65	64.01	86.71	-868.98	109.19	4,196.39	4,094.31	102.08	41.111		
11,100.00	7,228.05	9,674.00	7,236.30	137.86	64.01	86.71	-868.98	109.19	4,296.21	4,194.09	102.12	42.069		
11,200.00	7,227.52	9,674.00	7,236.30	141.08	64.01	86.71	-868.98	109.19	4,396.04	4,293.87	102.17	43.026		
11,300.00	7,227.00	9,674.00	7,236.30	144.30	64.01	86.71	-868.98	109.19	4,495.88	4,393.66	102.22	43.982		
11,400.00	7,226.47	9,674.00	7,236.30	147.52	64.01	86.71	-868.98	109.19	4,595.73	4,493.46	102.27	44.937		
11,500.00	7,225.94	9,674.00	7,236.30	150.76	64.01	86.71	-868.98	109.19	4,695.58	4,593.26	102.32	45.891		
11,600.00	7,225.41	9,674.00	7,236.30	153.99	64.01	86.71	-868.98	109.19	4,795.44	4,693.07	102.37	46.844		
11,700.00	7,224.88	9,674.00	7,236.30	157.23	64.01	86.71	-868.98	109.19	4,895.31	4,792.89	102.42	47.796		
11,800.00	7,224.35	9,664.60	7,236.31	160.48	63.83	86.83	-859.60	108.63	4,995.15	4,892.92	102.24	48.859		
11,900.00	7,223.82	9,662.64	7,236.31	163.72	63.79	86.86	-857.64	108.51	5,095.02	4,992.78	102.24	49.834		
12,000.00	7,223.29	9,660.73	7,236.31	166.98	63.75	86.88	-855.74	108.40	5,194.89	5,092.64	102.25	50.808		
12,100.00	7,222.77	9,658.87	7,236.31	170.23	63.72	86.90	-853.88	108.30	5,294.76	5,192.51	102.25	51.781		
12,200.00	7,222.24	9,657.05	7,236.31	173.49	63.68	86.92	-852.06	108.20	5,394.63	5,292.37	102.26	52.753		
12,300.00	7,221.71	9,655.27	7,236.31	176.75	63.65	86.94	-850.29	108.10	5,494.51	5,392.24	102.27	53.723		
12,400.00	7,221.18	9,653.54	7,236.31	180.01	63.62	86.96	-848.55	108.01	5,594.39	5,492.10	102.29	54.693		
12,500.00	7,220.65	9,651.84	7,236.31	183.28	63.58	86.98	-846.86	107.91	5,694.27	5,591.97	102.30	55.661		
12,600.00	7,220.12	9,642.00	7,236.30	186.54	63.40	87.08	-837.03	107.40	5,794.18	5,692.06	102.12	56.738		
12,700.00	7,219.59	9,642.00	7,236.30	189.81	63.40	87.08	-837.03	107.40	5,894.06	5,791.88	102.18	57.683		
12,800.00	7,219.06	9,642.00	7,236.30	193.09	63.40	87.08	-837.03	107.40	5,993.95	5,891.71	102.24	58.627		
12,900.00	7,218.54	9,642.00	7,236.30	196.36	63.40	87.08	-837.03	107.40	6,093.84	5,991.54	102.30	59.569		
13,000.00	7,218.01	9,642.00	7,236.30	199.64	63.40	87.08	-837.03	107.40	6,193.73	6,091.37	102.36	60.510		
13,100.00	7,217.48	9,642.00	7,236.30	202.92	63.40	87.08	-837.03	107.40	6,293.63	6,191.21	102.42	61.449		
13,200.00	7,216.95	9,642.00	7,236.30	206.20	63.40	87.08	-837.03	107.40	6,393.53	6,291.04	102.48	62.386		
13,300.00	7,216.42	9,642.00	7,236.30	209.48	63.40	87.08	-837.03	107.40	6,493.43	6,390.88	102.55	63.323		
13,400.00	7,215.89	9,634.93	7,236.28	212.76	63.26	87.15	-829.97	107.04	6,593.33	6,490.89	102.44	64.362		
13,500.00	7,215.36	9,632.39	7,236.27	216.05	63.21	87.17	-827.43	106.92	6,693.23	6,590.79	102.44	65.335		
13,600.00	7,214.84	9,629.87	7,236.27	219.33	63.17	87.20	-824.92	106.79	6,793.14	6,690.69	102.45	66.307		
13,700.00	7,214.31	9,627.39	7,236.26	222.62	63.12	87.22	-822.44	106.67	6,893.04	6,790.58	102.46	67.277		
13,800.00	7,213.78	9,624.93	7,236.25	225.91	63.07	87.24	-819.99	106.55	6,992.95	6,890.48	102.47	68.246		
13,900.00	7,213.25	9,622.51	7,236.24	229.20	63.03	87.26	-817.57	106.43	7,092.86	6,990.38	102.48	69.213		
14,000.00	7,212.72	9,620.12	7,236.23	232.49	62.98	87.28	-815.17	106.32	7,192.77	7,090.28	102.49	70.180		
14,100.00	7,212.19	9,617.75	7,236.22	235.79	62.94	87.30	-812.81	106.20	7,292.68	7,190.17	102.50	71.145		
14,200.00	7,211.66	9,615.41	7,236.21	239.08	62.89	87.32	-810.48	106.09	7,392.59	7,290.07	102.52	72.108		
14,300.00	7,211.13	9,610.00	7,236.18	242.38	62.79	87.36	-805.07	105.84	7,492.50	7,390.04	102.47	73.121		
14,400.00	7,210.61	9,610.00	7,236.18	245.67	62.79	87.36	-805.07	105.84	7,592.42	7,489.88	102.54	74.045		
14,500.00	7,210.08	9,610.00	7,236.18	248.97	62.79	87.36	-805.07	105.84	7,692.33	7,589.72	102.61	74.967		
14,600.00	7,209.55	9,610.00	7,236.18	252.27	62.79	87.36	-805.07	105.84	7,792.25	7,689.57	102.68	75.887		
14,700.00	7,209.02	9,610.00	7,236.18	255.57	62.79	87.36	-805.07	105.84	7,892.17	7,789.41	102.76	76.805		
14,800.00	7,208.49	9,610.00	7,236.18	258.87	62.79	87.36	-805.07	105.84	7,992.09	7,889.26	102.83	77.722		
14,900.00	7,207.96	9,610.00	7,236.18	262.17	62.79	87.36	-805.07	105.84	8,092.01	7,989.11	102.90	78.636		
15,000.00	7,207.43	9,610.00	7,236.18	265.47	62.79	87.36	-805.07	105.84	8,191.94	8,088.96	102.98	79.549		
15,081.89	7,207.00	9,610.00	7,236.18	268.17	62.79	87.36	-805.07	105.84	8,273.76	8,170.72	103.04	80.295		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	0.00	3.28	3.28	10.86	1,587.64	304.54	1,616.59					
100.00	100.00	78.75	78.74	3.28	3.29	10.88	1,588.05	305.16	1,617.24	1,610.67	6.57	246.153		
200.00	200.00	162.06	162.02	3.34	3.31	10.94	1,589.34	307.14	1,619.20	1,612.55	6.64	243.717		
300.00	299.98	281.14	281.03	3.44	3.41	-176.99	1,590.96	310.74	1,622.88	1,616.03	6.85	236.986		
400.00	399.84	374.02	373.87	3.59	3.54	-176.90	1,591.23	313.50	1,628.99	1,621.86	7.13	228.364		
500.00	499.45	467.35	467.17	3.80	3.71	-176.89	1,593.31	314.38	1,640.02	1,632.51	7.50	218.528		
600.00	598.70	591.68	591.49	4.06	3.99	-176.91	1,594.56	314.33	1,653.10	1,645.08	8.02	206.072		
700.00	697.49	679.86	679.67	4.38	4.22	-176.92	1,595.09	314.66	1,669.25	1,660.72	8.53	195.622		
800.00	796.13	769.13	768.93	4.74	4.47	-176.93	1,596.20	315.36	1,686.98	1,677.89	9.09	185.688		
900.00	894.78	879.45	879.24	5.15	4.82	-176.94	1,597.58	316.20	1,704.73	1,694.98	9.75	174.902		
1,000.00	993.43	975.71	975.50	5.58	5.13	-176.96	1,598.48	316.75	1,722.11	1,711.71	10.40	165.536		
1,100.00	1,092.07	1,059.93	1,059.70	6.03	5.42	-176.97	1,599.65	317.21	1,739.94	1,728.89	11.05	157.521		
1,200.00	1,190.72	1,157.64	1,157.40	6.50	5.77	-177.00	1,601.44	317.72	1,758.19	1,746.43	11.76	149.500		
1,300.00	1,289.36	1,266.01	1,265.75	6.98	6.16	-177.05	1,603.21	317.45	1,776.10	1,763.56	12.53	141.694		
1,400.00	1,388.01	1,361.37	1,361.09	7.47	6.51	-177.11	1,604.75	316.71	1,793.90	1,780.63	13.27	135.140		
1,500.00	1,486.65	1,457.92	1,457.63	7.97	6.87	-177.17	1,606.30	315.93	1,811.69	1,797.65	14.03	129.094		
1,600.00	1,585.30	1,532.63	1,532.32	8.48	7.16	-177.17	1,607.88	316.63	1,830.28	1,815.57	14.71	124.396		
1,700.00	1,683.94	1,604.33	1,603.94	9.00	7.44	-177.13	1,610.07	318.90	1,850.21	1,834.83	15.39	120.246		
1,800.00	1,782.59	1,683.20	1,682.65	9.52	7.76	-177.05	1,613.25	322.94	1,871.42	1,855.32	16.10	116.252		
1,900.00	1,881.24	1,761.01	1,760.18	10.05	8.08	-176.92	1,616.74	328.48	1,893.49	1,876.68	16.81	112.645		
2,000.00	1,979.88	1,831.96	1,830.76	10.58	8.37	-176.78	1,620.65	334.56	1,916.81	1,899.32	17.49	109.596		
2,100.00	2,078.53	1,901.32	1,899.67	11.11	8.66	-176.64	1,625.40	340.83	1,941.51	1,923.35	18.16	106.890		
2,200.00	2,177.17	1,985.41	1,983.13	11.64	9.03	-176.47	1,632.07	348.62	1,967.30	1,948.39	18.92	103.988		
2,300.00	2,275.82	2,072.85	2,069.89	12.18	9.41	-176.31	1,639.41	356.66	1,993.55	1,973.85	19.70	101.218		
2,400.00	2,374.46	2,166.02	2,162.39	12.72	9.82	-176.17	1,647.84	364.03	2,020.16	1,999.65	20.51	98.503		
2,500.00	2,473.11	2,266.41	2,261.98	13.26	10.27	-176.00	1,656.61	373.12	2,046.73	2,025.36	21.37	95.777		
2,600.00	2,571.76	2,397.33	2,391.87	13.80	10.87	-175.74	1,666.76	385.91	2,072.59	2,050.18	22.42	92.462		
2,700.00	2,670.40	2,486.77	2,480.71	14.35	11.27	-175.59	1,673.11	394.08	2,097.67	2,074.44	23.23	90.318		
2,800.00	2,769.05	2,571.35	2,564.70	14.89	11.66	-175.45	1,679.49	401.76	2,123.15	2,099.15	24.01	88.433		
2,900.00	2,867.69	2,649.93	2,642.67	15.44	12.03	-175.31	1,685.88	409.21	2,149.32	2,124.56	24.76	86.815		
3,000.00	2,966.34	2,749.08	2,740.95	15.99	12.49	-175.13	1,694.38	419.13	2,176.03	2,150.39	25.64	84.884		
3,100.00	3,064.98	2,890.49	2,881.15	16.53	13.16	-174.84	1,704.26	434.73	2,201.47	2,174.69	26.78	82.205		
3,200.00	3,163.63	2,992.87	2,982.76	17.08	13.64	-174.63	1,710.36	445.63	2,225.91	2,198.22	27.69	80.395		
3,300.00	3,262.27	3,090.04	3,079.38	17.63	14.10	-174.49	1,716.34	454.03	2,250.08	2,221.52	28.56	78.782		
3,400.00	3,360.92	3,171.35	3,160.17	18.18	14.48	-174.37	1,721.59	461.56	2,274.70	2,245.36	29.34	77.534		
3,500.00	3,459.57	3,255.78	3,243.97	18.74	14.88	-174.23	1,727.53	469.99	2,300.03	2,269.89	30.14	76.320		
3,600.00	3,558.21	3,382.91	3,370.34	19.29	15.48	-174.06	1,735.86	481.03	2,324.54	2,293.33	31.20	74.499		
3,700.00	3,656.86	3,473.87	3,460.79	19.84	15.91	-173.94	1,741.65	488.71	2,348.92	2,316.88	32.04	73.309		
3,800.00	3,755.50	3,563.86	3,550.23	20.39	16.34	-173.82	1,747.47	496.76	2,373.52	2,340.64	32.88	72.195		
3,900.00	3,854.15	3,653.30	3,639.11	20.95	16.76	-173.71	1,753.67	504.59	2,398.52	2,364.81	33.71	71.153		
4,000.00	3,952.79	3,755.11	3,740.22	21.50	17.25	-173.57	1,760.50	514.32	2,423.51	2,388.88	34.62	69.994		
4,100.00	4,051.44	3,842.50	3,826.97	22.05	17.68	-173.43	1,766.09	523.26	2,448.42	2,412.97	35.45	69.066		
4,200.00	4,150.08	3,912.00	3,895.82	22.61	18.02	-173.30	1,771.05	531.36	2,474.34	2,438.18	36.16	68.431		
4,300.00	4,248.73	3,991.02	3,973.97	23.16	18.41	-173.15	1,777.21	541.32	2,501.14	2,464.21	36.93	67.722		
4,400.00	4,347.38	4,070.23	4,052.28	23.72	18.82	-172.99	1,783.80	551.26	2,528.48	2,490.77	37.71	67.060		
4,500.00	4,446.02	4,171.75	4,152.71	24.27	19.33	-172.84	1,793.03	562.80	2,556.26	2,517.62	38.63	66.169		
4,600.00	4,544.67	4,310.18	4,290.08	24.83	20.00	-172.70	1,804.90	575.12	2,582.89	2,543.08	39.80	64.889		
4,700.00	4,643.31	4,373.30	4,352.30	25.39	20.25	-172.54	-684.22	657.69	2,596.36	2,560.04	36.32	71.488		
4,800.00	4,741.96	4,393.21	4,372.52	25.94	20.62	-172.37	-704.12	657.14	2,502.88	2,465.59	37.28	67.132		
4,900.00	4,840.60	4,434.18	4,412.76	26.50	21.38	-172.14	-745.08	656.06	2,409.73	2,371.27	38.45	62.664		
5,000.00	4,939.25	4,450.56	4,427.76	27.05	21.69	-172.05	-761.45	655.64	2,316.92	2,277.36	39.56	58.567		
5,100.00	5,037.90	4,468.34	4,444.76	27.61	22.02	-171.39	-779.22	655.15	2,224.62	2,183.85	40.77	54.565		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,136.54	9,479.47	7,127.77	28.17	62.23	-118.72	-790.35	654.85	2,132.89	2,090.85	42.05	50.726	
5,300.00	5,235.19	9,500.00	7,127.49	28.72	31.37	-114.16	-863.92	651.14	2,041.58	2,014.39	27.18	75.105	
5,400.00	5,333.83	9,558.00	7,127.43	29.28	63.69	-113.86	-868.75	650.79	1,950.81	1,905.53	45.28	43.081	
5,500.00	5,432.48	9,570.88	7,127.29	29.84	63.93	-113.03	-881.61	649.94	1,860.88	1,813.91	46.97	39.621	
5,600.00	5,531.12	9,576.90	7,127.25	30.40	64.04	-112.64	-887.62	649.61	1,772.00	1,723.21	48.79	36.318	
5,700.00	5,629.77	9,590.00	7,127.21	30.95	64.28	-111.79	-900.70	649.04	1,684.35	1,633.50	50.86	33.120	
5,800.00	5,728.41	9,590.00	7,127.21	31.51	64.28	-111.79	-900.70	649.04	1,598.02	1,544.95	53.07	30.112	
5,900.00	5,827.06	9,598.62	7,127.21	32.07	64.45	-111.22	-909.32	648.76	1,513.32	1,457.74	55.59	27.224	
6,000.00	5,925.71	9,607.87	7,127.21	32.63	64.62	-110.60	-918.57	648.54	1,430.50	1,372.11	58.39	24.498	
6,100.00	6,024.35	9,622.00	7,127.21	33.19	64.89	-109.65	-932.69	648.37	1,349.91	1,288.36	61.55	21.932	
6,200.00	6,123.00	9,627.71	7,127.21	33.74	65.00	-109.27	-938.41	648.35	1,271.92	1,206.94	64.98	19.573	
6,300.00	6,221.64	9,639.52	7,127.17	34.30	65.22	-108.47	-950.21	648.39	1,197.08	1,128.24	68.83	17.391	
6,400.00	6,320.29	9,650.82	7,127.09	34.86	65.44	-107.69	-961.52	648.54	1,125.98	1,052.93	73.05	15.414	
6,500.00	6,418.93	9,659.53	7,127.02	35.42	65.61	-107.09	-970.22	648.73	1,059.41	981.82	77.59	13.654	
6,600.00	6,517.58	9,667.81	7,126.97	35.98	65.77	-106.52	-978.50	648.97	998.31	915.90	82.41	12.114	
6,700.00	6,616.23	9,676.26	7,126.93	36.54	65.93	-105.94	-986.94	649.28	943.73	856.34	87.39	10.799	
6,800.00	6,714.51	9,685.00	7,126.91	37.10	66.10	-139.72	-995.67	649.67	901.82	809.38	92.44	9.756	
6,900.00	6,810.42	9,697.38	7,126.90	37.66	66.34	-157.43	-1,008.03	650.28	884.30	787.02	97.28	9.090	
6,916.40	6,825.76	9,699.39	7,126.90	37.75	66.38	-159.09	-1,010.05	650.39	883.94	785.94	98.00	9.020 CC, ES	
7,000.00	6,901.58	9,709.18	7,126.91	38.21	66.57	-164.95	-1,019.82	650.88	893.23	792.04	101.19	8.827	
7,100.00	6,985.76	9,794.51	7,126.19	38.76	68.22	-163.69	-1,105.11	651.59	926.83	821.69	105.14	8.815 SF	
7,200.00	7,060.88	9,804.91	7,125.93	39.32	68.42	-165.38	-1,115.51	651.34	982.56	875.81	106.75	9.205	
7,300.00	7,125.09	9,814.17	7,125.69	39.90	68.60	-165.89	-1,124.75	651.14	1,055.87	948.32	107.54	9.818	
7,400.00	7,176.81	9,822.52	7,125.46	40.55	68.76	-165.14	-1,133.10	650.98	1,141.80	1,033.90	107.90	10.582	
7,500.00	7,214.77	9,829.15	7,125.28	41.30	68.89	-162.08	-1,139.73	650.85	1,235.90	1,127.82	108.07	11.436	
7,600.00	7,238.02	9,834.00	7,125.13	42.22	68.99	-146.16	-1,144.58	650.76	1,334.39	1,226.20	108.19	12.334	
7,700.00	7,246.01	9,837.06	7,125.04	43.32	69.04	-15.49	-1,147.63	650.70	1,434.22	1,325.92	108.30	13.243	
7,800.00	7,245.50	9,839.10	7,124.98	44.65	69.08	-14.28	-1,149.67	650.66	1,533.82	1,425.41	108.41	14.148	
7,900.00	7,244.97	9,841.10	7,124.92	46.21	69.12	-15.11	-1,151.67	650.63	1,633.47	1,524.95	108.52	15.053	
8,000.00	7,244.44	9,843.06	7,124.86	47.99	69.16	-15.91	-1,153.63	650.59	1,733.15	1,624.54	108.62	15.957	
8,100.00	7,243.91	9,845.18	7,124.79	49.96	69.20	-16.77	-1,155.75	650.56	1,832.87	1,724.15	108.72	16.859	
8,200.00	7,243.39	9,847.46	7,124.72	52.10	69.25	-17.69	-1,158.03	650.52	1,932.61	1,823.80	108.82	17.760	
8,300.00	7,242.86	9,849.75	7,124.64	54.38	69.29	-18.59	-1,160.31	650.48	2,032.38	1,923.46	108.91	18.660	
8,400.00	7,242.33	9,852.03	7,124.57	56.78	69.33	-19.49	-1,162.59	650.44	2,132.16	2,023.15	109.01	19.559	
8,500.00	7,241.80	9,854.31	7,124.49	59.28	69.38	-20.37	-1,164.88	650.40	2,231.96	2,122.86	109.11	20.456	
8,600.00	7,241.27	9,856.60	7,124.41	61.88	69.42	-21.25	-1,167.16	650.36	2,331.78	2,222.58	109.21	21.352	
8,700.00	7,240.74	9,858.88	7,124.33	64.54	69.47	-22.11	-1,169.44	650.32	2,431.61	2,322.31	109.30	22.247	
8,800.00	7,240.21	9,861.17	7,124.25	67.27	69.51	-22.96	-1,171.73	650.28	2,531.45	2,422.05	109.40	23.140	
8,900.00	7,239.68	9,863.46	7,124.17	70.06	69.56	-23.80	-1,174.01	650.24	2,631.30	2,521.81	109.49	24.031	
9,000.00	7,239.16	9,865.74	7,124.09	72.89	69.60	-24.63	-1,176.30	650.20	2,731.16	2,621.57	109.59	24.921	
9,100.00	7,238.63	9,868.03	7,124.01	75.77	69.64	-25.44	-1,178.58	650.16	2,831.03	2,721.34	109.69	25.810	
9,200.00	7,238.10	9,870.32	7,123.92	78.69	69.69	-26.24	-1,180.87	650.12	2,930.90	2,821.12	109.79	26.697	
9,300.00	7,237.57	9,872.61	7,123.84	81.64	69.73	-27.01	-1,183.09	650.08	3,030.79	2,920.81	109.88	27.558	
9,400.00	7,237.04	9,875.11	7,123.75	84.62	69.78	-27.81	-1,185.44	650.04	3,130.67	3,020.69	109.99	28.464	
9,500.00	7,236.51	9,877.24	7,123.66	87.63	69.82	-28.60	-1,187.78	650.00	3,230.57	3,120.48	110.08	29.347	
9,600.00	7,235.98	9,879.58	7,123.57	90.66	69.87	-29.37	-1,190.12	649.96	3,330.46	3,220.28	110.18	30.226	
9,700.00	7,235.45	9,881.93	7,123.48	93.72	69.91	-30.14	-1,192.47	649.92	3,430.37	3,320.08	110.29	31.104	
9,800.00	7,234.93	9,884.28	7,123.39	96.79	69.96	-30.89	-1,194.81	649.87	3,530.27	3,419.88	110.39	31.980	
9,900.00	7,234.40	9,886.62	7,123.30	99.88	70.01	-31.62	-1,197.16	649.83	3,630.18	3,519.69	110.49	32.854	
10,000.00	7,233.87	9,888.97	7,123.21	102.98	70.05	-32.35	-1,199.50	649.79	3,730.09	3,619.50	110.60	33.727	
10,100.00	7,233.34	9,891.32	7,123.12	106.10	70.10	-33.06	-1,201.85	649.75	3,830.01	3,719.31	110.70	34.597	
10,200.00	7,232.81	9,893.66	7,123.03	109.23	70.14	-33.76	-1,204.19	649.71	3,929.93	3,819.12	110.81	35.466	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	9,896.01	7,122.94	112.38	70.19	-34.44	-1,206.54	649.67	4,029.85	3,918.93	110.92	36.332		
10,400.00	7,231.75	9,898.36	7,122.85	115.53	70.23	-35.12	-1,208.88	649.63	4,129.77	4,018.75	111.02	37.197		
10,500.00	7,231.23	9,900.70	7,122.76	118.70	70.28	-35.78	-1,211.23	649.59	4,229.70	4,118.57	111.13	38.060		
10,600.00	7,230.70	9,903.05	7,122.67	121.87	70.32	-36.43	-1,213.57	649.55	4,329.63	4,218.39	111.24	38.921		
10,700.00	7,230.17	10,024.17	7,119.28	125.05	72.68	-58.32	-1,334.58	645.81	4,429.50	4,314.59	114.91	38.547		
10,800.00	7,229.64	10,065.00	7,118.35	128.25	73.47	-62.38	-1,375.35	643.86	4,529.31	4,413.08	116.23	38.969		
10,900.00	7,229.11	10,070.96	7,118.24	131.44	73.59	-62.89	-1,381.30	643.55	4,629.10	4,512.63	116.47	39.744		
11,000.00	7,228.58	10,075.06	7,118.18	134.65	73.67	-63.24	-1,385.40	643.34	4,728.90	4,612.24	116.66	40.536		
11,100.00	7,228.05	10,079.10	7,118.15	137.86	73.75	-63.58	-1,389.43	643.13	4,828.70	4,711.85	116.85	41.325		
11,200.00	7,227.52	10,083.07	7,118.13	141.08	73.82	-63.90	-1,393.40	642.93	4,928.50	4,811.47	117.03	42.112		
11,300.00	7,227.00	10,086.98	7,118.14	144.30	73.90	-64.22	-1,397.30	642.74	5,028.31	4,911.09	117.22	42.898		
11,400.00	7,226.47	10,090.82	7,118.16	147.52	73.97	-64.53	-1,401.13	642.55	5,128.12	5,010.72	117.40	43.681		
11,500.00	7,225.94	10,096.00	7,118.22	150.76	74.07	-64.93	-1,406.31	642.29	5,227.93	5,110.30	117.62	44.446		
11,600.00	7,225.41	10,096.00	7,118.22	153.99	74.07	-64.93	-1,406.31	642.29	5,327.75	5,210.06	117.68	45.271		
11,700.00	7,224.88	10,101.61	7,118.30	157.23	74.18	-65.37	-1,411.91	642.02	5,427.56	5,309.64	117.93	46.025		
11,800.00	7,224.35	10,105.00	7,118.35	160.48	74.25	-65.62	-1,415.30	641.86	5,527.39	5,409.29	118.10	46.803		
11,900.00	7,223.82	10,108.35	7,118.40	163.72	74.31	-65.87	-1,418.64	641.70	5,627.21	5,508.95	118.27	47.580		
12,000.00	7,223.29	10,111.65	7,118.45	166.98	74.38	-66.11	-1,421.94	641.54	5,727.04	5,608.61	118.44	48.355		
12,100.00	7,222.77	10,114.91	7,118.50	170.23	74.44	-66.34	-1,425.19	641.39	5,826.87	5,708.27	118.61	49.128		
12,200.00	7,222.24	10,118.12	7,118.55	173.49	74.51	-66.57	-1,428.40	641.24	5,926.71	5,807.94	118.77	49.900		
12,300.00	7,221.71	10,121.29	7,118.60	176.75	74.57	-66.79	-1,431.57	641.09	6,026.55	5,907.61	118.94	50.669		
12,400.00	7,221.18	10,128.00	7,118.72	180.01	74.70	-67.24	-1,438.27	640.78	6,126.39	6,007.16	119.22	51.385		
12,500.00	7,220.65	10,128.00	7,118.72	183.28	74.70	-67.24	-1,438.27	640.78	6,226.23	6,106.94	119.29	52.195		
12,600.00	7,220.12	10,132.26	7,118.79	186.54	74.78	-67.52	-1,442.52	640.59	6,326.07	6,206.58	119.49	52.941		
12,700.00	7,219.59	10,137.34	7,118.88	189.81	74.88	-67.84	-1,447.60	640.36	6,425.92	6,306.19	119.73	53.672		
12,800.00	7,219.06	10,142.42	7,118.96	193.09	74.98	-68.16	-1,452.67	640.13	6,525.76	6,405.80	119.96	54.399		
12,900.00	7,218.54	10,147.50	7,119.05	196.36	75.08	-68.46	-1,457.75	639.90	6,625.61	6,505.41	120.20	55.123		
13,000.00	7,218.01	10,152.58	7,120.14	199.64	75.18	-72.20	-1,532.33	636.13	6,725.44	6,602.62	122.82	54.758		
13,100.00	7,217.48	13,100.00	7,120.07	202.92	133.08	-71.98	-1,527.18	636.41	6,825.23	6,645.80	179.43	38.039		
13,200.00	7,216.95	13,200.00	7,120.16	206.20	135.05	-72.23	-1,533.15	636.09	6,925.03	6,743.48	181.56	38.143		
13,300.00	7,216.42	10,223.00	7,120.16	209.48	76.56	-72.23	-1,533.14	636.09	7,024.83	6,901.78	123.06	57.087		
13,400.00	7,215.89	10,232.54	7,120.29	212.76	76.74	-72.62	-1,542.66	635.57	7,124.63	7,001.17	123.46	57.709		
13,500.00	7,215.36	10,234.84	7,120.32	216.05	76.79	-72.71	-1,544.97	635.44	7,224.43	7,100.82	123.61	58.446		
13,600.00	7,214.84	10,237.11	7,120.35	219.33	76.83	-72.80	-1,547.23	635.32	7,324.24	7,200.48	123.76	59.182		
13,700.00	7,214.31	10,239.34	7,120.38	222.62	76.88	-72.89	-1,549.45	635.21	7,424.05	7,300.15	123.91	59.917		
13,800.00	7,213.78	10,241.53	7,120.41	225.91	76.92	-72.97	-1,551.64	635.09	7,523.87	7,399.82	124.05	60.650		
13,900.00	7,213.25	10,243.69	7,120.43	229.20	76.96	-73.06	-1,553.80	634.98	7,623.69	7,499.49	124.20	61.382		
14,000.00	7,212.72	10,245.81	7,120.46	232.49	77.00	-73.14	-1,555.92	634.87	7,723.51	7,599.16	124.35	62.113		
14,100.00	7,212.19	10,255.00	7,120.57	235.79	77.18	-73.48	-1,565.10	634.41	7,823.34	7,698.60	124.74	62.715		
14,200.00	7,211.66	10,255.00	7,120.57	239.08	77.18	-73.48	-1,565.10	634.41	7,923.17	7,798.35	124.81	63.479		
14,300.00	7,211.13	10,255.00	7,120.57	242.38	77.18	-73.48	-1,565.10	634.41	8,023.00	7,898.11	124.89	64.242		
14,400.00	7,210.61	10,255.00	7,120.57	245.67	77.18	-73.48	-1,565.10	634.41	8,122.83	7,997.87	124.96	65.004		
14,500.00	7,210.08	10,257.54	7,120.61	248.97	77.23	-73.57	-1,567.63	634.29	8,222.66	8,097.54	125.12	65.718		
14,600.00	7,209.55	10,262.92	7,120.67	252.27	77.34	-73.76	-1,573.00	634.03	8,322.50	8,197.11	125.39	66.375		
14,700.00	7,209.02	10,268.30	7,120.72	255.57	77.45	-73.95	-1,578.38	633.77	8,422.34	8,296.69	125.65	67.029		
14,800.00	7,208.49	10,273.68	7,120.77	258.87	77.55	-74.13	-1,583.75	633.50	8,522.18	8,396.26	125.92	67.679		
14,900.00	7,207.96	10,279.06	7,120.82	262.17	77.66	-74.30	-1,589.13	633.24	8,622.01	8,495.83	126.19	68.327		
15,000.00	7,207.43	10,284.45	7,120.86	265.47	77.76	-74.48	-1,594.51	632.98	8,721.85	8,595.40	126.46	68.971		
15,081.89	7,207.00	15,081.89	7,120.97	268.17	172.55	-75.07	-1,614.15	631.98	8,803.59	8,581.90	221.69	39.712		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	13.13	3.13	3.28	3.28	46.94	1,584.05	1,695.14	2,320.07					
100.00	100.00	144.39	134.38	3.28	3.29	46.92	1,583.94	1,693.79	2,319.26	2,312.68	6.58	352.580		
200.00	200.00	257.14	247.09	3.34	3.37	46.86	1,584.20	1,690.83	2,317.50	2,310.79	6.71	345.397		
276.97	276.96	343.94	333.82	3.41	3.48	-141.28	1,584.95	1,687.45	2,316.58	2,309.68	6.89	336.067		
300.00	299.98	359.04	348.91	3.44	3.50	-141.30	1,585.16	1,686.82	2,316.64	2,309.70	6.94	333.651		
400.00	399.84	446.83	436.59	3.59	3.66	-141.44	1,586.92	1,683.04	2,318.95	2,311.70	7.25	319.915		
500.00	499.45	544.65	534.29	3.80	3.88	-141.62	1,589.38	1,678.58	2,324.22	2,316.56	7.66	303.298		
600.00	598.70	639.46	628.92	4.06	4.12	-141.83	1,592.45	1,673.81	2,332.43	2,324.27	8.15	286.022		
700.00	697.49	731.69	720.95	4.38	4.39	-142.10	1,595.97	1,668.86	2,343.51	2,334.80	8.71	268.933		
800.00	796.13	828.12	817.13	4.74	4.69	-142.50	1,600.33	1,663.45	2,355.73	2,346.39	9.34	252.219		
900.00	894.78	925.12	913.88	5.15	5.02	-142.91	1,604.59	1,657.82	2,367.84	2,357.82	10.02	236.388		
1,000.00	993.43	1,008.25	996.78	5.58	5.31	-143.26	1,608.65	1,653.17	2,380.57	2,369.88	10.68	222.814		
1,100.00	1,092.07	1,100.00	1,214.59	6.03	5.65	-144.49	1,625.68	1,627.66	2,391.56	2,380.14	11.42	209.419		
1,200.00	1,190.72	1,383.67	1,367.05	6.50	6.94	-145.50	1,636.98	1,600.33	2,397.97	2,384.88	13.09	183.165		
1,300.00	1,289.36	1,475.85	1,457.41	6.98	7.40	-146.10	1,643.53	1,583.30	2,404.31	2,390.36	13.95	172.308		
1,400.00	1,388.01	1,662.01	1,639.77	7.47	8.37	-147.31	1,654.92	1,547.81	2,410.37	2,395.07	15.31	157.467		
1,500.00	1,486.65	1,773.67	1,749.12	7.97	8.96	-148.00	1,658.65	1,525.53	2,413.67	2,397.36	16.31	148.032		
1,600.00	1,585.30	1,859.14	1,832.88	8.48	9.42	-148.51	1,660.84	1,508.65	2,416.83	2,399.65	17.18	140.670		
1,700.00	1,683.94	1,923.44	1,896.07	9.00	9.77	-148.88	1,662.76	1,496.85	2,421.40	2,403.45	17.96	134.856		
1,800.00	1,782.59	1,994.19	1,965.74	9.52	10.14	-149.28	1,665.18	1,484.82	2,427.38	2,408.62	18.76	129.387		
1,900.00	1,881.24	2,055.86	2,026.58	10.05	10.46	-149.62	1,667.63	1,475.06	2,434.77	2,415.25	19.52	124.737		
2,000.00	1,979.88	2,119.15	2,089.11	10.58	10.79	-149.96	1,670.87	1,465.78	2,443.86	2,423.58	20.28	120.477		
2,100.00	2,078.53	2,207.95	2,176.80	11.11	11.25	-150.44	1,676.14	1,452.86	2,453.91	2,432.72	21.19	115.821		
2,200.00	2,177.17	2,287.06	2,254.86	11.64	11.67	-150.88	1,681.49	1,441.18	2,464.69	2,442.64	22.05	111.802		
2,300.00	2,275.82	2,366.94	2,333.62	12.18	12.09	-151.33	1,687.62	1,429.36	2,476.37	2,453.45	22.91	108.078		
2,400.00	2,374.46	2,468.62	2,433.90	12.72	12.63	-151.90	1,695.64	1,414.61	2,488.62	2,464.72	23.90	104.120		
2,500.00	2,473.11	2,556.00	2,520.25	13.26	13.08	-152.36	1,701.83	1,402.71	2,500.97	2,476.17	24.80	100.830		
2,600.00	2,571.76	2,651.01	2,614.22	13.80	13.57	-152.84	1,708.55	1,390.39	2,513.87	2,488.12	25.74	97.649		
2,700.00	2,670.40	2,755.42	2,717.54	14.35	14.11	-153.36	1,715.55	1,377.09	2,526.79	2,500.06	26.73	94.513		
2,800.00	2,769.05	2,901.05	2,861.29	14.89	14.89	-154.12	1,725.11	1,355.89	2,538.79	2,510.82	27.98	90.744		
2,900.00	2,867.69	3,010.35	2,968.76	15.44	15.50	-154.73	1,732.31	1,337.31	2,549.69	2,520.66	29.04	87.813		
3,000.00	2,966.34	3,109.34	3,066.25	15.99	16.05	-155.26	1,738.21	1,321.20	2,560.73	2,530.70	30.03	85.268		
3,100.00	3,064.98	3,205.60	3,161.09	16.53	16.58	-155.77	1,743.69	1,305.69	2,571.84	2,540.83	31.01	82.938		
3,200.00	3,163.63	3,300.23	3,254.38	17.08	17.09	-156.25	1,749.04	1,290.75	2,583.29	2,551.32	31.97	80.805		
3,300.00	3,262.27	3,439.38	3,392.13	17.63	17.82	-156.87	1,754.15	1,271.70	2,594.46	2,561.31	33.15	78.264		
3,400.00	3,360.92	3,512.79	3,464.86	18.18	18.19	-157.18	1,756.15	1,262.05	2,605.16	2,571.19	33.97	76.698		
3,500.00	3,459.57	3,585.20	3,536.68	18.74	18.56	-157.48	1,758.50	1,253.13	2,616.86	2,582.09	34.77	75.254		
3,600.00	3,558.21	3,657.85	3,608.69	19.29	18.93	-157.79	1,761.81	1,244.00	2,629.66	2,594.08	35.58	73.903		
3,700.00	3,656.86	3,735.18	3,685.24	19.84	19.33	-158.13	1,766.29	1,234.00	2,643.46	2,607.03	36.42	72.578		
3,800.00	3,755.50	3,829.87	3,778.71	20.39	19.84	-158.58	1,772.94	1,220.40	2,657.78	2,620.40	37.38	71.102		
3,900.00	3,854.15	3,936.90	3,884.02	20.95	20.44	-159.13	1,781.29	1,203.28	2,672.19	2,633.76	38.43	69.527		
4,000.00	3,952.79	4,067.64	4,012.50	21.50	21.19	-159.81	1,790.92	1,181.02	2,685.96	2,646.31	39.65	67.743		
4,100.00	4,051.44	4,203.38	4,145.76	22.05	21.98	-160.52	1,799.42	1,156.65	2,698.58	2,657.68	40.90	65.988		
4,200.00	4,150.08	4,286.10	4,227.07	22.61	22.44	-160.93	1,804.02	1,142.19	2,711.00	2,669.21	41.80	64.859		
4,300.00	4,248.73	4,372.45	4,312.19	23.16	22.93	-161.33	1,808.52	1,128.36	2,723.99	2,681.26	42.72	63.758		
4,400.00	4,347.38	4,459.80	4,398.45	23.72	23.41	-161.71	1,812.94	1,115.36	2,737.49	2,693.85	43.64	62.732		
4,500.00	4,446.02	4,547.29	4,484.90	24.27	23.88	-162.09	1,817.53	1,102.71	2,751.48	2,706.93	44.55	61.765		
4,600.00	4,544.67	4,631.69	4,568.36	24.83	24.32	-162.44	1,822.09	1,090.94	2,765.98	2,720.55	45.43	60.885		
4,700.00	4,643.31	4,714.70	4,650.52	25.39	24.76	-162.77	1,826.68	1,080.13	2,781.10	2,734.80	46.30	60.072		
4,800.00	4,741.96	9,567.00	7,234.51	25.94	62.38	-116.90	-725.73	973.53	2,714.01	2,666.29	47.73	56.868		
4,900.00	4,840.60	9,577.79	7,234.41	26.50	62.58	-116.41	-736.52	973.63	2,624.57	2,575.57	49.00	53.565		
5,000.00	4,939.25	9,593.15	7,234.28	27.05	62.86	-115.71	-751.88	973.76	2,535.83	2,485.41	50.41	50.302		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	5,037.90	9,612.99	7,234.10	27.61	63.22	-114.80	-771.71	973.93	2,447.85	2,395.87	51.98	47.094	
5,200.00	5,136.54	9,634.33	7,233.85	28.17	63.62	-113.82	-793.05	974.09	2,360.69	2,307.01	53.67	43.984	
5,300.00	5,235.19	9,653.15	7,233.59	28.72	63.97	-112.94	-811.87	974.22	2,274.45	2,219.00	55.45	41.019	
5,400.00	5,333.83	9,667.21	7,233.38	29.28	64.23	-112.28	-825.93	974.32	2,189.27	2,131.98	57.29	38.216	
5,500.00	5,432.48	9,677.47	7,233.26	29.84	64.42	-111.79	-836.19	974.37	2,105.31	2,046.11	59.20	35.563	
5,600.00	5,531.12	9,688.28	7,233.18	30.40	64.62	-111.28	-847.00	974.39	2,022.73	1,961.48	61.26	33.021	
5,700.00	5,629.77	9,701.41	7,233.13	30.95	64.86	-110.66	-860.12	974.39	1,941.70	1,878.21	63.49	30.582	
5,800.00	5,728.41	9,716.69	7,233.10	31.51	65.15	-109.93	-875.40	974.37	1,862.39	1,796.48	65.91	28.255	
5,900.00	5,827.06	9,732.68	7,233.09	32.07	65.45	-109.16	-891.40	974.32	1,785.02	1,716.50	68.51	26.054	
6,000.00	5,925.71	9,749.07	7,233.08	32.63	65.75	-108.37	-907.79	974.28	1,709.84	1,638.55	71.29	23.984	
6,100.00	6,024.35	9,770.01	7,233.04	33.19	66.14	-107.36	-928.72	974.22	1,637.14	1,562.82	74.32	22.028	
6,200.00	6,123.00	9,795.23	7,232.96	33.74	66.62	-106.13	-953.95	974.00	1,567.21	1,489.60	77.61	20.194	
6,300.00	6,221.64	9,819.87	7,232.80	34.30	67.08	-104.92	-978.58	973.67	1,500.42	1,419.37	81.05	18.512	
6,400.00	6,320.29	9,837.03	7,232.63	34.86	67.40	-104.07	-995.73	973.40	1,437.27	1,352.77	84.50	17.009	
6,500.00	6,418.93	9,853.74	7,232.44	35.42	67.72	-103.24	-1,012.44	973.14	1,378.30	1,290.26	88.04	15.656	
6,600.00	6,517.58	9,864.77	7,232.30	35.98	67.93	-102.69	-1,023.48	972.99	1,324.11	1,232.61	91.50	14.471	
6,700.00	6,616.23	9,876.32	7,232.16	36.54	68.15	-102.12	-1,035.02	972.87	1,275.34	1,180.41	94.93	13.435	
6,800.00	6,714.51	9,887.73	7,232.03	37.10	68.36	-136.17	-1,046.43	972.78	1,237.68	1,139.41	98.26	12.595	
6,900.00	6,810.42	9,899.33	7,231.95	37.66	68.58	-154.25	-1,058.03	972.71	1,222.13	1,120.76	101.38	12.056	
6,916.13	6,825.50	9,901.26	7,231.94	37.75	68.62	-155.92	-1,059.96	972.69	1,221.82	1,119.99	101.83	11.998 CC, ES	
7,000.00	6,901.58	9,911.43	7,231.94	38.21	68.81	-161.92	-1,070.13	972.64	1,230.13	1,126.15	103.98	11.831 SF	
7,100.00	6,985.76	9,926.88	7,232.04	38.76	69.11	-165.58	-1,085.57	972.55	1,261.02	1,155.01	106.01	11.896	
7,200.00	7,060.88	9,943.40	7,232.24	39.32	69.42	-167.37	-1,102.10	972.41	1,312.45	1,205.02	107.43	12.216	
7,300.00	7,125.09	9,956.14	7,232.44	39.90	69.66	-168.26	-1,114.84	972.28	1,381.00	1,272.73	108.27	12.755	
7,400.00	7,176.81	9,966.08	7,232.59	40.55	69.85	-168.47	-1,124.77	972.18	1,462.78	1,354.04	108.73	13.453	
7,500.00	7,214.77	9,973.75	7,232.71	41.30	70.00	-167.82	-1,132.44	972.11	1,553.90	1,444.92	108.98	14.258	
7,600.00	7,238.02	9,978.99	7,232.80	42.22	70.10	-164.87	-1,137.68	972.06	1,650.81	1,541.69	109.12	15.129	
7,700.00	7,246.01	9,979.00	7,232.80	43.32	70.10	-70.56	-1,137.69	972.06	1,750.39	1,641.28	109.11	16.042	
7,800.00	7,245.50	9,979.00	7,232.80	44.65	70.10	-45.18	-1,137.69	972.06	1,850.38	1,741.25	109.13	16.956	
7,900.00	7,244.97	9,979.00	7,232.80	46.21	70.10	-45.18	-1,137.69	972.06	1,950.36	1,841.22	109.14	17.870	
8,000.00	7,244.44	9,979.00	7,232.80	47.99	70.10	-45.18	-1,137.69	972.06	2,050.35	1,941.19	109.16	18.784	
8,100.00	7,243.91	9,979.00	7,232.80	49.96	70.10	-45.18	-1,137.69	972.06	2,150.34	2,041.17	109.17	19.697	
8,200.00	7,243.39	9,979.00	7,232.80	52.10	70.10	-45.18	-1,137.69	972.06	2,250.33	2,141.14	109.19	20.610	
8,300.00	7,242.86	9,985.12	7,232.89	54.38	70.22	-52.09	-1,143.81	972.02	2,350.30	2,240.92	109.38	21.487	
8,400.00	7,242.33	9,985.74	7,232.90	56.78	70.23	-52.70	-1,144.43	972.01	2,450.29	2,340.87	109.42	22.393	
8,500.00	7,241.80	9,986.34	7,232.91	59.28	70.24	-53.26	-1,145.03	972.01	2,550.28	2,440.83	109.46	23.300	
8,600.00	7,241.27	9,986.92	7,232.92	61.88	70.25	-53.80	-1,145.61	972.01	2,650.27	2,540.78	109.49	24.205	
8,700.00	7,240.74	9,987.48	7,232.93	64.54	70.26	-54.30	-1,146.17	972.00	2,750.26	2,640.73	109.53	25.110	
8,800.00	7,240.21	9,988.01	7,232.94	67.27	70.27	-54.77	-1,146.70	972.00	2,850.25	2,740.69	109.56	26.015	
8,900.00	7,239.68	9,988.53	7,232.95	70.06	70.28	-55.22	-1,147.22	972.00	2,950.24	2,840.64	109.60	26.919	
9,000.00	7,239.16	9,989.03	7,232.95	72.89	70.29	-55.64	-1,147.72	972.00	3,050.23	2,940.60	109.63	27.822	
9,100.00	7,238.63	9,989.51	7,232.96	75.77	70.30	-56.04	-1,148.20	971.99	3,150.23	3,040.55	109.67	28.724	
9,200.00	7,238.10	9,989.97	7,232.97	78.69	70.31	-56.41	-1,148.66	971.99	3,250.22	3,140.51	109.71	29.626	
9,300.00	7,237.57	9,990.42	7,232.98	81.64	70.32	-56.77	-1,149.11	971.99	3,350.21	3,240.47	109.74	30.527	
9,400.00	7,237.04	9,990.85	7,232.98	84.62	70.33	-57.11	-1,149.54	971.99	3,450.20	3,340.42	109.78	31.428	
9,500.00	7,236.51	9,991.27	7,232.99	87.63	70.33	-57.43	-1,149.96	971.99	3,550.20	3,440.38	109.82	32.328	
9,600.00	7,235.98	9,991.68	7,233.00	90.66	70.34	-57.74	-1,150.37	971.99	3,650.19	3,540.33	109.86	33.227	
9,700.00	7,235.45	9,992.07	7,233.00	93.72	70.35	-58.04	-1,150.76	971.98	3,750.18	3,640.29	109.90	34.125	
9,800.00	7,234.93	9,992.46	7,233.01	96.79	70.36	-58.31	-1,151.15	971.98	3,850.18	3,740.24	109.93	35.022	
9,900.00	7,234.40	9,992.83	7,233.01	99.88	70.36	-58.58	-1,151.52	971.98	3,950.17	3,840.20	109.97	35.919	
10,000.00	7,233.87	9,993.18	7,233.02	102.98	70.37	-58.84	-1,151.87	971.98	4,050.16	3,940.15	110.01	36.815	
10,100.00	7,233.34	9,993.53	7,233.03	106.10	70.38	-59.08	-1,152.22	971.98	4,150.16	4,040.10	110.05	37.710	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.81	9,993.87	7,233.03	109.23	70.38	-59.32	-1,152.56	971.98	4,250.15	4,140.06	110.10	38.604		
10,300.00	7,232.28	9,994.20	7,233.04	112.38	70.39	-59.54	-1,152.89	971.98	4,350.15	4,240.01	110.14	39.498		
10,400.00	7,231.75	9,994.52	7,233.04	115.53	70.40	-59.76	-1,153.21	971.98	4,450.14	4,339.96	110.18	40.390		
10,500.00	7,231.23	9,994.83	7,233.05	118.70	70.40	-59.96	-1,153.52	971.98	4,550.14	4,439.92	110.22	41.282		
10,600.00	7,230.70	9,995.13	7,233.05	121.87	70.41	-60.16	-1,153.82	971.97	4,650.13	4,539.87	110.26	42.173		
10,700.00	7,230.17	9,995.42	7,233.06	125.05	70.41	-60.35	-1,154.11	971.97	4,750.13	4,639.82	110.31	43.062		
10,800.00	7,229.64	9,995.71	7,233.06	128.25	70.42	-60.54	-1,154.40	971.97	4,850.13	4,739.77	110.35	43.951		
10,900.00	7,229.11	9,995.99	7,233.06	131.44	70.42	-60.72	-1,154.68	971.97	4,950.12	4,839.72	110.40	44.839		
11,000.00	7,228.58	9,996.26	7,233.07	134.65	70.43	-60.89	-1,154.95	971.97	5,050.12	4,939.67	110.44	45.726		
11,100.00	7,228.05	9,996.52	7,233.07	137.86	70.44	-61.05	-1,155.21	971.97	5,150.11	5,039.62	110.49	46.612		
11,200.00	7,227.52	9,996.78	7,233.08	141.08	70.44	-61.21	-1,155.47	971.97	5,250.11	5,139.57	110.54	47.497		
11,300.00	7,227.00	9,997.03	7,233.08	144.30	70.44	-61.36	-1,155.72	971.97	5,350.11	5,239.52	110.58	48.381		
11,400.00	7,226.47	9,997.28	7,233.08	147.52	70.45	-61.51	-1,155.97	971.97	5,450.10	5,339.47	110.63	49.264		
11,500.00	7,225.94	9,997.51	7,233.09	150.76	70.45	-61.66	-1,156.20	971.97	5,550.10	5,439.42	110.68	50.146		
11,600.00	7,225.41	9,997.75	7,233.09	153.99	70.46	-61.79	-1,156.44	971.97	5,650.09	5,539.37	110.73	51.026		
11,700.00	7,224.88	9,997.97	7,233.10	157.23	70.46	-61.93	-1,156.66	971.97	5,750.09	5,639.31	110.78	51.906		
11,800.00	7,224.35	9,998.20	7,233.10	160.48	70.47	-62.06	-1,156.89	971.97	5,850.09	5,739.26	110.83	52.785		
11,900.00	7,223.82	9,998.41	7,233.10	163.72	70.47	-62.19	-1,157.10	971.97	5,950.08	5,839.20	110.88	53.662		
12,000.00	7,223.29	9,998.62	7,233.11	166.98	70.48	-62.31	-1,157.31	971.97	6,050.08	5,939.15	110.93	54.538		
12,100.00	7,222.77	9,998.83	7,233.11	170.23	70.48	-62.43	-1,157.52	971.97	6,150.08	6,039.09	110.99	55.414		
12,200.00	7,222.24	9,999.03	7,233.11	173.49	70.48	-62.54	-1,157.72	971.97	6,250.08	6,139.04	111.04	56.288		
12,300.00	7,221.71	9,999.23	7,233.12	176.75	70.49	-62.65	-1,157.92	971.97	6,350.07	6,238.98	111.09	57.160		
12,400.00	7,221.18	9,999.42	7,233.12	180.01	70.49	-62.76	-1,158.11	971.97	6,450.07	6,338.92	111.15	58.032		
12,500.00	7,220.65	9,999.61	7,233.12	183.28	70.49	-62.87	-1,158.30	971.97	6,550.07	6,438.86	111.20	58.902		
12,600.00	7,220.12	9,999.80	7,233.12	186.54	70.50	-62.97	-1,158.49	971.97	6,650.06	6,538.81	111.26	59.772		
12,700.00	7,219.59	9,999.98	7,233.13	189.81	70.50	-63.07	-1,158.67	971.97	6,750.06	6,638.75	111.31	60.640		
12,800.00	7,219.06	10,000.16	7,233.13	193.09	70.50	-63.16	-1,158.85	971.97	6,850.06	6,738.69	111.37	61.506		
12,900.00	7,218.54	10,001.00	7,233.30	196.36	70.71	-68.08	-1,169.69	971.98	6,950.09	6,838.33	111.76	62.188		
13,000.00	7,218.01	10,011.00	7,233.30	199.64	70.71	-68.08	-1,169.69	971.98	7,050.08	6,938.27	111.81	63.052		
13,100.00	7,217.48	10,011.00	7,233.30	202.92	70.71	-68.08	-1,169.69	971.98	7,150.08	7,038.21	111.87	63.916		
13,200.00	7,216.95	10,011.00	7,233.30	206.20	70.71	-68.08	-1,169.69	971.98	7,250.08	7,138.15	111.92	64.778		
13,300.00	7,216.42	10,011.00	7,233.30	209.48	70.71	-68.08	-1,169.69	971.98	7,350.07	7,238.09	111.98	65.639		
13,400.00	7,215.89	10,011.00	7,233.30	212.76	70.71	-68.08	-1,169.69	971.98	7,450.07	7,338.03	112.03	66.498		
13,500.00	7,215.36	10,011.00	7,233.30	216.05	70.71	-68.08	-1,169.69	971.98	7,550.07	7,437.97	112.09	67.356		
13,600.00	7,214.84	10,011.00	7,233.30	219.33	70.71	-68.08	-1,169.69	971.98	7,650.06	7,537.91	112.15	68.213		
13,700.00	7,214.31	10,011.00	7,233.30	222.62	70.71	-68.08	-1,169.69	971.98	7,750.06	7,637.85	112.21	69.068		
13,800.00	7,213.78	10,011.00	7,233.30	225.91	70.71	-68.08	-1,169.69	971.98	7,850.06	7,737.79	112.27	69.923		
13,900.00	7,213.25	10,011.00	7,233.30	229.20	70.71	-68.08	-1,169.69	971.98	7,950.05	7,837.73	112.33	70.775		
14,000.00	7,212.72	10,011.00	7,233.30	232.49	70.71	-68.08	-1,169.69	971.98	8,050.05	7,937.66	112.39	71.627		
14,100.00	7,212.19	10,011.00	7,233.30	235.79	70.71	-68.08	-1,169.69	971.98	8,150.05	8,037.60	112.45	72.476		
14,200.00	7,211.66	10,011.00	7,233.30	239.08	70.71	-68.08	-1,169.69	971.98	8,250.05	8,137.53	112.51	73.325		
14,300.00	7,211.13	10,011.00	7,233.30	242.38	70.71	-68.08	-1,169.69	971.98	8,350.04	8,237.47	112.58	74.172		
14,400.00	7,210.61	10,011.00	7,233.30	245.67	70.71	-68.08	-1,169.69	971.98	8,450.04	8,337.40	112.64	75.018		
14,500.00	7,210.08	10,011.00	7,233.30	248.97	70.71	-68.08	-1,169.69	971.98	8,550.04	8,437.33	112.71	75.862		
14,600.00	7,209.55	10,011.00	7,233.30	252.27	70.71	-68.08	-1,169.69	971.98	8,650.04	8,537.27	112.77	76.704		
14,700.00	7,209.02	10,011.00	7,233.30	255.57	70.71	-68.08	-1,169.69	971.98	8,750.03	8,637.20	112.84	77.545		
14,800.00	7,208.49	10,011.00	7,233.30	258.87	70.71	-68.08	-1,169.69	971.98	8,850.03	8,737.13	112.90	78.385		
14,900.00	7,207.96	10,011.00	7,233.30	262.17	70.71	-68.08	-1,169.69	971.98	8,950.03	8,837.06	112.97	79.223		
15,000.00	7,207.43	10,011.00	7,233.30	265.47	70.71	-68.08	-1,169.69	971.98	9,050.03	8,936.99	113.04	80.060		
15,081.89	7,207.00	10,011.00	7,233.30	268.17	70.71	-68.08	-1,169.69	971.98	9,131.91	9,018.82	113.10	80.744		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	0.00	0.00	3.28	3.28	-179.47	-60.11	-0.56	60.12					
100.00	100.00	100.00	100.00	3.28	3.28	-179.47	-60.11	-0.56	60.12	53.55	6.57	9.151		
200.00	200.00	200.00	200.00	3.34	3.34	-179.47	-60.11	-0.56	60.12	53.44	6.67	9.008		
300.00	299.98	297.95	297.93	3.44	3.44	-7.59	-61.78	-0.71	60.09	53.20	6.89	8.725		
400.00	399.84	395.91	395.75	3.59	3.59	-7.82	-66.78	-1.18	60.01	52.80	7.21	8.327		
500.00	499.45	493.86	493.35	3.80	3.78	-8.22	-75.11	-1.97	59.88	52.25	7.63	7.850		
600.00	598.70	591.83	590.61	4.06	4.01	-8.77	-86.75	-3.07	59.70	51.57	8.13	7.340		
669.47	667.41	659.89	657.92	4.28	4.20	-9.21	-96.79	-4.01	59.79	51.26	8.53	7.009		
700.00	697.49	689.80	687.42	4.38	4.28	-9.46	-101.70	-4.47	59.62	50.91	8.71	6.844 CC, ES		
800.00	796.13	787.71	783.60	4.74	4.60	-9.89	-119.92	-6.19	62.04	52.69	9.35	6.639		
900.00	894.78	885.35	878.83	5.15	4.94	-9.91	-141.34	-8.21	67.85	57.83	10.02	6.771		
1,000.00	993.43	983.50	973.83	5.58	5.33	-9.63	-165.87	-10.52	76.77	66.05	10.72	7.162		
1,100.00	1,092.07	1,083.04	1,070.03	6.03	5.74	-9.36	-191.35	-12.92	86.32	74.89	11.43	7.549		
1,200.00	1,190.72	1,182.58	1,166.22	6.50	6.17	-9.14	-216.84	-15.32	95.88	83.70	12.18	7.870		
1,300.00	1,289.36	1,282.12	1,262.42	6.98	6.62	-8.96	-242.32	-17.72	105.43	92.48	12.96	8.138		
1,400.00	1,388.01	1,381.66	1,358.61	7.47	7.09	-8.81	-267.80	-20.12	114.99	101.24	13.75	8.361		
1,500.00	1,486.65	1,481.21	1,454.81	7.97	7.56	-8.69	-293.29	-22.52	124.55	109.98	14.57	8.550		
1,600.00	1,585.30	1,580.75	1,551.00	8.48	8.04	-8.58	-318.77	-24.92	134.11	118.71	15.40	8.709		
1,700.00	1,683.94	1,680.29	1,647.20	9.00	8.53	-8.49	-344.25	-27.32	143.67	127.43	16.24	8.845		
1,800.00	1,782.59	1,779.83	1,743.39	9.52	9.02	-8.40	-369.74	-29.72	153.23	136.13	17.10	8.962		
1,900.00	1,881.24	1,879.37	1,839.59	10.05	9.52	-8.33	-395.22	-32.12	162.79	144.82	17.96	9.062		
2,000.00	1,979.88	1,978.91	1,935.78	10.58	10.02	-8.27	-420.70	-34.52	172.35	153.51	18.84	9.150		
2,100.00	2,078.53	2,078.46	2,031.97	11.11	10.53	-8.21	-446.19	-36.92	181.91	162.19	19.72	9.226		
2,200.00	2,177.17	2,178.00	2,128.17	11.64	11.04	-8.16	-471.67	-39.32	191.47	170.86	20.60	9.293		
2,300.00	2,275.82	2,277.54	2,224.36	12.18	11.55	-8.11	-497.15	-41.72	201.03	179.53	21.50	9.352		
2,400.00	2,374.46	2,377.08	2,320.56	12.72	12.06	-8.07	-522.63	-44.13	210.59	188.20	22.39	9.404		
2,500.00	2,473.11	2,476.62	2,416.75	13.26	12.58	-8.03	-548.12	-46.53	220.15	196.86	23.30	9.450		
2,600.00	2,571.76	2,576.17	2,512.95	13.80	13.10	-7.99	-573.60	-48.93	229.71	205.51	24.20	9.492		
2,700.00	2,670.40	2,675.71	2,609.14	14.35	13.62	-7.96	-599.08	-51.33	239.27	214.16	25.11	9.529		
2,800.00	2,769.05	2,775.25	2,705.34	14.89	14.14	-7.93	-624.57	-53.73	248.83	222.81	26.02	9.563		
2,900.00	2,867.69	2,874.79	2,801.53	15.44	14.66	-7.90	-650.05	-56.13	258.40	231.46	26.94	9.593		
3,000.00	2,966.34	2,974.33	2,897.73	15.99	15.19	-7.87	-675.53	-58.53	267.96	240.10	27.85	9.620		
3,100.00	3,064.98	3,073.87	2,993.92	16.53	15.71	-7.85	-701.02	-60.93	277.52	248.75	28.77	9.645		
3,200.00	3,163.63	3,173.42	3,090.12	17.08	16.24	-7.83	-726.50	-63.33	287.08	257.39	29.69	9.668		
3,300.00	3,262.27	3,272.96	3,186.31	17.63	16.77	-7.81	-751.98	-65.73	296.64	266.02	30.62	9.689		
3,400.00	3,360.92	3,372.50	3,282.51	18.18	17.29	-7.79	-777.47	-68.13	306.20	274.66	31.54	9.708		
3,500.00	3,459.57	3,472.04	3,378.70	18.74	17.82	-7.77	-802.95	-70.53	315.76	283.29	32.47	9.725		
3,600.00	3,558.21	3,571.58	3,474.89	19.29	18.35	-7.75	-828.43	-72.93	325.33	291.93	33.40	9.741		
3,700.00	3,656.86	3,671.12	3,571.09	19.84	18.88	-7.73	-853.92	-75.33	334.89	300.56	34.33	9.756		
3,800.00	3,755.50	3,770.67	3,667.28	20.39	19.41	-7.72	-879.40	-77.73	344.45	309.19	35.26	9.770		
3,900.00	3,854.15	3,870.21	3,763.48	20.95	19.94	-7.70	-904.88	-80.13	354.01	317.82	36.19	9.783		
4,000.00	3,952.79	3,969.75	3,859.67	21.50	20.47	-7.69	-930.37	-82.53	363.57	326.45	37.12	9.794		
4,100.00	4,051.44	4,069.29	3,955.87	22.05	21.00	-7.68	-955.85	-84.93	373.13	335.08	38.05	9.805		
4,200.00	4,150.08	4,168.83	4,052.06	22.61	21.53	-7.66	-981.33	-87.33	382.69	343.71	38.99	9.816		
4,300.00	4,248.73	4,268.38	4,148.26	23.16	22.07	-7.65	-1,006.81	-89.73	392.26	352.33	39.92	9.825		
4,400.00	4,347.38	4,367.92	4,244.45	23.72	22.60	-7.64	-1,032.30	-92.13	401.82	360.96	40.86	9.834		
4,500.00	4,446.02	4,467.46	4,340.65	24.27	23.13	-7.63	-1,057.78	-94.54	411.38	369.58	41.80	9.843		
4,600.00	4,544.67	4,567.00	4,436.84	24.83	23.67	-7.62	-1,083.26	-96.94	420.94	378.21	42.73	9.850		
4,700.00	4,643.31	4,666.54	4,533.04	25.39	24.20	-7.61	-1,108.75	-99.34	430.50	386.83	43.67	9.858		
4,800.00	4,741.96	4,766.08	4,629.23	25.94	24.73	-7.60	-1,134.23	-101.74	440.06	395.45	44.61	9.865		
4,900.00	4,840.60	4,865.63	4,725.43	26.50	25.27	-7.59	-1,159.71	-104.14	449.63	404.08	45.55	9.871		
5,000.00	4,939.25	4,965.17	4,821.62	27.05	25.80	-7.58	-1,185.20	-106.54	459.19	412.70	46.49	9.878		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	5,064.71	4,917.81	27.61	26.34	-7.57	-1,210.68	-108.94	468.75	421.32	47.43	9.883		
5,200.00	5,136.54	5,164.25	5,014.01	28.17	26.87	-7.56	-1,236.16	-111.34	478.31	429.94	48.37	9.889		
5,300.00	5,235.19	5,263.79	5,110.20	28.72	27.40	-7.56	-1,261.65	-113.74	487.87	438.56	49.31	9.894		
5,400.00	5,333.83	5,363.34	5,206.40	29.28	27.94	-7.55	-1,287.13	-116.14	497.44	447.18	50.25	9.899		
5,500.00	5,432.48	5,462.88	5,302.59	29.84	28.48	-7.54	-1,312.61	-118.54	507.00	455.80	51.19	9.904		
5,600.00	5,531.12	5,562.42	5,398.79	30.40	29.01	-7.53	-1,338.10	-120.94	516.56	464.42	52.13	9.908		
5,700.00	5,629.77	5,661.96	5,494.98	30.95	29.55	-7.53	-1,363.58	-123.34	526.12	473.04	53.08	9.912		
5,800.00	5,728.41	5,761.50	5,591.18	31.51	30.08	-7.52	-1,389.06	-125.74	535.68	481.66	54.02	9.916		
5,900.00	5,827.06	5,861.04	5,687.37	32.07	30.62	-7.52	-1,414.55	-128.14	545.24	490.28	54.96	9.920		
6,000.00	5,925.71	5,960.59	5,783.57	32.63	31.15	-7.51	-1,440.03	-130.54	554.81	498.90	55.91	9.924		
6,100.00	6,024.35	6,060.13	5,879.76	33.19	31.69	-7.50	-1,465.51	-132.94	564.37	507.52	56.85	9.927		
6,200.00	6,123.00	6,159.67	5,975.96	33.74	32.23	-7.50	-1,490.99	-135.34	573.93	516.14	57.79	9.931		
6,300.00	6,221.64	6,259.21	6,072.15	34.30	32.76	-7.49	-1,516.48	-137.74	583.49	524.75	58.74	9.934		
6,400.00	6,320.29	6,358.75	6,168.35	34.86	33.30	-7.49	-1,541.96	-140.14	593.05	533.37	59.68	9.937		
6,500.00	6,418.93	6,458.30	6,264.54	35.42	33.83	-7.48	-1,567.44	-142.54	602.61	541.99	60.63	9.940		
6,600.00	6,517.58	6,557.71	6,360.61	35.98	34.37	-7.47	-1,592.89	-145.03	612.18	550.61	61.57	9.943		
6,700.00	6,616.23	6,655.00	6,453.91	36.54	34.89	-6.63	-1,617.67	-156.37	621.93	559.47	62.46	9.958		
6,800.00	6,714.51	6,748.84	6,541.28	37.10	35.35	-39.04	-1,640.98	-181.10	632.24	568.99	63.26	9.995		
6,900.00	6,810.42	6,840.32	6,622.16	37.66	35.77	-55.35	-1,662.65	-217.75	642.78	578.77	64.01	10.043		
7,000.00	6,901.58	6,929.83	6,695.57	38.21	36.14	-61.39	-1,682.41	-264.86	653.15	588.45	64.70	10.095		
7,100.00	6,985.76	7,017.70	6,760.72	38.76	36.47	-63.79	-1,700.05	-321.02	662.98	597.59	65.39	10.139		
7,200.00	7,060.88	7,104.23	6,816.96	39.32	36.77	-64.70	-1,715.38	-384.88	671.92	605.77	66.15	10.157		
7,300.00	7,125.09	7,189.70	6,863.77	39.90	37.04	-64.95	-1,728.27	-455.14	679.67	612.58	67.10	10.130		
7,400.00	7,176.81	7,274.35	6,900.75	40.55	37.30	-64.93	-1,738.59	-530.51	685.96	617.62	68.34	10.038		
7,500.00	7,214.77	7,358.42	6,927.59	41.30	37.59	-64.84	-1,746.24	-609.75	690.59	620.62	69.97	9.869		
7,600.00	7,238.02	7,442.12	6,944.05	42.22	37.95	-64.76	-1,751.17	-691.61	693.40	621.35	72.05	9.624		
7,700.00	7,246.01	7,525.67	6,949.99	43.32	38.44	-64.76	-1,753.33	-774.85	694.32	619.76	74.56	9.312		
7,800.00	7,245.50	7,624.16	6,949.66	44.65	39.25	-64.78	-1,753.93	-873.35	694.26	616.86	77.41	8.969		
7,900.00	7,244.97	7,724.16	6,949.28	46.21	40.35	-64.79	-1,754.53	-973.35	694.21	613.67	80.54	8.620		
8,000.00	7,244.44	7,824.16	6,948.90	47.99	41.71	-64.80	-1,755.13	-1,073.34	694.16	610.23	83.93	8.270		
8,100.00	7,243.91	7,924.16	6,948.52	49.96	43.26	-64.81	-1,755.73	-1,173.34	694.11	606.55	87.56	7.927		
8,200.00	7,243.39	8,024.16	6,948.14	52.10	44.97	-64.82	-1,756.32	-1,273.34	694.06	602.66	91.40	7.594		
8,300.00	7,242.86	8,124.16	6,947.76	54.38	46.80	-64.84	-1,756.92	-1,373.34	694.01	598.59	95.42	7.274		
8,400.00	7,242.33	8,224.16	6,947.38	56.78	48.75	-64.85	-1,757.52	-1,473.33	693.96	594.37	99.59	6.968		
8,500.00	7,241.80	8,324.16	6,947.00	59.28	50.79	-64.86	-1,758.12	-1,573.33	693.91	590.00	103.91	6.678		
8,600.00	7,241.27	8,424.16	6,946.62	61.88	52.91	-64.87	-1,758.72	-1,673.33	693.86	585.51	108.35	6.404		
8,700.00	7,240.74	8,524.16	6,946.24	64.54	55.10	-64.88	-1,759.32	-1,773.33	693.81	580.90	112.90	6.145		
8,800.00	7,240.21	8,624.16	6,945.87	67.27	57.36	-64.89	-1,759.92	-1,873.32	693.76	576.21	117.55	5.902		
8,900.00	7,239.68	8,724.16	6,945.49	70.06	59.66	-64.91	-1,760.51	-1,973.32	693.71	571.42	122.29	5.673		
9,000.00	7,239.16	8,824.16	6,945.11	72.89	62.02	-64.92	-1,761.11	-2,073.32	693.66	566.56	127.10	5.458		
9,100.00	7,238.63	8,924.16	6,944.73	75.77	64.41	-64.93	-1,761.71	-2,173.32	693.61	561.63	131.98	5.256		
9,200.00	7,238.10	9,024.16	6,944.35	78.69	66.85	-64.94	-1,762.31	-2,273.31	693.56	556.64	136.92	5.065		
9,300.00	7,237.57	9,124.16	6,943.97	81.64	69.31	-64.95	-1,762.91	-2,373.31	693.50	551.59	141.91	4.887		
9,400.00	7,237.04	9,224.16	6,943.59	84.62	71.81	-64.96	-1,763.51	-2,473.31	693.45	546.49	146.96	4.719		
9,500.00	7,236.51	9,324.16	6,943.21	87.63	74.33	-64.98	-1,764.11	-2,573.30	693.40	541.35	152.05	4.560		
9,600.00	7,235.98	9,424.16	6,942.83	90.66	76.88	-64.99	-1,764.71	-2,673.30	693.35	536.17	157.18	4.411		
9,700.00	7,235.45	9,524.16	6,942.45	93.72	79.44	-65.00	-1,765.30	-2,773.30	693.30	530.95	162.35	4.270		
9,800.00	7,234.93	9,624.16	6,942.07	96.79	82.03	-65.01	-1,765.90	-2,873.30	693.25	525.70	167.55	4.138		
9,900.00	7,234.40	9,724.16	6,941.69	99.88	84.64	-65.02	-1,766.50	-2,973.29	693.20	520.42	172.79	4.012		
10,000.00	7,233.87	9,824.16	6,941.31	102.98	87.26	-65.03	-1,767.10	-3,073.29	693.15	515.11	178.05	3.893		
10,100.00	7,233.34	9,924.16	6,940.93	106.10	89.89	-65.05	-1,767.70	-3,173.29	693.10	509.77	183.33	3.781		
10,200.00	7,232.81	10,024.16	6,940.55	109.23	92.54	-65.06	-1,768.30	-3,273.29	693.05	504.41	188.64	3.674		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,124.16	6,940.18	112.38	95.20	-65.07	-1,768.90	-3,373.28	693.00	499.03	193.97	3.573		
10,400.00	7,231.75	10,224.16	6,939.80	115.53	97.87	-65.08	-1,769.49	-3,473.28	692.95	493.63	199.33	3.476		
10,500.00	7,231.23	10,324.16	6,939.42	118.70	100.56	-65.09	-1,770.09	-3,573.28	692.90	488.21	204.70	3.385		
10,600.00	7,230.70	10,424.16	6,939.04	121.87	103.25	-65.10	-1,770.69	-3,673.28	692.85	482.77	210.08	3.298		
10,700.00	7,230.17	10,524.16	6,938.66	125.05	105.95	-65.12	-1,771.29	-3,773.27	692.80	477.32	215.49	3.215		
10,800.00	7,229.64	10,624.16	6,938.28	128.25	108.66	-65.13	-1,771.89	-3,873.27	692.75	471.85	220.91	3.136		
10,900.00	7,229.11	10,724.16	6,937.90	131.44	111.38	-65.14	-1,772.49	-3,973.27	692.70	466.37	226.34	3.060		
11,000.00	7,228.58	10,824.16	6,937.52	134.65	114.10	-65.15	-1,773.09	-4,073.27	692.65	460.87	231.78	2.988		
11,100.00	7,228.05	10,924.16	6,937.14	137.86	116.83	-65.16	-1,773.68	-4,173.26	692.60	455.36	237.24	2.919		
11,200.00	7,227.52	11,024.16	6,936.76	141.08	119.57	-65.18	-1,774.28	-4,273.26	692.55	449.84	242.71	2.853		
11,300.00	7,227.00	11,124.16	6,936.38	144.30	122.31	-65.19	-1,774.88	-4,373.26	692.50	444.31	248.19	2.790		
11,400.00	7,226.47	11,224.16	6,936.00	147.52	125.06	-65.20	-1,775.48	-4,473.26	692.45	438.77	253.68	2.730		
11,500.00	7,225.94	11,324.16	6,935.62	150.76	127.81	-65.21	-1,776.08	-4,573.25	692.41	433.22	259.18	2.672		
11,600.00	7,225.41	11,424.16	6,935.24	153.99	130.56	-65.22	-1,776.68	-4,673.25	692.36	427.66	264.69	2.616		
11,700.00	7,224.88	11,524.16	6,934.86	157.23	133.32	-65.23	-1,777.28	-4,773.25	692.31	422.10	270.21	2.562		
11,800.00	7,224.35	11,624.16	6,934.49	160.48	136.09	-65.25	-1,777.88	-4,873.24	692.26	416.52	275.73	2.511		
11,900.00	7,223.82	11,724.16	6,934.11	163.72	138.86	-65.26	-1,778.47	-4,973.24	692.21	410.94	281.27	2.461		
12,000.00	7,223.29	11,824.16	6,933.73	166.98	141.63	-65.27	-1,779.07	-5,073.24	692.16	405.35	286.81	2.413		
12,100.00	7,222.77	11,924.16	6,933.35	170.23	144.41	-65.28	-1,779.67	-5,173.24	692.11	399.75	292.35	2.367		
12,200.00	7,222.24	12,024.16	6,932.97	173.49	147.19	-65.29	-1,780.27	-5,273.23	692.06	394.15	297.91	2.323		
12,300.00	7,221.71	12,124.16	6,932.59	176.75	149.97	-65.30	-1,780.87	-5,373.23	692.01	388.54	303.47	2.280		
12,400.00	7,221.18	12,224.16	6,932.21	180.01	152.75	-65.32	-1,781.47	-5,473.23	691.96	382.92	309.03	2.239		
12,500.00	7,220.65	12,324.16	6,931.83	183.28	155.54	-65.33	-1,782.07	-5,573.23	691.91	377.30	314.61	2.199		
12,600.00	7,220.12	12,424.16	6,931.45	186.54	158.33	-65.34	-1,782.66	-5,673.22	691.86	371.68	320.18	2.161		
12,700.00	7,219.59	12,524.16	6,931.07	189.81	161.12	-65.35	-1,783.26	-5,773.22	691.81	366.04	325.77	2.124		
12,800.00	7,219.06	12,624.16	6,930.69	193.09	163.92	-65.36	-1,783.86	-5,873.22	691.76	360.41	331.35	2.088		
12,900.00	7,218.54	12,724.16	6,930.31	196.36	166.71	-65.37	-1,784.46	-5,973.22	691.71	354.77	336.95	2.053		
13,000.00	7,218.01	12,824.16	6,929.93	199.64	169.51	-65.39	-1,785.06	-6,073.21	691.66	349.12	342.54	2.019		
13,100.00	7,217.48	12,924.16	6,929.55	202.92	172.31	-65.40	-1,785.66	-6,173.21	691.61	343.47	348.15	1.987		
13,200.00	7,216.95	13,024.16	6,929.17	206.20	175.12	-65.41	-1,786.26	-6,273.21	691.56	337.81	353.75	1.955		
13,300.00	7,216.42	13,124.16	6,928.80	209.48	177.92	-65.42	-1,786.85	-6,373.21	691.52	332.15	359.36	1.924		
13,400.00	7,215.89	13,224.16	6,928.42	212.76	180.73	-65.43	-1,787.45	-6,473.20	691.47	326.49	364.98	1.895		
13,500.00	7,215.36	13,324.16	6,928.04	216.05	183.54	-65.45	-1,788.05	-6,573.20	691.42	320.82	370.59	1.866		
13,600.00	7,214.84	13,424.16	6,927.66	219.33	186.35	-65.46	-1,788.65	-6,673.20	691.37	315.15	376.21	1.838		
13,700.00	7,214.31	13,524.16	6,927.28	222.62	189.16	-65.47	-1,789.25	-6,773.19	691.32	309.48	381.84	1.810		
13,800.00	7,213.78	13,624.16	6,926.90	225.91	191.97	-65.48	-1,789.85	-6,873.19	691.27	303.80	387.47	1.784		
13,900.00	7,213.25	13,724.16	6,926.52	229.20	194.78	-65.49	-1,790.45	-6,973.19	691.22	298.12	393.10	1.758		
14,000.00	7,212.72	13,824.16	6,926.14	232.49	197.60	-65.50	-1,791.05	-7,073.19	691.17	292.44	398.74	1.733		
14,100.00	7,212.19	13,924.16	6,925.76	235.79	200.41	-65.52	-1,791.64	-7,173.18	691.12	286.75	404.37	1.709		
14,200.00	7,211.66	14,024.16	6,925.38	239.08	203.23	-65.53	-1,792.24	-7,273.18	691.07	281.06	410.02	1.685		
14,300.00	7,211.13	14,124.16	6,925.00	242.38	206.05	-65.54	-1,792.84	-7,373.18	691.03	275.37	415.66	1.662		
14,400.00	7,210.61	14,224.16	6,924.62	245.67	208.87	-65.55	-1,793.44	-7,473.18	690.98	269.67	421.31	1.640		
14,500.00	7,210.08	14,324.16	6,924.24	248.97	211.69	-65.56	-1,794.04	-7,573.17	690.93	263.97	426.96	1.618		
14,600.00	7,209.55	14,424.16	6,923.86	252.27	214.51	-65.57	-1,794.64	-7,673.17	690.88	258.27	432.61	1.597		
14,700.00	7,209.02	14,524.16	6,923.48	255.57	217.34	-65.59	-1,795.24	-7,773.17	690.83	252.56	438.27	1.576		
14,800.00	7,208.49	14,624.16	6,923.11	258.87	220.16	-65.60	-1,795.83	-7,873.17	690.78	246.86	443.92	1.556		
14,900.00	7,207.96	14,724.16	6,922.73	262.17	222.98	-65.61	-1,796.43	-7,973.16	690.73	241.15	449.58	1.536		
15,000.00	7,207.43	14,824.16	6,922.35	265.47	225.81	-65.62	-1,797.03	-8,073.16	690.68	235.44	455.25	1.517		
15,081.89	7,207.00	14,906.04	6,922.04	268.17	228.12	-65.63	-1,797.52	-8,155.05	690.64	230.76	459.89	1.502 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	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	3.050		
200.00	200.00	200.00	200.00	3.34	3.34	-179.20	-20.04	-0.28	20.04	13.36	6.67	3.002		
300.00	299.98	299.31	299.29	3.44	3.44	-7.31	-21.74	-0.50	20.03	13.14	6.89	2.907		
400.00	399.84	398.62	398.46	3.59	3.59	-7.50	-26.86	-1.16	20.00	12.79	7.21	2.773		
500.00	499.45	497.93	497.40	3.80	3.79	-7.82	-35.39	-2.26	19.95	12.32	7.64	2.613		
600.00	598.70	597.25	595.98	4.06	4.03	-8.26	-47.31	-3.80	19.89	11.74	8.15	2.441		
607.62	606.25	604.82	603.47	4.08	4.05	-8.30	-48.36	-3.93	19.89	11.70	8.19	2.428 CC		
700.00	697.49	696.57	694.08	4.38	4.30	-8.78	-62.61	-5.77	19.95	11.21	8.73	2.284		
800.00	796.13	796.33	792.19	4.74	4.62	-8.64	-80.57	-8.09	21.73	12.39	9.34	2.326		
900.00	894.78	903.69	890.49	5.15	5.00	-8.47	-98.72	-10.43	23.67	13.66	10.01	2.365		
1,000.00	993.43	1,003.70	988.78	5.58	5.37	-8.32	-116.88	-12.77	25.62	14.92	10.70	2.395		
1,100.00	1,092.07	1,103.72	1,087.07	6.03	5.77	-8.19	-135.03	-15.11	27.56	16.14	11.42	2.414		
1,200.00	1,190.72	1,203.74	1,185.36	6.50	6.18	-8.08	-153.19	-17.45	29.51	17.34	12.17	2.425		
1,300.00	1,289.36	1,303.76	1,283.65	6.98	6.60	-7.98	-171.34	-19.80	31.46	18.51	12.94	2.430		
1,400.00	1,388.01	1,403.78	1,381.94	7.47	7.03	-7.90	-189.50	-22.14	33.40	19.67	13.74	2.432		
1,500.00	1,486.65	1,496.20	1,480.23	7.97	7.43	-7.82	-207.65	-24.48	35.35	20.84	14.52	2.435		
1,600.00	1,585.30	1,603.82	1,578.52	8.48	7.91	-7.75	-225.81	-26.82	37.30	21.93	15.37	2.427		
1,700.00	1,683.94	1,696.16	1,676.81	9.00	8.32	-7.69	-243.97	-29.16	39.25	23.07	16.17	2.427		
1,800.00	1,782.59	1,796.14	1,775.10	9.52	8.78	-7.63	-262.12	-31.50	41.19	24.18	17.02	2.421		
1,900.00	1,881.24	1,903.87	1,873.39	10.05	9.27	-7.58	-280.28	-33.85	43.14	25.24	17.90	2.410		
2,000.00	1,979.88	2,003.89	1,971.69	10.58	9.74	-7.54	-298.43	-36.19	45.09	26.32	18.76	2.403		
2,100.00	2,078.53	2,103.91	2,069.98	11.11	10.20	-7.49	-316.59	-38.53	47.03	27.40	19.63	2.396		
2,200.00	2,177.17	2,203.93	2,168.27	11.64	10.67	-7.46	-334.74	-40.87	48.98	28.48	20.50	2.389		
2,300.00	2,275.82	2,303.95	2,266.56	12.18	11.14	-7.42	-352.90	-43.21	50.93	29.55	21.38	2.382		
2,400.00	2,374.46	2,403.97	2,364.85	12.72	11.62	-7.39	-371.05	-45.56	52.87	30.62	22.26	2.375		
2,500.00	2,473.11	2,503.99	2,463.14	13.26	12.09	-7.35	-389.21	-47.90	54.82	31.68	23.14	2.369		
2,600.00	2,571.76	2,604.01	2,561.43	13.80	12.57	-7.33	-407.36	-50.24	56.77	32.74	24.03	2.362		
2,700.00	2,670.40	2,704.03	2,659.72	14.35	13.04	-7.30	-425.52	-52.58	58.72	33.79	24.92	2.356		
2,800.00	2,769.05	2,804.05	2,758.01	14.89	13.52	-7.27	-443.68	-54.92	60.66	34.84	25.82	2.350		
2,900.00	2,867.69	2,904.06	2,856.30	15.44	14.00	-7.25	-461.83	-57.27	62.61	35.90	26.72	2.344		
3,000.00	2,966.34	3,004.08	2,954.59	15.99	14.49	-7.23	-479.99	-59.61	64.56	36.94	27.61	2.338		
3,100.00	3,064.98	3,104.10	3,052.89	16.53	14.97	-7.21	-498.14	-61.95	66.51	37.99	28.52	2.332		
3,200.00	3,163.63	3,204.12	3,151.18	17.08	15.45	-7.19	-516.30	-64.29	68.45	39.03	29.42	2.327		
3,300.00	3,262.27	3,304.14	3,249.47	17.63	15.94	-7.17	-534.45	-66.63	70.40	40.08	30.32	2.322		
3,400.00	3,360.92	3,395.84	3,347.76	18.18	16.38	-7.15	-552.61	-68.97	72.35	41.16	31.19	2.320		
3,500.00	3,459.57	3,504.18	3,446.05	18.74	16.91	-7.13	-570.76	-71.32	74.29	42.16	32.14	2.312		
3,600.00	3,558.21	3,604.20	3,544.34	19.29	17.39	-7.12	-588.92	-73.66	76.24	43.20	33.04	2.307		
3,700.00	3,656.86	3,704.22	3,642.63	19.84	17.88	-7.10	-607.07	-76.00	78.19	44.24	33.95	2.303		
3,800.00	3,755.50	3,804.24	3,740.92	20.39	18.36	-7.09	-625.23	-78.34	80.14	45.27	34.86	2.299		
3,900.00	3,854.15	3,904.25	3,839.21	20.95	18.85	-7.07	-643.39	-80.68	82.08	46.31	35.78	2.294		
4,000.00	3,952.79	4,004.27	3,937.50	21.50	19.34	-7.06	-661.54	-83.03	84.03	47.34	36.69	2.290		
4,100.00	4,051.44	4,095.71	4,035.79	22.05	19.79	-7.05	-679.70	-85.37	85.98	48.42	37.56	2.289		
4,200.00	4,150.08	4,204.31	4,134.09	22.61	20.32	-7.04	-697.85	-87.71	87.93	49.41	38.52	2.283		
4,300.00	4,248.73	4,304.33	4,232.38	23.16	20.81	-7.03	-716.01	-90.05	89.87	50.44	39.43	2.279		
4,400.00	4,347.38	4,404.35	4,330.67	23.72	21.29	-7.01	-734.16	-92.39	91.82	51.47	40.35	2.276		
4,500.00	4,446.02	4,504.37	4,428.96	24.27	21.78	-7.00	-752.32	-94.74	93.77	52.51	41.26	2.272		
4,600.00	4,544.67	4,604.39	4,527.25	24.83	22.27	-6.99	-770.47	-97.08	95.71	53.54	42.18	2.269		
4,700.00	4,643.31	4,704.41	4,625.54	25.39	22.76	-6.98	-788.63	-99.42	97.66	54.57	43.10	2.266		
4,800.00	4,741.96	4,795.58	4,723.83	25.94	23.21	-6.98	-806.78	-101.76	99.61	55.64	43.97	2.265		
4,900.00	4,840.60	4,895.56	4,822.12	26.50	23.70	-6.97	-824.94	-104.10	101.56	56.66	44.89	2.262		
5,000.00	4,939.25	5,004.46	4,920.41	27.05	24.24	-6.96	-843.10	-106.44	103.50	57.65	45.85	2.257		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	5,104.48	5,018.70	27.61	24.73	-6.95	-861.25	-108.79	105.45	58.68	46.77	2.255		
5,200.00	5,136.54	5,204.50	5,116.99	28.17	25.22	-6.94	-879.41	-111.13	107.40	59.71	47.69	2.252		
5,300.00	5,235.19	5,304.52	5,215.29	28.72	25.71	-6.93	-897.56	-113.47	109.35	60.74	48.61	2.249		
5,400.00	5,333.83	5,404.54	5,313.58	29.28	26.20	-6.93	-915.72	-115.81	111.29	61.76	49.53	2.247		
5,500.00	5,432.48	5,504.56	5,411.87	29.84	26.69	-6.92	-933.87	-118.15	113.24	62.79	50.45	2.245		
5,600.00	5,531.12	5,604.58	5,510.16	30.40	27.18	-6.91	-952.03	-120.50	115.19	63.81	51.37	2.242		
5,700.00	5,629.77	5,704.60	5,608.45	30.95	27.68	-6.91	-970.18	-122.84	117.14	64.84	52.29	2.240		
5,800.00	5,728.41	5,804.61	5,706.74	31.51	28.17	-6.90	-988.34	-125.18	119.08	65.87	53.22	2.238		
5,900.00	5,827.06	5,904.63	5,805.03	32.07	28.66	-6.89	-1,006.49	-127.52	121.03	66.89	54.14	2.236		
6,000.00	5,925.71	6,004.65	5,903.32	32.63	29.15	-6.89	-1,024.65	-129.86	122.98	67.92	55.06	2.233		
6,100.00	6,024.35	6,095.33	6,001.61	33.19	29.60	-6.88	-1,042.81	-132.21	124.92	68.98	55.94	2.233		
6,200.00	6,123.00	6,204.69	6,099.90	33.74	30.14	-6.88	-1,060.96	-134.55	126.87	69.97	56.91	2.230		
6,300.00	6,221.64	6,304.71	6,198.19	34.30	30.63	-6.87	-1,079.12	-136.89	128.82	70.99	57.83	2.228		
6,400.00	6,320.29	6,404.73	6,296.49	34.86	31.12	-6.86	-1,097.27	-139.23	130.77	72.01	58.75	2.226		
6,500.00	6,418.93	6,504.75	6,394.78	35.42	31.62	-6.86	-1,115.43	-141.57	132.71	73.04	59.68	2.224		
6,600.00	6,517.58	6,595.23	6,493.07	35.98	32.06	-6.85	-1,133.58	-143.91	134.66	74.11	60.55	2.224		
6,700.00	6,616.23	6,694.57	6,590.55	36.54	32.55	-5.62	-1,151.64	-149.18	136.75	75.32	61.43	2.226		
6,800.00	6,714.51	6,791.75	6,684.15	37.10	33.01	-35.46	-1,169.21	-168.09	139.91	77.73	62.18	2.250		
6,900.00	6,810.42	6,887.24	6,772.27	37.66	33.44	-49.54	-1,185.99	-200.56	144.04	81.24	62.80	2.294		
7,000.00	6,901.58	6,981.23	6,853.35	38.21	33.82	-53.69	-1,201.68	-245.25	148.80	85.66	63.13	2.357		
7,100.00	6,985.76	7,073.91	6,926.08	38.76	34.17	-54.58	-1,216.01	-300.75	153.83	90.70	63.13	2.437		
7,200.00	7,060.88	7,165.48	6,989.38	39.32	34.49	-54.31	-1,228.76	-365.57	158.81	95.92	62.89	2.525		
7,300.00	7,125.09	7,256.14	7,042.38	39.90	34.79	-53.71	-1,239.74	-438.20	163.42	100.79	62.64	2.609		
7,400.00	7,176.81	7,346.08	7,084.39	40.55	35.11	-53.11	-1,248.80	-517.13	167.43	104.75	62.68	2.671		
7,500.00	7,214.77	7,435.50	7,114.88	41.30	35.52	-52.66	-1,255.82	-600.81	170.62	107.30	63.32	2.694		
7,600.00	7,238.02	7,524.58	7,133.50	42.22	36.11	-52.44	-1,260.71	-687.71	172.88	108.06	64.82	2.667		
7,700.00	7,246.01	7,627.22	7,140.04	43.32	37.04	-52.50	-1,263.38	-775.49	174.09	106.65	67.43	2.582		
7,800.00	7,245.50	7,712.71	7,139.49	44.65	38.02	-52.68	-1,264.95	-875.47	174.89	104.90	69.99	2.499		
7,900.00	7,244.97	7,812.70	7,138.95	46.21	39.35	-52.88	-1,266.52	-975.45	175.68	102.72	72.97	2.408		
8,000.00	7,244.44	7,912.70	7,138.41	47.99	40.87	-53.07	-1,268.09	-1,075.44	176.48	100.30	76.18	2.317		
8,100.00	7,243.91	8,012.69	7,137.87	49.96	42.54	-53.25	-1,269.66	-1,175.42	177.27	97.66	79.61	2.227		
8,200.00	7,243.39	8,112.69	7,137.33	52.10	44.33	-53.44	-1,271.23	-1,275.40	178.07	94.84	83.23	2.140		
8,300.00	7,242.86	8,212.68	7,136.78	54.38	46.24	-53.62	-1,272.80	-1,375.38	178.87	91.86	87.02	2.056		
8,400.00	7,242.33	8,312.68	7,136.24	56.78	48.24	-53.81	-1,274.37	-1,475.36	179.68	88.72	90.96	1.975		
8,500.00	7,241.80	8,412.67	7,135.70	59.28	50.33	-53.99	-1,275.94	-1,575.34	180.48	85.44	95.04	1.899		
8,600.00	7,241.27	8,512.67	7,135.16	61.88	52.49	-54.17	-1,277.51	-1,675.32	181.29	82.05	99.24	1.827		
8,700.00	7,240.74	8,612.66	7,134.62	64.54	54.72	-54.35	-1,279.08	-1,775.31	182.09	78.55	103.55	1.759		
8,800.00	7,240.21	8,712.66	7,134.07	67.27	57.00	-54.52	-1,280.65	-1,875.29	182.90	74.95	107.95	1.694		
8,900.00	7,239.68	8,812.65	7,133.53	70.06	59.33	-54.70	-1,282.22	-1,975.27	183.72	71.26	112.45	1.634		
9,000.00	7,239.16	8,912.65	7,132.99	72.89	61.71	-54.87	-1,283.79	-2,075.25	184.53	67.49	117.03	1.577		
9,100.00	7,238.63	9,012.64	7,132.45	75.77	64.13	-55.04	-1,285.36	-2,175.23	185.34	63.66	121.69	1.523		
9,200.00	7,238.10	9,112.64	7,131.91	78.69	66.58	-55.21	-1,286.93	-2,275.21	186.16	59.75	126.41	1.473 Level 3		
9,300.00	7,237.57	9,212.63	7,131.36	81.64	69.06	-55.38	-1,288.50	-2,375.19	186.98	55.78	131.19	1.425 Level 3		
9,400.00	7,237.04	9,312.63	7,130.82	84.62	71.57	-55.55	-1,290.07	-2,475.17	187.80	51.76	136.04	1.380 Level 3		
9,500.00	7,236.51	9,412.62	7,130.28	87.63	74.11	-55.72	-1,291.64	-2,575.16	188.62	47.69	140.93	1.338 Level 3		
9,600.00	7,235.98	9,512.62	7,129.74	90.66	76.67	-55.88	-1,293.21	-2,675.14	189.44	43.56	145.88	1.299 Level 3		
9,700.00	7,235.45	9,612.61	7,129.20	93.72	79.25	-56.04	-1,294.78	-2,775.12	190.26	39.40	150.87	1.261 Level 3		
9,800.00	7,234.93	9,712.61	7,128.66	96.79	81.84	-56.21	-1,296.35	-2,875.10	191.09	35.19	155.90	1.226 Level 2		
9,900.00	7,234.40	9,812.60	7,128.11	99.88	84.46	-56.37	-1,297.92	-2,975.08	191.92	30.94	160.97	1.192 Level 2		
10,000.00	7,233.87	9,912.60	7,127.57	102.98	87.09	-56.53	-1,299.49	-3,075.06	192.75	26.66	166.09	1.161 Level 2		
10,100.00	7,233.34	10,012.59	7,127.03	106.10	89.73	-56.68	-1,301.06	-3,175.04	193.58	22.35	171.23	1.131 Level 2		
10,200.00	7,232.81	10,112.59	7,126.49	109.23	92.39	-56.84	-1,302.63	-3,275.03	194.41	18.00	176.41	1.102 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,212.58	7,125.95	112.38	95.06	-56.99	-1,304.20	-3,375.01	195.24	13.62	181.62	1.075 Level 2		
10,400.00	7,231.75	10,312.58	7,125.40	115.53	97.73	-57.15	-1,305.77	-3,474.99	196.08	9.22	186.86	1.049 Level 2		
10,500.00	7,231.23	10,412.58	7,124.86	118.70	100.42	-57.30	-1,307.34	-3,574.97	196.91	4.78	192.13	1.025 Level 2		
10,600.00	7,230.70	10,512.57	7,124.32	121.87	103.12	-57.45	-1,308.91	-3,674.95	197.75	0.33	197.42	1.002 Level 2		
10,700.00	7,230.17	10,612.57	7,123.78	125.05	105.82	-57.60	-1,310.48	-3,774.93	198.59	-4.16	202.74	0.980 Level 1		
10,800.00	7,229.64	10,712.56	7,123.24	128.25	108.54	-57.75	-1,312.05	-3,874.91	199.43	-8.66	208.09	0.958 Level 1		
10,900.00	7,229.11	10,812.56	7,122.69	131.44	111.26	-57.90	-1,313.62	-3,974.90	200.27	-13.19	213.46	0.938 Level 1		
11,000.00	7,228.58	10,912.55	7,122.15	134.65	113.98	-58.04	-1,315.19	-4,074.88	201.11	-17.73	218.85	0.919 Level 1		
11,100.00	7,228.05	11,012.55	7,121.61	137.86	116.72	-58.19	-1,316.76	-4,174.86	201.96	-22.30	224.26	0.901 Level 1		
11,200.00	7,227.52	11,112.54	7,121.07	141.08	119.46	-58.33	-1,318.33	-4,274.84	202.80	-26.89	229.69	0.883 Level 1		
11,300.00	7,227.00	11,212.54	7,120.53	144.30	122.20	-58.47	-1,319.90	-4,374.82	203.65	-31.49	235.14	0.866 Level 1		
11,400.00	7,226.47	11,312.53	7,119.98	147.52	124.95	-58.62	-1,321.47	-4,474.80	204.50	-36.12	240.61	0.850 Level 1		
11,500.00	7,225.94	11,412.53	7,119.44	150.76	127.70	-58.76	-1,323.04	-4,574.78	205.35	-40.76	246.10	0.834 Level 1		
11,600.00	7,225.41	11,512.52	7,118.90	153.99	130.46	-58.89	-1,324.61	-4,674.76	206.20	-45.41	251.61	0.820 Level 1		
11,700.00	7,224.88	11,612.52	7,118.36	157.23	133.22	-59.03	-1,326.18	-4,774.75	207.05	-50.08	257.13	0.805 Level 1		
11,800.00	7,224.35	11,712.51	7,117.82	160.48	135.99	-59.17	-1,327.75	-4,874.73	207.90	-54.77	262.67	0.791 Level 1		
11,900.00	7,223.82	11,812.51	7,117.27	163.72	138.76	-59.30	-1,329.32	-4,974.71	208.75	-59.47	268.22	0.778 Level 1		
12,000.00	7,223.29	11,912.50	7,116.73	166.98	141.53	-59.44	-1,330.88	-5,074.69	209.61	-64.18	273.79	0.766 Level 1		
12,100.00	7,222.77	12,012.50	7,116.19	170.23	144.31	-59.57	-1,332.45	-5,174.67	210.47	-68.91	279.38	0.753 Level 1		
12,200.00	7,222.24	12,112.49	7,115.65	173.49	147.09	-59.70	-1,334.02	-5,274.65	211.32	-73.65	284.97	0.742 Level 1		
12,300.00	7,221.71	12,212.49	7,115.11	176.75	149.87	-59.84	-1,335.59	-5,374.63	212.18	-78.41	290.59	0.730 Level 1		
12,400.00	7,221.18	12,312.48	7,114.56	180.01	152.65	-59.97	-1,337.16	-5,474.62	213.04	-83.17	296.21	0.719 Level 1		
12,500.00	7,220.65	12,412.48	7,114.02	183.28	155.44	-60.09	-1,338.73	-5,574.60	213.90	-87.95	301.85	0.709 Level 1		
12,600.00	7,220.12	12,512.47	7,113.48	186.54	158.23	-60.22	-1,340.30	-5,674.58	214.76	-92.74	307.50	0.698 Level 1		
12,700.00	7,219.59	12,612.47	7,112.94	189.81	161.02	-60.35	-1,341.87	-5,774.56	215.63	-97.54	313.16	0.689 Level 1		
12,800.00	7,219.06	12,712.46	7,112.40	193.09	163.82	-60.48	-1,343.44	-5,874.54	216.49	-102.35	318.84	0.679 Level 1		
12,900.00	7,218.54	12,812.46	7,111.86	196.36	166.62	-60.60	-1,345.01	-5,974.52	217.35	-107.17	324.53	0.670 Level 1		
13,000.00	7,218.01	12,912.45	7,111.31	199.64	169.41	-60.73	-1,346.58	-6,074.50	218.22	-112.00	330.22	0.661 Level 1		
13,100.00	7,217.48	13,012.45	7,110.77	202.92	172.21	-60.85	-1,348.15	-6,174.48	219.09	-116.85	335.93	0.652 Level 1		
13,200.00	7,216.95	13,112.44	7,110.23	206.20	175.02	-60.97	-1,349.72	-6,274.47	219.95	-121.70	341.65	0.644 Level 1		
13,300.00	7,216.42	13,212.44	7,109.69	209.48	177.82	-61.09	-1,351.29	-6,374.45	220.82	-126.56	347.38	0.636 Level 1		
13,400.00	7,215.89	13,312.43	7,109.15	212.76	180.63	-61.21	-1,352.86	-6,474.43	221.69	-131.43	353.12	0.628 Level 1		
13,500.00	7,215.36	13,412.43	7,108.60	216.05	183.43	-61.33	-1,354.43	-6,574.41	222.56	-136.31	358.87	0.620 Level 1		
13,600.00	7,214.84	13,512.42	7,108.06	219.33	186.24	-61.45	-1,356.00	-6,674.39	223.44	-141.19	364.63	0.613 Level 1		
13,700.00	7,214.31	13,612.42	7,107.52	222.62	189.05	-61.57	-1,357.57	-6,774.37	224.31	-146.09	370.40	0.606 Level 1		
13,800.00	7,213.78	13,712.41	7,106.98	225.91	191.86	-61.68	-1,359.14	-6,874.35	225.18	-150.99	376.18	0.599 Level 1		
13,900.00	7,213.25	13,812.41	7,106.44	229.20	194.67	-61.80	-1,360.71	-6,974.34	226.06	-155.91	381.96	0.592 Level 1		
14,000.00	7,212.72	13,912.41	7,105.89	232.49	197.49	-61.91	-1,362.28	-7,074.32	226.93	-160.82	387.76	0.585 Level 1		
14,100.00	7,212.19	14,012.40	7,105.35	235.79	200.30	-62.03	-1,363.85	-7,174.30	227.81	-165.75	393.56	0.579 Level 1		
14,200.00	7,211.66	14,112.40	7,104.81	239.08	203.12	-62.14	-1,365.42	-7,274.28	228.69	-170.69	399.37	0.573 Level 1		
14,300.00	7,211.13	14,212.39	7,104.27	242.38	205.94	-62.25	-1,366.99	-7,374.26	229.56	-175.63	405.19	0.567 Level 1		
14,400.00	7,210.61	14,312.39	7,103.73	245.67	208.75	-62.36	-1,368.56	-7,474.24	230.44	-180.58	411.02	0.561 Level 1		
14,500.00	7,210.08	14,412.38	7,103.18	248.97	211.57	-62.47	-1,370.13	-7,574.22	231.32	-185.53	416.85	0.555 Level 1		
14,600.00	7,209.55	14,512.38	7,102.64	252.27	214.39	-62.58	-1,371.70	-7,674.21	232.20	-190.49	422.70	0.549 Level 1		
14,700.00	7,209.02	14,612.37	7,102.10	255.57	217.21	-62.69	-1,373.27	-7,774.19	233.08	-195.46	428.55	0.544 Level 1		
14,800.00	7,208.49	14,712.37	7,101.56	258.87	220.04	-62.80	-1,374.84	-7,874.17	233.97	-200.44	434.40	0.539 Level 1		
14,900.00	7,207.96	14,812.36	7,101.02	262.17	222.86	-62.91	-1,376.41	-7,974.15	234.85	-205.42	440.27	0.533 Level 1		
15,000.00	7,207.43	14,912.36	7,100.47	265.47	225.68	-63.01	-1,377.98	-8,074.13	235.73	-210.41	446.14	0.528 Level 1		
15,081.89	7,207.00	14,994.24	7,100.03	268.17	228.00	-63.10	-1,379.27	-8,156.00	236.46	-214.49	450.95	0.524 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	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	153.26	6.67	23.967		
300.00	299.98	293.77	294.76	3.44	3.43	-7.59	-161.46	-1.48	159.82	152.94	6.88	23.227		
400.00	399.84	388.50	389.36	3.59	3.57	-7.74	-166.12	-1.76	159.55	152.36	7.19	22.184		
500.00	499.45	483.23	483.77	3.80	3.76	-7.99	-173.90	-2.22	159.13	151.53	7.60	20.935		
600.00	598.70	577.98	577.89	4.06	3.98	-8.34	-184.79	-2.87	158.56	150.46	8.09	19.590		
693.70	691.32	666.77	665.71	4.36	4.22	-8.74	-197.81	-3.65	158.31	149.69	8.62	18.367		
700.00	697.49	672.75	671.61	4.38	4.23	-8.79	-198.78	-3.71	157.97	149.31	8.66	18.250 CC, ES		
800.00	796.13	767.49	764.79	4.74	4.53	-9.19	-215.86	-4.72	159.80	150.52	9.27	17.229		
900.00	894.78	862.02	857.15	5.15	4.86	-9.49	-235.95	-5.92	164.93	154.99	9.93	16.605		
1,000.00	993.43	956.14	948.39	5.58	5.22	-9.68	-258.96	-7.29	173.33	162.70	10.63	16.309		
1,100.00	1,092.07	1,049.64	1,038.24	6.03	5.61	-9.76	-284.78	-8.83	184.98	173.63	11.34	16.306		
1,200.00	1,190.72	1,142.33	1,126.43	6.50	6.02	-9.75	-313.25	-10.53	199.83	187.76	12.07	16.551		
1,300.00	1,289.36	1,234.04	1,212.74	6.98	6.46	-9.67	-344.20	-12.37	217.85	205.04	12.81	17.004		
1,400.00	1,388.01	1,324.60	1,296.94	7.47	6.92	-9.54	-377.46	-14.35	238.98	225.43	13.55	17.636		
1,500.00	1,486.65	1,420.59	1,385.44	7.97	7.43	-9.39	-414.55	-16.56	262.12	247.78	14.34	18.279		
1,600.00	1,585.30	1,517.86	1,475.12	8.48	7.97	-9.25	-452.18	-18.80	285.30	270.14	15.16	18.818		
1,700.00	1,683.94	1,615.14	1,564.79	9.00	8.52	-9.14	-489.81	-21.05	308.49	292.49	16.00	19.279		
1,800.00	1,782.59	1,712.41	1,654.46	9.52	9.08	-9.04	-527.44	-23.29	331.68	314.82	16.86	19.675		
1,900.00	1,881.24	1,809.68	1,744.13	10.05	9.65	-8.96	-565.07	-25.53	354.87	337.14	17.73	20.017		
2,000.00	1,979.88	1,906.96	1,833.81	10.58	10.23	-8.89	-602.70	-27.77	378.05	359.44	18.61	20.314		
2,100.00	2,078.53	2,004.23	1,923.48	11.11	10.81	-8.82	-640.32	-30.01	401.24	381.74	19.50	20.573		
2,200.00	2,177.17	2,101.50	2,013.15	11.64	11.40	-8.76	-677.95	-32.26	424.43	404.03	20.41	20.800		
2,300.00	2,275.82	2,201.22	2,102.82	12.18	12.00	-8.71	-715.58	-34.50	447.62	426.29	21.33	20.988		
2,400.00	2,374.46	2,303.95	2,192.50	12.72	12.63	-8.66	-753.21	-36.74	470.81	448.54	22.27	21.139		
2,500.00	2,473.11	2,406.68	2,282.17	13.26	13.26	-8.62	-790.84	-38.98	494.00	470.78	23.22	21.272		
2,600.00	2,571.76	2,490.60	2,371.84	13.80	13.78	-8.58	-828.47	-41.22	517.19	493.11	24.08	21.476		
2,700.00	2,670.40	2,587.87	2,461.51	14.35	14.38	-8.55	-866.09	-43.47	540.39	515.37	25.02	21.602		
2,800.00	2,769.05	2,685.14	2,551.19	14.89	14.99	-8.51	-903.72	-45.71	563.58	537.62	25.95	21.716		
2,900.00	2,867.69	2,782.41	2,640.86	15.44	15.60	-8.48	-941.35	-47.95	586.77	559.88	26.89	21.819		
3,000.00	2,966.34	2,879.69	2,730.53	15.99	16.21	-8.46	-978.98	-50.19	609.96	582.12	27.84	21.912		
3,100.00	3,064.98	2,976.96	2,820.20	16.53	16.82	-8.43	-1,016.61	-52.43	633.15	604.37	28.78	21.997		
3,200.00	3,163.63	3,074.23	2,909.88	17.08	17.43	-8.41	-1,054.24	-54.68	656.34	626.61	29.73	22.074		
3,300.00	3,262.27	3,171.51	2,999.55	17.63	18.04	-8.38	-1,091.86	-56.92	679.53	648.85	30.69	22.144		
3,400.00	3,360.92	3,268.78	3,089.22	18.18	18.66	-8.36	-1,129.49	-59.16	702.73	671.09	31.64	22.209		
3,500.00	3,459.57	3,366.05	3,178.89	18.74	19.27	-8.34	-1,167.12	-61.40	725.92	693.32	32.60	22.269		
3,600.00	3,558.21	3,463.33	3,268.57	19.29	19.89	-8.32	-1,204.75	-63.64	749.11	715.55	33.56	22.324		
3,700.00	3,656.86	3,560.60	3,358.24	19.84	20.51	-8.31	-1,242.38	-65.89	772.30	737.79	34.52	22.374		
3,800.00	3,755.50	3,657.87	3,447.91	20.39	21.12	-8.29	-1,280.01	-68.13	795.50	760.02	35.48	22.421		
3,900.00	3,854.15	3,755.15	3,537.58	20.95	21.74	-8.28	-1,317.63	-70.37	818.69	782.24	36.44	22.465		
4,000.00	3,952.79	3,852.42	3,627.26	21.50	22.36	-8.26	-1,355.26	-72.61	841.88	804.47	37.41	22.505		
4,100.00	4,051.44	3,949.69	3,716.93	22.05	22.98	-8.25	-1,392.89	-74.85	865.07	826.70	38.37	22.543		
4,200.00	4,150.08	4,046.97	3,806.60	22.61	23.60	-8.24	-1,430.52	-77.10	888.26	848.92	39.34	22.578		
4,300.00	4,248.73	4,144.24	3,896.27	23.16	24.22	-8.22	-1,468.15	-79.34	911.46	871.15	40.31	22.611		
4,400.00	4,347.38	4,241.51	3,985.95	23.72	24.84	-8.21	-1,505.77	-81.58	934.65	893.37	41.28	22.642		
4,500.00	4,446.02	4,338.79	4,075.62	24.27	25.47	-8.20	-1,543.40	-83.82	957.84	915.59	42.25	22.670		
4,600.00	4,544.67	4,436.06	4,165.29	24.83	26.09	-8.19	-1,581.03	-86.06	981.03	937.81	43.22	22.698		
4,700.00	4,643.31	4,533.33	4,254.96	25.39	26.71	-8.18	-1,618.66	-88.31	1,004.23	960.03	44.19	22.723		
4,800.00	4,741.96	4,630.61	4,344.64	25.94	27.33	-8.17	-1,656.29	-90.55	1,027.42	982.25	45.17	22.747		
4,900.00	4,840.60	4,727.88	4,434.31	26.50	27.96	-8.16	-1,693.92	-92.79	1,050.61	1,004.47	46.14	22.770		
5,000.00	4,939.25	4,825.15	4,523.98	27.05	28.58	-8.15	-1,731.54	-95.03	1,073.81	1,026.69	47.12	22.791		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	4,922.43	4,613.65	27.61	29.20	-8.14	-1,769.17	-97.27	1,097.00	1,048.91	48.09	22.811		
5,200.00	5,136.54	5,019.70	4,703.33	28.17	29.83	-8.14	-1,806.80	-99.52	1,120.19	1,071.12	49.07	22.830		
5,300.00	5,235.19	5,116.97	4,793.00	28.72	30.45	-8.13	-1,844.43	-101.76	1,143.38	1,093.34	50.04	22.848		
5,400.00	5,333.83	5,214.24	4,882.67	29.28	31.08	-8.12	-1,882.06	-104.00	1,166.58	1,115.56	51.02	22.865		
5,500.00	5,432.48	5,311.52	4,972.34	29.84	31.70	-8.11	-1,919.69	-106.24	1,189.77	1,137.77	52.00	22.882		
5,600.00	5,531.12	5,408.79	5,062.02	30.40	32.32	-8.11	-1,957.31	-108.48	1,212.96	1,159.99	52.97	22.897		
5,700.00	5,629.77	5,506.06	5,151.69	30.95	32.95	-8.10	-1,994.94	-110.73	1,236.15	1,182.20	53.95	22.912		
5,800.00	5,728.41	5,603.34	5,241.36	31.51	33.57	-8.09	-2,032.57	-112.97	1,259.35	1,204.42	54.93	22.926		
5,900.00	5,827.06	5,700.61	5,331.03	32.07	34.20	-8.09	-2,070.20	-115.21	1,282.54	1,226.63	55.91	22.939		
6,000.00	5,925.71	5,802.12	5,420.71	32.63	34.85	-8.08	-2,107.83	-117.45	1,305.73	1,248.82	56.91	22.942		
6,100.00	6,024.35	5,895.16	5,510.38	33.19	35.45	-8.08	-2,145.46	-119.69	1,328.93	1,271.06	57.87	22.964		
6,200.00	6,123.00	6,007.57	5,600.05	33.74	36.17	-8.07	-2,183.08	-121.94	1,352.12	1,293.18	58.93	22.943		
6,300.00	6,221.64	6,089.70	5,689.72	34.30	36.70	-8.06	-2,220.71	-124.18	1,375.31	1,315.48	59.83	22.986		
6,400.00	6,320.29	6,186.98	5,779.40	34.86	37.33	-8.06	-2,258.34	-126.42	1,398.51	1,337.69	60.81	22.997		
6,500.00	6,418.93	6,284.25	5,869.07	35.42	37.95	-8.05	-2,295.97	-128.66	1,421.70	1,359.90	61.79	23.007		
6,600.00	6,517.58	6,381.52	5,958.74	35.98	38.58	-8.05	-2,333.60	-130.90	1,444.89	1,382.11	62.78	23.016		
6,700.00	6,616.23	6,478.80	6,048.41	36.54	39.21	-8.04	-2,371.23	-133.15	1,468.08	1,404.33	63.76	23.026		
6,800.00	6,714.51	6,575.85	6,137.89	37.10	39.83	-41.26	-2,408.77	-135.38	1,491.21	1,426.45	64.76	23.028		
6,900.00	6,810.42	6,670.96	6,225.56	37.66	40.44	-58.62	-2,445.56	-137.57	1,513.99	1,448.19	65.80	23.011		
7,000.00	6,901.58	6,761.77	6,309.28	38.21	41.03	-66.01	-2,480.69	-139.67	1,536.47	1,469.59	66.89	22.971		
7,100.00	6,985.76	6,846.06	6,386.98	38.76	41.57	-69.85	-2,513.30	-141.61	1,559.06	1,490.99	68.07	22.904		
7,200.00	7,060.88	6,921.75	6,456.75	39.32	42.06	-72.03	-2,542.57	-143.35	1,582.42	1,513.01	69.40	22.801		
7,300.00	7,125.09	7,000.03	6,528.89	39.90	42.56	-73.49	-2,572.85	-146.04	1,607.19	1,536.10	71.08	22.611		
7,400.00	7,176.81	7,117.75	6,635.71	40.55	43.29	-75.38	-2,617.80	-165.69	1,632.53	1,559.11	73.42	22.235		
7,500.00	7,214.77	7,278.29	6,772.31	41.30	44.15	-77.80	-2,675.53	-226.06	1,656.96	1,580.95	76.01	21.799		
7,600.00	7,238.02	7,522.80	6,942.62	42.22	45.15	-81.17	-2,748.10	-383.47	1,677.61	1,599.37	78.23	21.443		
7,700.00	7,246.01	7,895.15	7,067.81	43.32	46.14	-83.94	-2,803.07	-724.13	1,688.09	1,607.75	80.34	21.012		
7,800.00	7,245.50	8,038.77	7,069.74	44.65	46.54	-84.02	-2,804.92	-867.67	1,688.25	1,604.91	83.35	20.256		
7,900.00	7,244.97	8,138.77	7,069.44	46.21	46.96	-84.03	-2,805.52	-967.67	1,688.24	1,601.67	86.57	19.500		
8,000.00	7,244.44	8,238.77	7,069.14	47.99	47.55	-84.04	-2,806.11	-1,067.66	1,688.23	1,598.12	90.11	18.736		
8,100.00	7,243.91	8,338.77	7,068.85	49.96	48.38	-84.05	-2,806.71	-1,167.66	1,688.22	1,594.31	93.91	17.978		
8,200.00	7,243.39	8,438.77	7,068.55	52.10	49.48	-84.06	-2,807.31	-1,267.66	1,688.21	1,590.27	97.94	17.237		
8,300.00	7,242.86	8,538.77	7,068.25	54.38	50.83	-84.06	-2,807.91	-1,367.66	1,688.20	1,586.01	102.19	16.520		
8,400.00	7,242.33	8,638.77	7,067.95	56.78	52.39	-84.07	-2,808.51	-1,467.65	1,688.19	1,581.57	106.62	15.834		
8,500.00	7,241.80	8,738.77	7,067.66	59.28	54.12	-84.08	-2,809.10	-1,567.65	1,688.18	1,576.97	111.21	15.180		
8,600.00	7,241.27	8,838.77	7,067.36	61.88	55.98	-84.09	-2,809.70	-1,667.65	1,688.17	1,572.22	115.95	14.560		
8,700.00	7,240.74	8,938.77	7,067.06	64.54	57.96	-84.09	-2,810.30	-1,767.65	1,688.16	1,567.34	120.81	13.973		
8,800.00	7,240.21	9,038.77	7,066.76	67.27	60.03	-84.10	-2,810.90	-1,867.64	1,688.15	1,562.36	125.79	13.420		
8,900.00	7,239.68	9,138.77	7,066.47	70.06	62.17	-84.11	-2,811.50	-1,967.64	1,688.14	1,557.27	130.87	12.900		
9,000.00	7,239.16	9,238.77	7,066.17	72.89	64.38	-84.12	-2,812.09	-2,067.64	1,688.13	1,552.10	136.03	12.410		
9,100.00	7,238.63	9,338.77	7,065.87	75.77	66.65	-84.13	-2,812.69	-2,167.64	1,688.12	1,546.84	141.27	11.949		
9,200.00	7,238.10	9,438.77	7,065.57	78.69	68.96	-84.13	-2,813.29	-2,267.63	1,688.11	1,541.52	146.59	11.516		
9,300.00	7,237.57	9,538.77	7,065.28	81.64	71.32	-84.14	-2,813.89	-2,367.63	1,688.10	1,536.13	151.97	11.108		
9,400.00	7,237.04	9,638.77	7,064.98	84.62	73.72	-84.15	-2,814.48	-2,467.63	1,688.09	1,530.68	157.40	10.725		
9,500.00	7,236.51	9,738.76	7,064.68	87.63	76.15	-84.16	-2,815.08	-2,567.63	1,688.08	1,525.19	162.89	10.363		
9,600.00	7,235.98	9,838.76	7,064.38	90.66	78.61	-84.17	-2,815.68	-2,667.62	1,688.07	1,519.64	168.42	10.023		
9,700.00	7,235.45	9,938.76	7,064.09	93.72	81.10	-84.17	-2,816.28	-2,767.62	1,688.06	1,514.06	174.00	9.701		
9,800.00	7,234.93	10,038.76	7,063.79	96.79	83.62	-84.18	-2,816.88	-2,867.62	1,688.05	1,508.43	179.61	9.398		
9,900.00	7,234.40	10,138.76	7,063.49	99.88	86.15	-84.19	-2,817.47	-2,967.62	1,688.04	1,502.77	185.26	9.112		
10,000.00	7,233.87	10,238.76	7,063.19	102.98	88.71	-84.20	-2,818.07	-3,067.61	1,688.03	1,497.08	190.94	8.840		
10,100.00	7,233.34	10,338.76	7,062.89	106.10	91.29	-84.20	-2,818.67	-3,167.61	1,688.02	1,491.36	196.65	8.584		
10,200.00	7,232.81	10,438.76	7,062.60	109.23	93.88	-84.21	-2,819.27	-3,267.61	1,688.01	1,485.62	202.39	8.340		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,538.76	7,062.30	112.38	96.49	-84.22	-2,819.87	-3,367.61	1,688.00	1,479.85	208.15	8.110		
10,400.00	7,231.75	10,638.76	7,062.00	115.53	99.11	-84.23	-2,820.46	-3,467.60	1,687.99	1,474.06	213.93	7.890		
10,500.00	7,231.23	10,738.76	7,061.70	118.70	101.75	-84.24	-2,821.06	-3,567.60	1,687.98	1,468.24	219.74	7.682		
10,600.00	7,230.70	10,838.76	7,061.41	121.87	104.39	-84.24	-2,821.66	-3,667.60	1,687.97	1,462.41	225.56	7.484		
10,700.00	7,230.17	10,938.76	7,061.11	125.05	107.05	-84.25	-2,822.26	-3,767.60	1,687.96	1,456.56	231.40	7.295		
10,800.00	7,229.64	11,038.76	7,060.81	128.25	109.72	-84.26	-2,822.86	-3,867.59	1,687.95	1,450.69	237.26	7.114		
10,900.00	7,229.11	11,138.76	7,060.51	131.44	112.40	-84.27	-2,823.45	-3,967.59	1,687.94	1,444.81	243.13	6.943		
11,000.00	7,228.58	11,238.76	7,060.22	134.65	115.09	-84.28	-2,824.05	-4,067.59	1,687.93	1,438.91	249.01	6.778		
11,100.00	7,228.05	11,338.76	7,059.92	137.86	117.78	-84.28	-2,824.65	-4,167.59	1,687.92	1,433.01	254.91	6.622		
11,200.00	7,227.52	11,438.76	7,059.62	141.08	120.49	-84.29	-2,825.25	-4,267.58	1,687.91	1,427.08	260.83	6.471		
11,300.00	7,227.00	11,538.76	7,059.32	144.30	123.20	-84.30	-2,825.85	-4,367.58	1,687.90	1,421.15	266.75	6.328		
11,400.00	7,226.47	11,638.76	7,059.03	147.52	125.92	-84.31	-2,826.44	-4,467.58	1,687.89	1,415.21	272.68	6.190		
11,500.00	7,225.94	11,738.76	7,058.73	150.76	128.64	-84.31	-2,827.04	-4,567.58	1,687.88	1,409.25	278.63	6.058		
11,600.00	7,225.41	11,838.76	7,058.43	153.99	131.37	-84.32	-2,827.64	-4,667.57	1,687.87	1,403.29	284.58	5.931		
11,700.00	7,224.88	11,938.76	7,058.13	157.23	134.10	-84.33	-2,828.24	-4,767.57	1,687.86	1,397.32	290.55	5.809		
11,800.00	7,224.35	12,038.76	7,057.84	160.48	136.84	-84.34	-2,828.83	-4,867.57	1,687.85	1,391.34	296.52	5.692		
11,900.00	7,223.82	12,138.76	7,057.54	163.72	139.59	-84.35	-2,829.43	-4,967.57	1,687.84	1,385.35	302.50	5.580		
12,000.00	7,223.29	12,238.76	7,057.24	166.98	142.34	-84.35	-2,830.03	-5,067.56	1,687.84	1,379.35	308.48	5.471		
12,100.00	7,222.77	12,338.76	7,056.94	170.23	145.09	-84.36	-2,830.63	-5,167.56	1,687.83	1,373.35	314.48	5.367		
12,200.00	7,222.24	12,438.76	7,056.65	173.49	147.85	-84.37	-2,831.23	-5,267.56	1,687.82	1,367.34	320.48	5.267		
12,300.00	7,221.71	12,538.76	7,056.35	176.75	150.61	-84.38	-2,831.82	-5,367.56	1,687.81	1,361.32	326.49	5.170		
12,400.00	7,221.18	12,638.76	7,056.05	180.01	153.37	-84.39	-2,832.42	-5,467.55	1,687.80	1,355.30	332.50	5.076		
12,500.00	7,220.65	12,738.76	7,055.75	183.28	156.14	-84.39	-2,833.02	-5,567.55	1,687.79	1,349.27	338.52	4.986		
12,600.00	7,220.12	12,838.76	7,055.45	186.54	158.91	-84.40	-2,833.62	-5,667.55	1,687.78	1,343.24	344.54	4.899		
12,700.00	7,219.59	12,938.76	7,055.16	189.81	161.69	-84.41	-2,834.22	-5,767.55	1,687.77	1,337.20	350.57	4.814		
12,800.00	7,219.06	13,038.76	7,054.86	193.09	164.47	-84.42	-2,834.81	-5,867.54	1,687.76	1,331.16	356.60	4.733		
12,900.00	7,218.54	13,138.76	7,054.56	196.36	167.25	-84.42	-2,835.41	-5,967.54	1,687.75	1,325.11	362.64	4.654		
13,000.00	7,218.01	13,238.76	7,054.26	199.64	170.03	-84.43	-2,836.01	-6,067.54	1,687.74	1,319.06	368.68	4.578		
13,100.00	7,217.48	13,338.76	7,053.97	202.92	172.81	-84.44	-2,836.61	-6,167.54	1,687.74	1,313.00	374.73	4.504		
13,200.00	7,216.95	13,438.75	7,053.67	206.20	175.60	-84.45	-2,837.21	-6,267.53	1,687.73	1,306.94	380.78	4.432		
13,300.00	7,216.42	13,538.75	7,053.37	209.48	178.39	-84.46	-2,837.80	-6,367.53	1,687.72	1,300.88	386.84	4.363		
13,400.00	7,215.89	13,638.75	7,053.07	212.76	181.19	-84.46	-2,838.40	-6,467.53	1,687.71	1,294.81	392.90	4.296		
13,500.00	7,215.36	13,738.75	7,052.78	216.05	183.98	-84.47	-2,839.00	-6,567.53	1,687.70	1,288.74	398.96	4.230		
13,600.00	7,214.84	13,838.75	7,052.48	219.33	186.78	-84.48	-2,839.60	-6,667.52	1,687.69	1,282.67	405.02	4.167		
13,700.00	7,214.31	13,938.75	7,052.18	222.62	189.57	-84.49	-2,840.20	-6,767.52	1,687.68	1,276.59	411.09	4.105		
13,800.00	7,213.78	14,038.75	7,051.88	225.91	192.37	-84.50	-2,840.79	-6,867.52	1,687.67	1,270.51	417.16	4.046		
13,900.00	7,213.25	14,138.75	7,051.59	229.20	195.18	-84.50	-2,841.39	-6,967.52	1,687.67	1,264.43	423.24	3.988		
14,000.00	7,212.72	14,238.75	7,051.29	232.49	197.98	-84.51	-2,841.99	-7,067.51	1,687.66	1,258.34	429.32	3.931		
14,100.00	7,212.19	14,338.75	7,050.99	235.79	200.78	-84.52	-2,842.59	-7,167.51	1,687.65	1,252.25	435.40	3.876		
14,200.00	7,211.66	14,438.75	7,050.69	239.08	203.59	-84.53	-2,843.18	-7,267.51	1,687.64	1,246.16	441.48	3.823		
14,300.00	7,211.13	14,538.75	7,050.40	242.38	206.40	-84.53	-2,843.78	-7,367.51	1,687.63	1,240.07	447.56	3.771		
14,400.00	7,210.61	14,638.75	7,050.10	245.67	209.21	-84.54	-2,844.38	-7,467.50	1,687.62	1,233.97	453.65	3.720		
14,500.00	7,210.08	14,738.75	7,049.80	248.97	212.02	-84.55	-2,844.98	-7,567.50	1,687.61	1,227.87	459.74	3.671		
14,600.00	7,209.55	14,838.75	7,049.50	252.27	214.83	-84.56	-2,845.58	-7,667.50	1,687.61	1,221.77	465.83	3.623		
14,700.00	7,209.02	14,938.75	7,049.21	255.57	217.64	-84.57	-2,846.17	-7,767.50	1,687.60	1,215.67	471.93	3.576		
14,800.00	7,208.49	15,038.75	7,048.91	258.87	220.46	-84.57	-2,846.77	-7,867.49	1,687.59	1,209.56	478.02	3.530		
14,900.00	7,207.96	15,138.75	7,048.61	262.17	223.27	-84.58	-2,847.37	-7,967.49	1,687.58	1,203.46	484.12	3.486		
15,000.00	7,207.43	15,238.75	7,048.31	265.47	226.09	-84.59	-2,847.97	-8,067.49	1,687.57	1,197.35	490.22	3.442		
15,081.89	7,207.00	15,320.64	7,048.07	268.17	228.40	-84.60	-2,848.46	-8,149.38	1,687.57	1,192.35	495.22	3.408 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	200.01	1.67	200.01					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	200.01	1.67	200.01	193.45	6.57	30.445		
200.00	200.00	201.00	200.00	3.34	3.34	0.48	200.01	1.67	200.01	193.34	6.67	29.965 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	172.50	200.01	1.67	201.74	194.86	6.89	29.297		
400.00	399.84	400.84	399.84	3.59	3.60	172.67	200.01	1.67	206.93	199.74	7.20	28.752		
500.00	499.45	500.45	499.45	3.80	3.81	172.95	200.01	1.67	215.58	207.98	7.60	28.367		
600.00	598.70	593.18	592.16	4.06	4.03	173.08	201.35	0.97	229.10	221.03	8.07	28.385		
700.00	697.49	687.09	685.97	4.38	4.28	172.97	205.23	-1.04	248.51	239.90	8.61	28.861		
800.00	796.13	784.90	783.64	4.74	4.57	172.86	209.81	-3.41	269.35	260.16	9.19	29.310		
900.00	894.78	882.70	881.31	5.15	4.88	172.77	214.39	-5.78	290.19	280.37	9.81	29.567		
1,000.00	993.43	980.50	978.98	5.58	5.20	172.69	218.97	-8.15	311.03	300.55	10.48	29.687		
1,100.00	1,092.07	1,078.31	1,076.64	6.03	5.54	172.62	223.55	-10.52	331.87	320.70	11.17	29.708		
1,200.00	1,190.72	1,176.11	1,174.31	6.50	5.90	172.56	228.13	-12.89	352.71	340.82	11.89	29.663		
1,300.00	1,289.36	1,273.92	1,271.98	6.98	6.26	172.50	232.71	-15.27	373.55	360.92	12.63	29.574		
1,400.00	1,388.01	1,371.72	1,369.65	7.47	6.63	172.45	237.29	-17.64	394.39	381.00	13.39	29.455		
1,500.00	1,486.65	1,469.52	1,467.31	7.97	7.01	172.41	241.87	-20.01	415.23	401.07	14.16	29.319		
1,600.00	1,585.30	1,567.33	1,564.98	8.48	7.39	172.37	246.44	-22.38	436.07	421.12	14.95	29.172		
1,700.00	1,683.94	1,665.13	1,662.65	9.00	7.78	172.33	251.02	-24.75	456.91	441.17	15.75	29.020		
1,800.00	1,782.59	1,762.93	1,760.32	9.52	8.17	172.30	255.60	-27.12	477.76	461.21	16.55	28.866		
1,900.00	1,881.24	1,860.74	1,857.98	10.05	8.57	172.27	260.18	-29.49	498.60	481.23	17.36	28.714		
2,000.00	1,979.88	1,958.54	1,955.65	10.58	8.97	172.24	264.76	-31.87	519.44	501.26	18.18	28.565		
2,100.00	2,078.53	2,056.34	2,053.32	11.11	9.37	172.22	269.34	-34.24	540.28	521.27	19.01	28.420		
2,200.00	2,177.17	2,154.15	2,150.99	11.64	9.78	172.19	273.92	-36.61	561.13	541.28	19.84	28.280		
2,300.00	2,275.82	2,251.95	2,248.65	12.18	10.18	172.17	278.50	-38.98	581.97	561.29	20.68	28.144		
2,400.00	2,374.46	2,349.75	2,346.32	12.72	10.59	172.15	283.08	-41.35	602.81	581.29	21.52	28.014		
2,500.00	2,473.11	2,447.56	2,443.99	13.26	11.01	172.13	287.66	-43.72	623.65	601.29	22.36	27.890		
2,600.00	2,571.76	2,545.36	2,541.66	13.80	11.42	172.11	292.24	-46.10	644.50	621.29	23.21	27.770		
2,700.00	2,670.40	2,643.17	2,639.32	14.35	11.83	172.09	296.82	-48.47	665.34	641.28	24.06	27.656		
2,800.00	2,769.05	2,740.97	2,736.99	14.89	12.25	172.08	301.40	-50.84	686.18	661.27	24.91	27.546		
2,900.00	2,867.69	2,838.77	2,834.66	15.44	12.66	172.06	305.98	-53.21	707.02	681.26	25.76	27.442		
3,000.00	2,966.34	2,936.58	2,932.33	15.99	13.08	172.05	310.56	-55.58	727.87	701.25	26.62	27.342		
3,100.00	3,064.98	3,034.38	3,029.99	16.53	13.50	172.04	315.13	-57.95	748.71	721.23	27.48	27.246		
3,200.00	3,163.63	3,132.18	3,127.66	17.08	13.92	172.02	319.71	-60.33	769.55	741.21	28.34	27.155		
3,300.00	3,262.27	3,229.99	3,225.33	17.63	14.34	172.01	324.29	-62.70	790.40	761.20	29.20	27.067		
3,400.00	3,360.92	3,327.79	3,323.00	18.18	14.76	172.00	328.87	-65.07	811.24	781.18	30.06	26.983		
3,500.00	3,459.57	3,425.59	3,420.66	18.74	15.18	171.99	333.45	-67.44	832.08	801.15	30.93	26.903		
3,600.00	3,558.21	3,523.40	3,518.33	19.29	15.60	171.98	338.03	-69.81	852.93	821.13	31.79	26.826		
3,700.00	3,656.86	3,621.20	3,616.00	19.84	16.02	171.97	342.61	-72.18	873.77	841.11	32.66	26.752		
3,800.00	3,755.50	3,719.00	3,713.67	20.39	16.45	171.96	347.19	-74.55	894.61	861.08	33.53	26.682		
3,900.00	3,854.15	3,816.81	3,811.33	20.95	16.87	171.95	351.77	-76.93	915.46	881.06	34.40	26.614		
4,000.00	3,952.79	3,914.61	3,909.00	21.50	17.29	171.94	356.35	-79.30	936.30	901.03	35.27	26.549		
4,100.00	4,051.44	4,012.42	4,006.67	22.05	17.72	171.93	360.93	-81.67	957.14	921.00	36.14	26.486		
4,200.00	4,150.08	4,110.22	4,104.34	22.61	18.14	171.93	365.51	-84.04	977.99	940.98	37.01	26.426		
4,300.00	4,248.73	4,208.02	4,202.00	23.16	18.57	171.92	370.09	-86.41	998.83	960.95	37.88	26.367		
4,400.00	4,347.38	4,305.83	4,299.67	23.72	18.99	171.91	374.67	-88.78	1,019.67	980.92	38.75	26.312		
4,500.00	4,446.02	4,403.63	4,397.34	24.27	19.42	171.90	379.25	-91.16	1,040.52	1,000.89	39.63	26.258		
4,600.00	4,544.67	4,501.43	4,495.01	24.83	19.84	171.90	383.82	-93.53	1,061.36	1,020.86	40.50	26.206		
4,700.00	4,643.31	4,600.76	4,592.67	25.39	20.27	171.89	388.40	-95.90	1,082.20	1,040.82	41.38	26.152		
4,800.00	4,741.96	4,702.96	4,690.34	25.94	20.72	171.89	392.98	-98.27	1,103.05	1,060.77	42.28	26.092		
4,900.00	4,840.60	4,805.16	4,788.01	26.50	21.16	171.88	397.56	-100.64	1,123.89	1,080.72	43.17	26.034		
5,000.00	4,939.25	4,907.35	4,885.68	27.05	21.61	171.87	402.14	-103.01	1,144.73	1,100.67	44.07	25.978		
5,100.00	5,037.90	4,990.45	4,983.34	27.61	21.97	171.87	406.72	-105.39	1,165.58	1,120.70	44.88	25.972		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	5,136.54	5,088.26	5,081.01	28.17	22.40	171.86	411.30	-107.76	1,186.42	1,140.66	45.75	25.930		
5,300.00	5,235.19	5,186.06	5,178.68	28.72	22.83	171.86	415.88	-110.13	1,207.26	1,160.63	46.63	25.890		
5,400.00	5,333.83	5,283.86	5,276.35	29.28	23.25	171.85	420.46	-112.50	1,228.11	1,180.60	47.51	25.850		
5,500.00	5,432.48	5,381.67	5,374.02	29.84	23.68	171.85	425.04	-114.87	1,248.95	1,200.56	48.39	25.812		
5,600.00	5,531.12	5,479.47	5,471.68	30.40	24.11	171.84	429.62	-117.24	1,269.79	1,220.53	49.26	25.775		
5,700.00	5,629.77	5,577.27	5,569.35	30.95	24.54	171.84	434.20	-119.61	1,290.64	1,240.49	50.14	25.739		
5,800.00	5,728.41	5,675.08	5,667.02	31.51	24.96	171.84	438.78	-121.99	1,311.48	1,260.46	51.02	25.704		
5,900.00	5,827.06	5,772.88	5,764.69	32.07	25.39	171.83	443.36	-124.36	1,332.32	1,280.42	51.90	25.670		
6,000.00	5,925.71	5,870.68	5,862.35	32.63	25.82	171.83	447.94	-126.73	1,353.17	1,300.39	52.78	25.638		
6,100.00	6,024.35	5,968.49	5,960.02	33.19	26.25	171.82	452.51	-129.10	1,374.01	1,320.35	53.66	25.606		
6,200.00	6,123.00	6,066.29	6,057.69	33.74	26.68	171.82	457.09	-131.47	1,394.85	1,340.31	54.54	25.575		
6,300.00	6,221.64	6,164.09	6,155.36	34.30	27.11	171.82	461.67	-133.84	1,415.70	1,360.28	55.42	25.545		
6,400.00	6,320.29	6,261.90	6,253.02	34.86	27.53	171.81	466.25	-136.22	1,436.54	1,380.24	56.30	25.516		
6,500.00	6,418.93	6,359.70	6,350.69	35.42	27.96	171.81	470.83	-138.59	1,457.38	1,400.20	57.18	25.487		
6,600.00	6,517.58	6,457.65	6,448.50	35.98	28.39	171.80	475.42	-141.03	1,478.23	1,420.16	58.06	25.459		
6,700.00	6,616.23	6,556.06	6,546.05	36.54	28.82	171.45	479.93	-152.39	1,499.03	1,440.08	58.96	25.425		
6,800.00	6,714.51	6,651.01	6,637.44	37.10	29.24	134.39	484.06	-177.49	1,519.90	1,460.05	59.84	25.399		
6,900.00	6,810.42	6,743.68	6,722.09	37.66	29.66	113.20	487.79	-214.83	1,540.44	1,479.73	60.71	25.373		
7,000.00	6,901.58	6,834.53	6,798.96	38.21	30.08	102.67	491.09	-262.98	1,560.13	1,498.54	61.59	25.331		
7,100.00	6,985.76	6,923.92	6,867.17	38.76	30.53	96.23	493.91	-320.57	1,578.41	1,515.89	62.52	25.248		
7,200.00	7,060.88	7,012.15	6,925.95	39.32	31.03	91.82	496.24	-386.23	1,594.81	1,531.25	63.56	25.091		
7,300.00	7,125.09	7,099.48	6,974.66	39.90	31.62	88.65	498.04	-458.61	1,608.89	1,544.09	64.80	24.828		
7,400.00	7,176.81	7,186.11	7,012.76	40.55	32.32	86.36	499.32	-536.33	1,620.29	1,553.96	66.33	24.429		
7,500.00	7,214.77	7,272.21	7,039.85	41.30	33.13	84.78	500.04	-617.99	1,628.70	1,560.52	68.18	23.887		
7,600.00	7,238.02	7,357.92	7,055.64	42.22	34.06	83.83	500.22	-702.16	1,633.91	1,563.52	70.38	23.214		
7,700.00	7,246.01	7,445.74	7,060.02	43.32	35.12	83.47	499.86	-787.21	1,635.78	1,562.85	72.93	22.430		
7,800.00	7,245.50	7,543.14	7,058.27	44.65	36.45	83.43	499.10	-887.19	1,635.75	1,559.72	76.04	21.513		
7,900.00	7,244.97	7,643.14	7,056.52	46.21	37.97	83.38	498.35	-987.16	1,635.73	1,556.22	79.51	20.573		
8,000.00	7,244.44	7,743.13	7,054.77	47.99	39.64	83.34	497.60	-1,087.14	1,635.70	1,552.41	83.29	19.639		
8,100.00	7,243.91	7,843.12	7,053.02	49.96	41.43	83.30	496.85	-1,187.11	1,635.67	1,548.34	87.34	18.728		
8,200.00	7,243.39	7,943.11	7,051.27	52.10	43.35	83.25	496.09	-1,287.08	1,635.65	1,544.03	91.62	17.852		
8,300.00	7,242.86	8,043.11	7,049.53	54.38	45.36	83.21	495.34	-1,387.06	1,635.63	1,539.52	96.11	17.019		
8,400.00	7,242.33	8,143.10	7,047.78	56.78	47.45	83.17	494.59	-1,487.03	1,635.60	1,534.84	100.77	16.232		
8,500.00	7,241.80	8,243.09	7,046.03	59.28	49.63	83.13	493.84	-1,587.01	1,635.58	1,530.01	105.58	15.492		
8,600.00	7,241.27	8,343.08	7,044.28	61.88	51.87	83.08	493.08	-1,686.98	1,635.56	1,525.05	110.52	14.799		
8,700.00	7,240.74	8,443.07	7,042.53	64.54	54.16	83.04	492.33	-1,786.96	1,635.54	1,519.97	115.57	14.152		
8,800.00	7,240.21	8,543.07	7,040.78	67.27	56.51	83.00	491.58	-1,886.93	1,635.52	1,514.80	120.73	13.547		
8,900.00	7,239.68	8,643.06	7,039.03	70.06	58.91	82.95	490.83	-1,986.90	1,635.51	1,509.54	125.97	12.983		
9,000.00	7,239.16	8,743.05	7,037.28	72.89	61.34	82.91	490.07	-2,086.88	1,635.49	1,504.20	131.29	12.457		
9,100.00	7,238.63	8,843.04	7,035.53	75.77	63.81	82.87	489.32	-2,186.85	1,635.47	1,498.79	136.68	11.966		
9,200.00	7,238.10	8,943.04	7,033.78	78.69	66.31	82.82	488.57	-2,286.83	1,635.46	1,493.33	142.13	11.507		
9,300.00	7,237.57	9,043.03	7,032.03	81.64	68.84	82.78	487.82	-2,386.80	1,635.44	1,487.82	147.63	11.078		
9,400.00	7,237.04	9,143.02	7,030.28	84.62	71.39	82.74	487.06	-2,486.78	1,635.43	1,482.26	153.17	10.677		
9,500.00	7,236.51	9,243.01	7,028.53	87.63	73.97	82.69	486.31	-2,586.75	1,635.42	1,476.65	158.77	10.301		
9,600.00	7,235.98	9,343.01	7,026.78	90.66	76.56	82.65	485.56	-2,686.72	1,635.41	1,471.02	164.39	9.948		
9,700.00	7,235.45	9,443.00	7,025.03	93.72	79.17	82.61	484.81	-2,786.70	1,635.40	1,465.34	170.05	9.617		
9,800.00	7,234.93	9,542.99	7,023.28	96.79	81.80	82.56	484.05	-2,886.67	1,635.39	1,459.64	175.75	9.305		
9,900.00	7,234.40	9,642.98	7,021.53	99.88	84.45	82.52	483.30	-2,986.65	1,635.38	1,453.91	181.47	9.012		
10,000.00	7,233.87	9,742.98	7,019.79	102.98	87.11	82.48	482.55	-3,086.62	1,635.37	1,448.16	187.21	8.735		
10,100.00	7,233.34	9,842.97	7,018.04	106.10	89.78	82.43	481.80	-3,186.60	1,635.37	1,442.39	192.98	8.474		
10,200.00	7,232.81	9,942.96	7,016.29	109.23	92.46	82.39	481.04	-3,286.57	1,635.36	1,436.59	198.77	8.228		
10,300.00	7,232.28	10,042.95	7,014.54	112.38	95.15	82.35	480.29	-3,386.54	1,635.36	1,430.78	204.57	7.994		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,142.95	7,012.79	115.53	97.85	82.31	479.54	-3,486.52	1,635.35	1,424.96	210.39	7.773		
10,500.00	7,231.23	10,242.94	7,011.04	118.70	100.56	82.26	478.78	-3,586.49	1,635.35	1,419.12	216.23	7.563		
10,600.00	7,230.70	10,342.93	7,009.29	121.87	103.28	82.22	478.03	-3,686.47	1,635.35	1,413.26	222.09	7.364		
10,700.00	7,230.17	10,442.92	7,007.54	125.05	106.01	82.18	477.28	-3,786.44	1,635.35	1,407.39	227.95	7.174		
10,762.76	7,229.84	10,505.68	7,006.44	127.06	107.72	82.15	476.81	-3,849.18	1,635.35	1,403.71	231.64	7.060		
10,800.00	7,229.64	10,542.92	7,005.79	128.25	108.74	82.13	476.53	-3,886.42	1,635.35	1,401.52	233.83	6.994		
10,900.00	7,229.11	10,642.91	7,004.04	131.44	111.48	82.09	475.77	-3,986.39	1,635.35	1,395.63	239.72	6.822		
11,000.00	7,228.58	10,742.90	7,002.29	134.65	114.22	82.05	475.02	-4,086.36	1,635.35	1,389.73	245.61	6.658		
11,100.00	7,228.05	10,842.89	7,000.54	137.86	116.97	82.00	474.27	-4,186.34	1,635.35	1,383.83	251.52	6.502		
11,200.00	7,227.52	10,942.89	6,998.79	141.08	119.72	81.96	473.52	-4,286.31	1,635.35	1,377.92	257.44	6.352		
11,300.00	7,227.00	11,042.88	6,997.04	144.30	122.48	81.92	472.76	-4,386.29	1,635.36	1,372.00	263.36	6.210		
11,400.00	7,226.47	11,142.87	6,995.29	147.52	125.25	81.87	472.01	-4,486.26	1,635.36	1,366.07	269.29	6.073		
11,500.00	7,225.94	11,242.86	6,993.54	150.76	128.02	81.83	471.26	-4,586.24	1,635.37	1,360.14	275.23	5.942		
11,600.00	7,225.41	11,342.85	6,991.79	153.99	130.79	81.79	470.51	-4,686.21	1,635.38	1,354.20	281.17	5.816		
11,700.00	7,224.88	11,442.85	6,990.05	157.23	133.56	81.74	469.75	-4,786.18	1,635.39	1,348.26	287.12	5.696		
11,800.00	7,224.35	11,542.84	6,988.30	160.48	136.34	81.70	469.00	-4,886.16	1,635.40	1,342.32	293.08	5.580		
11,900.00	7,223.82	11,642.83	6,986.55	163.72	139.12	81.66	468.25	-4,986.13	1,635.41	1,336.37	299.04	5.469		
12,000.00	7,223.29	11,742.82	6,984.80	166.98	141.91	81.61	467.50	-5,086.11	1,635.42	1,330.42	305.00	5.362		
12,100.00	7,222.77	11,842.82	6,983.05	170.23	144.70	81.57	466.74	-5,186.08	1,635.43	1,324.46	310.97	5.259		
12,200.00	7,222.24	11,942.81	6,981.30	173.49	147.49	81.53	465.99	-5,286.06	1,635.44	1,318.50	316.94	5.160		
12,300.00	7,221.71	12,042.80	6,979.55	176.75	150.28	81.48	465.24	-5,386.03	1,635.46	1,312.54	322.91	5.065		
12,400.00	7,221.18	12,142.79	6,977.80	180.01	153.08	81.44	464.49	-5,486.00	1,635.47	1,306.58	328.89	4.973		
12,500.00	7,220.65	12,242.79	6,976.05	183.28	155.87	81.40	463.73	-5,585.98	1,635.49	1,300.61	334.87	4.884		
12,600.00	7,220.12	12,342.78	6,974.30	186.54	158.67	81.36	462.98	-5,685.95	1,635.50	1,294.64	340.86	4.798		
12,700.00	7,219.59	12,442.77	6,972.55	189.81	161.48	81.31	462.23	-5,785.93	1,635.52	1,288.68	346.84	4.715		
12,800.00	7,219.06	12,542.76	6,970.80	193.09	164.28	81.27	461.48	-5,885.90	1,635.54	1,282.71	352.83	4.635		
12,900.00	7,218.54	12,642.76	6,969.05	196.36	167.09	81.23	460.72	-5,985.88	1,635.56	1,276.73	358.82	4.558		
13,000.00	7,218.01	12,742.75	6,967.30	199.64	169.89	81.18	459.97	-6,085.85	1,635.58	1,270.76	364.82	4.483		
13,100.00	7,217.48	12,842.74	6,965.55	202.92	172.70	81.14	459.22	-6,185.82	1,635.60	1,264.79	370.81	4.411		
13,200.00	7,216.95	12,942.73	6,963.80	206.20	175.51	81.10	458.47	-6,285.80	1,635.62	1,258.82	376.81	4.341		
13,300.00	7,216.42	13,042.73	6,962.05	209.48	178.33	81.05	457.71	-6,385.77	1,635.64	1,252.84	382.80	4.273		
13,400.00	7,215.89	13,142.72	6,960.31	212.76	181.14	81.01	456.96	-6,485.75	1,635.67	1,246.87	388.80	4.207		
13,500.00	7,215.36	13,242.71	6,958.56	216.05	183.95	80.97	456.21	-6,585.72	1,635.69	1,240.89	394.80	4.143		
13,600.00	7,214.84	13,342.70	6,956.81	219.33	186.77	80.92	455.46	-6,685.70	1,635.72	1,234.92	400.80	4.081		
13,700.00	7,214.31	13,442.70	6,955.06	222.62	189.59	80.88	454.70	-6,785.67	1,635.75	1,228.94	406.80	4.021		
13,800.00	7,213.78	13,542.69	6,953.31	225.91	192.41	80.84	453.95	-6,885.64	1,635.77	1,222.97	412.81	3.963		
13,900.00	7,213.25	13,642.68	6,951.56	229.20	195.23	80.79	453.20	-6,985.62	1,635.80	1,216.99	418.81	3.906		
14,000.00	7,212.72	13,742.67	6,949.81	232.49	198.05	80.75	452.44	-7,085.59	1,635.83	1,211.02	424.81	3.851		
14,100.00	7,212.19	13,842.66	6,948.06	235.79	200.87	80.71	451.69	-7,185.57	1,635.86	1,205.05	430.82	3.797		
14,200.00	7,211.66	13,942.66	6,946.31	239.08	203.69	80.66	450.94	-7,285.54	1,635.89	1,199.07	436.82	3.745		
14,300.00	7,211.13	14,042.65	6,944.56	242.38	206.52	80.62	450.19	-7,385.52	1,635.93	1,193.10	442.83	3.694		
14,400.00	7,210.61	14,142.64	6,942.81	245.67	209.34	80.58	449.43	-7,485.49	1,635.96	1,187.13	448.83	3.645		
14,500.00	7,210.08	14,242.63	6,941.06	248.97	212.17	80.54	448.68	-7,585.46	1,635.99	1,181.16	454.83	3.597		
14,600.00	7,209.55	14,342.63	6,939.31	252.27	214.99	80.49	447.93	-7,685.44	1,636.03	1,175.19	460.84	3.550		
14,700.00	7,209.02	14,442.62	6,937.56	255.57	217.82	80.45	447.18	-7,785.41	1,636.07	1,169.22	466.84	3.505		
14,800.00	7,208.49	14,542.61	6,935.81	258.87	220.65	80.41	446.42	-7,885.39	1,636.10	1,163.25	472.85	3.460		
14,900.00	7,207.96	14,642.60	6,934.06	262.17	223.48	80.36	445.67	-7,985.36	1,636.14	1,157.29	478.85	3.417		
15,000.00	7,207.43	14,742.60	6,932.31	265.47	226.31	80.32	444.92	-8,085.34	1,636.18	1,151.32	484.86	3.375		
15,001.66	7,207.42	14,744.26	6,932.29	265.53	226.35	80.32	444.91	-8,087.00	1,636.18	1,151.22	484.96	3.374		
15,081.89	7,207.00	14,817.75	6,931.00	268.17	228.43	80.29	444.35	-8,160.47	1,636.23	1,146.69	489.53	3.342 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.40	119.86	0.83	119.86					
100.00	100.00	101.00	100.00	3.28	3.28	0.40	119.86	0.83	119.86	113.29	6.57	18.244		
200.00	200.00	201.00	200.00	3.34	3.34	0.40	119.86	0.83	119.86	113.18	6.67	17.957 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	172.46	119.86	0.83	121.59	114.70	6.89	17.657		
400.00	399.84	400.84	399.84	3.59	3.60	172.76	119.86	0.83	126.78	119.58	7.20	17.615		
500.00	499.45	500.47	499.47	3.80	3.81	173.20	119.86	0.83	135.43	127.83	7.60	17.820		
600.00	598.70	604.84	603.82	4.06	4.05	173.56	118.03	0.24	145.79	137.70	8.08	18.033		
700.00	697.49	709.61	708.42	4.38	4.31	173.61	112.57	-1.56	155.98	147.34	8.64	18.050		
800.00	796.13	810.02	808.53	4.74	4.60	173.47	105.13	-4.00	164.85	155.62	9.23	17.862		
900.00	894.78	909.63	907.83	5.15	4.90	173.35	97.70	-6.43	173.69	163.83	9.86	17.615		
1,000.00	993.43	1,009.24	1,007.13	5.58	5.23	173.24	90.27	-8.87	182.52	171.99	10.53	17.333		
1,100.00	1,092.07	1,108.85	1,106.43	6.03	5.58	173.13	82.85	-11.31	191.36	180.12	11.23	17.034		
1,200.00	1,190.72	1,208.46	1,205.74	6.50	5.93	173.04	75.42	-13.74	200.19	188.23	11.96	16.733		
1,300.00	1,289.36	1,308.07	1,305.04	6.98	6.31	172.96	68.00	-16.18	209.03	196.31	12.72	16.437		
1,400.00	1,388.01	1,407.67	1,404.34	7.47	6.69	172.88	60.57	-18.62	217.86	204.37	13.49	16.152		
1,500.00	1,486.65	1,507.28	1,503.64	7.97	7.07	172.81	53.14	-21.05	226.70	212.42	14.28	15.880		
1,600.00	1,585.30	1,606.89	1,602.94	8.48	7.47	172.74	45.72	-23.49	235.53	220.46	15.08	15.623		
1,700.00	1,683.94	1,706.50	1,702.24	9.00	7.87	172.68	38.29	-25.93	244.37	228.48	15.89	15.381		
1,800.00	1,782.59	1,806.11	1,801.54	9.52	8.28	172.62	30.87	-28.36	253.21	236.50	16.71	15.154		
1,900.00	1,881.24	1,905.72	1,900.85	10.05	8.69	172.57	23.44	-30.80	262.05	244.51	17.54	14.941		
2,000.00	1,979.88	2,005.32	2,000.15	10.58	9.10	172.52	16.01	-33.24	270.88	252.51	18.38	14.742		
2,100.00	2,078.53	2,104.93	2,099.45	11.11	9.52	172.47	8.59	-35.67	279.72	260.50	19.22	14.555		
2,200.00	2,177.17	2,204.54	2,198.75	11.64	9.94	172.42	1.16	-38.11	288.56	268.49	20.07	14.380		
2,300.00	2,275.82	2,304.15	2,298.05	12.18	10.37	172.38	-6.26	-40.54	297.40	276.48	20.92	14.217		
2,400.00	2,374.46	2,403.76	2,397.35	12.72	10.79	172.34	-13.69	-42.98	306.24	284.46	21.78	14.063		
2,500.00	2,473.11	2,503.37	2,496.65	13.26	11.22	172.31	-21.12	-45.42	315.07	292.44	22.64	13.918		
2,600.00	2,571.76	2,602.98	2,595.95	13.80	11.65	172.27	-28.54	-47.85	323.91	300.41	23.50	13.783		
2,700.00	2,670.40	2,702.58	2,695.26	14.35	12.08	172.24	-35.97	-50.29	332.75	308.38	24.37	13.655		
2,800.00	2,769.05	2,802.19	2,794.56	14.89	12.51	172.21	-43.39	-52.73	341.59	316.35	25.24	13.534		
2,900.00	2,867.69	2,901.80	2,893.86	15.44	12.94	172.18	-50.82	-55.16	350.43	324.32	26.11	13.421		
3,000.00	2,966.34	3,001.41	2,993.16	15.99	13.38	172.15	-58.25	-57.60	359.27	332.28	26.99	13.313		
3,100.00	3,064.98	3,101.02	3,092.46	16.53	13.81	172.12	-65.67	-60.04	368.11	340.24	27.86	13.212		
3,200.00	3,163.63	3,200.63	3,191.76	17.08	14.25	172.10	-73.10	-62.47	376.95	348.21	28.74	13.116		
3,300.00	3,262.27	3,300.23	3,291.06	17.63	14.68	172.07	-80.53	-64.91	385.78	356.17	29.62	13.025		
3,400.00	3,360.92	3,399.84	3,390.37	18.18	15.12	172.05	-87.95	-67.34	394.62	364.12	30.50	12.938		
3,500.00	3,459.57	3,500.55	3,489.67	18.74	15.57	172.03	-95.38	-69.78	403.46	372.08	31.39	12.854		
3,600.00	3,558.21	3,600.94	3,588.97	19.29	16.01	172.00	-102.80	-72.22	412.30	380.03	32.28	12.774		
3,700.00	3,656.86	3,701.33	3,688.27	19.84	16.45	171.98	-110.23	-74.65	421.14	387.98	33.16	12.699		
3,800.00	3,755.50	3,801.72	3,787.57	20.39	16.90	171.96	-117.66	-77.09	429.98	395.93	34.05	12.627		
3,900.00	3,854.15	3,902.11	3,886.87	20.95	17.34	171.95	-125.08	-79.53	438.82	403.88	34.94	12.558		
4,000.00	3,952.79	4,002.51	3,986.17	21.50	17.78	171.93	-132.51	-81.96	447.66	411.83	35.84	12.492		
4,100.00	4,051.44	4,102.90	4,085.47	22.05	18.23	171.91	-139.93	-84.40	456.50	419.77	36.73	12.429		
4,200.00	4,150.08	4,203.29	4,184.78	22.61	18.68	171.89	-147.36	-86.84	465.34	427.72	37.62	12.369		
4,300.00	4,248.73	4,303.68	4,284.08	23.16	19.12	171.88	-154.79	-89.27	474.18	435.66	38.51	12.312		
4,400.00	4,347.38	4,404.07	4,383.38	23.72	19.57	171.86	-162.21	-91.71	483.02	443.61	39.41	12.256		
4,500.00	4,446.02	4,504.46	4,482.68	24.27	20.01	171.85	-169.64	-94.15	491.86	451.55	40.30	12.204		
4,600.00	4,544.67	4,604.86	4,581.98	24.83	20.46	171.83	-177.06	-96.58	500.70	459.50	41.20	12.153		
4,700.00	4,643.31	4,705.25	4,681.28	25.39	20.91	171.82	-184.49	-99.02	509.54	467.44	42.10	12.104		
4,800.00	4,741.96	4,805.64	4,780.58	25.94	21.36	171.80	-191.92	-101.45	518.38	475.39	42.99	12.057		
4,900.00	4,840.60	4,906.03	4,879.89	26.50	21.80	171.79	-199.34	-103.89	527.22	483.33	43.89	12.012		
5,000.00	4,939.25	5,006.42	4,979.19	27.05	22.25	171.78	-206.77	-106.33	536.06	491.27	44.79	11.969		
5,100.00	5,037.90	5,106.81	5,078.49	27.61	22.70	171.77	-214.19	-108.76	544.90	499.21	45.69	11.927		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,192.80	5,177.79	28.17	23.08	171.75	-221.62	-111.20	553.74	507.22	46.52	11.903		
5,300.00	5,235.19	5,307.60	5,277.09	28.72	23.60	171.74	-229.05	-113.64	562.58	515.09	47.48	11.848		
5,400.00	5,333.83	5,407.99	5,376.39	29.28	24.05	171.73	-236.47	-116.07	571.42	523.03	48.38	11.810		
5,500.00	5,432.48	5,491.62	5,475.69	29.84	24.42	171.72	-243.90	-118.51	580.26	531.05	49.21	11.792		
5,600.00	5,531.12	5,608.77	5,575.00	30.40	24.94	171.71	-251.32	-120.95	589.10	538.91	50.18	11.739		
5,700.00	5,629.77	5,709.16	5,674.30	30.95	25.39	171.70	-258.75	-123.38	597.94	546.85	51.08	11.705		
5,800.00	5,728.41	5,790.45	5,773.60	31.51	25.76	171.69	-266.18	-125.82	606.78	554.88	51.90	11.691		
5,900.00	5,827.06	5,890.05	5,872.90	32.07	26.20	171.68	-273.60	-128.25	615.62	562.82	52.80	11.660		
6,000.00	5,925.71	5,989.66	5,972.20	32.63	26.65	171.67	-281.03	-130.69	624.46	570.76	53.70	11.630		
6,100.00	6,024.35	6,089.27	6,071.50	33.19	27.10	171.66	-288.46	-133.13	633.30	578.70	54.59	11.600		
6,200.00	6,123.00	6,188.88	6,170.80	33.74	27.54	171.65	-295.88	-135.56	642.14	586.65	55.49	11.572		
6,300.00	6,221.64	6,288.49	6,270.10	34.30	27.99	171.65	-303.31	-138.00	650.98	594.59	56.39	11.544		
6,400.00	6,320.29	6,388.10	6,369.41	34.86	28.44	171.64	-310.73	-140.44	659.82	602.53	57.29	11.517		
6,500.00	6,418.93	6,487.71	6,468.71	35.42	28.88	171.63	-318.16	-142.87	668.66	610.47	58.19	11.491		
6,600.00	6,517.58	6,587.31	6,568.01	35.98	29.33	171.62	-325.59	-145.31	677.50	618.41	59.09	11.466		
6,700.00	6,616.23	6,686.96	6,667.27	36.54	29.78	171.48	-333.02	-149.29	686.34	626.35	59.99	11.441		
6,800.00	6,714.51	6,785.42	6,763.92	37.10	30.21	135.27	-340.37	-166.09	695.20	634.29	60.91	11.414		
6,900.00	6,810.42	6,882.51	6,855.56	37.66	30.62	115.08	-347.45	-197.08	703.95	642.12	61.82	11.387		
7,000.00	6,901.58	6,978.39	6,940.40	38.21	31.01	105.47	-354.14	-241.03	712.34	649.60	62.73	11.355		
7,100.00	6,985.76	7,073.20	7,016.89	38.76	31.37	99.88	-360.29	-296.56	720.14	656.46	63.68	11.309		
7,200.00	7,060.88	7,167.09	7,083.70	39.32	31.74	96.20	-365.81	-362.18	727.14	662.41	64.73	11.234		
7,300.00	7,125.09	7,260.23	7,139.76	39.90	32.18	93.65	-370.59	-436.29	733.13	667.18	65.96	11.115		
7,400.00	7,176.81	7,352.74	7,184.18	40.55	32.76	91.86	-374.56	-517.26	737.96	670.51	67.46	10.939		
7,500.00	7,214.77	7,444.79	7,216.30	41.30	33.51	90.65	-377.66	-603.38	741.49	672.19	69.31	10.699		
7,600.00	7,238.02	7,536.51	7,235.66	42.22	34.43	89.94	-379.83	-692.92	743.62	672.10	71.52	10.398		
7,700.00	7,246.01	7,630.24	7,242.00	43.32	35.50	89.69	-381.04	-784.04	744.28	670.20	74.08	10.047		
7,800.00	7,245.50	7,727.93	7,241.61	44.65	36.78	89.70	-381.82	-884.04	744.09	666.91	77.17	9.642		
7,900.00	7,244.97	7,827.93	7,241.22	46.21	38.26	89.71	-382.60	-984.03	743.89	663.25	80.64	9.225		
8,000.00	7,244.44	7,927.93	7,240.82	47.99	39.88	89.72	-383.39	-1,084.03	743.69	659.28	84.41	8.810		
8,100.00	7,243.91	8,027.93	7,240.43	49.96	41.64	89.73	-384.17	-1,184.02	743.49	655.03	88.46	8.405		
8,200.00	7,243.39	8,127.93	7,240.04	52.10	43.52	89.74	-384.95	-1,284.02	743.29	650.55	92.74	8.014		
8,300.00	7,242.86	8,227.93	7,239.64	54.38	45.50	89.75	-385.73	-1,384.02	743.09	645.86	97.23	7.642		
8,400.00	7,242.33	8,327.93	7,239.25	56.78	47.56	89.76	-386.51	-1,484.01	742.89	640.99	101.90	7.290		
8,500.00	7,241.80	8,427.93	7,238.86	59.28	49.71	89.77	-387.30	-1,584.01	742.70	635.97	106.72	6.959		
8,600.00	7,241.27	8,527.93	7,238.46	61.88	51.93	89.78	-388.08	-1,684.00	742.50	630.82	111.68	6.648		
8,700.00	7,240.74	8,627.93	7,238.07	64.54	54.20	89.79	-388.86	-1,784.00	742.30	625.54	116.76	6.358		
8,800.00	7,240.21	8,727.93	7,237.68	67.27	56.53	89.80	-389.64	-1,884.00	742.10	620.16	121.94	6.086		
8,900.00	7,239.68	8,827.93	7,237.28	70.06	58.91	89.82	-390.43	-1,983.99	741.90	614.70	127.21	5.832		
9,000.00	7,239.16	8,927.93	7,236.89	72.89	61.32	89.83	-391.21	-2,083.99	741.70	609.15	132.55	5.595		
9,100.00	7,238.63	9,027.93	7,236.50	75.77	63.78	89.84	-391.99	-2,183.98	741.51	603.53	137.97	5.374		
9,200.00	7,238.10	9,127.93	7,236.10	78.69	66.26	89.85	-392.77	-2,283.98	741.31	597.85	143.46	5.167		
9,300.00	7,237.57	9,227.93	7,235.71	81.64	68.78	89.86	-393.55	-2,383.97	741.11	592.12	148.99	4.974		
9,400.00	7,237.04	9,327.93	7,235.32	84.62	71.32	89.87	-394.34	-2,483.97	740.91	586.33	154.58	4.793		
9,500.00	7,236.51	9,427.93	7,234.92	87.63	73.88	89.88	-395.12	-2,583.97	740.71	580.50	160.21	4.623		
9,600.00	7,235.98	9,527.93	7,234.53	90.66	76.47	89.89	-395.90	-2,683.96	740.52	574.63	165.89	4.464		
9,700.00	7,235.45	9,627.93	7,234.14	93.72	79.07	89.90	-396.68	-2,783.96	740.32	568.72	171.59	4.314		
9,800.00	7,234.93	9,727.93	7,233.74	96.79	81.69	89.91	-397.47	-2,883.95	740.12	562.78	177.33	4.174		
9,900.00	7,234.40	9,827.93	7,233.35	99.88	84.33	89.92	-398.25	-2,983.95	739.92	556.82	183.10	4.041		
10,000.00	7,233.87	9,927.93	7,232.96	102.98	86.98	89.93	-399.03	-3,083.95	739.72	550.82	188.90	3.916		
10,100.00	7,233.34	10,027.93	7,232.57	106.10	89.64	89.94	-399.81	-3,183.94	739.52	544.80	194.72	3.798		
10,200.00	7,232.81	10,127.93	7,232.17	109.23	92.32	89.95	-400.59	-3,283.94	739.33	538.76	200.56	3.686		
10,300.00	7,232.28	10,227.93	7,231.78	112.38	95.00	89.96	-401.38	-3,383.93	739.13	532.70	206.43	3.581		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,327.93	7,231.39	115.53	97.70	89.97	-402.16	-3,483.93	738.93	526.62	212.31	3.480		
10,500.00	7,231.23	10,427.93	7,230.99	118.70	100.40	89.98	-402.94	-3,583.93	738.73	520.52	218.21	3.385		
10,600.00	7,230.70	10,527.93	7,230.60	121.87	103.12	89.99	-403.72	-3,683.92	738.54	514.41	224.13	3.295		
10,700.00	7,230.17	10,627.92	7,230.21	125.05	105.84	90.00	-404.51	-3,783.92	738.34	508.28	230.06	3.209		
10,800.00	7,229.64	10,727.92	7,229.81	128.25	108.57	90.01	-405.29	-3,883.91	738.14	502.14	236.00	3.128		
10,900.00	7,229.11	10,827.92	7,229.42	131.44	111.30	90.02	-406.07	-3,983.91	737.94	495.99	241.95	3.050		
11,000.00	7,228.58	10,927.92	7,229.03	134.65	114.04	90.04	-406.85	-4,083.90	737.74	489.82	247.92	2.976		
11,100.00	7,228.05	11,027.92	7,228.63	137.86	116.78	90.05	-407.63	-4,183.90	737.55	483.65	253.90	2.905		
11,200.00	7,227.52	11,127.92	7,228.24	141.08	119.54	90.06	-408.42	-4,283.90	737.35	477.46	259.89	2.837		
11,300.00	7,227.00	11,227.92	7,227.85	144.30	122.29	90.07	-409.20	-4,383.89	737.15	471.27	265.89	2.772		
11,400.00	7,226.47	11,327.92	7,227.45	147.52	125.05	90.08	-409.98	-4,483.89	736.95	465.06	271.89	2.710		
11,500.00	7,225.94	11,427.92	7,227.06	150.76	127.82	90.09	-410.76	-4,583.88	736.76	458.85	277.91	2.651		
11,600.00	7,225.41	11,527.92	7,226.67	153.99	130.59	90.10	-411.55	-4,683.88	736.56	452.63	283.93	2.594		
11,700.00	7,224.88	11,627.92	7,226.27	157.23	133.36	90.11	-412.33	-4,783.88	736.36	446.40	289.96	2.540		
11,800.00	7,224.35	11,727.92	7,225.88	160.48	136.14	90.12	-413.11	-4,883.87	736.16	440.17	295.99	2.487		
11,900.00	7,223.82	11,827.92	7,225.49	163.72	138.91	90.13	-413.89	-4,983.87	735.96	433.93	302.04	2.437		
12,000.00	7,223.29	11,927.92	7,225.09	166.98	141.70	90.14	-414.67	-5,083.86	735.77	427.68	308.08	2.388		
12,100.00	7,222.77	12,027.92	7,224.70	170.23	144.48	90.15	-415.46	-5,183.86	735.57	421.43	314.14	2.342		
12,200.00	7,222.24	12,127.92	7,224.31	173.49	147.27	90.16	-416.24	-5,283.86	735.37	415.18	320.20	2.297		
12,300.00	7,221.71	12,227.92	7,223.91	176.75	150.06	90.17	-417.02	-5,383.85	735.17	408.91	326.26	2.253		
12,400.00	7,221.18	12,327.92	7,223.52	180.01	152.86	90.18	-417.80	-5,483.85	734.98	402.65	332.33	2.212		
12,500.00	7,220.65	12,427.92	7,223.13	183.28	155.65	90.19	-418.59	-5,583.84	734.78	396.38	338.40	2.171		
12,600.00	7,220.12	12,527.92	7,222.73	186.54	158.45	90.20	-419.37	-5,683.84	734.58	390.10	344.48	2.132		
12,700.00	7,219.59	12,627.92	7,222.34	189.81	161.25	90.21	-420.15	-5,783.83	734.39	383.82	350.56	2.095		
12,800.00	7,219.06	12,727.92	7,221.95	193.09	164.05	90.23	-420.93	-5,883.83	734.19	377.54	356.65	2.059		
12,900.00	7,218.54	12,827.92	7,221.55	196.36	166.86	90.24	-421.71	-5,983.83	733.99	371.26	362.73	2.023		
13,000.00	7,218.01	12,927.92	7,221.16	199.64	169.66	90.25	-422.50	-6,083.82	733.79	364.97	368.83	1.990		
13,100.00	7,217.48	13,027.92	7,220.77	202.92	172.47	90.26	-423.28	-6,183.82	733.60	358.67	374.92	1.957		
13,200.00	7,216.95	13,127.92	7,220.37	206.20	175.28	90.27	-424.06	-6,283.81	733.40	352.38	381.02	1.925		
13,300.00	7,216.42	13,227.92	7,219.98	209.48	178.09	90.28	-424.84	-6,383.81	733.20	346.08	387.12	1.894		
13,400.00	7,215.89	13,327.92	7,219.59	212.76	180.90	90.29	-425.62	-6,483.81	733.00	339.78	393.23	1.864		
13,500.00	7,215.36	13,427.92	7,219.19	216.05	183.72	90.30	-426.41	-6,583.80	732.81	333.47	399.33	1.835		
13,600.00	7,214.84	13,527.92	7,218.80	219.33	186.53	90.31	-427.19	-6,683.80	732.61	327.17	405.44	1.807		
13,700.00	7,214.31	13,627.92	7,218.41	222.62	189.35	90.32	-427.97	-6,783.79	732.41	320.86	411.55	1.780		
13,800.00	7,213.78	13,727.92	7,218.01	225.91	192.16	90.33	-428.75	-6,883.79	732.22	314.55	417.67	1.753		
13,900.00	7,213.25	13,827.92	7,217.62	229.20	194.98	90.34	-429.54	-6,983.79	732.02	308.23	423.79	1.727		
14,000.00	7,212.72	13,927.92	7,217.23	232.49	197.80	90.35	-430.32	-7,083.78	731.82	301.92	429.90	1.702		
14,100.00	7,212.19	14,027.92	7,216.83	235.79	200.62	90.36	-431.10	-7,183.78	731.62	295.60	436.02	1.678		
14,200.00	7,211.66	14,127.91	7,216.44	239.08	203.45	90.37	-431.88	-7,283.77	731.43	289.28	442.15	1.654		
14,300.00	7,211.13	14,227.91	7,216.05	242.38	206.27	90.39	-432.66	-7,383.77	731.23	282.96	448.27	1.631		
14,400.00	7,210.61	14,327.91	7,215.65	245.67	209.09	90.40	-433.45	-7,483.76	731.03	276.64	454.40	1.609		
14,500.00	7,210.08	14,427.91	7,215.26	248.97	211.92	90.41	-434.23	-7,583.76	730.84	270.31	460.53	1.587		
14,600.00	7,209.55	14,527.91	7,214.87	252.27	214.74	90.42	-435.01	-7,683.76	730.64	263.98	466.66	1.566		
14,700.00	7,209.02	14,627.91	7,214.47	255.57	217.57	90.43	-435.79	-7,783.75	730.44	257.66	472.79	1.545		
14,800.00	7,208.49	14,727.91	7,214.08	258.87	220.40	90.44	-436.58	-7,883.75	730.25	251.33	478.92	1.525		
14,900.00	7,207.96	14,827.91	7,213.69	262.17	223.23	90.45	-437.36	-7,983.74	730.05	245.00	485.05	1.505		
15,000.00	7,207.43	14,927.91	7,213.29	265.47	226.06	90.46	-438.14	-8,083.74	729.85	238.66	491.19	1.486 Level 3		
15,081.89	7,207.00	15,009.80	7,212.97	268.17	228.37	90.47	-438.78	-8,165.63	729.69	233.48	496.21	1.471 Level 3, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	0.00	0.00	3.28	3.28	0.00	20.04	0.00	20.04					
100.00	100.00	100.00	100.00	3.28	3.28	0.00	20.04	0.00	20.04	13.47	6.57	3.050		
200.00	200.00	200.00	200.00	3.34	3.34	0.00	20.04	0.00	20.04	13.36	6.67	3.002 CC		
300.00	299.98	299.98	299.98	3.44	3.44	172.60	20.04	0.00	21.77	14.88	6.88	3.161		
400.00	399.84	400.74	400.72	3.59	3.60	173.49	18.29	-0.30	25.23	18.03	7.20	3.506		
500.00	499.45	501.62	501.45	3.80	3.79	173.94	13.05	-1.21	28.68	21.07	7.61	3.770		
600.00	598.70	602.62	602.06	4.06	4.03	174.09	4.30	-2.73	32.11	24.00	8.11	3.960		
700.00	697.49	703.75	702.41	4.38	4.30	174.00	-7.95	-4.86	35.38	26.69	8.69	4.073		
800.00	796.13	803.76	801.41	4.74	4.60	173.69	-21.89	-7.28	37.70	28.42	9.28	4.064		
900.00	894.78	903.73	900.38	5.15	4.93	173.41	-35.82	-9.70	40.03	30.11	9.92	4.036		
1,000.00	993.43	1,003.70	999.35	5.58	5.28	173.17	-49.76	-12.12	42.35	31.75	10.60	3.995		
1,100.00	1,092.07	1,103.67	1,098.32	6.03	5.66	172.95	-63.70	-14.54	44.68	33.36	11.32	3.948		
1,200.00	1,190.72	1,203.65	1,197.28	6.50	6.04	172.75	-77.63	-16.96	47.00	34.94	12.06	3.898		
1,300.00	1,289.36	1,303.62	1,296.25	6.98	6.44	172.57	-91.57	-19.38	49.33	36.50	12.83	3.846		
1,400.00	1,388.01	1,403.59	1,395.22	7.47	6.85	172.41	-105.50	-21.80	51.65	38.04	13.61	3.795		
1,500.00	1,486.65	1,503.57	1,494.19	7.97	7.26	172.26	-119.44	-24.21	53.98	39.57	14.41	3.745		
1,600.00	1,585.30	1,603.54	1,593.15	8.48	7.69	172.12	-133.37	-26.63	56.31	41.08	15.23	3.698		
1,700.00	1,683.94	1,703.51	1,692.12	9.00	8.11	172.00	-147.31	-29.05	58.64	42.58	16.05	3.652		
1,800.00	1,782.59	1,803.48	1,791.09	9.52	8.55	171.88	-161.25	-31.47	60.96	44.07	16.89	3.609		
1,900.00	1,881.24	1,903.46	1,890.05	10.05	8.98	171.77	-175.18	-33.89	63.29	45.56	17.74	3.569		
2,000.00	1,979.88	2,003.43	1,989.02	10.58	9.43	171.67	-189.12	-36.31	65.62	47.03	18.59	3.530		
2,100.00	2,078.53	2,103.40	2,087.99	11.11	9.87	171.58	-203.05	-38.73	67.95	48.50	19.45	3.494		
2,200.00	2,177.17	2,203.38	2,186.96	11.64	10.32	171.49	-216.99	-41.15	70.28	49.97	20.31	3.460		
2,300.00	2,275.82	2,303.35	2,285.92	12.18	10.77	171.41	-230.93	-43.57	72.61	51.43	21.18	3.428		
2,400.00	2,374.46	2,403.32	2,384.89	12.72	11.22	171.34	-244.86	-45.99	74.94	52.88	22.05	3.398		
2,500.00	2,473.11	2,503.29	2,483.86	13.26	11.67	171.26	-258.80	-48.41	77.26	54.34	22.93	3.370		
2,600.00	2,571.76	2,603.27	2,582.82	13.80	12.13	171.20	-272.73	-50.83	79.59	55.79	23.81	3.343		
2,700.00	2,670.40	2,703.24	2,681.79	14.35	12.58	171.13	-286.67	-53.25	81.92	57.23	24.69	3.318		
2,800.00	2,769.05	2,803.21	2,780.76	14.89	13.04	171.07	-300.61	-55.67	84.25	58.67	25.58	3.294		
2,900.00	2,867.69	2,903.19	2,879.73	15.44	13.50	171.02	-314.54	-58.09	86.58	60.12	26.47	3.271		
3,000.00	2,966.34	3,003.16	2,978.69	15.99	13.96	170.96	-328.48	-60.51	88.91	61.56	27.36	3.250		
3,100.00	3,064.98	3,103.13	3,077.66	16.53	14.42	170.91	-342.41	-62.93	91.24	62.99	28.25	3.230		
3,200.00	3,163.63	3,203.10	3,176.63	17.08	14.88	170.86	-356.35	-65.34	93.57	64.43	29.14	3.211		
3,300.00	3,262.27	3,303.08	3,275.59	17.63	15.34	170.82	-370.28	-67.76	95.90	65.86	30.04	3.193		
3,400.00	3,360.92	3,403.05	3,374.56	18.18	15.81	170.77	-384.22	-70.18	98.23	67.29	30.94	3.175		
3,500.00	3,459.57	3,503.02	3,473.53	18.74	16.27	170.73	-398.16	-72.60	100.56	68.73	31.83	3.159		
3,600.00	3,558.21	3,603.00	3,572.50	19.29	16.74	170.69	-412.09	-75.02	102.89	70.15	32.74	3.143		
3,700.00	3,656.86	3,702.97	3,671.46	19.84	17.20	170.65	-426.03	-77.44	105.22	71.58	33.64	3.128		
3,800.00	3,755.50	3,802.94	3,770.43	20.39	17.67	170.62	-439.96	-79.86	107.55	73.01	34.54	3.114		
3,900.00	3,854.15	3,902.91	3,869.40	20.95	18.13	170.58	-453.90	-82.28	109.88	74.44	35.44	3.100		
4,000.00	3,952.79	4,002.89	3,968.36	21.50	18.60	170.55	-467.84	-84.70	112.21	75.86	36.35	3.087		
4,100.00	4,051.44	4,102.86	4,067.33	22.05	19.07	170.51	-481.77	-87.12	114.54	77.29	37.25	3.075		
4,200.00	4,150.08	4,202.83	4,166.30	22.61	19.53	170.48	-495.71	-89.54	116.87	78.71	38.16	3.063		
4,300.00	4,248.73	4,302.80	4,265.27	23.16	20.00	170.45	-509.64	-91.96	119.20	80.14	39.06	3.051		
4,400.00	4,347.38	4,402.78	4,364.23	23.72	20.47	170.42	-523.58	-94.38	121.53	81.56	39.97	3.040		
4,500.00	4,446.02	4,502.75	4,463.20	24.27	20.94	170.40	-537.52	-96.80	123.86	82.98	40.88	3.030		
4,600.00	4,544.67	4,602.72	4,562.17	24.83	21.41	170.37	-551.45	-99.22	126.19	84.40	41.79	3.020		
4,700.00	4,643.31	4,702.70	4,661.14	25.39	21.87	170.34	-565.39	-101.64	128.52	85.83	42.70	3.010		
4,800.00	4,741.96	4,802.67	4,760.10	25.94	22.34	170.32	-579.32	-104.06	130.85	87.25	43.61	3.001		
4,900.00	4,840.60	4,902.64	4,859.07	26.50	22.81	170.30	-593.26	-106.47	133.18	88.67	44.52	2.992		
5,000.00	4,939.25	5,002.61	4,958.04	27.05	23.28	170.27	-607.19	-108.89	135.51	90.09	45.43	2.983		
5,100.00	5,037.90	5,102.59	5,057.00	27.61	23.75	170.25	-621.13	-111.31	137.84	91.51	46.34	2.975		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	5,136.54	5,202.56	5,155.97	28.17	24.22	170.23	-635.07	-113.73	140.17	92.92	47.25	2.967		
5,300.00	5,235.19	5,302.53	5,254.94	28.72	24.69	170.21	-649.00	-116.15	142.50	94.34	48.16	2.959		
5,400.00	5,333.83	5,402.51	5,353.91	29.28	25.16	170.19	-662.94	-118.57	144.83	95.76	49.07	2.951		
5,500.00	5,432.48	5,502.48	5,452.87	29.84	25.63	170.17	-676.87	-120.99	147.17	97.18	49.99	2.944		
5,600.00	5,531.12	5,602.45	5,551.84	30.40	26.10	170.15	-690.81	-123.41	149.50	98.60	50.90	2.937		
5,700.00	5,629.77	5,702.42	5,650.81	30.95	26.57	170.13	-704.75	-125.83	151.83	100.01	51.81	2.930		
5,800.00	5,728.41	5,802.40	5,749.77	31.51	27.05	170.11	-718.68	-128.25	154.16	101.43	52.73	2.924		
5,900.00	5,827.06	5,902.37	5,848.74	32.07	27.52	170.10	-732.62	-130.67	156.49	102.85	53.64	2.917		
6,000.00	5,925.71	6,002.34	5,947.71	32.63	27.99	170.08	-746.55	-133.09	158.82	104.26	54.55	2.911		
6,100.00	6,024.35	6,102.32	6,046.68	33.19	28.46	170.06	-760.49	-135.51	161.15	105.68	55.47	2.905		
6,200.00	6,123.00	6,202.29	6,145.64	33.74	28.93	170.05	-774.43	-137.93	163.48	107.10	56.38	2.899		
6,300.00	6,221.64	6,302.26	6,244.61	34.30	29.40	170.03	-788.36	-140.35	165.81	108.51	57.30	2.894		
6,400.00	6,320.29	6,402.23	6,343.58	34.86	29.87	170.02	-802.30	-142.77	168.14	109.93	58.21	2.888		
6,500.00	6,418.93	6,502.21	6,442.54	35.42	30.35	170.00	-816.23	-145.19	170.47	111.34	59.13	2.883		
6,600.00	6,517.58	6,600.89	6,539.77	35.98	30.81	167.86	-829.98	-153.99	173.10	112.96	60.14	2.878		
6,700.00	6,616.23	6,695.33	6,630.49	36.54	31.23	161.34	-842.93	-176.48	178.12	116.73	61.39	2.901		
6,800.00	6,714.51	6,783.94	6,711.73	37.10	31.61	117.77	-854.64	-209.68	188.27	125.78	62.49	3.013		
6,900.00	6,810.42	6,869.37	6,784.99	37.66	31.95	91.49	-865.31	-252.17	201.62	138.86	62.77	3.212		
7,000.00	6,901.58	6,952.23	6,850.04	38.21	32.26	77.10	-874.89	-302.49	216.50	154.43	62.07	3.488		
7,100.00	6,985.76	7,033.00	6,906.70	38.76	32.54	67.86	-883.35	-359.36	231.52	170.98	60.53	3.825		
7,200.00	7,060.88	7,112.10	6,954.84	39.32	32.82	61.48	-890.66	-421.63	245.63	187.20	58.43	4.204		
7,300.00	7,125.09	7,189.87	6,994.34	39.90	33.13	56.96	-896.79	-488.28	258.05	201.96	56.09	4.600		
7,400.00	7,176.81	7,266.62	7,025.16	40.55	33.54	53.79	-901.73	-558.35	268.22	214.34	53.88	4.978		
7,500.00	7,214.77	7,342.64	7,047.23	41.30	34.09	51.68	-905.46	-630.95	275.73	223.61	52.12	5.290		
7,600.00	7,238.02	7,418.18	7,060.52	42.22	34.79	50.46	-907.98	-705.23	280.32	229.17	51.15	5.480		
7,700.00	7,246.01	7,493.48	7,065.00	43.32	35.60	50.04	-909.26	-780.33	281.84	230.63	51.21	5.504		
7,800.00	7,245.50	7,607.58	7,064.62	44.65	37.05	50.03	-910.06	-879.27	281.59	227.79	53.80	5.234		
7,900.00	7,244.97	7,707.58	7,064.23	46.21	38.52	50.02	-910.87	-979.27	281.33	224.71	56.62	4.969		
8,000.00	7,244.44	7,807.58	7,063.83	47.99	40.14	50.02	-911.69	-1,079.26	281.07	221.36	59.71	4.707		
8,100.00	7,243.91	7,892.42	7,063.44	49.96	41.62	50.01	-912.50	-1,179.26	280.81	218.01	62.80	4.471		
8,200.00	7,243.39	8,007.58	7,063.05	52.10	43.77	50.00	-913.31	-1,279.25	280.55	214.00	66.54	4.216		
8,300.00	7,242.86	8,107.58	7,062.65	54.38	45.74	49.99	-914.12	-1,379.25	280.28	210.06	70.22	3.991		
8,400.00	7,242.33	8,207.58	7,062.26	56.78	47.81	49.98	-914.93	-1,479.25	280.02	205.98	74.05	3.782		
8,500.00	7,241.80	8,307.58	7,061.87	59.28	49.96	49.97	-915.74	-1,579.24	279.76	201.77	77.99	3.587		
8,600.00	7,241.27	8,407.58	7,061.48	61.88	52.17	49.96	-916.56	-1,679.24	279.50	197.47	82.03	3.407		
8,700.00	7,240.74	8,507.58	7,061.08	64.54	54.45	49.95	-917.37	-1,779.23	279.24	193.07	86.16	3.241		
8,800.00	7,240.21	8,607.58	7,060.69	67.27	56.78	49.95	-918.18	-1,879.23	278.98	188.60	90.37	3.087		
8,900.00	7,239.68	8,707.58	7,060.30	70.06	59.15	49.94	-918.99	-1,979.22	278.72	184.07	94.65	2.945		
9,000.00	7,239.16	8,807.58	7,059.90	72.89	61.57	49.93	-919.80	-2,079.22	278.46	179.48	98.98	2.813		
9,100.00	7,238.63	8,907.58	7,059.51	75.77	64.02	49.92	-920.61	-2,179.22	278.19	174.84	103.36	2.692		
9,200.00	7,238.10	9,007.59	7,059.12	78.69	66.51	49.91	-921.43	-2,279.21	277.93	170.15	107.78	2.579		
9,300.00	7,237.57	9,107.59	7,058.72	81.64	69.02	49.90	-922.24	-2,379.21	277.67	165.43	112.24	2.474		
9,400.00	7,237.04	9,207.59	7,058.33	84.62	71.56	49.89	-923.05	-2,479.20	277.41	160.67	116.74	2.376		
9,500.00	7,236.51	9,292.41	7,057.94	87.63	73.73	49.88	-923.86	-2,579.20	277.15	156.20	120.95	2.292		
9,600.00	7,235.98	9,407.59	7,057.54	90.66	76.71	49.88	-924.67	-2,679.19	276.89	151.07	125.81	2.201		
9,700.00	7,235.45	9,507.59	7,057.15	93.72	79.31	49.87	-925.48	-2,779.19	276.63	146.24	130.39	2.122		
9,800.00	7,234.93	9,607.59	7,056.76	96.79	81.93	49.86	-926.30	-2,879.18	276.37	141.38	134.98	2.047		
9,900.00	7,234.40	9,707.59	7,056.36	99.88	84.57	49.85	-927.11	-2,979.18	276.10	136.50	139.60	1.978		
10,000.00	7,233.87	9,792.41	7,055.97	102.98	86.81	49.84	-927.92	-3,079.18	275.84	131.94	143.91	1.917		
10,100.00	7,233.34	9,907.59	7,055.58	106.10	89.88	49.83	-928.73	-3,179.17	275.58	126.70	148.88	1.851		
10,200.00	7,232.81	10,007.59	7,055.18	109.23	92.55	49.82	-929.54	-3,279.17	275.32	121.78	153.54	1.793		
10,300.00	7,232.28	10,107.59	7,054.79	112.38	95.24	49.81	-930.36	-3,379.16	275.06	116.85	158.21	1.739		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,231.75	10,207.59	7,054.40	115.53	97.93	49.80	-931.17	-3,479.16	274.80	111.90	162.90	1.687	
10,500.00	7,231.23	10,307.59	7,054.00	118.70	100.64	49.80	-931.98	-3,579.15	274.54	106.95	167.59	1.638	
10,600.00	7,230.70	10,407.59	7,053.61	121.87	103.35	49.79	-932.79	-3,679.15	274.28	101.98	172.29	1.592	
10,700.00	7,230.17	10,507.59	7,053.22	125.05	106.07	49.78	-933.60	-3,779.14	274.01	97.01	177.01	1.548	
10,800.00	7,229.64	10,607.59	7,052.83	128.25	108.80	49.77	-934.41	-3,879.14	273.75	92.03	181.73	1.506	
10,900.00	7,229.11	10,707.59	7,052.43	131.44	111.53	49.76	-935.23	-3,979.14	273.49	87.04	186.45	1.467	Level 3
11,000.00	7,228.58	10,807.59	7,052.04	134.65	114.27	49.75	-936.04	-4,079.13	273.23	82.05	191.19	1.429	Level 3
11,100.00	7,228.05	10,907.59	7,051.65	137.86	117.01	49.74	-936.85	-4,179.13	272.97	77.05	195.92	1.393	Level 3
11,200.00	7,227.52	11,007.59	7,051.25	141.08	119.76	49.73	-937.66	-4,279.12	272.71	72.04	200.67	1.359	Level 3
11,300.00	7,227.00	11,107.59	7,050.86	144.30	122.52	49.72	-938.47	-4,379.12	272.45	67.03	205.42	1.326	Level 3
11,400.00	7,226.47	11,207.59	7,050.47	147.52	125.28	49.71	-939.28	-4,479.11	272.19	62.02	210.17	1.295	Level 3
11,500.00	7,225.94	11,307.59	7,050.07	150.76	128.04	49.70	-940.10	-4,579.11	271.93	57.00	214.93	1.265	Level 3
11,600.00	7,225.41	11,407.59	7,049.68	153.99	130.81	49.69	-940.91	-4,679.10	271.66	51.97	219.69	1.237	Level 2
11,700.00	7,224.88	11,507.59	7,049.29	157.23	133.58	49.69	-941.72	-4,779.10	271.40	46.95	224.46	1.209	Level 2
11,800.00	7,224.35	11,592.41	7,048.89	160.48	135.94	49.68	-942.53	-4,879.10	271.14	42.26	228.89	1.185	Level 2
11,900.00	7,223.82	11,692.41	7,048.50	163.72	138.72	49.67	-943.34	-4,979.09	270.88	37.23	233.66	1.159	Level 2
12,000.00	7,223.29	11,807.60	7,048.11	166.98	141.92	49.66	-944.15	-5,079.09	270.62	31.85	238.77	1.133	Level 2
12,100.00	7,222.77	11,907.60	7,047.71	170.23	144.71	49.65	-944.97	-5,179.08	270.36	26.82	243.54	1.110	Level 2
12,200.00	7,222.24	12,007.60	7,047.32	173.49	147.49	49.64	-945.78	-5,279.08	270.10	21.78	248.32	1.088	Level 2
12,300.00	7,221.71	12,092.40	7,046.93	176.75	149.86	49.63	-946.59	-5,379.07	269.84	17.08	252.76	1.068	Level 2
12,400.00	7,221.18	12,207.60	7,046.53	180.01	153.08	49.62	-947.40	-5,479.07	269.58	11.69	257.88	1.045	Level 2
12,500.00	7,220.65	12,307.60	7,046.14	183.28	155.87	49.61	-948.21	-5,579.06	269.32	6.65	262.67	1.025	Level 2
12,600.00	7,220.12	12,407.60	7,045.75	186.54	158.67	49.60	-949.02	-5,679.06	269.05	1.60	267.45	1.006	Level 2
12,700.00	7,219.59	12,507.60	7,045.36	189.81	161.47	49.59	-949.84	-5,779.06	268.79	-3.44	272.24	0.987	Level 1
12,800.00	7,219.06	12,607.60	7,044.96	193.09	164.27	49.58	-950.65	-5,879.05	268.53	-8.49	277.02	0.969	Level 1
12,900.00	7,218.54	12,707.60	7,044.57	196.36	167.08	49.57	-951.46	-5,979.05	268.27	-13.54	281.81	0.952	Level 1
13,000.00	7,218.01	12,807.60	7,044.18	199.64	169.88	49.56	-952.27	-6,079.04	268.01	-18.59	286.60	0.935	Level 1
13,100.00	7,217.48	12,907.60	7,043.78	202.92	172.69	49.55	-953.08	-6,179.04	267.75	-23.64	291.39	0.919	Level 1
13,200.00	7,216.95	13,007.60	7,043.39	206.20	175.50	49.55	-953.90	-6,279.03	267.49	-28.69	296.18	0.903	Level 1
13,300.00	7,216.42	13,107.60	7,043.00	209.48	178.31	49.54	-954.71	-6,379.03	267.23	-33.75	300.97	0.888	Level 1
13,400.00	7,215.89	13,207.60	7,042.60	212.76	181.12	49.53	-955.52	-6,479.03	266.97	-38.80	305.77	0.873	Level 1
13,500.00	7,215.36	13,307.60	7,042.21	216.05	183.93	49.52	-956.33	-6,579.02	266.71	-43.85	310.56	0.859	Level 1
13,600.00	7,214.84	13,407.60	7,041.82	219.33	186.75	49.51	-957.14	-6,679.02	266.44	-48.91	315.35	0.845	Level 1
13,700.00	7,214.31	13,492.40	7,041.42	222.62	189.14	49.50	-957.95	-6,779.01	266.18	-53.62	319.80	0.832	Level 1
13,800.00	7,213.78	13,607.60	7,041.03	225.91	192.38	49.49	-958.77	-6,879.01	265.92	-59.02	324.94	0.818	Level 1
13,900.00	7,213.25	13,692.40	7,040.64	229.20	194.77	49.48	-959.58	-6,979.00	265.66	-63.73	329.39	0.807	Level 1
14,000.00	7,212.72	13,807.60	7,040.24	232.49	198.02	49.47	-960.39	-7,079.00	265.40	-69.12	334.52	0.793	Level 1
14,100.00	7,212.19	13,907.60	7,039.85	235.79	200.84	49.46	-961.20	-7,178.99	265.14	-74.18	339.32	0.781	Level 1
14,200.00	7,211.66	14,007.60	7,039.46	239.08	203.66	49.45	-962.01	-7,278.99	264.88	-79.23	344.11	0.770	Level 1
14,300.00	7,211.13	14,107.60	7,039.06	242.38	206.48	49.44	-962.82	-7,378.99	264.62	-84.29	348.91	0.758	Level 1
14,400.00	7,210.61	14,207.60	7,038.67	245.67	209.31	49.43	-963.64	-7,478.98	264.36	-89.34	353.70	0.747	Level 1
14,500.00	7,210.08	14,307.60	7,038.28	248.97	212.13	49.42	-964.45	-7,578.98	264.10	-94.40	358.49	0.737	Level 1
14,600.00	7,209.55	14,407.60	7,037.89	252.27	214.96	49.41	-965.26	-7,678.97	263.84	-99.45	363.28	0.726	Level 1
14,700.00	7,209.02	14,507.60	7,037.49	255.57	217.79	49.40	-966.07	-7,778.97	263.57	-104.50	368.08	0.716	Level 1
14,800.00	7,208.49	14,607.61	7,037.10	258.87	220.61	49.39	-966.88	-7,878.96	263.31	-109.56	372.87	0.706	Level 1
14,900.00	7,207.96	14,707.61	7,036.71	262.17	223.44	49.38	-967.69	-7,978.96	263.05	-114.61	377.66	0.697	Level 1
15,000.00	7,207.43	14,792.39	7,036.31	265.47	225.84	49.37	-968.51	-8,078.95	262.79	-119.32	382.11	0.688	Level 1
15,081.89	7,207.00	14,874.28	7,035.99	268.17	228.16	49.36	-969.17	-8,160.84	262.58	-123.46	386.03	0.680	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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	100.19	0.83	100.19					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	100.19	0.83	100.19	93.62	6.57	15.251		
200.00	200.00	201.00	200.00	3.34	3.34	0.48	100.19	0.83	100.19	93.52	6.67	15.010 CC		
300.00	299.98	300.98	299.98	3.44	3.45	172.56	100.19	0.83	101.92	95.04	6.89	14.801		
400.00	399.84	400.84	399.84	3.59	3.60	172.91	100.19	0.83	107.11	99.92	7.20	14.883		
500.00	499.45	500.45	499.45	3.80	3.81	173.42	100.19	0.83	115.77	108.17	7.60	15.233		
600.00	598.70	600.60	599.60	4.06	4.05	174.02	100.12	0.82	127.81	119.73	8.08	15.819		
700.00	697.49	704.54	703.50	4.38	4.30	174.49	97.55	0.22	140.78	132.16	8.62	16.327		
800.00	796.13	809.26	808.01	4.74	4.60	174.66	91.26	-1.25	151.10	141.87	9.23	16.372		
900.00	894.78	913.74	911.99	5.15	4.92	174.57	81.32	-3.57	157.86	147.98	9.89	15.963		
1,000.00	993.43	1,013.59	1,011.22	5.58	5.24	174.41	70.54	-6.09	163.34	152.78	10.56	15.470		
1,100.00	1,092.07	1,113.44	1,110.45	6.03	5.59	174.25	59.76	-8.61	168.82	157.56	11.26	14.993		
1,200.00	1,190.72	1,213.28	1,209.69	6.50	5.95	174.11	48.98	-11.13	174.30	162.31	11.99	14.536		
1,300.00	1,289.36	1,313.13	1,308.92	6.98	6.33	173.97	38.20	-13.65	179.79	167.04	12.75	14.106		
1,400.00	1,388.01	1,412.98	1,408.15	7.47	6.71	173.84	27.42	-16.17	185.27	171.75	13.52	13.704		
1,500.00	1,486.65	1,512.83	1,507.39	7.97	7.11	173.72	16.64	-18.69	190.75	176.44	14.31	13.331		
1,600.00	1,585.30	1,612.68	1,606.62	8.48	7.51	173.61	5.86	-21.21	196.24	181.12	15.11	12.985		
1,700.00	1,683.94	1,712.53	1,705.85	9.00	7.92	173.50	-4.91	-23.73	201.72	185.79	15.93	12.664		
1,800.00	1,782.59	1,812.38	1,805.09	9.52	8.34	173.40	-15.69	-26.24	207.21	190.45	16.75	12.368		
1,900.00	1,881.24	1,912.23	1,904.32	10.05	8.76	173.30	-26.47	-28.76	212.69	195.11	17.59	12.093		
2,000.00	1,979.88	2,012.07	2,003.55	10.58	9.18	173.21	-37.25	-31.28	218.18	199.75	18.43	11.839		
2,100.00	2,078.53	2,111.92	2,102.79	11.11	9.61	173.12	-48.03	-33.80	223.67	204.39	19.28	11.603		
2,200.00	2,177.17	2,211.77	2,202.02	11.64	10.04	173.04	-58.81	-36.32	229.16	209.03	20.13	11.383		
2,300.00	2,275.82	2,311.62	2,301.25	12.18	10.47	172.96	-69.59	-38.84	234.65	213.66	20.99	11.179		
2,400.00	2,374.46	2,411.47	2,400.49	12.72	10.91	172.88	-80.37	-41.36	240.14	218.28	21.85	10.989		
2,500.00	2,473.11	2,511.32	2,499.72	13.26	11.34	172.81	-91.15	-43.88	245.62	222.91	22.72	10.811		
2,600.00	2,571.76	2,611.17	2,598.95	13.80	11.78	172.74	-101.93	-46.40	251.11	227.52	23.59	10.645		
2,700.00	2,670.40	2,711.02	2,696.19	14.35	12.22	172.67	-112.71	-48.91	256.60	232.14	24.46	10.490		
2,800.00	2,769.05	2,810.86	2,797.42	14.89	12.67	172.61	-123.49	-51.43	262.09	236.76	25.34	10.343		
2,900.00	2,867.69	2,910.71	2,896.65	15.44	13.11	172.55	-134.27	-53.95	267.59	241.37	26.22	10.206		
3,000.00	2,966.34	3,010.56	2,995.89	15.99	13.55	172.49	-145.05	-56.47	273.08	245.98	27.10	10.077		
3,100.00	3,064.98	3,110.41	3,095.12	16.53	14.00	172.44	-155.83	-58.99	278.57	250.59	27.98	9.955		
3,200.00	3,163.63	3,210.26	3,194.35	17.08	14.45	172.38	-166.61	-61.51	284.06	255.19	28.87	9.840		
3,300.00	3,262.27	3,310.11	3,293.59	17.63	14.90	172.33	-177.38	-64.03	289.55	259.80	29.75	9.732		
3,400.00	3,360.92	3,409.96	3,392.82	18.18	15.34	172.28	-188.16	-66.55	295.04	264.40	30.64	9.629		
3,500.00	3,459.57	3,509.81	3,492.05	18.74	15.79	172.23	-198.94	-69.07	300.54	269.00	31.53	9.531		
3,600.00	3,558.21	3,609.65	3,591.29	19.29	16.24	172.19	-209.72	-71.58	306.03	273.61	32.42	9.439		
3,700.00	3,656.86	3,709.50	3,690.52	19.84	16.69	172.14	-220.50	-74.10	311.52	278.21	33.31	9.351		
3,800.00	3,755.50	3,809.35	3,789.75	20.39	17.15	172.10	-231.28	-76.62	317.01	282.81	34.21	9.267		
3,900.00	3,854.15	3,909.20	3,888.98	20.95	17.60	172.06	-242.06	-79.14	322.51	287.41	35.10	9.188		
4,000.00	3,952.79	4,009.05	3,988.22	21.50	18.05	172.02	-252.84	-81.66	328.00	292.00	36.00	9.112		
4,100.00	4,051.44	4,108.90	4,087.45	22.05	18.50	171.98	-263.62	-84.18	333.49	296.60	36.89	9.040		
4,200.00	4,150.08	4,208.75	4,186.68	22.61	18.96	171.94	-274.40	-86.70	338.99	301.20	37.79	8.970		
4,300.00	4,248.73	4,308.60	4,285.92	23.16	19.41	171.90	-285.18	-89.22	344.48	305.79	38.69	8.904		
4,400.00	4,347.38	4,408.44	4,385.15	23.72	19.86	171.87	-295.96	-91.74	349.97	310.39	39.59	8.841		
4,500.00	4,446.02	4,508.29	4,484.38	24.27	20.32	171.83	-306.74	-94.25	355.47	314.98	40.48	8.780		
4,600.00	4,544.67	4,608.14	4,583.62	24.83	20.77	171.80	-317.52	-96.77	360.96	319.58	41.38	8.722		
4,700.00	4,643.31	4,707.99	4,682.85	25.39	21.23	171.77	-328.30	-99.29	366.46	324.17	42.28	8.666		
4,800.00	4,741.96	4,807.84	4,782.08	25.94	21.68	171.74	-339.08	-101.81	371.95	328.77	43.19	8.613		
4,900.00	4,840.60	4,907.69	4,881.32	26.50	22.14	171.71	-349.85	-104.33	377.45	333.36	44.09	8.561		
5,000.00	4,939.25	5,007.54	4,980.55	27.05	22.60	171.68	-360.63	-106.85	382.94	337.95	44.99	8.512		
5,100.00	5,037.90	5,107.39	5,079.78	27.61	23.05	171.65	-371.41	-109.37	388.43	342.54	45.89	8.464		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Separation (ft)	Factor		
5,200.00	5,136.54	5,207.23	5,179.02	28.17	23.51	171.62	-382.19	-111.89	393.93	347.14	46.79	8.418		
5,300.00	5,235.19	5,307.08	5,278.25	28.72	23.96	171.59	-392.97	-114.40	399.42	351.73	47.70	8.374		
5,400.00	5,333.83	5,406.93	5,377.48	29.28	24.42	171.57	-403.75	-116.92	404.92	356.32	48.60	8.332		
5,500.00	5,432.48	5,506.78	5,476.72	29.84	24.88	171.54	-414.53	-119.44	410.41	360.91	49.50	8.290		
5,600.00	5,531.12	5,606.63	5,575.95	30.40	25.33	171.52	-425.31	-121.96	415.91	365.50	50.41	8.251		
5,700.00	5,629.77	5,706.48	5,675.18	30.95	25.79	171.49	-436.09	-124.48	421.40	370.09	51.31	8.212		
5,800.00	5,728.41	5,806.33	5,774.42	31.51	26.25	171.47	-446.87	-127.00	426.90	374.68	52.22	8.175		
5,900.00	5,827.06	5,906.18	5,873.65	32.07	26.71	171.44	-457.65	-129.52	432.39	379.27	53.12	8.139		
6,000.00	5,925.71	6,006.02	5,972.88	32.63	27.16	171.42	-468.43	-132.04	437.89	383.86	54.03	8.105		
6,100.00	6,024.35	6,105.87	6,072.12	33.19	27.62	171.40	-479.21	-134.56	443.38	388.45	54.93	8.071		
6,200.00	6,123.00	6,205.72	6,171.35	33.74	28.08	171.38	-489.99	-137.07	448.88	393.04	55.84	8.039		
6,300.00	6,221.64	6,305.57	6,270.58	34.30	28.54	171.36	-500.77	-139.59	454.38	397.63	56.75	8.007		
6,400.00	6,320.29	6,405.42	6,369.82	34.86	29.00	171.34	-511.55	-142.11	459.87	402.22	57.65	7.977		
6,500.00	6,418.93	6,505.27	6,469.05	35.42	29.45	171.32	-522.32	-144.63	465.37	406.81	58.56	7.947		
6,600.00	6,517.58	6,604.82	6,567.86	35.98	29.91	171.01	-533.08	-149.49	470.88	411.40	59.48	7.917		
6,700.00	6,616.23	6,701.55	6,662.24	36.54	30.35	169.12	-543.46	-167.47	476.80	416.36	60.44	7.889		
6,800.00	6,714.51	6,793.31	6,748.29	37.10	30.74	131.04	-553.04	-197.62	484.01	422.62	61.39	7.884		
6,900.00	6,810.42	6,882.08	6,826.60	37.66	31.10	109.16	-561.86	-238.34	492.16	429.89	62.27	7.904		
7,000.00	6,901.58	6,968.40	6,896.62	38.21	31.43	98.07	-569.86	-288.07	500.76	437.73	63.03	7.945		
7,100.00	6,985.76	7,052.69	6,957.92	38.76	31.74	91.20	-576.98	-345.38	509.33	445.66	63.67	7.999		
7,200.00	7,060.88	7,135.32	7,010.19	39.32	32.06	86.45	-583.17	-409.00	517.42	453.15	64.27	8.051		
7,300.00	7,125.09	7,216.63	7,053.21	39.90	32.44	83.03	-588.40	-477.73	524.62	459.70	64.92	8.081		
7,400.00	7,176.81	7,296.91	7,086.80	40.55	32.96	80.57	-592.65	-550.47	530.58	464.84	65.74	8.070		
7,500.00	7,214.77	7,376.44	7,110.84	41.30	33.62	78.90	-595.88	-626.16	535.03	468.16	66.87	8.001		
7,600.00	7,238.02	7,455.48	7,125.26	42.22	34.41	77.91	-598.08	-703.79	537.78	469.42	68.36	7.866		
7,700.00	7,246.01	7,538.82	7,130.01	43.32	35.36	77.56	-599.24	-781.82	538.70	468.38	70.32	7.661		
7,800.00	7,245.50	7,633.72	7,129.57	44.65	36.61	77.57	-600.01	-881.82	538.50	465.18	73.31	7.345		
7,900.00	7,244.97	7,733.72	7,129.14	46.21	38.07	77.57	-600.79	-981.81	538.29	461.58	76.71	7.017		
8,000.00	7,244.44	7,833.72	7,128.71	47.99	39.70	77.58	-601.57	-1,081.81	538.08	457.65	80.43	6.690		
8,100.00	7,243.91	7,933.71	7,128.27	49.96	41.45	77.58	-602.35	-1,181.80	537.87	453.46	84.41	6.372		
8,200.00	7,243.39	8,033.71	7,127.84	52.10	43.33	77.59	-603.12	-1,281.80	537.66	449.03	88.63	6.066		
8,300.00	7,242.86	8,133.71	7,127.40	54.38	45.31	77.60	-603.90	-1,381.80	537.45	444.40	93.06	5.775		
8,400.00	7,242.33	8,233.71	7,126.97	56.78	47.38	77.60	-604.68	-1,481.79	537.24	439.58	97.66	5.501		
8,500.00	7,241.80	8,333.71	7,126.54	59.28	49.53	77.61	-605.46	-1,581.79	537.04	434.62	102.41	5.244		
8,600.00	7,241.27	8,433.71	7,126.10	61.88	51.74	77.61	-606.23	-1,681.78	536.83	429.53	107.30	5.003		
8,700.00	7,240.74	8,533.71	7,125.67	64.54	54.02	77.62	-607.01	-1,781.78	536.62	424.32	112.30	4.778		
8,800.00	7,240.21	8,633.71	7,125.23	67.27	56.35	77.62	-607.79	-1,881.77	536.41	419.00	117.40	4.569		
8,900.00	7,239.68	8,733.71	7,124.80	70.06	58.73	77.63	-608.57	-1,981.77	536.20	413.61	122.59	4.374		
9,000.00	7,239.16	8,833.71	7,124.37	72.89	61.15	77.63	-609.34	-2,081.77	535.99	408.13	127.86	4.192		
9,100.00	7,238.63	8,933.71	7,123.93	75.77	63.61	77.64	-610.12	-2,181.76	535.78	402.58	133.20	4.022		
9,200.00	7,238.10	9,033.71	7,123.50	78.69	66.09	77.64	-610.90	-2,281.76	535.57	396.98	138.59	3.864		
9,300.00	7,237.57	9,133.71	7,123.06	81.64	68.61	77.65	-611.68	-2,381.75	535.36	391.32	144.04	3.717		
9,400.00	7,237.04	9,233.71	7,122.63	84.62	71.15	77.66	-612.45	-2,481.75	535.16	385.61	149.54	3.579		
9,500.00	7,236.51	9,333.71	7,122.20	87.63	73.72	77.66	-613.23	-2,581.75	534.95	379.86	155.08	3.449		
9,600.00	7,235.98	9,433.71	7,121.76	90.66	76.31	77.67	-614.01	-2,681.74	534.74	374.08	160.66	3.328		
9,700.00	7,235.45	9,533.71	7,121.33	93.72	78.91	77.67	-614.78	-2,781.74	534.53	368.25	166.28	3.215		
9,800.00	7,234.93	9,633.71	7,120.89	96.79	81.54	77.68	-615.56	-2,881.73	534.32	362.40	171.92	3.108		
9,900.00	7,234.40	9,733.71	7,120.46	99.88	84.17	77.68	-616.34	-2,981.73	534.11	356.52	177.59	3.007		
10,000.00	7,233.87	9,833.71	7,120.03	102.98	86.83	77.69	-617.12	-3,081.72	533.90	350.61	183.29	2.913		
10,100.00	7,233.34	9,933.71	7,119.59	106.10	89.49	77.69	-617.89	-3,181.72	533.69	344.68	189.01	2.824		
10,200.00	7,232.81	10,033.71	7,119.16	109.23	92.17	77.70	-618.67	-3,281.72	533.49	338.73	194.76	2.739		
10,300.00	7,232.28	10,133.71	7,118.73	112.38	94.85	77.71	-619.45	-3,381.71	533.28	332.76	200.52	2.659		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,231.75	10,233.71	7,118.29	115.53	97.55	77.71	-620.23	-3,481.71	533.07	326.77	206.30	2.584	
10,500.00	7,231.23	10,333.71	7,117.86	118.70	100.26	77.72	-621.00	-3,581.70	532.86	320.76	212.10	2.512	
10,600.00	7,230.70	10,433.71	7,117.42	121.87	102.97	77.72	-621.78	-3,681.70	532.65	314.74	217.91	2.444	
10,700.00	7,230.17	10,533.71	7,116.99	125.05	105.69	77.73	-622.56	-3,781.70	532.44	308.70	223.74	2.380	
10,800.00	7,229.64	10,633.71	7,116.56	128.25	108.42	77.73	-623.34	-3,881.69	532.23	302.66	229.58	2.318	
10,900.00	7,229.11	10,733.71	7,116.12	131.44	111.15	77.74	-624.11	-3,981.69	532.02	296.60	235.43	2.260	
11,000.00	7,228.58	10,833.71	7,115.69	134.65	113.90	77.74	-624.89	-4,081.68	531.82	290.52	241.29	2.204	
11,100.00	7,228.05	10,933.71	7,115.25	137.86	116.64	77.75	-625.67	-4,181.68	531.61	284.44	247.16	2.151	
11,200.00	7,227.52	11,033.71	7,114.82	141.08	119.39	77.76	-626.45	-4,281.67	531.40	278.35	253.05	2.100	
11,300.00	7,227.00	11,133.71	7,114.39	144.30	122.15	77.76	-627.22	-4,381.67	531.19	272.25	258.94	2.051	
11,400.00	7,226.47	11,233.71	7,113.95	147.52	124.91	77.77	-628.00	-4,481.67	530.98	266.14	264.84	2.005	
11,500.00	7,225.94	11,333.71	7,113.52	150.76	127.68	77.77	-628.78	-4,581.66	530.77	260.03	270.74	1.960	
11,600.00	7,225.41	11,433.71	7,113.08	153.99	130.45	77.78	-629.55	-4,681.66	530.56	253.90	276.66	1.918	
11,700.00	7,224.88	11,533.71	7,112.65	157.23	133.22	77.78	-630.33	-4,781.65	530.35	247.77	282.58	1.877	
11,800.00	7,224.35	11,633.71	7,112.22	160.48	136.00	77.79	-631.11	-4,881.65	530.15	241.64	288.51	1.838	
11,900.00	7,223.82	11,733.71	7,111.78	163.72	138.78	77.79	-631.89	-4,981.64	529.94	235.49	294.45	1.800	
12,000.00	7,223.29	11,833.71	7,111.35	166.98	141.56	77.80	-632.66	-5,081.64	529.73	229.34	300.39	1.763	
12,100.00	7,222.77	11,933.71	7,110.91	170.23	144.35	77.81	-633.44	-5,181.64	529.52	223.19	306.33	1.729	
12,200.00	7,222.24	12,033.71	7,110.48	173.49	147.14	77.81	-634.22	-5,281.63	529.31	217.03	312.28	1.695	
12,300.00	7,221.71	12,133.71	7,110.05	176.75	149.93	77.82	-635.00	-5,381.63	529.10	210.86	318.24	1.663	
12,400.00	7,221.18	12,233.70	7,109.61	180.01	152.72	77.82	-635.77	-5,481.62	528.89	204.69	324.20	1.631	
12,500.00	7,220.65	12,333.70	7,109.18	183.28	155.52	77.83	-636.55	-5,581.62	528.68	198.52	330.17	1.601	
12,600.00	7,220.12	12,433.70	7,108.75	186.54	158.32	77.83	-637.33	-5,681.62	528.48	192.34	336.13	1.572	
12,700.00	7,219.59	12,533.70	7,108.31	189.81	161.12	77.84	-638.11	-5,781.61	528.27	186.16	342.11	1.544	
12,800.00	7,219.06	12,633.70	7,107.88	193.09	163.92	77.85	-638.88	-5,881.61	528.06	179.97	348.09	1.517	
12,900.00	7,218.54	12,733.70	7,107.44	196.36	166.73	77.85	-639.66	-5,981.60	527.85	173.78	354.07	1.491 Level 3	
13,000.00	7,218.01	12,833.70	7,107.01	199.64	169.53	77.86	-640.44	-6,081.60	527.64	167.59	360.05	1.465 Level 3	
13,100.00	7,217.48	12,933.70	7,106.58	202.92	172.34	77.86	-641.22	-6,181.59	527.43	161.39	366.04	1.441 Level 3	
13,200.00	7,216.95	13,033.70	7,106.14	206.20	175.15	77.87	-641.99	-6,281.59	527.22	155.20	372.03	1.417 Level 3	
13,300.00	7,216.42	13,133.70	7,105.71	209.48	177.96	77.87	-642.77	-6,381.59	527.02	148.99	378.02	1.394 Level 3	
13,400.00	7,215.89	13,233.70	7,105.27	212.76	180.77	77.88	-643.55	-6,481.58	526.81	142.79	384.02	1.372 Level 3	
13,500.00	7,215.36	13,333.70	7,104.84	216.05	183.59	77.88	-644.32	-6,581.58	526.60	136.58	390.02	1.350 Level 3	
13,600.00	7,214.84	13,433.70	7,104.41	219.33	186.40	77.89	-645.10	-6,681.57	526.39	130.37	396.02	1.329 Level 3	
13,700.00	7,214.31	13,533.70	7,103.97	222.62	189.22	77.90	-645.88	-6,781.57	526.18	124.16	402.02	1.309 Level 3	
13,800.00	7,213.78	13,633.70	7,103.54	225.91	192.04	77.90	-646.66	-6,881.57	525.97	117.94	408.03	1.289 Level 3	
13,900.00	7,213.25	13,733.70	7,103.10	229.20	194.86	77.91	-647.43	-6,981.56	525.76	111.72	414.04	1.270 Level 3	
14,000.00	7,212.72	13,833.70	7,102.67	232.49	197.68	77.91	-648.21	-7,081.56	525.56	105.50	420.05	1.251 Level 3	
14,100.00	7,212.19	13,933.70	7,102.24	235.79	200.50	77.92	-648.99	-7,181.55	525.35	99.28	426.07	1.233 Level 2	
14,200.00	7,211.66	14,033.70	7,101.80	239.08	203.32	77.92	-649.77	-7,281.55	525.14	93.06	432.08	1.215 Level 2	
14,300.00	7,211.13	14,133.70	7,101.37	242.38	206.15	77.93	-650.54	-7,381.54	524.93	86.83	438.10	1.198 Level 2	
14,400.00	7,210.61	14,233.70	7,100.93	245.67	208.97	77.94	-651.32	-7,481.54	524.72	80.60	444.12	1.181 Level 2	
14,500.00	7,210.08	14,333.70	7,100.50	248.97	211.79	77.94	-652.10	-7,581.54	524.51	74.37	450.14	1.165 Level 2	
14,600.00	7,209.55	14,433.70	7,100.07	252.27	214.62	77.95	-652.88	-7,681.53	524.30	68.14	456.16	1.149 Level 2	
14,700.00	7,209.02	14,533.70	7,099.63	255.57	217.45	77.95	-653.65	-7,781.53	524.10	61.91	462.19	1.134 Level 2	
14,800.00	7,208.49	14,633.70	7,099.20	258.87	220.28	77.96	-654.43	-7,881.52	523.89	55.67	468.21	1.119 Level 2	
14,900.00	7,207.96	14,733.70	7,098.77	262.17	223.10	77.96	-655.21	-7,981.52	523.68	49.44	474.24	1.104 Level 2	
15,000.00	7,207.43	14,833.70	7,098.33	265.47	225.93	77.97	-655.99	-8,081.51	523.47	43.20	480.27	1.090 Level 2	
15,081.89	7,207.00	14,915.59	7,097.98	268.17	228.25	77.98	-656.62	-8,163.40	523.30	38.09	485.21	1.078 Level 2, 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	0.00	0.00	3.28	3.28	-179.52	-99.82	-0.83	99.82					
100.00	100.00	100.00	100.00	3.28	3.28	-179.52	-99.82	-0.83	99.82	93.25	6.57	15.195		
200.00	200.00	200.00	200.00	3.34	3.34	-179.52	-99.82	-0.83	99.82	93.15	6.67	14.956		
300.00	299.98	296.64	296.62	3.44	3.44	-7.63	-101.44	-0.96	99.77	92.89	6.89	14.491		
400.00	399.84	393.29	393.14	3.59	3.58	-7.82	-106.31	-1.33	99.63	92.43	7.20	13.834		
500.00	499.45	489.94	489.44	3.80	3.77	-8.14	-114.43	-1.96	99.40	91.78	7.62	13.048		
600.00	598.70	586.59	585.42	4.06	4.00	-8.59	-125.78	-2.83	99.08	90.96	8.12	12.204		
679.37	677.18	663.32	661.30	4.31	4.21	-9.01	-137.09	-3.69	99.07	90.50	8.57	11.563		
700.00	697.49	683.27	680.98	4.38	4.26	-9.16	-140.36	-3.95	98.81	90.12	8.69	11.371	CC, ES	
800.00	796.13	779.89	775.94	4.74	4.57	-9.62	-158.13	-5.31	101.02	91.70	9.32	10.841		
900.00	894.78	876.27	870.00	5.15	4.91	-9.86	-179.03	-6.91	106.58	96.59	9.99	10.673		
1,000.00	993.43	972.18	962.86	5.58	5.28	-9.89	-202.95	-8.75	115.46	104.77	10.69	10.801		
1,100.00	1,092.07	1,067.42	1,054.23	6.03	5.68	-9.76	-229.76	-10.80	127.65	116.23	11.42	11.182		
1,200.00	1,190.72	1,165.15	1,147.27	6.50	6.12	-9.55	-259.56	-13.09	142.26	130.10	12.15	11.705		
1,300.00	1,289.36	1,264.06	1,241.40	6.98	6.59	-9.37	-289.84	-15.41	157.00	144.08	12.92	12.150		
1,400.00	1,388.01	1,362.96	1,335.53	7.47	7.07	-9.22	-320.12	-17.74	171.74	158.02	13.72	12.522		
1,500.00	1,486.65	1,461.87	1,429.66	7.97	7.57	-9.09	-350.40	-20.06	186.48	171.95	14.53	12.835		
1,600.00	1,585.30	1,560.78	1,523.79	8.48	8.07	-8.99	-380.68	-22.38	201.23	185.86	15.36	13.100		
1,700.00	1,683.94	1,659.68	1,617.92	9.00	8.58	-8.89	-410.96	-24.71	215.97	199.76	16.21	13.325		
1,800.00	1,782.59	1,758.59	1,712.05	9.52	9.11	-8.81	-441.24	-27.03	230.71	213.65	17.07	13.518		
1,900.00	1,881.24	1,857.50	1,806.17	10.05	9.63	-8.74	-471.52	-29.36	245.46	227.52	17.94	13.683		
2,000.00	1,979.88	1,956.40	1,900.30	10.58	10.16	-8.68	-501.80	-31.68	260.20	241.38	18.82	13.827		
2,100.00	2,078.53	2,055.31	1,994.43	11.11	10.70	-8.62	-532.08	-34.00	274.95	255.24	19.71	13.952		
2,200.00	2,177.17	2,154.22	2,088.56	11.64	11.24	-8.57	-562.36	-36.33	289.69	269.09	20.60	14.062		
2,300.00	2,275.82	2,253.12	2,182.69	12.18	11.78	-8.52	-592.64	-38.65	304.44	282.94	21.50	14.158		
2,400.00	2,374.46	2,352.03	2,276.82	12.72	12.33	-8.48	-622.92	-40.97	319.19	296.78	22.41	14.243		
2,500.00	2,473.11	2,450.94	2,370.95	13.26	12.87	-8.44	-653.20	-43.30	333.93	310.61	23.32	14.319		
2,600.00	2,571.76	2,549.84	2,465.08	13.80	13.42	-8.41	-683.48	-45.62	348.68	324.44	24.24	14.386		
2,700.00	2,670.40	2,648.75	2,559.21	14.35	13.97	-8.38	-713.76	-47.94	363.42	338.27	25.16	14.446		
2,800.00	2,769.05	2,747.66	2,653.33	14.89	14.53	-8.35	-744.04	-50.27	378.17	352.09	26.08	14.500		
2,900.00	2,867.69	2,846.56	2,747.46	15.44	15.08	-8.32	-774.32	-52.59	392.92	365.91	27.01	14.549		
3,000.00	2,966.34	2,945.47	2,841.59	15.99	15.64	-8.30	-804.60	-54.91	407.66	379.73	27.94	14.593		
3,100.00	3,064.98	3,044.37	2,935.72	16.53	16.20	-8.27	-834.88	-57.24	422.41	393.54	28.87	14.633		
3,200.00	3,163.63	3,143.28	3,029.85	17.08	16.75	-8.25	-865.16	-59.56	437.16	407.36	29.80	14.669		
3,300.00	3,262.27	3,242.19	3,123.98	17.63	17.31	-8.23	-895.44	-61.88	451.90	421.17	30.74	14.702		
3,400.00	3,360.92	3,341.09	3,218.11	18.18	17.87	-8.21	-925.72	-64.21	466.65	434.98	31.67	14.733		
3,500.00	3,459.57	3,440.00	3,312.24	18.74	18.43	-8.19	-956.00	-66.53	481.40	448.78	32.61	14.761		
3,600.00	3,558.21	3,538.91	3,406.36	19.29	18.99	-8.18	-986.28	-68.85	496.14	462.59	33.55	14.786		
3,700.00	3,656.86	3,637.81	3,500.49	19.84	19.56	-8.16	-1,016.56	-71.18	510.89	476.39	34.50	14.810		
3,800.00	3,755.50	3,736.72	3,594.62	20.39	20.12	-8.14	-1,046.84	-73.50	525.64	490.20	35.44	14.832		
3,900.00	3,854.15	3,835.63	3,688.75	20.95	20.68	-8.13	-1,077.12	-75.82	540.38	504.00	36.39	14.852		
4,000.00	3,952.79	3,934.53	3,782.88	21.50	21.25	-8.12	-1,107.40	-78.15	555.13	517.80	37.33	14.870		
4,100.00	4,051.44	4,033.44	3,877.01	22.05	21.81	-8.10	-1,137.68	-80.47	569.88	531.60	38.28	14.888		
4,200.00	4,150.08	4,132.35	3,971.14	22.61	22.38	-8.09	-1,167.96	-82.79	584.63	545.40	39.23	14.904		
4,300.00	4,248.73	4,231.25	4,065.27	23.16	22.94	-8.08	-1,198.24	-85.12	599.37	559.20	40.18	14.919		
4,400.00	4,347.38	4,330.16	4,159.39	23.72	23.51	-8.07	-1,228.52	-87.44	614.12	572.99	41.13	14.933		
4,500.00	4,446.02	4,429.07	4,253.52	24.27	24.07	-8.06	-1,258.80	-89.76	628.87	586.79	42.08	14.946		
4,600.00	4,544.67	4,527.97	4,347.65	24.83	24.64	-8.05	-1,289.08	-92.09	643.61	600.59	43.03	14.958		
4,700.00	4,643.31	4,626.88	4,441.78	25.39	25.20	-8.04	-1,319.36	-94.41	658.36	614.38	43.98	14.970		
4,800.00	4,741.96	4,725.79	4,535.91	25.94	25.77	-8.03	-1,349.64	-96.73	673.11	628.18	44.93	14.981		
4,900.00	4,840.60	4,824.69	4,630.04	26.50	26.34	-8.02	-1,379.92	-99.06	687.86	641.97	45.88	14.991		
5,000.00	4,939.25	4,923.60	4,724.17	27.05	26.91	-8.01	-1,410.20	-101.38	702.60	655.76	46.84	15.001		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	5,022.51	4,818.30	27.61	27.47	-8.01	-1,440.48	-103.70	717.35	669.56	47.79	15.010		
5,200.00	5,136.54	5,121.41	4,912.43	28.17	28.04	-8.00	-1,470.76	-106.03	732.10	683.35	48.75	15.018		
5,300.00	5,235.19	5,220.32	5,006.55	28.72	28.61	-7.99	-1,501.04	-108.35	746.84	697.14	49.70	15.026		
5,400.00	5,333.83	5,319.23	5,100.68	29.28	29.18	-7.98	-1,531.32	-110.67	761.59	710.93	50.66	15.034		
5,500.00	5,432.48	5,418.13	5,194.81	29.84	29.74	-7.98	-1,561.60	-113.00	776.34	724.72	51.61	15.041		
5,600.00	5,531.12	5,517.04	5,288.94	30.40	30.31	-7.97	-1,591.88	-115.32	791.09	738.51	52.57	15.048		
5,700.00	5,629.77	5,615.95	5,383.07	30.95	30.88	-7.96	-1,622.16	-117.64	805.83	752.30	53.53	15.054		
5,800.00	5,728.41	5,714.85	5,477.20	31.51	31.45	-7.96	-1,652.44	-119.97	820.58	766.09	54.49	15.061		
5,900.00	5,827.06	5,813.76	5,571.33	32.07	32.02	-7.95	-1,682.72	-122.29	835.33	779.88	55.44	15.066		
6,000.00	5,925.71	5,912.67	5,665.46	32.63	32.59	-7.95	-1,713.00	-124.61	850.08	793.67	56.40	15.072		
6,100.00	6,024.35	6,011.57	5,759.58	33.19	33.16	-7.94	-1,743.28	-126.94	864.82	807.46	57.36	15.077		
6,200.00	6,123.00	6,110.48	5,853.71	33.74	33.73	-7.94	-1,773.56	-129.26	879.57	821.25	58.32	15.082		
6,300.00	6,221.64	6,209.39	5,947.84	34.30	34.30	-7.93	-1,803.84	-131.58	894.32	835.04	59.28	15.087		
6,400.00	6,320.29	6,308.29	6,041.97	34.86	34.86	-7.93	-1,834.12	-133.91	909.06	848.83	60.24	15.092		
6,500.00	6,418.93	6,407.20	6,136.10	35.42	35.43	-7.92	-1,864.40	-136.23	923.81	862.62	61.20	15.096		
6,600.00	6,517.58	6,506.10	6,230.23	35.98	36.00	-7.92	-1,894.68	-138.55	938.56	876.40	62.16	15.100		
6,700.00	6,616.23	6,605.01	6,324.36	36.54	36.57	-7.91	-1,924.96	-140.88	953.31	890.19	63.12	15.104		
6,800.00	6,714.51	6,703.69	6,418.27	37.10	37.14	-41.90	-1,955.17	-143.20	968.00	903.90	64.10	15.102		
6,900.00	6,810.42	6,801.32	6,511.16	37.66	37.70	-60.43	-1,985.06	-146.10	982.58	917.44	65.14	15.083		
7,000.00	6,901.58	6,902.71	6,606.51	38.21	38.27	-68.73	-2,015.82	-160.94	997.04	930.73	66.31	15.037		
7,100.00	6,985.76	7,008.55	6,702.29	38.76	38.82	-73.20	-2,046.87	-193.16	1,010.99	943.42	67.57	14.961		
7,200.00	7,060.88	7,119.30	6,795.59	39.32	39.32	-75.94	-2,077.25	-244.23	1,024.02	955.09	68.93	14.856		
7,300.00	7,125.09	7,235.25	6,882.65	39.90	39.79	-77.77	-2,105.79	-315.02	1,035.66	965.28	70.39	14.714		
7,400.00	7,176.81	7,356.39	6,958.95	40.55	40.20	-79.04	-2,131.02	-405.42	1,045.47	973.48	71.99	14.523		
7,500.00	7,214.77	7,482.29	7,019.48	41.30	40.57	-79.92	-2,151.31	-513.71	1,052.99	979.15	73.84	14.261		
7,600.00	7,238.02	7,612.04	7,059.37	42.22	40.95	-80.46	-2,165.09	-636.16	1,057.84	981.83	76.02	13.915		
7,700.00	7,246.01	7,744.19	7,074.88	43.32	41.42	-80.71	-2,171.08	-767.02	1,059.76	981.17	78.59	13.484		
7,800.00	7,245.50	7,847.87	7,074.71	44.65	41.97	-80.73	-2,171.83	-870.70	1,059.83	978.28	81.55	12.995		
7,900.00	7,244.97	7,947.87	7,074.38	46.21	42.76	-80.74	-2,172.50	-970.69	1,059.88	975.05	84.84	12.493		
8,000.00	7,244.44	8,047.87	7,074.06	47.99	43.82	-80.75	-2,173.16	-1,070.69	1,059.93	971.51	88.42	11.988		
8,100.00	7,243.91	8,147.87	7,073.73	49.96	45.15	-80.76	-2,173.83	-1,170.69	1,059.98	967.72	92.26	11.488		
8,200.00	7,243.39	8,247.87	7,073.41	52.10	46.68	-80.77	-2,174.50	-1,270.68	1,060.03	963.69	96.34	11.002		
8,300.00	7,242.86	8,347.87	7,073.08	54.38	48.37	-80.78	-2,175.17	-1,370.68	1,060.08	959.45	100.63	10.534		
8,400.00	7,242.33	8,447.87	7,072.76	56.78	50.21	-80.80	-2,175.83	-1,470.68	1,060.13	955.03	105.09	10.087		
8,500.00	7,241.80	8,547.87	7,072.43	59.28	52.15	-80.81	-2,176.50	-1,570.67	1,060.18	950.46	109.72	9.663		
8,600.00	7,241.27	8,647.87	7,072.11	61.88	54.18	-80.82	-2,177.17	-1,670.67	1,060.23	945.75	114.48	9.261		
8,700.00	7,240.74	8,747.87	7,071.79	64.54	56.30	-80.83	-2,177.84	-1,770.67	1,060.28	940.91	119.37	8.882		
8,800.00	7,240.21	8,847.87	7,071.46	67.27	58.49	-80.84	-2,178.50	-1,870.67	1,060.33	935.97	124.36	8.526		
8,900.00	7,239.68	8,947.87	7,071.14	70.06	60.73	-80.85	-2,179.17	-1,970.66	1,060.38	930.92	129.45	8.191		
9,000.00	7,239.16	9,047.87	7,070.81	72.89	63.03	-80.87	-2,179.84	-2,070.66	1,060.43	925.80	134.63	7.877		
9,100.00	7,238.63	9,147.87	7,070.49	75.77	65.37	-80.88	-2,180.51	-2,170.66	1,060.48	920.60	139.88	7.581		
9,200.00	7,238.10	9,247.87	7,070.16	78.69	67.76	-80.89	-2,181.17	-2,270.65	1,060.53	915.33	145.20	7.304		
9,300.00	7,237.57	9,347.87	7,069.84	81.64	70.18	-80.90	-2,181.84	-2,370.65	1,060.58	909.99	150.58	7.043		
9,400.00	7,237.04	9,447.87	7,069.51	84.62	72.63	-80.91	-2,182.51	-2,470.65	1,060.63	904.61	156.02	6.798		
9,500.00	7,236.51	9,547.87	7,069.19	87.63	75.12	-80.92	-2,183.18	-2,570.64	1,060.68	899.17	161.50	6.568		
9,600.00	7,235.98	9,647.86	7,068.86	90.66	77.63	-80.93	-2,183.84	-2,670.64	1,060.73	893.69	167.03	6.350		
9,700.00	7,235.45	9,747.86	7,068.54	93.72	80.16	-80.95	-2,184.51	-2,770.64	1,060.78	888.17	172.60	6.146		
9,800.00	7,234.93	9,847.86	7,068.21	96.79	82.72	-80.96	-2,185.18	-2,870.64	1,060.83	882.62	178.21	5.953		
9,900.00	7,234.40	9,947.86	7,067.89	99.88	85.30	-80.97	-2,185.85	-2,970.63	1,060.88	877.03	183.85	5.770		
10,000.00	7,233.87	10,047.86	7,067.56	102.98	87.89	-80.98	-2,186.51	-3,070.63	1,060.93	871.41	189.52	5.598		
10,100.00	7,233.34	10,147.86	7,067.24	106.10	90.50	-80.99	-2,187.18	-3,170.63	1,060.98	865.76	195.21	5.435		
10,200.00	7,232.81	10,247.86	7,066.91	109.23	93.13	-81.00	-2,187.85	-3,270.62	1,061.03	860.09	200.93	5.280		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	10,347.86	7,066.59	112.38	95.76	-81.02	-2,188.52	-3,370.62	1,061.08	854.40	206.68	5.134		
10,400.00	7,231.75	10,447.86	7,066.26	115.53	98.41	-81.03	-2,189.18	-3,470.62	1,061.13	848.68	212.45	4.995		
10,500.00	7,231.23	10,547.86	7,065.94	118.70	101.08	-81.04	-2,189.85	-3,570.61	1,061.18	842.94	218.23	4.863		
10,600.00	7,230.70	10,647.86	7,065.61	121.87	103.75	-81.05	-2,190.52	-3,670.61	1,061.23	837.19	224.04	4.737		
10,700.00	7,230.17	10,747.86	7,065.29	125.05	106.43	-81.06	-2,191.18	-3,770.61	1,061.28	831.42	229.86	4.617		
10,800.00	7,229.64	10,847.86	7,064.96	128.25	109.12	-81.07	-2,191.85	-3,870.61	1,061.33	825.63	235.70	4.503		
10,900.00	7,229.11	10,947.86	7,064.64	131.44	111.82	-81.09	-2,192.52	-3,970.60	1,061.38	819.83	241.55	4.394		
11,000.00	7,228.58	11,047.86	7,064.31	134.65	114.53	-81.10	-2,193.19	-4,070.60	1,061.43	814.01	247.42	4.290		
11,100.00	7,228.05	11,147.86	7,063.99	137.86	117.25	-81.11	-2,193.85	-4,170.60	1,061.48	808.18	253.30	4.191		
11,200.00	7,227.52	11,247.86	7,063.66	141.08	119.97	-81.12	-2,194.52	-4,270.59	1,061.53	802.34	259.19	4.096		
11,300.00	7,227.00	11,347.86	7,063.34	144.30	122.70	-81.13	-2,195.19	-4,370.59	1,061.58	796.49	265.09	4.005		
11,400.00	7,226.47	11,447.86	7,063.01	147.52	125.43	-81.14	-2,195.86	-4,470.59	1,061.63	790.63	271.00	3.917		
11,500.00	7,225.94	11,547.86	7,062.69	150.76	128.17	-81.15	-2,196.52	-4,570.58	1,061.68	784.76	276.92	3.834		
11,600.00	7,225.41	11,647.86	7,062.36	153.99	130.91	-81.17	-2,197.19	-4,670.58	1,061.73	778.88	282.85	3.754		
11,700.00	7,224.88	11,747.86	7,062.04	157.23	133.66	-81.18	-2,197.86	-4,770.58	1,061.78	772.99	288.79	3.677		
11,800.00	7,224.35	11,847.86	7,061.71	160.48	136.42	-81.19	-2,198.53	-4,870.58	1,061.84	767.09	294.74	3.603		
11,900.00	7,223.82	11,947.86	7,061.39	163.72	139.17	-81.20	-2,199.19	-4,970.57	1,061.89	761.19	300.70	3.531		
12,000.00	7,223.29	12,047.86	7,061.06	166.98	141.94	-81.21	-2,199.86	-5,070.57	1,061.94	755.28	306.66	3.463		
12,100.00	7,222.77	12,147.86	7,060.74	170.23	144.70	-81.22	-2,200.53	-5,170.57	1,061.99	749.36	312.63	3.397		
12,200.00	7,222.24	12,247.86	7,060.41	173.49	147.47	-81.24	-2,201.20	-5,270.56	1,062.04	743.44	318.60	3.333		
12,300.00	7,221.71	12,347.86	7,060.09	176.75	150.24	-81.25	-2,201.86	-5,370.56	1,062.09	737.51	324.59	3.272		
12,400.00	7,221.18	12,447.86	7,059.76	180.01	153.02	-81.26	-2,202.53	-5,470.56	1,062.14	731.57	330.57	3.213		
12,500.00	7,220.65	12,547.86	7,059.44	183.28	155.80	-81.27	-2,203.20	-5,570.55	1,062.19	725.63	336.57	3.156		
12,600.00	7,220.12	12,647.86	7,059.11	186.54	158.58	-81.28	-2,203.87	-5,670.55	1,062.24	719.68	342.57	3.101		
12,700.00	7,219.59	12,747.86	7,058.79	189.81	161.37	-81.29	-2,204.53	-5,770.55	1,062.30	713.73	348.57	3.048		
12,800.00	7,219.06	12,847.86	7,058.46	193.09	164.15	-81.30	-2,205.20	-5,870.55	1,062.35	707.77	354.58	2.996		
12,900.00	7,218.54	12,947.86	7,058.14	196.36	166.94	-81.32	-2,205.87	-5,970.54	1,062.40	701.81	360.59	2.946		
13,000.00	7,218.01	13,047.86	7,057.81	199.64	169.73	-81.33	-2,206.54	-6,070.54	1,062.45	695.84	366.61	2.898		
13,100.00	7,217.48	13,147.86	7,057.49	202.92	172.53	-81.34	-2,207.20	-6,170.54	1,062.50	689.87	372.63	2.851		
13,200.00	7,216.95	13,247.86	7,057.16	206.20	175.32	-81.35	-2,207.87	-6,270.53	1,062.55	683.90	378.65	2.806		
13,300.00	7,216.42	13,347.86	7,056.84	209.48	178.12	-81.36	-2,208.54	-6,370.53	1,062.60	677.92	384.68	2.762		
13,400.00	7,215.89	13,447.86	7,056.51	212.76	180.92	-81.37	-2,209.21	-6,470.53	1,062.66	671.94	390.71	2.720		
13,500.00	7,215.36	13,547.86	7,056.19	216.05	183.72	-81.39	-2,209.87	-6,570.52	1,062.71	665.96	396.75	2.679		
13,600.00	7,214.84	13,647.86	7,055.86	219.33	186.53	-81.40	-2,210.54	-6,670.52	1,062.76	659.97	402.79	2.638		
13,700.00	7,214.31	13,747.86	7,055.54	222.62	189.33	-81.41	-2,211.21	-6,770.52	1,062.81	653.98	408.83	2.600		
13,800.00	7,213.78	13,847.85	7,055.22	225.91	192.14	-81.42	-2,211.88	-6,870.52	1,062.86	647.99	414.88	2.562		
13,900.00	7,213.25	13,947.85	7,054.89	229.20	194.95	-81.43	-2,212.54	-6,970.51	1,062.91	641.99	420.93	2.525		
14,000.00	7,212.72	14,047.85	7,054.57	232.49	197.76	-81.44	-2,213.21	-7,070.51	1,062.97	635.99	426.98	2.490		
14,100.00	7,212.19	14,147.85	7,054.24	235.79	200.57	-81.45	-2,213.88	-7,170.51	1,063.02	629.99	433.03	2.455		
14,200.00	7,211.66	14,247.85	7,053.92	239.08	203.38	-81.47	-2,214.55	-7,270.50	1,063.07	623.98	439.09	2.421		
14,300.00	7,211.13	14,347.85	7,053.59	242.38	206.19	-81.48	-2,215.21	-7,370.50	1,063.12	617.97	445.15	2.388		
14,400.00	7,210.61	14,447.85	7,053.27	245.67	209.01	-81.49	-2,215.88	-7,470.50	1,063.17	611.96	451.21	2.356		
14,500.00	7,210.08	14,547.85	7,052.94	248.97	211.82	-81.50	-2,216.55	-7,570.49	1,063.23	605.95	457.27	2.325		
14,600.00	7,209.55	14,647.85	7,052.62	252.27	214.64	-81.51	-2,217.22	-7,670.49	1,063.28	599.94	463.34	2.295		
14,700.00	7,209.02	14,747.85	7,052.29	255.57	217.46	-81.52	-2,217.88	-7,770.49	1,063.33	593.92	469.41	2.265		
14,800.00	7,208.49	14,847.85	7,051.97	258.87	220.28	-81.54	-2,218.55	-7,870.49	1,063.38	587.90	475.48	2.236		
14,900.00	7,207.96	14,947.85	7,051.64	262.17	223.10	-81.55	-2,219.22	-7,970.48	1,063.43	581.88	481.55	2.208		
15,000.00	7,207.43	15,047.85	7,051.32	265.47	225.92	-81.56	-2,219.89	-8,070.48	1,063.49	575.86	487.63	2.181		
15,081.89	7,207.00	15,129.74	7,051.05	268.17	228.23	-81.57	-2,220.43	-8,152.37	1,063.53	570.93	492.60	2.159 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	1.00	0.00	3.28	3.28	-179.47	-179.97	-1.67	179.97					
100.00	100.00	101.00	100.00	3.28	3.28	-179.47	-179.97	-1.67	179.97	173.40	6.57	27.395		
200.00	200.00	199.00	200.00	3.34	3.34	-179.47	-179.97	-1.67	179.97	173.30	6.67	26.970		
300.00	299.98	293.16	294.14	3.44	3.43	-7.56	-181.48	-1.75	179.85	172.97	6.88	26.141		
400.00	399.84	387.26	388.12	3.59	3.57	-7.70	-186.08	-2.00	179.55	172.36	7.19	24.973		
500.00	499.45	481.37	481.92	3.80	3.75	-7.93	-193.75	-2.42	179.07	171.48	7.60	23.573		
600.00	598.70	575.50	575.42	4.06	3.97	-8.26	-204.50	-3.01	178.43	170.34	8.09	22.064		
697.54	695.11	667.32	666.26	4.37	4.22	-8.65	-217.94	-3.75	178.09	169.46	8.63	20.632		
700.00	697.49	669.65	668.54	4.38	4.22	-8.67	-218.32	-3.77	177.75	169.10	8.65	20.558 CC, ES		
800.00	796.13	763.77	761.14	4.74	4.52	-9.06	-235.18	-4.69	179.46	170.20	9.26	19.376		
900.00	894.78	857.70	852.94	5.15	4.84	-9.37	-255.02	-5.78	184.45	174.54	9.92	18.601		
1,000.00	993.43	951.22	943.64	5.58	5.20	-9.58	-277.75	-7.02	192.70	182.09	10.61	18.165		
1,100.00	1,092.07	1,044.15	1,032.99	6.03	5.58	-9.69	-303.26	-8.42	204.18	192.86	11.32	18.034		
1,200.00	1,190.72	1,136.30	1,120.72	6.50	6.00	-9.73	-331.39	-9.96	218.85	206.81	12.05	18.163		
1,300.00	1,289.36	1,227.48	1,206.59	6.98	6.43	-9.70	-361.98	-11.63	236.67	223.89	12.78	18.512		
1,400.00	1,388.01	1,317.53	1,290.40	7.47	6.89	-9.62	-394.87	-13.43	257.58	244.06	13.52	19.049		
1,500.00	1,486.65	1,406.36	1,372.02	7.97	7.36	-9.50	-429.86	-15.35	281.52	267.27	14.26	19.745		
1,600.00	1,585.30	1,503.07	1,460.29	8.48	7.90	-9.37	-469.31	-17.51	306.94	291.87	15.07	20.365		
1,700.00	1,683.94	1,599.79	1,548.57	9.00	8.46	-9.25	-508.77	-19.67	332.36	316.45	15.91	20.894		
1,800.00	1,782.59	1,703.50	1,636.84	9.52	9.07	-9.16	-548.22	-21.83	357.78	340.98	16.79	21.304		
1,900.00	1,881.24	1,806.79	1,725.11	10.05	9.69	-9.07	-587.68	-23.99	383.20	365.50	17.69	21.656		
2,000.00	1,979.88	1,889.93	1,813.39	10.58	10.20	-9.00	-627.13	-26.15	408.62	390.11	18.51	22.077		
2,100.00	2,078.53	1,986.64	1,901.66	11.11	10.79	-8.94	-666.59	-28.31	434.04	414.64	19.40	22.372		
2,200.00	2,177.17	2,083.35	1,989.93	11.64	11.39	-8.88	-706.04	-30.47	459.46	439.16	20.30	22.631		
2,300.00	2,275.82	2,180.07	2,078.21	12.18	11.99	-8.83	-745.50	-32.63	484.89	463.67	21.21	22.858		
2,400.00	2,374.46	2,276.78	2,166.48	12.72	12.60	-8.78	-784.95	-34.79	510.31	488.18	22.13	23.059		
2,500.00	2,473.11	2,373.50	2,254.75	13.26	13.21	-8.74	-824.41	-36.95	535.73	512.68	23.05	23.238		
2,600.00	2,571.76	2,470.21	2,343.03	13.80	13.82	-8.70	-863.86	-39.11	561.15	537.17	23.98	23.397		
2,700.00	2,670.40	2,566.92	2,431.30	14.35	14.44	-8.67	-903.32	-41.27	586.58	561.66	24.92	23.540		
2,800.00	2,769.05	2,663.64	2,519.58	14.89	15.06	-8.64	-942.77	-43.43	612.00	586.14	25.86	23.668		
2,900.00	2,867.69	2,760.35	2,607.85	15.44	15.68	-8.61	-982.22	-45.59	637.43	610.62	26.80	23.783		
3,000.00	2,966.34	2,857.06	2,696.12	15.99	16.30	-8.58	-1,021.68	-47.75	662.85	635.10	27.75	23.888		
3,100.00	3,064.98	2,953.78	2,784.40	16.53	16.93	-8.55	-1,061.13	-49.91	688.27	659.58	28.70	23.983		
3,200.00	3,163.63	3,050.49	2,872.67	17.08	17.55	-8.53	-1,100.59	-52.07	713.70	684.05	29.65	24.069		
3,300.00	3,262.27	3,147.20	2,960.94	17.63	18.18	-8.51	-1,140.04	-54.23	739.12	708.51	30.61	24.148		
3,400.00	3,360.92	3,243.92	3,049.22	18.18	18.81	-8.49	-1,179.50	-56.39	764.55	732.98	31.57	24.221		
3,500.00	3,459.57	3,340.63	3,137.49	18.74	19.44	-8.47	-1,218.95	-58.55	789.97	757.44	32.53	24.287		
3,600.00	3,558.21	3,437.35	3,225.76	19.29	20.07	-8.45	-1,258.41	-60.72	815.40	781.91	33.49	24.348		
3,700.00	3,656.86	3,534.06	3,314.04	19.84	20.70	-8.44	-1,297.86	-62.88	840.82	806.37	34.45	24.405		
3,800.00	3,755.50	3,630.77	3,402.31	20.39	21.33	-8.42	-1,337.32	-65.04	866.25	830.83	35.42	24.457		
3,900.00	3,854.15	3,727.49	3,490.58	20.95	21.97	-8.40	-1,376.77	-67.20	891.67	855.28	36.39	24.505		
4,000.00	3,952.79	3,824.20	3,578.86	21.50	22.60	-8.39	-1,416.23	-69.36	917.09	879.74	37.36	24.550		
4,100.00	4,051.44	3,920.91	3,667.13	22.05	23.23	-8.38	-1,455.68	-71.52	942.52	904.19	38.33	24.592		
4,200.00	4,150.08	4,017.63	3,755.40	22.61	23.87	-8.37	-1,495.14	-73.68	967.94	928.65	39.30	24.630		
4,300.00	4,248.73	4,114.34	3,843.68	23.16	24.50	-8.35	-1,534.59	-75.84	993.37	953.10	40.27	24.667		
4,400.00	4,347.38	4,211.06	3,931.95	23.72	25.14	-8.34	-1,574.05	-78.00	1,018.79	977.55	41.25	24.701		
4,500.00	4,446.02	4,307.77	4,020.22	24.27	25.78	-8.33	-1,613.50	-80.16	1,044.22	1,002.00	42.22	24.732		
4,600.00	4,544.67	4,404.48	4,108.50	24.83	26.41	-8.32	-1,652.95	-82.32	1,069.64	1,026.45	43.20	24.762		
4,700.00	4,643.31	4,501.20	4,196.77	25.39	27.05	-8.31	-1,692.41	-84.48	1,095.07	1,050.90	44.17	24.790		
4,800.00	4,741.96	4,602.09	4,285.04	25.94	27.72	-8.30	-1,731.86	-86.64	1,120.49	1,075.32	45.17	24.804		
4,900.00	4,840.60	4,694.62	4,373.32	26.50	28.33	-8.29	-1,771.32	-88.80	1,145.92	1,099.79	46.13	24.841		
5,000.00	4,939.25	4,808.66	4,461.59	27.05	29.08	-8.28	-1,810.77	-90.96	1,171.34	1,124.14	47.20	24.814		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	4,888.05	4,549.86	27.61	29.60	-8.28	-1,850.23	-93.12	1,196.77	1,148.68	48.09	24.887		
5,200.00	5,136.54	4,984.76	4,638.14	28.17	30.24	-8.27	-1,889.68	-95.28	1,222.19	1,173.13	49.07	24.908		
5,300.00	5,235.19	5,081.48	4,726.41	28.72	30.88	-8.26	-1,929.14	-97.44	1,247.62	1,197.57	50.05	24.927		
5,400.00	5,333.83	5,178.19	4,814.68	29.28	31.52	-8.25	-1,968.59	-99.60	1,273.05	1,222.01	51.03	24.946		
5,500.00	5,432.48	5,274.91	4,902.96	29.84	32.16	-8.25	-2,008.05	-101.76	1,298.47	1,246.46	52.01	24.964		
5,600.00	5,531.12	5,371.62	4,991.23	30.40	32.80	-8.24	-2,047.50	-103.92	1,323.90	1,270.90	53.00	24.981		
5,700.00	5,629.77	5,468.33	5,079.50	30.95	33.44	-8.23	-2,086.96	-106.08	1,349.32	1,295.34	53.98	24.997		
5,800.00	5,728.41	5,565.05	5,167.78	31.51	34.08	-8.23	-2,126.41	-108.24	1,374.75	1,319.78	54.96	25.012		
5,900.00	5,827.06	5,661.76	5,256.05	32.07	34.72	-8.22	-2,165.87	-110.40	1,400.17	1,344.22	55.95	25.026		
6,000.00	5,925.71	5,758.47	5,344.32	32.63	35.36	-8.22	-2,205.32	-112.56	1,425.60	1,368.66	56.93	25.040		
6,100.00	6,024.35	5,855.19	5,432.60	33.19	36.00	-8.21	-2,244.78	-114.72	1,451.02	1,393.10	57.92	25.053		
6,200.00	6,123.00	5,951.90	5,520.87	33.74	36.64	-8.21	-2,284.23	-116.88	1,476.45	1,417.54	58.90	25.065		
6,300.00	6,221.64	6,048.62	5,609.14	34.30	37.28	-8.20	-2,323.68	-119.04	1,501.87	1,441.98	59.89	25.077		
6,400.00	6,320.29	6,145.33	5,697.42	34.86	37.92	-8.19	-2,363.14	-121.20	1,527.30	1,466.42	60.88	25.089		
6,500.00	6,418.93	6,242.04	5,785.69	35.42	38.56	-8.19	-2,402.59	-123.36	1,552.72	1,490.86	61.86	25.100		
6,600.00	6,517.58	6,338.76	5,873.96	35.98	39.20	-8.19	-2,442.05	-125.52	1,578.15	1,515.30	62.85	25.110		
6,700.00	6,616.23	6,435.47	5,962.24	36.54	39.85	-8.18	-2,481.50	-127.68	1,603.57	1,539.74	63.84	25.120		
6,800.00	6,714.51	6,531.97	6,050.31	37.10	40.49	-8.18	-2,520.87	-129.84	1,628.94	1,564.10	64.84	25.122		
6,900.00	6,810.42	6,626.52	6,136.61	37.66	41.11	-8.18	-2,559.44	-131.95	1,653.93	1,588.05	65.88	25.105		
7,000.00	6,901.58	6,716.79	6,219.01	38.21	41.71	-8.17	-2,598.27	-133.97	1,678.49	1,611.52	66.97	25.063		
7,100.00	6,985.76	6,800.57	6,295.48	38.76	42.27	-8.17	-2,637.45	-135.84	1,702.90	1,634.76	68.14	24.990		
7,200.00	7,060.88	6,875.80	6,364.14	39.32	42.77	-8.17	-2,676.14	-137.52	1,727.66	1,658.20	69.45	24.875		
7,300.00	7,125.09	6,940.61	6,423.30	39.90	43.20	-8.16	-2,714.58	-138.96	1,753.36	1,682.40	70.96	24.710		
7,400.00	7,176.81	7,006.58	6,471.50	40.55	43.63	-8.16	-2,752.12	-140.14	1,780.56	1,707.80	72.76	24.471		
7,500.00	7,214.77	7,032.92	6,507.55	41.30	43.81	-8.15	-2,789.24	-141.03	1,809.65	1,735.00	74.65	24.241		
7,600.00	7,238.02	7,058.14	6,530.57	42.22	43.98	-8.15	-2,825.52	-141.59	1,840.71	1,763.92	76.79	23.970		
7,700.00	7,246.01	7,068.46	6,539.99	43.32	44.05	-8.14	-2,739.74	-141.82	1,873.48	1,794.46	79.02	23.710		
7,800.00	7,245.50	7,068.03	6,539.99	44.65	44.49	-8.14	-3,015.84	-86.57	1,892.69	1,809.12	83.57	22.647		
7,900.00	7,244.97	7,067.50	6,539.99	46.21	44.83	-8.14	-3,016.42	-96.57	1,892.70	1,805.91	86.78	21.809		
8,000.00	7,244.44	7,067.03	6,539.99	47.99	44.93	-8.14	-3,017.01	-106.57	1,892.70	1,802.40	90.30	20.960		
8,100.00	7,243.91	7,066.50	6,539.99	49.96	44.99	-8.14	-3,017.60	-116.56	1,892.71	1,798.62	94.09	20.116		
8,200.00	7,243.39	7,066.03	6,539.99	52.10	50.91	-8.14	-3,018.19	-126.56	1,892.71	1,794.59	98.12	19.290		
8,300.00	7,242.86	7,065.50	6,539.99	54.38	52.09	-8.14	-3,018.78	-136.56	1,892.71	1,790.35	102.36	18.491		
8,400.00	7,242.33	7,065.03	6,539.99	56.78	53.51	-8.14	-3,019.36	-146.55	1,892.72	1,785.93	106.79	17.724		
8,500.00	7,241.80	7,064.50	6,539.99	59.28	55.13	-8.14	-3,019.95	-156.55	1,892.72	1,781.34	111.38	16.994		
8,600.00	7,241.27	7,064.03	6,539.99	61.88	56.91	-8.14	-3,020.54	-166.55	1,892.73	1,776.61	116.12	16.300		
8,700.00	7,240.74	7,063.50	6,539.99	64.54	58.82	-8.14	-3,021.13	-176.54	1,892.73	1,771.75	120.98	15.645		
8,800.00	7,240.21	7,063.03	6,539.99	67.27	60.83	-8.14	-3,021.71	-186.54	1,892.73	1,766.77	125.96	15.026		
8,900.00	7,239.68	7,062.50	6,539.99	70.06	62.92	-8.14	-3,022.30	-196.54	1,892.74	1,761.69	131.05	14.443		
9,000.00	7,239.16	7,062.03	6,539.99	72.89	65.09	-8.14	-3,022.89	-206.54	1,892.74	1,756.53	136.22	13.895		
9,100.00	7,238.63	7,061.50	6,539.99	75.77	67.32	-8.14	-3,023.48	-216.53	1,892.75	1,751.28	141.47	13.379		
9,200.00	7,238.10	7,061.03	6,539.99	78.69	69.60	-8.14	-3,024.07	-226.53	1,892.75	1,745.96	146.79	12.894		
9,300.00	7,237.57	7,060.50	6,539.99	81.64	71.93	-8.14	-3,024.65	-236.53	1,892.76	1,740.58	152.18	12.438		
9,400.00	7,237.04	7,060.03	6,539.99	84.62	74.31	-8.14	-3,025.24	-246.52	1,892.76	1,735.13	157.63	12.008		
9,500.00	7,236.51	7,059.50	6,539.99	87.63	76.71	-8.14	-3,025.83	-256.52	1,892.76	1,729.64	163.12	11.603		
9,600.00	7,235.98	7,059.03	6,539.99	90.66	79.15	-8.14	-3,026.42	-266.52	1,892.77	1,724.10	168.67	11.222		
9,700.00	7,235.45	7,058.50	6,539.99	93.72	81.62	-8.14	-3,027.01	-276.51	1,892.77	1,718.52	174.26	10.862		
9,800.00	7,234.93	7,058.03	6,539.99	96.79	84.12	-8.14	-3,027.59	-286.51	1,892.78	1,712.89	179.88	10.522		
9,900.00	7,234.40	7,057.50	6,539.99	99.88	86.64	-8.14	-3,028.18	-296.51	1,892.78	1,707.24	185.55	10.201		
10,000.00	7,233.87	7,057.03	6,539.99	102.98	89.18	-8.14	-3,028.77	-306.50	1,892.79	1,701.55	191.24	9.897		
10,100.00	7,233.34	7,056.50	6,539.99	106.10	91.74	-8.14	-3,029.36	-316.50	1,892.79	1,695.83	196.96	9.610		
10,200.00	7,232.81	7,056.03	6,539.99	109.23	94.32	-8.14	-3,029.95	-326.50	1,892.79	1,690.08	202.71	9.337		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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		
10,300.00	7,232.28	10,684.03	7,131.01	112.38	96.91	-86.93	-3,030.53	-3,366.49	1,892.80	1,684.31	208.49	9.079		
10,400.00	7,231.75	10,784.03	7,130.47	115.53	99.52	-86.93	-3,031.12	-3,466.49	1,892.80	1,678.52	214.28	8.833		
10,500.00	7,231.23	10,884.03	7,129.93	118.70	102.14	-86.93	-3,031.71	-3,566.49	1,892.81	1,672.70	220.10	8.600		
10,600.00	7,230.70	10,984.03	7,129.39	121.87	104.78	-86.93	-3,032.30	-3,666.48	1,892.81	1,666.87	225.94	8.377		
10,700.00	7,230.17	11,084.03	7,128.85	125.05	107.43	-86.93	-3,032.89	-3,766.48	1,892.82	1,661.02	231.80	8.166		
10,800.00	7,229.64	11,184.03	7,128.31	128.25	110.09	-86.93	-3,033.47	-3,866.48	1,892.82	1,655.15	237.67	7.964		
10,900.00	7,229.11	11,284.03	7,127.77	131.44	112.76	-86.93	-3,034.06	-3,966.47	1,892.82	1,649.27	243.56	7.772		
11,000.00	7,228.58	11,384.03	7,127.23	134.65	115.43	-86.93	-3,034.65	-4,066.47	1,892.83	1,643.37	249.46	7.588		
11,100.00	7,228.05	11,484.03	7,126.68	137.86	118.12	-86.93	-3,035.24	-4,166.47	1,892.83	1,637.46	255.37	7.412		
11,200.00	7,227.52	11,584.03	7,126.14	141.08	120.82	-86.93	-3,035.83	-4,266.46	1,892.84	1,631.54	261.30	7.244		
11,300.00	7,227.00	11,684.03	7,125.60	144.30	123.52	-86.93	-3,036.41	-4,366.46	1,892.84	1,625.60	267.24	7.083		
11,400.00	7,226.47	11,784.03	7,125.06	147.52	126.23	-86.93	-3,037.00	-4,466.46	1,892.84	1,619.66	273.19	6.929		
11,500.00	7,225.94	11,884.03	7,124.52	150.76	128.94	-86.93	-3,037.59	-4,566.46	1,892.85	1,613.70	279.15	6.781		
11,600.00	7,225.41	11,984.03	7,123.98	153.99	131.67	-86.93	-3,038.18	-4,666.45	1,892.85	1,607.74	285.12	6.639		
11,700.00	7,224.88	12,084.03	7,123.44	157.23	134.39	-86.93	-3,038.76	-4,766.45	1,892.86	1,601.76	291.10	6.503		
11,800.00	7,224.35	12,184.03	7,122.90	160.48	137.13	-86.93	-3,039.35	-4,866.45	1,892.86	1,595.78	297.08	6.372		
11,900.00	7,223.82	12,284.03	7,122.36	163.72	139.87	-86.93	-3,039.94	-4,966.44	1,892.87	1,589.79	303.08	6.246		
12,000.00	7,223.29	12,384.03	7,121.81	166.98	142.61	-86.93	-3,040.53	-5,066.44	1,892.87	1,583.79	309.08	6.124		
12,100.00	7,222.77	12,484.03	7,121.27	170.23	145.36	-86.93	-3,041.12	-5,166.44	1,892.87	1,577.79	315.09	6.007		
12,200.00	7,222.24	12,584.03	7,120.73	173.49	148.11	-86.93	-3,041.70	-5,266.43	1,892.88	1,571.78	321.10	5.895		
12,300.00	7,221.71	12,684.03	7,120.19	176.75	150.86	-86.93	-3,042.29	-5,366.43	1,892.88	1,565.76	327.13	5.786		
12,400.00	7,221.18	12,784.03	7,119.65	180.01	153.62	-86.93	-3,042.88	-5,466.43	1,892.89	1,559.73	333.15	5.682		
12,500.00	7,220.65	12,884.03	7,119.11	183.28	156.39	-86.92	-3,043.47	-5,566.42	1,892.89	1,553.71	339.19	5.581		
12,600.00	7,220.12	12,984.03	7,118.57	186.54	159.15	-86.92	-3,044.06	-5,666.42	1,892.90	1,547.67	345.22	5.483		
12,700.00	7,219.59	13,084.03	7,118.03	189.81	161.92	-86.92	-3,044.64	-5,766.42	1,892.90	1,541.63	351.27	5.389		
12,800.00	7,219.06	13,184.03	7,117.49	193.09	164.70	-86.92	-3,045.23	-5,866.41	1,892.90	1,535.59	357.32	5.298		
12,900.00	7,218.54	13,284.03	7,116.94	196.36	167.47	-86.92	-3,045.82	-5,966.41	1,892.91	1,529.54	363.37	5.209		
13,000.00	7,218.01	13,384.03	7,116.40	199.64	170.25	-86.92	-3,046.41	-6,066.41	1,892.91	1,523.49	369.43	5.124		
13,100.00	7,217.48	13,484.03	7,115.86	202.92	173.03	-86.92	-3,047.00	-6,166.40	1,892.92	1,517.43	375.49	5.041		
13,200.00	7,216.95	13,584.03	7,115.32	206.20	175.82	-86.92	-3,047.58	-6,266.40	1,892.92	1,511.37	381.55	4.961		
13,300.00	7,216.42	13,684.03	7,114.78	209.48	178.60	-86.92	-3,048.17	-6,366.40	1,892.93	1,505.30	387.62	4.883		
13,400.00	7,215.89	13,784.03	7,114.24	212.76	181.39	-86.92	-3,048.76	-6,466.39	1,892.93	1,499.23	393.70	4.808		
13,500.00	7,215.36	13,884.03	7,113.70	216.05	184.18	-86.92	-3,049.35	-6,566.39	1,892.93	1,493.16	399.77	4.735		
13,600.00	7,214.84	13,984.03	7,113.16	219.33	186.98	-86.92	-3,049.94	-6,666.39	1,892.94	1,487.09	405.85	4.664		
13,700.00	7,214.31	14,084.03	7,112.62	222.62	189.77	-86.92	-3,050.52	-6,766.39	1,892.94	1,481.01	411.93	4.595		
13,800.00	7,213.78	14,184.03	7,112.07	225.91	192.57	-86.92	-3,051.11	-6,866.38	1,892.95	1,474.93	418.02	4.528		
13,900.00	7,213.25	14,284.03	7,111.53	229.20	195.37	-86.92	-3,051.70	-6,966.38	1,892.95	1,468.84	424.11	4.463		
14,000.00	7,212.72	14,384.03	7,110.99	232.49	198.17	-86.92	-3,052.29	-7,066.38	1,892.95	1,462.76	430.20	4.400		
14,100.00	7,212.19	14,484.03	7,110.45	235.79	200.97	-86.92	-3,052.88	-7,166.37	1,892.96	1,456.67	436.29	4.339		
14,200.00	7,211.66	14,584.03	7,109.91	239.08	203.77	-86.92	-3,053.46	-7,266.37	1,892.96	1,450.58	442.39	4.279		
14,300.00	7,211.13	14,684.03	7,109.37	242.38	206.58	-86.92	-3,054.05	-7,366.37	1,892.97	1,444.48	448.49	4.221		
14,400.00	7,210.61	14,784.03	7,108.83	245.67	209.38	-86.92	-3,054.64	-7,466.36	1,892.97	1,438.39	454.59	4.164		
14,500.00	7,210.08	14,884.03	7,108.29	248.97	212.19	-86.92	-3,055.23	-7,566.36	1,892.98	1,432.29	460.69	4.109		
14,600.00	7,209.55	14,984.03	7,107.75	252.27	215.00	-86.92	-3,055.81	-7,666.36	1,892.98	1,426.19	466.79	4.055		
14,700.00	7,209.02	15,084.03	7,107.21	255.57	217.81	-86.92	-3,056.40	-7,766.35	1,892.98	1,420.08	472.90	4.003		
14,800.00	7,208.49	15,184.03	7,106.66	258.87	220.62	-86.92	-3,056.99	-7,866.35	1,892.99	1,413.98	479.01	3.952		
14,900.00	7,207.96	15,284.03	7,106.12	262.17	223.44	-86.92	-3,057.58	-7,966.35	1,892.99	1,407.87	485.12	3.902		
15,000.00	7,207.43	15,384.03	7,105.58	265.47	226.25	-86.92	-3,058.17	-8,066.34	1,893.00	1,401.76	491.23	3.854		
15,081.89	7,207.00	15,465.92	7,105.14	268.17	228.56	-86.92	-3,058.65	-8,148.23	1,893.00	1,396.76	496.24	3.815 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.46	240.07	1.95	240.08					
100.00	100.00	101.00	100.00	3.28	3.28	0.46	240.07	1.95	240.08	233.51	6.57	36.544		
200.00	200.00	201.00	200.00	3.34	3.34	0.46	240.07	1.95	240.08	233.41	6.67	35.968 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	172.47	240.07	1.95	241.81	234.92	6.89	35.115		
400.00	399.84	400.84	399.84	3.59	3.60	172.62	240.07	1.95	247.00	239.80	7.20	34.319		
500.00	499.45	500.45	499.45	3.80	3.81	172.85	240.07	1.95	255.65	248.05	7.60	33.639		
600.00	598.70	599.70	598.70	4.06	4.05	173.14	240.07	1.95	267.74	259.66	8.08	33.134		
700.00	697.49	698.88	688.86	4.38	4.29	173.39	241.44	1.62	284.64	276.03	8.61	33.052		
800.00	796.13	778.86	777.74	4.74	4.55	173.50	245.50	0.65	305.39	296.21	9.18	33.279		
900.00	894.78	866.64	865.25	5.15	4.83	173.47	252.13	-0.94	329.05	319.27	9.77	33.667		
1,000.00	993.43	955.45	953.54	5.58	5.13	173.33	261.41	-3.16	355.47	345.08	10.40	34.188		
1,100.00	1,092.07	1,051.65	1,049.10	6.03	5.46	173.17	272.27	-5.77	382.74	371.67	11.07	34.569		
1,200.00	1,190.72	1,147.86	1,144.66	6.50	5.80	173.03	283.14	-8.37	410.00	398.23	11.77	34.833		
1,300.00	1,289.36	1,244.06	1,240.21	6.98	6.16	172.90	294.00	-10.97	437.27	424.78	12.49	34.997		
1,400.00	1,388.01	1,340.27	1,335.77	7.47	6.53	172.79	304.87	-13.57	464.54	451.31	13.24	35.094		
1,500.00	1,486.65	1,436.48	1,431.32	7.97	6.90	172.69	315.73	-16.18	491.82	477.82	14.00	35.140		
1,600.00	1,585.30	1,532.68	1,526.88	8.48	7.28	172.60	326.60	-18.78	519.09	504.32	14.77	35.149		
1,700.00	1,683.94	1,628.89	1,622.43	9.00	7.67	172.53	337.46	-21.38	546.36	530.81	15.55	35.131		
1,800.00	1,782.59	1,725.10	1,717.99	9.52	8.06	172.45	348.33	-23.98	573.64	557.29	16.35	35.093		
1,900.00	1,881.24	1,821.30	1,813.54	10.05	8.46	172.39	359.19	-26.59	600.91	583.76	17.15	35.041		
2,000.00	1,979.88	1,917.51	1,909.10	10.58	8.86	172.33	370.06	-29.19	628.19	610.23	17.96	34.980		
2,100.00	2,078.53	2,013.71	2,004.65	11.11	9.26	172.28	380.92	-31.79	655.47	636.69	18.77	34.912		
2,200.00	2,177.17	2,109.92	2,100.21	11.64	9.67	172.23	391.78	-34.39	682.74	663.15	19.60	34.840		
2,300.00	2,275.82	2,206.13	2,195.76	12.18	10.07	172.18	402.65	-37.00	710.02	689.60	20.42	34.765		
2,400.00	2,374.46	2,302.33	2,291.32	12.72	10.49	172.14	413.51	-39.60	737.30	716.05	21.25	34.688		
2,500.00	2,473.11	2,401.46	2,386.87	13.26	10.91	172.10	424.38	-42.20	764.58	742.48	22.10	34.592		
2,600.00	2,571.76	2,494.74	2,482.43	13.80	11.31	172.06	435.24	-44.80	791.86	768.93	22.93	34.536		
2,700.00	2,670.40	2,609.05	2,577.98	14.35	11.81	172.02	446.11	-47.41	819.14	795.29	23.85	34.347		
2,800.00	2,769.05	2,687.16	2,673.54	14.89	12.15	171.99	456.97	-50.01	846.42	821.80	24.62	34.386		
2,900.00	2,867.69	2,783.36	2,769.09	15.44	12.56	171.96	467.84	-52.61	873.70	848.23	25.46	34.314		
3,000.00	2,966.34	2,879.57	2,864.65	15.99	12.98	171.93	478.70	-55.21	900.98	874.67	26.31	34.243		
3,100.00	3,064.98	2,975.77	2,960.20	16.53	13.41	171.91	489.57	-57.82	928.26	901.09	27.16	34.174		
3,200.00	3,163.63	3,071.98	3,055.76	17.08	13.83	171.88	500.43	-60.42	955.54	927.52	28.02	34.107		
3,300.00	3,262.27	3,168.19	3,151.32	17.63	14.25	171.86	511.30	-63.02	982.82	953.95	28.87	34.042		
3,400.00	3,360.92	3,264.39	3,246.87	18.18	14.67	171.83	522.16	-65.62	1,010.10	980.37	29.73	33.979		
3,500.00	3,459.57	3,360.60	3,342.43	18.74	15.10	171.81	533.03	-68.23	1,037.38	1,006.79	30.59	33.918		
3,600.00	3,558.21	3,456.81	3,437.98	19.29	15.52	171.79	543.89	-70.83	1,064.66	1,033.22	31.44	33.858		
3,700.00	3,656.86	3,553.01	3,533.54	19.84	15.95	171.77	554.76	-73.43	1,091.94	1,059.64	32.30	33.801		
3,800.00	3,755.50	3,649.22	3,629.09	20.39	16.37	171.76	565.62	-76.03	1,119.22	1,086.06	33.17	33.746		
3,900.00	3,854.15	3,745.42	3,724.65	20.95	16.80	171.74	576.49	-78.64	1,146.50	1,112.47	34.03	33.692		
4,000.00	3,952.79	3,841.63	3,820.20	21.50	17.23	171.72	587.35	-81.24	1,173.79	1,138.89	34.89	33.640		
4,100.00	4,051.44	3,937.84	3,915.76	22.05	17.65	171.71	598.21	-83.84	1,201.07	1,165.31	35.76	33.590		
4,200.00	4,150.08	4,034.04	4,011.31	22.61	18.08	171.69	609.08	-86.44	1,228.35	1,191.73	36.62	33.541		
4,300.00	4,248.73	4,130.25	4,106.87	23.16	18.51	171.68	619.94	-89.05	1,255.63	1,218.14	37.49	33.494		
4,400.00	4,347.38	4,226.45	4,202.42	23.72	18.94	171.66	630.81	-91.65	1,282.91	1,244.56	38.36	33.448		
4,500.00	4,446.02	4,322.66	4,297.98	24.27	19.37	171.65	641.67	-94.25	1,310.19	1,270.97	39.22	33.404		
4,600.00	4,544.67	4,418.87	4,393.53	24.83	19.80	171.64	652.54	-96.85	1,337.48	1,297.38	40.09	33.361		
4,700.00	4,643.31	4,515.07	4,489.09	25.39	20.22	171.62	663.40	-99.46	1,364.76	1,323.80	40.96	33.320		
4,800.00	4,741.96	4,611.28	4,584.64	25.94	20.65	171.61	674.27	-102.06	1,392.04	1,350.21	41.83	33.280		
4,900.00	4,840.60	4,707.49	4,680.20	26.50	21.08	171.60	685.13	-104.66	1,419.32	1,376.62	42.70	33.241		
5,000.00	4,939.25	4,803.69	4,775.75	27.05	21.51	171.59	696.00	-107.26	1,446.60	1,403.03	43.57	33.203		
5,100.00	5,037.90	4,900.10	4,871.31	27.61	21.95	171.58	706.86	-109.87	1,473.89	1,429.44	44.44	33.165		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	5,136.54	5,003.90	4,966.87	28.17	22.41	171.57	717.73	-112.47	1,501.17	1,455.82	45.35	33.105		
5,300.00	5,235.19	5,107.69	5,062.42	28.72	22.87	171.56	728.59	-115.07	1,528.45	1,482.20	46.25	33.047		
5,400.00	5,333.83	5,188.52	5,157.98	29.28	23.24	171.55	739.46	-117.67	1,555.73	1,508.68	47.05	33.062		
5,500.00	5,432.48	5,284.72	5,253.53	29.84	23.67	171.54	750.32	-120.27	1,583.01	1,535.09	47.93	33.029		
5,600.00	5,531.12	5,380.93	5,349.09	30.40	24.10	171.53	761.19	-122.88	1,610.30	1,561.50	48.80	32.998		
5,700.00	5,629.77	5,477.13	5,444.64	30.95	24.53	171.52	772.05	-125.48	1,637.58	1,587.90	49.67	32.967		
5,800.00	5,728.41	5,573.34	5,540.20	31.51	24.96	171.51	782.92	-128.08	1,664.86	1,614.31	50.55	32.937		
5,900.00	5,827.06	5,669.55	5,635.75	32.07	25.39	171.51	793.78	-130.68	1,692.14	1,640.72	51.42	32.908		
6,000.00	5,925.71	5,765.75	5,731.31	32.63	25.83	171.50	804.64	-133.29	1,719.43	1,667.13	52.30	32.879		
6,100.00	6,024.35	5,861.96	5,826.86	33.19	26.26	171.49	815.51	-135.89	1,746.71	1,693.54	53.17	32.851		
6,200.00	6,123.00	5,958.17	5,922.42	33.74	26.69	171.48	826.37	-138.49	1,773.99	1,719.95	54.04	32.824		
6,300.00	6,221.64	6,054.37	6,017.97	34.30	27.12	171.48	837.24	-141.09	1,801.27	1,746.35	54.92	32.798		
6,400.00	6,320.29	6,150.58	6,113.53	34.86	27.55	171.47	848.10	-143.70	1,828.56	1,772.76	55.80	32.772		
6,500.00	6,418.93	6,246.78	6,209.08	35.42	27.99	171.46	858.97	-146.30	1,855.84	1,799.17	56.67	32.747		
6,600.00	6,517.58	6,342.99	6,304.64	35.98	28.42	171.46	869.83	-148.90	1,883.12	1,825.57	57.55	32.723		
6,700.00	6,616.23	6,439.54	6,400.32	36.54	28.85	171.34	880.69	-155.02	1,910.40	1,851.97	58.43	32.695		
6,800.00	6,714.51	6,534.44	6,492.54	37.10	29.28	134.08	891.05	-174.48	1,937.60	1,878.29	59.31	32.668		
6,900.00	6,810.42	6,627.99	6,579.65	37.66	29.69	112.60	900.75	-206.94	1,964.20	1,904.01	60.19	32.633		
7,000.00	6,901.58	6,720.61	6,660.33	38.21	30.09	101.80	909.62	-251.38	1,989.52	1,928.44	61.08	32.571		
7,100.00	6,985.76	6,812.63	6,733.32	38.76	30.52	95.14	917.55	-306.72	2,012.92	1,950.89	62.03	32.451		
7,200.00	7,060.88	6,904.31	6,797.42	39.32	31.00	90.53	924.39	-371.80	2,033.80	1,970.70	63.10	32.233		
7,300.00	7,125.09	6,995.83	6,851.49	39.90	31.58	87.20	930.03	-445.32	2,051.65	1,987.27	64.38	31.869		
7,400.00	7,176.81	7,087.30	6,894.53	40.55	32.28	84.80	934.36	-525.83	2,066.03	2,000.07	65.96	31.323		
7,500.00	7,214.77	7,178.76	6,925.67	41.30	33.13	83.16	937.31	-611.69	2,076.58	2,008.68	67.90	30.584		
7,600.00	7,238.02	7,270.19	6,944.28	42.22	34.11	82.18	938.80	-701.12	2,083.04	2,012.83	70.21	29.670		
7,700.00	7,246.01	7,361.91	6,949.99	43.32	35.21	81.84	938.80	-792.58	2,085.26	2,012.41	72.85	28.625		
7,800.00	7,245.50	7,461.91	6,949.69	44.65	36.58	81.84	938.07	-892.58	2,085.08	2,009.09	75.99	27.438		
7,900.00	7,244.97	7,561.91	6,949.39	46.21	38.10	81.85	937.33	-992.57	2,084.89	2,005.43	79.47	26.236		
8,000.00	7,244.44	7,661.91	6,949.09	47.99	39.76	81.86	936.59	-1,092.57	2,084.71	2,001.46	83.25	25.041		
8,100.00	7,243.91	7,761.91	6,948.79	49.96	41.55	81.86	935.85	-1,192.57	2,084.53	1,997.22	87.30	23.876		
8,200.00	7,243.39	7,861.91	6,948.50	52.10	43.46	81.87	935.11	-1,292.56	2,084.34	1,992.75	91.59	22.758		
8,300.00	7,242.86	7,961.91	6,948.20	54.38	45.46	81.87	934.38	-1,392.56	2,084.16	1,988.08	96.07	21.693		
8,400.00	7,242.33	8,061.91	6,947.90	56.78	47.56	81.88	933.64	-1,492.56	2,083.97	1,983.24	100.73	20.688		
8,500.00	7,241.80	8,161.91	6,947.60	59.28	49.72	81.88	932.90	-1,592.55	2,083.79	1,978.24	105.54	19.743		
8,600.00	7,241.27	8,261.91	6,947.30	61.88	51.96	81.89	932.16	-1,692.55	2,083.60	1,973.12	110.49	18.858		
8,700.00	7,240.74	8,361.91	6,947.00	64.54	54.26	81.90	931.43	-1,792.54	2,083.42	1,967.88	115.54	18.032		
8,800.00	7,240.21	8,461.91	6,946.71	67.27	56.60	81.90	930.69	-1,892.54	2,083.23	1,962.53	120.70	17.260		
8,900.00	7,239.68	8,561.91	6,946.41	70.06	58.99	81.91	929.95	-1,992.54	2,083.05	1,957.10	125.95	16.539		
9,000.00	7,239.16	8,661.91	6,946.11	72.89	61.42	81.91	929.21	-2,092.53	2,082.87	1,951.60	131.27	15.867		
9,100.00	7,238.63	8,761.91	6,945.81	75.77	63.89	81.92	928.47	-2,192.53	2,082.68	1,946.02	136.66	15.240		
9,200.00	7,238.10	8,861.91	6,945.51	78.69	66.39	81.92	927.74	-2,292.53	2,082.50	1,940.38	142.11	14.654		
9,300.00	7,237.57	8,961.91	6,945.21	81.64	68.92	81.93	927.00	-2,392.52	2,082.31	1,934.69	147.62	14.106		
9,400.00	7,237.04	9,061.91	6,944.92	84.62	71.47	81.94	926.26	-2,492.52	2,082.13	1,928.95	153.17	13.593		
9,500.00	7,236.51	9,161.91	6,944.62	87.63	74.04	81.94	925.52	-2,592.52	2,081.95	1,923.17	158.77	13.113		
9,600.00	7,235.98	9,261.91	6,944.32	90.66	76.63	81.95	924.79	-2,692.51	2,081.76	1,917.35	164.41	12.662		
9,700.00	7,235.45	9,361.91	6,944.02	93.72	79.25	81.95	924.05	-2,792.51	2,081.58	1,911.50	170.08	12.239		
9,800.00	7,234.93	9,461.90	6,943.72	96.79	81.88	81.96	923.31	-2,892.51	2,081.39	1,905.61	175.79	11.841		
9,900.00	7,234.40	9,561.90	6,943.42	99.88	84.52	81.96	922.57	-2,992.50	2,081.21	1,899.69	181.52	11.466		
10,000.00	7,233.87	9,661.90	6,943.13	102.98	87.18	81.97	921.83	-3,092.50	2,081.02	1,893.75	187.28	11.112		
10,100.00	7,233.34	9,761.90	6,942.83	106.10	89.85	81.97	921.10	-3,192.49	2,080.84	1,887.78	193.06	10.778		
10,200.00	7,232.81	9,861.90	6,942.53	109.23	92.53	81.98	920.36	-3,292.49	2,080.66	1,881.80	198.86	10.463		
10,300.00	7,232.28	9,961.90	6,942.23	112.38	95.22	81.99	919.62	-3,392.49	2,080.47	1,875.79	204.68	10.164		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,061.90	6,941.93	115.53	97.92	81.99	918.88	-3,492.48	2,080.29	1,869.76	210.53	9.881		
10,500.00	7,231.23	10,161.90	6,941.63	118.70	100.63	82.00	918.15	-3,592.48	2,080.10	1,863.72	216.38	9.613		
10,600.00	7,230.70	10,261.90	6,941.34	121.87	103.34	82.00	917.41	-3,692.48	2,079.92	1,857.66	222.26	9.358		
10,700.00	7,230.17	10,361.90	6,941.04	125.05	106.07	82.01	916.67	-3,792.47	2,079.74	1,851.59	228.15	9.116		
10,800.00	7,229.64	10,461.90	6,940.74	128.25	108.80	82.01	915.93	-3,892.47	2,079.55	1,845.50	234.05	8.885		
10,900.00	7,229.11	10,561.90	6,940.44	131.44	111.54	82.02	915.20	-3,992.47	2,079.37	1,839.41	239.96	8.665		
11,000.00	7,228.58	10,661.90	6,940.14	134.65	114.28	82.03	914.46	-4,092.46	2,079.18	1,833.30	245.89	8.456		
11,100.00	7,228.05	10,761.90	6,939.84	137.86	117.03	82.03	913.72	-4,192.46	2,079.00	1,827.18	251.82	8.256		
11,200.00	7,227.52	10,861.90	6,939.55	141.08	119.79	82.04	912.98	-4,292.46	2,078.82	1,821.05	257.77	8.065		
11,300.00	7,227.00	10,961.90	6,939.25	144.30	122.55	82.04	912.24	-4,392.45	2,078.63	1,814.91	263.72	7.882		
11,400.00	7,226.47	11,061.90	6,938.95	147.52	125.31	82.05	911.51	-4,492.45	2,078.45	1,808.76	269.69	7.707		
11,500.00	7,225.94	11,161.90	6,938.65	150.76	128.08	82.05	910.77	-4,592.45	2,078.27	1,802.61	275.66	7.539		
11,600.00	7,225.41	11,261.90	6,938.35	153.99	130.85	82.06	910.03	-4,692.44	2,078.08	1,796.45	281.64	7.379		
11,700.00	7,224.88	11,361.90	6,938.05	157.23	133.62	82.07	909.29	-4,792.44	2,077.90	1,790.28	287.62	7.224		
11,800.00	7,224.35	11,461.90	6,937.76	160.48	136.40	82.07	908.56	-4,892.43	2,077.71	1,784.10	293.61	7.076		
11,900.00	7,223.82	11,561.90	6,937.46	163.72	139.18	82.08	907.82	-4,992.43	2,077.53	1,777.92	299.61	6.934		
12,000.00	7,223.29	11,661.90	6,937.16	166.98	141.97	82.08	907.08	-5,092.43	2,077.35	1,771.73	305.62	6.797		
12,100.00	7,222.77	11,761.90	6,936.86	170.23	144.76	82.09	906.34	-5,192.42	2,077.16	1,765.53	311.63	6.666		
12,200.00	7,222.24	11,861.90	6,936.56	173.49	147.55	82.09	905.60	-5,292.42	2,076.98	1,759.34	317.64	6.539		
12,300.00	7,221.71	11,961.90	6,936.26	176.75	150.34	82.10	904.87	-5,392.42	2,076.80	1,753.13	323.67	6.416		
12,400.00	7,221.18	12,061.90	6,935.96	180.01	153.14	82.11	904.13	-5,492.41	2,076.61	1,746.92	329.69	6.299		
12,500.00	7,220.65	12,161.89	6,935.67	183.28	155.94	82.11	903.39	-5,592.41	2,076.43	1,740.71	335.72	6.185		
12,600.00	7,220.12	12,261.89	6,935.37	186.54	158.74	82.12	902.65	-5,692.41	2,076.25	1,734.49	341.75	6.075		
12,700.00	7,219.59	12,361.89	6,935.07	189.81	161.54	82.12	901.92	-5,792.40	2,076.06	1,728.27	347.79	5.969		
12,800.00	7,219.06	12,461.89	6,934.77	193.09	164.34	82.13	901.18	-5,892.40	2,075.88	1,722.04	353.83	5.867		
12,900.00	7,218.54	12,561.89	6,934.47	196.36	167.15	82.13	900.44	-5,992.40	2,075.69	1,715.81	359.88	5.768		
13,000.00	7,218.01	12,661.89	6,934.17	199.64	169.95	82.14	899.70	-6,092.39	2,075.51	1,709.58	365.93	5.672		
13,100.00	7,217.48	12,761.89	6,933.88	202.92	172.76	82.15	898.96	-6,192.39	2,075.33	1,703.35	371.98	5.579		
13,200.00	7,216.95	12,861.89	6,933.58	206.20	175.57	82.15	898.23	-6,292.39	2,075.14	1,697.11	378.04	5.489		
13,300.00	7,216.42	12,961.89	6,933.28	209.48	178.39	82.16	897.49	-6,392.38	2,074.96	1,690.87	384.10	5.402		
13,400.00	7,215.89	13,061.89	6,932.98	212.76	181.20	82.16	896.75	-6,492.38	2,074.78	1,684.62	390.16	5.318		
13,500.00	7,215.36	13,161.89	6,932.68	216.05	184.02	82.17	896.01	-6,592.37	2,074.59	1,678.37	396.22	5.236		
13,600.00	7,214.84	13,261.89	6,932.38	219.33	186.83	82.17	895.28	-6,692.37	2,074.41	1,672.12	402.29	5.157		
13,700.00	7,214.31	13,361.89	6,932.09	222.62	189.65	82.18	894.54	-6,792.37	2,074.23	1,665.87	408.36	5.079		
13,800.00	7,213.78	13,461.89	6,931.79	225.91	192.47	82.19	893.80	-6,892.36	2,074.04	1,659.61	414.43	5.005		
13,900.00	7,213.25	13,561.89	6,931.49	229.20	195.29	82.19	893.06	-6,992.36	2,073.86	1,653.36	420.50	4.932		
14,000.00	7,212.72	13,661.89	6,931.19	232.49	198.11	82.20	892.32	-7,092.36	2,073.68	1,647.10	426.58	4.861		
14,100.00	7,212.19	13,761.89	6,930.89	235.79	200.93	82.20	891.59	-7,192.35	2,073.49	1,640.84	432.66	4.792		
14,200.00	7,211.66	13,861.89	6,930.59	239.08	203.76	82.21	890.85	-7,292.35	2,073.31	1,634.57	438.74	4.726		
14,300.00	7,211.13	13,961.89	6,930.30	242.38	206.58	82.21	890.11	-7,392.35	2,073.13	1,628.31	444.82	4.661		
14,400.00	7,210.61	14,061.89	6,930.00	245.67	209.40	82.22	889.37	-7,492.34	2,072.94	1,622.04	450.91	4.597		
14,500.00	7,210.08	14,161.89	6,929.70	248.97	212.23	82.23	888.64	-7,592.34	2,072.76	1,615.77	456.99	4.536		
14,600.00	7,209.55	14,261.89	6,929.40	252.27	215.06	82.23	887.90	-7,692.34	2,072.58	1,609.50	463.08	4.476		
14,700.00	7,209.02	14,361.89	6,929.10	255.57	217.89	82.24	887.16	-7,792.33	2,072.40	1,603.22	469.17	4.417		
14,800.00	7,208.49	14,461.89	6,928.80	258.87	220.71	82.24	886.42	-7,892.33	2,072.21	1,596.95	475.26	4.360		
14,900.00	7,207.96	14,561.89	6,928.51	262.17	223.54	82.25	885.68	-7,992.32	2,072.03	1,590.67	481.36	4.305		
15,000.00	7,207.43	14,661.89	6,928.21	265.47	226.37	82.26	884.95	-8,092.32	2,071.85	1,584.40	487.45	4.250		
15,072.53	7,207.05	14,734.41	6,927.99	267.87	228.43	82.26	884.41	-8,164.85	2,071.71	1,579.84	491.87	4.212		
15,081.89	7,207.00	14,732.12	6,928.00	268.17	228.36	82.26	884.43	-8,162.56	2,071.73	1,579.68	492.05	4.210 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.43	260.12	1.95	260.13					
100.00	100.00	101.00	100.00	3.28	3.28	0.43	260.12	1.95	260.13	253.56	6.57	39.595		
200.00	200.00	201.00	200.00	3.34	3.34	0.43	260.12	1.95	260.13	253.45	6.67	38.971	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	172.43	260.12	1.95	261.86	254.97	6.89	38.026		
400.00	399.84	400.84	399.84	3.59	3.60	172.57	260.12	1.95	267.04	259.85	7.20	37.104		
500.00	499.45	500.45	499.45	3.80	3.81	172.78	260.12	1.95	275.69	268.09	7.60	36.276		
600.00	598.70	599.70	598.70	4.06	4.05	173.06	260.12	1.95	287.78	279.70	8.08	35.615		
700.00	697.49	698.49	697.49	4.38	4.29	173.30	261.49	1.73	304.69	296.08	8.61	35.388		
800.00	796.13	797.13	796.13	4.74	4.55	173.47	265.54	1.07	325.48	316.31	9.17	35.483		
900.00	894.78	895.78	894.78	5.15	4.82	173.53	272.17	0.01	349.21	339.44	9.77	35.753		
1,000.00	993.43	994.43	993.43	5.58	5.11	173.51	281.23	-1.45	375.80	365.42	10.38	36.197		
1,100.00	1,092.07	1,093.07	1,092.07	6.03	5.40	173.42	292.60	-3.28	405.19	394.19	11.01	36.809		
1,200.00	1,190.72	1,191.72	1,190.72	6.50	5.73	173.28	306.89	-5.59	436.78	425.11	11.67	37.420		
1,300.00	1,289.36	1,290.36	1,289.36	6.98	6.08	173.15	322.04	-8.03	468.56	456.18	12.38	37.850		
1,400.00	1,388.01	1,389.01	1,388.01	7.47	6.44	173.04	337.18	-10.47	500.34	487.23	13.11	38.174		
1,500.00	1,486.65	1,487.65	1,486.65	7.97	6.81	172.93	352.32	-12.90	532.12	518.27	13.85	38.415		
1,600.00	1,585.30	1,586.30	1,585.30	8.48	7.19	172.85	367.46	-15.34	563.91	549.30	14.61	38.593		
1,700.00	1,683.94	1,684.94	1,683.94	9.00	7.58	172.77	382.61	-17.78	595.69	580.30	15.39	38.703		
1,800.00	1,782.59	1,783.59	1,782.59	9.52	8.02	172.69	397.75	-20.22	627.48	611.26	16.22	38.691		
1,900.00	1,881.24	1,882.24	1,881.24	10.05	8.37	172.63	412.89	-22.66	659.26	642.30	16.96	38.870		
2,000.00	1,979.88	1,980.88	1,979.88	10.58	8.77	172.57	428.04	-25.10	691.05	673.29	17.76	38.907		
2,100.00	2,078.53	2,079.53	2,078.53	11.11	9.18	172.52	443.18	-27.54	722.84	704.27	18.57	38.926		
2,200.00	2,177.17	2,178.17	2,177.17	11.64	9.59	172.47	458.32	-29.98	754.63	735.24	19.38	38.931		
2,300.00	2,275.82	2,276.82	2,275.82	12.18	10.01	172.42	473.47	-32.42	786.41	766.21	20.20	38.925		
2,400.00	2,374.46	2,375.46	2,374.46	12.72	10.42	172.38	488.61	-34.86	818.20	797.17	21.03	38.911		
2,500.00	2,473.11	2,474.11	2,473.11	13.26	10.84	172.34	503.75	-37.29	849.99	828.14	21.86	38.890		
2,600.00	2,571.76	2,572.76	2,571.76	13.80	11.26	172.31	518.89	-39.73	881.78	859.09	22.69	38.865		
2,700.00	2,670.40	2,671.40	2,670.40	14.35	11.68	172.27	534.04	-42.17	913.57	890.05	23.52	38.835		
2,800.00	2,769.05	2,770.05	2,769.05	14.89	12.11	172.24	549.18	-44.61	945.36	921.00	24.36	38.803		
2,900.00	2,867.69	2,868.69	2,867.69	15.44	12.53	172.21	564.32	-47.05	977.15	951.95	25.20	38.769		
3,000.00	2,966.34	2,967.34	2,966.34	15.99	12.96	172.19	579.47	-49.49	1,008.94	982.89	26.05	38.733		
3,100.00	3,064.98	3,065.98	3,064.98	16.53	13.38	172.16	594.61	-51.93	1,040.73	1,013.84	26.90	38.696		
3,200.00	3,163.63	3,164.63	3,163.63	17.08	13.81	172.14	609.75	-54.37	1,072.52	1,044.78	27.74	38.659		
3,300.00	3,262.27	3,263.27	3,262.27	17.63	14.24	172.11	624.90	-56.81	1,104.31	1,075.72	28.59	38.621		
3,400.00	3,360.92	3,361.92	3,360.92	18.18	14.67	172.09	640.04	-59.25	1,136.10	1,106.66	29.45	38.584		
3,500.00	3,459.57	3,460.57	3,459.57	18.74	15.10	172.07	655.18	-61.69	1,167.90	1,137.60	30.30	38.546		
3,600.00	3,558.21	3,559.21	3,558.21	19.29	15.53	172.05	670.32	-64.12	1,199.69	1,168.53	31.15	38.509		
3,700.00	3,656.86	3,657.86	3,656.86	19.84	16.01	172.03	685.47	-66.56	1,231.48	1,199.43	32.05	38.422		
3,800.00	3,755.50	3,756.50	3,755.50	20.39	16.40	172.02	700.61	-69.00	1,263.27	1,230.40	32.87	38.436		
3,900.00	3,854.15	3,855.15	3,854.15	20.95	16.83	172.00	715.75	-71.44	1,295.06	1,261.34	33.73	38.400		
4,000.00	3,952.79	3,953.79	3,952.79	21.50	17.27	171.99	730.90	-73.88	1,326.85	1,292.27	34.59	38.365		
4,100.00	4,051.44	4,052.44	4,051.44	22.05	17.70	171.97	746.04	-76.32	1,358.65	1,323.20	35.45	38.330		
4,200.00	4,150.08	4,151.08	4,150.08	22.61	18.14	171.96	761.18	-78.76	1,390.44	1,354.13	36.31	38.296		
4,300.00	4,248.73	4,249.73	4,248.73	23.16	18.57	171.94	776.33	-81.20	1,422.23	1,385.06	37.17	38.263		
4,400.00	4,347.38	4,348.38	4,347.38	23.72	19.01	171.93	791.47	-83.64	1,454.02	1,415.99	38.03	38.231		
4,500.00	4,446.02	4,447.02	4,446.02	24.27	19.44	171.92	806.61	-86.08	1,485.81	1,446.92	38.90	38.199		
4,600.00	4,544.67	4,545.67	4,544.67	24.83	19.88	171.91	821.75	-88.52	1,517.61	1,477.85	39.76	38.168		
4,700.00	4,643.31	4,644.31	4,643.31	25.39	20.32	171.89	836.90	-90.95	1,549.40	1,508.77	40.63	38.138		
4,800.00	4,741.96	4,742.96	4,741.96	25.94	20.75	171.88	852.04	-93.39	1,581.19	1,539.70	41.49	38.108		
4,900.00	4,840.60	4,841.60	4,840.60	26.50	21.19	171.87	867.18	-95.83	1,612.98	1,570.62	42.36	38.079		
5,000.00	4,939.25	4,940.25	4,939.25	27.05	21.63	171.86	882.33	-98.27	1,644.78	1,601.55	43.23	38.051		
5,100.00	5,037.90	5,038.90	5,037.90	27.61	22.07	171.85	897.47	-100.71	1,676.57	1,632.47	44.09	38.023		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	5,136.54	4,917.54	4,863.75	28.17	22.51	171.84	912.61	-103.15	1,708.36	1,663.40	44.96	37.996		
5,300.00	5,235.19	5,012.35	4,957.32	28.72	22.94	171.83	927.76	-105.59	1,740.15	1,694.32	45.83	37.970		
5,400.00	5,333.83	5,107.16	5,050.88	29.28	23.38	171.83	942.90	-108.03	1,771.95	1,725.25	46.70	37.944		
5,500.00	5,432.48	5,201.97	5,144.44	29.84	23.82	171.82	958.04	-110.47	1,803.74	1,756.17	47.57	37.919		
5,600.00	5,531.12	5,303.21	5,238.00	30.40	24.29	171.81	973.18	-112.91	1,835.53	1,787.06	48.47	37.871		
5,700.00	5,629.77	5,408.40	5,331.57	30.95	24.78	171.80	988.33	-115.35	1,867.32	1,817.94	49.39	37.811		
5,800.00	5,728.41	5,486.41	5,425.13	31.51	25.14	171.79	1,003.47	-117.78	1,899.12	1,848.94	50.18	37.847		
5,900.00	5,827.06	5,581.22	5,518.69	32.07	25.58	171.79	1,018.61	-120.22	1,930.91	1,879.86	51.05	37.824		
6,000.00	5,925.71	5,676.03	5,612.25	32.63	26.02	171.78	1,033.76	-122.66	1,962.70	1,910.78	51.92	37.801		
6,100.00	6,024.35	5,770.84	5,705.82	33.19	26.46	171.77	1,048.90	-125.10	1,994.49	1,941.70	52.79	37.779		
6,200.00	6,123.00	5,865.65	5,799.38	33.74	26.90	171.77	1,064.04	-127.54	2,026.29	1,972.62	53.67	37.758		
6,300.00	6,221.64	5,960.46	5,892.94	34.30	27.34	171.76	1,079.19	-129.98	2,058.08	2,003.54	54.54	37.737		
6,400.00	6,320.29	6,055.28	5,986.50	34.86	27.78	171.75	1,094.33	-132.42	2,089.87	2,034.46	55.41	37.716		
6,500.00	6,418.93	6,150.09	6,080.06	35.42	28.22	171.75	1,109.47	-134.86	2,121.67	2,065.38	56.28	37.696		
6,600.00	6,517.58	6,244.90	6,173.63	35.98	28.66	171.74	1,124.61	-137.30	2,153.46	2,096.30	57.16	37.676		
6,700.00	6,616.23	6,339.71	6,267.19	36.54	29.10	171.74	1,139.76	-139.74	2,185.25	2,127.22	58.03	37.657		
6,800.00	6,714.51	6,434.31	6,360.54	37.10	29.54	134.59	1,154.87	-142.17	2,216.98	2,158.07	58.91	37.636		
6,900.00	6,810.42	6,527.00	6,452.01	37.66	29.97	113.49	1,169.67	-144.55	2,248.21	2,188.44	59.77	37.614		
7,000.00	6,901.58	6,619.83	6,543.61	38.21	30.40	103.33	1,184.49	-147.24	2,278.56	2,217.91	60.65	37.571		
7,100.00	6,985.76	6,737.60	6,658.49	38.76	30.94	97.58	1,202.59	-164.67	2,307.12	2,245.33	61.79	37.340		
7,200.00	7,060.88	6,869.13	6,780.70	39.32	31.53	93.89	1,220.97	-209.00	2,332.78	2,269.67	63.11	36.963		
7,300.00	7,125.09	7,016.75	6,904.00	39.90	32.14	91.42	1,238.37	-287.68	2,354.57	2,289.87	64.70	36.392		
7,400.00	7,176.81	7,180.84	7,016.15	40.55	32.91	89.74	1,252.61	-405.99	2,371.50	2,304.78	66.72	35.544		
7,500.00	7,214.77	7,357.83	7,099.58	41.30	34.15	88.56	1,260.92	-561.21	2,382.62	2,313.21	69.42	34.324		
7,600.00	7,238.02	7,539.50	7,138.23	42.22	35.98	87.70	1,261.21	-738.09	2,387.34	2,314.44	72.90	32.749		
7,700.00	7,246.01	7,661.79	7,139.69	43.32	37.49	87.44	1,257.30	-860.27	2,386.37	2,310.28	76.09	31.361		
7,800.00	7,245.50	7,761.75	7,139.26	44.65	38.89	87.45	1,253.85	-960.17	2,383.50	2,304.18	79.32	30.050		
7,900.00	7,244.97	7,861.71	7,138.83	46.21	40.44	87.45	1,250.39	-1,060.07	2,380.62	2,297.74	82.88	28.725		
8,000.00	7,244.44	7,961.66	7,138.39	47.99	42.13	87.45	1,246.93	-1,159.96	2,377.74	2,291.01	86.73	27.415		
8,100.00	7,243.91	8,061.62	7,137.96	49.96	43.94	87.45	1,243.47	-1,259.86	2,374.87	2,284.02	90.84	26.143		
8,200.00	7,243.39	8,161.58	7,137.53	52.10	45.85	87.45	1,240.01	-1,359.76	2,371.99	2,276.81	95.17	24.922		
8,300.00	7,242.86	8,261.54	7,137.09	54.38	47.86	87.45	1,236.55	-1,459.66	2,369.11	2,269.41	99.70	23.762		
8,400.00	7,242.33	8,361.50	7,136.66	56.78	49.95	87.45	1,233.09	-1,559.55	2,366.23	2,261.83	104.40	22.666		
8,500.00	7,241.80	8,461.46	7,136.22	59.28	52.11	87.45	1,229.63	-1,659.45	2,363.35	2,254.11	109.24	21.634		
8,600.00	7,241.27	8,561.42	7,135.79	61.88	54.34	87.45	1,226.17	-1,759.35	2,360.48	2,246.27	114.21	20.668		
8,700.00	7,240.74	8,661.37	7,135.36	64.54	56.62	87.45	1,222.72	-1,859.25	2,357.60	2,238.30	119.29	19.763		
8,800.00	7,240.21	8,761.33	7,134.92	67.27	58.95	87.44	1,219.26	-1,959.15	2,354.72	2,230.25	124.48	18.917		
8,900.00	7,239.68	8,861.29	7,134.49	70.06	61.32	87.44	1,215.80	-2,059.04	2,351.84	2,222.10	129.74	18.127		
9,000.00	7,239.16	8,961.25	7,134.06	72.89	63.73	87.44	1,212.34	-2,158.94	2,348.97	2,213.88	135.09	17.388		
9,100.00	7,238.63	9,061.21	7,133.62	75.77	66.18	87.44	1,208.88	-2,258.84	2,346.09	2,205.59	140.50	16.698		
9,200.00	7,238.10	9,161.17	7,133.19	78.69	68.66	87.44	1,205.42	-2,358.74	2,343.21	2,197.23	145.98	16.052		
9,300.00	7,237.57	9,261.13	7,132.76	81.64	71.16	87.44	1,201.96	-2,458.63	2,340.33	2,188.83	151.50	15.447		
9,400.00	7,237.04	9,361.08	7,132.32	84.62	73.69	87.44	1,198.50	-2,558.53	2,337.46	2,180.38	157.08	14.881		
9,500.00	7,236.51	9,461.04	7,131.89	87.63	76.25	87.44	1,195.04	-2,658.43	2,334.58	2,171.88	162.70	14.349		
9,600.00	7,235.98	9,561.00	7,131.46	90.66	78.82	87.44	1,191.58	-2,758.33	2,331.70	2,163.35	168.35	13.850		
9,700.00	7,235.45	9,660.96	7,131.02	93.72	81.41	87.44	1,188.13	-2,858.23	2,328.82	2,154.78	174.05	13.380		
9,800.00	7,234.93	9,760.92	7,130.59	96.79	84.02	87.44	1,184.67	-2,958.12	2,325.95	2,146.17	179.77	12.938		
9,900.00	7,234.40	9,860.88	7,130.15	99.88	86.64	87.44	1,181.21	-3,058.02	2,323.07	2,137.54	185.52	12.522		
10,000.00	7,233.87	9,960.84	7,129.72	102.98	89.28	87.43	1,177.75	-3,157.92	2,320.19	2,128.89	191.30	12.128		
10,100.00	7,233.34	10,060.79	7,129.29	106.10	91.93	87.43	1,174.29	-3,257.82	2,317.31	2,120.21	197.11	11.757		
10,200.00	7,232.81	10,160.75	7,128.85	109.23	94.59	87.43	1,170.83	-3,357.71	2,314.43	2,111.50	202.93	11.405		
10,300.00	7,232.28	10,260.71	7,128.42	112.38	97.26	87.43	1,167.37	-3,457.61	2,311.56	2,102.78	208.78	11.072		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,360.67	7,127.99	115.53	99.94	87.43	1,163.91	-3,557.51	2,308.68	2,094.04	214.64	10.756		
10,500.00	7,231.23	10,460.63	7,127.55	118.70	102.63	87.43	1,160.45	-3,657.41	2,305.80	2,085.28	220.52	10.456		
10,600.00	7,230.70	10,560.59	7,127.12	121.87	105.33	87.43	1,157.00	-3,757.31	2,302.92	2,076.51	226.42	10.171		
10,700.00	7,230.17	10,660.55	7,126.69	125.05	108.03	87.43	1,153.54	-3,857.20	2,300.05	2,067.72	232.33	9.900		
10,800.00	7,229.64	10,760.50	7,126.25	128.25	110.75	87.43	1,150.08	-3,957.10	2,297.17	2,058.92	238.25	9.642		
10,900.00	7,229.11	10,860.46	7,125.82	131.44	113.47	87.43	1,146.62	-4,057.00	2,294.29	2,050.10	244.19	9.396		
11,000.00	7,228.58	10,960.42	7,125.38	134.65	116.19	87.43	1,143.16	-4,156.90	2,291.41	2,041.28	250.13	9.161		
11,100.00	7,228.05	11,060.38	7,124.95	137.86	118.93	87.43	1,139.70	-4,256.79	2,288.54	2,032.44	256.09	8.936		
11,200.00	7,227.52	11,160.34	7,124.52	141.08	121.66	87.42	1,136.24	-4,356.69	2,285.66	2,023.60	262.06	8.722		
11,300.00	7,227.00	11,260.30	7,124.08	144.30	124.40	87.42	1,132.78	-4,456.59	2,282.78	2,014.74	268.04	8.517		
11,400.00	7,226.47	11,360.26	7,123.65	147.52	127.15	87.42	1,129.32	-4,556.49	2,279.90	2,005.88	274.02	8.320		
11,500.00	7,225.94	11,460.21	7,123.22	150.76	129.90	87.42	1,125.87	-4,656.39	2,277.03	1,997.01	280.02	8.132		
11,600.00	7,225.41	11,560.17	7,122.78	153.99	132.66	87.42	1,122.41	-4,756.28	2,274.15	1,988.13	286.02	7.951		
11,700.00	7,224.88	11,660.13	7,122.35	157.23	135.41	87.42	1,118.95	-4,856.18	2,271.27	1,979.24	292.03	7.777		
11,800.00	7,224.35	11,760.09	7,121.92	160.48	138.18	87.42	1,115.49	-4,956.08	2,268.39	1,970.35	298.05	7.611		
11,900.00	7,223.82	11,860.05	7,121.48	163.72	140.94	87.42	1,112.03	-5,055.98	2,265.51	1,961.45	304.07	7.451		
12,000.00	7,223.29	11,960.01	7,121.05	166.98	143.71	87.42	1,108.57	-5,155.87	2,262.64	1,952.54	310.10	7.297		
12,100.00	7,222.77	12,059.97	7,120.62	170.23	146.48	87.42	1,105.11	-5,255.77	2,259.76	1,943.63	316.13	7.148		
12,200.00	7,222.24	12,159.92	7,120.18	173.49	149.26	87.42	1,101.65	-5,355.67	2,256.88	1,934.71	322.17	7.005		
12,300.00	7,221.71	12,259.88	7,119.75	176.75	152.04	87.41	1,098.19	-5,455.57	2,254.00	1,925.79	328.22	6.867		
12,400.00	7,221.18	12,359.84	7,119.31	180.01	154.82	87.41	1,094.73	-5,555.47	2,251.13	1,916.86	334.26	6.735		
12,500.00	7,220.65	12,459.80	7,118.88	183.28	157.60	87.41	1,091.28	-5,655.36	2,248.25	1,907.93	340.32	6.606		
12,600.00	7,220.12	12,559.76	7,118.45	186.54	160.38	87.41	1,087.82	-5,755.26	2,245.37	1,898.99	346.38	6.482		
12,700.00	7,219.59	12,659.72	7,118.01	189.81	163.17	87.41	1,084.36	-5,855.16	2,242.49	1,890.06	352.44	6.363		
12,800.00	7,219.06	12,759.68	7,117.58	193.09	165.96	87.41	1,080.90	-5,955.06	2,239.62	1,881.11	358.50	6.247		
12,900.00	7,218.54	12,859.63	7,117.15	196.36	168.75	87.41	1,077.44	-6,054.95	2,236.74	1,872.17	364.57	6.135		
13,000.00	7,218.01	12,959.59	7,116.71	199.64	171.54	87.41	1,073.98	-6,154.85	2,233.86	1,863.21	370.65	6.027		
13,100.00	7,217.48	13,059.55	7,116.28	202.92	174.34	87.41	1,070.52	-6,254.75	2,230.98	1,854.26	376.72	5.922		
13,200.00	7,216.95	13,159.51	7,115.85	206.20	177.13	87.41	1,067.06	-6,354.65	2,228.11	1,845.30	382.80	5.821		
13,300.00	7,216.42	13,259.47	7,115.41	209.48	179.93	87.41	1,063.60	-6,454.55	2,225.23	1,836.34	388.88	5.722		
13,400.00	7,215.89	13,359.43	7,114.98	212.76	182.73	87.40	1,060.15	-6,554.44	2,222.35	1,827.38	394.97	5.627		
13,500.00	7,215.36	13,459.39	7,114.54	216.05	185.53	87.40	1,056.69	-6,654.34	2,219.47	1,818.42	401.06	5.534		
13,600.00	7,214.84	13,559.34	7,114.11	219.33	188.33	87.40	1,053.23	-6,754.24	2,216.59	1,809.45	407.15	5.444		
13,700.00	7,214.31	13,659.30	7,113.68	222.62	191.14	87.40	1,049.77	-6,854.14	2,213.72	1,800.48	413.24	5.357		
13,800.00	7,213.78	13,759.26	7,113.24	225.91	193.94	87.40	1,046.31	-6,954.03	2,210.84	1,791.51	419.33	5.272		
13,900.00	7,213.25	13,859.22	7,112.81	229.20	196.75	87.40	1,042.85	-7,053.93	2,207.96	1,782.53	425.43	5.190		
14,000.00	7,212.72	13,959.18	7,112.38	232.49	199.56	87.40	1,039.39	-7,153.83	2,205.08	1,773.55	431.53	5.110		
14,100.00	7,212.19	14,059.14	7,111.94	235.79	202.36	87.40	1,035.93	-7,253.73	2,202.21	1,764.57	437.63	5.032		
14,200.00	7,211.66	14,159.10	7,111.51	239.08	205.17	87.40	1,032.47	-7,353.63	2,199.33	1,755.59	443.74	4.956		
14,300.00	7,211.13	14,259.06	7,111.08	242.38	207.98	87.40	1,029.02	-7,453.52	2,196.45	1,746.61	449.84	4.883		
14,400.00	7,210.61	14,359.01	7,110.64	245.67	210.79	87.40	1,025.56	-7,553.42	2,193.57	1,737.62	455.95	4.811		
14,500.00	7,210.08	14,458.97	7,110.21	248.97	213.61	87.39	1,022.10	-7,653.32	2,190.70	1,728.64	462.06	4.741		
14,600.00	7,209.55	14,558.93	7,109.78	252.27	216.42	87.39	1,018.64	-7,753.22	2,187.82	1,719.65	468.17	4.673		
14,700.00	7,209.02	14,658.89	7,109.34	255.57	219.23	87.39	1,015.18	-7,853.11	2,184.94	1,710.66	474.28	4.607		
14,800.00	7,208.49	14,758.85	7,108.91	258.87	222.05	87.39	1,011.72	-7,953.01	2,182.06	1,701.67	480.40	4.542		
14,900.00	7,207.96	14,858.81	7,108.47	262.17	224.87	87.39	1,008.26	-8,052.91	2,179.19	1,692.67	486.51	4.479		
15,000.00	7,207.43	14,958.77	7,108.04	265.47	227.68	87.39	1,004.80	-8,152.81	2,176.31	1,683.68	492.63	4.418		
15,073.02	7,207.05	14,969.16	7,108.00	267.88	227.97	87.39	1,004.44	-8,163.20	2,175.11	1,680.03	495.08	4.393		
15,081.89	7,207.00	14,969.16	7,108.00	268.17	227.97	87.39	1,004.44	-8,163.20	2,175.13	1,679.82	495.30	4.392 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.46	139.90	1.11	139.90					
100.00	100.00	101.00	100.00	3.28	3.28	0.46	139.90	1.11	139.90	133.33	6.57	21.295		
200.00	200.00	201.00	200.00	3.34	3.34	0.46	139.90	1.11	139.90	133.23	6.67	20.959	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	172.50	139.90	1.11	141.63	134.75	6.89	20.567		
400.00	399.84	400.87	399.87	3.59	3.60	172.76	139.90	1.11	146.82	139.62	7.20	20.400		
500.00	499.45	504.96	503.93	3.80	3.81	172.73	138.39	-0.08	154.01	146.40	7.60	20.257		
600.00	598.70	604.98	603.88	4.06	4.03	172.40	135.25	-2.55	162.94	154.87	8.07	20.188		
700.00	697.49	704.22	703.04	4.38	4.29	172.24	132.12	-5.01	175.17	166.56	8.61	20.348		
800.00	796.13	803.36	802.10	4.74	4.58	172.17	128.99	-7.47	188.29	179.10	9.19	20.481		
900.00	894.78	902.49	901.15	5.15	4.88	172.10	125.86	-9.93	201.41	191.58	9.83	20.498		
1,000.00	993.43	1,001.63	1,000.21	5.58	5.21	172.04	122.74	-12.39	214.53	204.03	10.50	20.439		
1,100.00	1,092.07	1,100.77	1,099.26	6.03	5.55	171.99	119.61	-14.85	227.65	216.45	11.20	20.328		
1,200.00	1,190.72	1,200.10	1,198.32	6.50	5.91	171.95	116.48	-17.31	240.77	228.84	11.93	20.185		
1,300.00	1,289.36	1,300.96	1,297.37	6.98	6.28	171.91	113.36	-19.77	253.89	241.21	12.68	20.016		
1,400.00	1,388.01	1,401.83	1,396.43	7.47	6.66	171.87	110.23	-22.23	267.01	253.55	13.46	19.838		
1,500.00	1,486.65	1,502.69	1,495.48	7.97	7.05	171.84	107.10	-24.69	280.13	265.88	14.25	19.659		
1,600.00	1,585.30	1,603.56	1,594.54	8.48	7.45	171.81	103.98	-27.15	293.26	278.20	15.05	19.481		
1,700.00	1,683.94	1,704.42	1,693.59	9.00	7.85	171.78	100.85	-29.61	306.38	290.51	15.87	19.309		
1,800.00	1,782.59	1,805.29	1,792.65	9.52	8.26	171.75	97.72	-32.07	319.50	302.81	16.69	19.142		
1,900.00	1,881.24	1,906.15	1,891.71	10.05	8.67	171.73	94.60	-34.53	332.62	315.10	17.52	18.983		
2,000.00	1,979.88	2,007.02	1,990.76	10.58	9.08	171.71	91.47	-37.00	345.74	327.38	18.36	18.831		
2,100.00	2,078.53	2,107.88	2,089.82	11.11	9.50	171.69	88.34	-39.46	358.86	339.66	19.20	18.686		
2,200.00	2,177.17	2,208.75	2,188.87	11.64	9.91	171.67	85.22	-41.92	371.98	351.93	20.05	18.549		
2,300.00	2,275.82	2,309.61	2,287.93	12.18	10.34	171.65	82.09	-44.38	385.11	364.20	20.91	18.418		
2,400.00	2,374.46	2,389.52	2,386.98	12.72	10.67	171.64	78.97	-46.84	398.23	376.55	21.68	18.369		
2,500.00	2,473.11	2,488.66	2,486.04	13.26	11.09	171.62	75.84	-49.30	411.35	388.82	22.53	18.255		
2,600.00	2,571.76	2,587.79	2,585.09	13.80	11.51	171.61	72.71	-51.76	424.47	401.08	23.39	18.146		
2,700.00	2,670.40	2,686.93	2,684.15	14.35	11.93	171.59	69.59	-54.22	437.59	413.34	24.25	18.044		
2,800.00	2,769.05	2,786.07	2,783.20	14.89	12.35	171.58	66.46	-56.68	450.72	425.60	25.12	17.946		
2,900.00	2,867.69	2,885.20	2,882.26	15.44	12.77	171.57	63.33	-59.14	463.84	437.86	25.98	17.853		
3,000.00	2,966.34	2,984.34	2,981.32	15.99	13.20	171.56	60.21	-61.60	476.96	450.11	26.85	17.765		
3,100.00	3,064.98	3,083.47	3,080.37	16.53	13.62	171.55	57.08	-64.06	490.08	462.36	27.72	17.681		
3,200.00	3,163.63	3,182.61	3,179.43	17.08	14.05	171.54	53.95	-66.52	503.20	474.61	28.59	17.602		
3,300.00	3,262.27	3,281.74	3,278.48	17.63	14.48	171.53	50.83	-68.98	516.32	486.86	29.46	17.526		
3,400.00	3,360.92	3,380.88	3,377.54	18.18	14.90	171.52	47.70	-71.44	529.45	499.11	30.33	17.453		
3,500.00	3,459.57	3,480.01	3,476.59	18.74	15.33	171.51	44.57	-73.90	542.57	511.36	31.21	17.384		
3,600.00	3,558.21	3,579.15	3,575.65	19.29	15.76	171.50	41.45	-76.36	555.69	523.60	32.09	17.318		
3,700.00	3,656.86	3,678.28	3,674.70	19.84	16.19	171.49	38.32	-78.82	568.81	535.85	32.96	17.255		
3,800.00	3,755.50	3,777.42	3,773.76	20.39	16.62	171.49	35.19	-81.28	581.93	548.09	33.84	17.195		
3,900.00	3,854.15	3,876.55	3,872.81	20.95	17.05	171.48	32.07	-83.74	595.06	560.33	34.72	17.137		
4,000.00	3,952.79	3,975.69	3,971.87	21.50	17.48	171.47	28.94	-86.20	608.18	572.58	35.60	17.082		
4,100.00	4,051.44	4,074.82	4,070.93	22.05	17.91	171.47	25.81	-88.66	621.30	584.82	36.48	17.029		
4,200.00	4,150.08	4,173.96	4,169.98	22.61	18.34	171.46	22.69	-91.12	634.42	597.06	37.37	16.978		
4,300.00	4,248.73	4,273.09	4,269.04	23.16	18.78	171.45	19.56	-93.58	647.54	609.29	38.25	16.929		
4,400.00	4,347.38	4,372.23	4,368.09	23.72	19.21	171.45	16.43	-96.04	660.67	621.53	39.13	16.883		
4,500.00	4,446.02	4,471.37	4,467.15	24.27	19.64	171.44	13.31	-98.50	673.79	633.77	40.02	16.837		
4,600.00	4,544.67	4,570.50	4,566.20	24.83	20.07	171.44	10.18	-100.96	686.91	646.01	40.90	16.794		
4,700.00	4,643.31	4,669.64	4,665.26	25.39	20.51	171.43	7.06	-103.42	700.03	658.25	41.79	16.752		
4,800.00	4,741.96	4,768.77	4,764.31	25.94	20.94	171.43	3.93	-105.88	713.15	670.48	42.67	16.712		
4,900.00	4,840.60	4,867.91	4,863.37	26.50	21.37	171.42	0.80	-108.34	726.28	682.72	43.56	16.673		
5,000.00	4,939.25	4,967.04	4,962.42	27.05	21.81	171.42	-2.32	-110.80	739.40	694.95	44.45	16.636		
5,100.00	5,037.90	5,066.18	5,061.48	27.61	22.24	171.41	-5.45	-113.27	752.52	707.19	45.33	16.600		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,165.31	5,160.54	28.17	22.68	171.41	-8.58	-115.73	765.64	719.42	46.22	16.565		
5,300.00	5,235.19	5,264.45	5,259.59	28.72	23.11	171.40	-11.70	-118.19	778.76	731.66	47.11	16.531		
5,400.00	5,333.83	5,363.58	5,358.65	29.28	23.55	171.40	-14.83	-120.65	791.89	743.89	48.00	16.499		
5,500.00	5,432.48	5,462.72	5,457.70	29.84	23.98	171.40	-17.96	-123.11	805.01	756.12	48.88	16.467		
5,600.00	5,531.12	5,561.85	5,556.76	30.40	24.42	171.39	-21.08	-125.57	818.13	768.36	49.77	16.437		
5,700.00	5,629.77	5,660.99	5,655.81	30.95	24.85	171.39	-24.21	-128.03	831.25	780.59	50.66	16.408		
5,800.00	5,728.41	5,760.12	5,754.87	31.51	25.29	171.39	-27.34	-130.49	844.38	792.82	51.55	16.379		
5,900.00	5,827.06	5,859.26	5,853.92	32.07	25.72	171.38	-30.46	-132.95	857.50	805.05	52.44	16.351		
6,000.00	5,925.71	5,958.40	5,952.98	32.63	26.16	171.38	-33.59	-135.41	870.62	817.29	53.33	16.324		
6,100.00	6,024.35	6,057.53	6,052.03	33.19	26.59	171.38	-36.72	-137.87	883.74	829.52	54.22	16.298		
6,200.00	6,123.00	6,156.67	6,151.09	33.74	27.03	171.37	-39.84	-140.33	896.86	841.75	55.11	16.273		
6,300.00	6,221.64	6,255.80	6,250.15	34.30	27.46	171.37	-42.97	-142.79	909.99	853.98	56.00	16.249		
6,400.00	6,320.29	6,354.94	6,349.20	34.86	27.90	171.37	-46.10	-145.25	923.11	866.21	56.89	16.225		
6,500.00	6,418.93	6,454.03	6,448.22	35.42	28.34	171.36	-49.22	-147.77	936.23	878.44	57.79	16.202		
6,600.00	6,517.58	6,551.72	6,545.11	35.98	28.77	170.82	-52.33	-150.97	949.42	890.74	58.68	16.179		
6,700.00	6,616.23	6,644.60	6,634.63	36.54	29.17	169.50	-55.29	-153.26	963.13	903.57	59.56	16.171		
6,800.00	6,714.51	6,731.43	6,714.30	37.10	29.54	131.96	-58.01	-217.51	977.88	917.50	60.39	16.194		
6,900.00	6,810.42	6,815.16	6,786.02	37.66	29.89	110.47	-60.52	-260.51	993.10	931.94	61.17	16.236		
7,000.00	6,901.58	6,896.44	6,849.68	38.21	30.24	99.69	-62.83	-310.92	1,008.18	946.27	61.91	16.284		
7,100.00	6,985.76	6,975.79	6,905.13	38.76	30.63	93.06	-64.92	-367.56	1,022.55	959.89	62.66	16.319		
7,200.00	7,060.88	7,053.61	6,952.27	39.32	31.07	88.51	-66.78	-429.39	1,035.68	972.21	63.47	16.318		
7,300.00	7,125.09	7,130.23	6,990.98	39.90	31.60	85.23	-68.40	-495.44	1,047.10	982.67	64.43	16.251		
7,400.00	7,176.81	7,205.96	7,021.18	40.55	32.22	82.87	-69.77	-564.83	1,056.44	990.81	65.63	16.097		
7,500.00	7,214.77	7,281.05	7,042.78	41.30	32.94	81.26	-70.89	-636.69	1,063.38	996.25	67.13	15.840		
7,600.00	7,238.02	7,355.72	7,055.73	42.22	33.75	80.31	-71.75	-710.17	1,067.70	998.73	68.97	15.481		
7,700.00	7,246.01	7,435.08	7,060.01	43.32	34.70	79.98	-72.33	-783.73	1,069.27	998.07	71.20	15.019		
7,800.00	7,245.50	7,529.44	7,059.57	44.65	35.99	79.99	-72.93	-883.73	1,069.25	995.01	74.24	14.403		
7,900.00	7,244.97	7,629.44	7,059.14	46.21	37.50	79.99	-73.53	-983.73	1,069.21	991.52	77.69	13.762		
8,000.00	7,244.44	7,729.44	7,058.71	47.99	39.16	80.00	-74.13	-1,083.72	1,069.18	987.72	81.46	13.125		
8,100.00	7,243.91	7,829.44	7,058.27	49.96	40.96	80.00	-74.73	-1,183.72	1,069.15	983.66	85.50	12.505		
8,200.00	7,243.39	7,929.44	7,057.84	52.10	42.87	80.01	-75.33	-1,283.72	1,069.12	979.35	89.77	11.910		
8,300.00	7,242.86	8,029.44	7,057.40	54.38	44.88	80.01	-75.93	-1,383.72	1,069.09	974.85	94.24	11.344		
8,400.00	7,242.33	8,129.44	7,056.97	56.78	46.98	80.02	-76.52	-1,483.71	1,069.06	970.17	98.89	10.810		
8,500.00	7,241.80	8,229.44	7,056.54	59.28	49.16	80.02	-77.12	-1,583.71	1,069.03	965.34	103.69	10.309		
8,600.00	7,241.27	8,329.44	7,056.10	61.88	51.40	80.03	-77.72	-1,683.71	1,069.00	960.37	108.63	9.841		
8,700.00	7,240.74	8,429.44	7,055.67	64.54	53.70	80.03	-78.32	-1,783.70	1,068.97	955.29	113.68	9.404		
8,800.00	7,240.21	8,529.44	7,055.23	67.27	56.06	80.03	-78.92	-1,883.70	1,068.94	950.12	118.82	8.996		
8,900.00	7,239.68	8,629.44	7,054.80	70.06	58.46	80.04	-79.52	-1,983.70	1,068.91	944.85	124.06	8.616		
9,000.00	7,239.16	8,729.44	7,054.37	72.89	60.90	80.04	-80.12	-2,083.70	1,068.88	939.51	129.37	8.262		
9,100.00	7,238.63	8,829.44	7,053.93	75.77	63.37	80.05	-80.72	-2,183.69	1,068.85	934.10	134.75	7.932		
9,200.00	7,238.10	8,929.44	7,053.50	78.69	65.87	80.05	-81.31	-2,283.69	1,068.82	928.62	140.19	7.624		
9,300.00	7,237.57	9,029.44	7,053.06	81.64	68.41	80.06	-81.91	-2,383.69	1,068.79	923.10	145.69	7.336		
9,400.00	7,237.04	9,129.44	7,052.63	84.62	70.97	80.06	-82.51	-2,483.69	1,068.76	917.53	151.23	7.067		
9,500.00	7,236.51	9,229.44	7,052.20	87.63	73.55	80.07	-83.11	-2,583.68	1,068.73	911.91	156.81	6.815		
9,600.00	7,235.98	9,329.44	7,051.76	90.66	76.15	80.07	-83.71	-2,683.68	1,068.69	906.26	162.43	6.579		
9,700.00	7,235.45	9,429.44	7,051.33	93.72	78.76	80.08	-84.31	-2,783.68	1,068.66	900.57	168.09	6.358		
9,800.00	7,234.93	9,529.44	7,050.89	96.79	81.40	80.08	-84.91	-2,883.67	1,068.63	894.85	173.78	6.149		
9,900.00	7,234.40	9,629.44	7,050.46	99.88	84.05	80.09	-85.51	-2,983.67	1,068.60	889.11	179.50	5.953		
10,000.00	7,233.87	9,729.44	7,050.03	102.98	86.71	80.09	-86.10	-3,083.67	1,068.57	883.34	185.24	5.769		
10,100.00	7,233.34	9,829.44	7,049.59	106.10	89.38	80.10	-86.70	-3,183.67	1,068.54	877.54	191.00	5.594		
10,200.00	7,232.81	9,929.44	7,049.16	109.23	92.07	80.10	-87.30	-3,283.66	1,068.51	871.72	196.79	5.430		
10,300.00	7,232.28	10,029.44	7,048.72	112.38	94.76	80.11	-87.90	-3,383.66	1,068.48	865.89	202.59	5.274		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	10,129.44	7,048.29	115.53	97.47	80.11	-88.50	-3,483.66	1,068.45	860.03	208.42	5.126		
10,500.00	7,231.23	10,229.44	7,047.86	118.70	100.18	80.12	-89.10	-3,583.65	1,068.42	854.16	214.26	4.987		
10,600.00	7,230.70	10,329.44	7,047.42	121.87	102.90	80.12	-89.70	-3,683.65	1,068.39	848.28	220.11	4.854		
10,700.00	7,230.17	10,429.44	7,046.99	125.05	105.63	80.13	-90.30	-3,783.65	1,068.36	842.38	225.98	4.728		
10,800.00	7,229.64	10,529.44	7,046.55	128.25	108.37	80.13	-90.89	-3,883.65	1,068.33	836.47	231.86	4.608		
10,900.00	7,229.11	10,629.44	7,046.12	131.44	111.11	80.14	-91.49	-3,983.64	1,068.30	830.54	237.76	4.493		
11,000.00	7,228.58	10,729.44	7,045.69	134.65	113.86	80.14	-92.09	-4,083.64	1,068.27	824.61	243.66	4.384		
11,100.00	7,228.05	10,829.44	7,045.25	137.86	116.61	80.15	-92.69	-4,183.64	1,068.24	818.66	249.58	4.280		
11,200.00	7,227.52	10,929.44	7,044.82	141.08	119.37	80.15	-93.29	-4,283.64	1,068.21	812.71	255.50	4.181		
11,300.00	7,227.00	11,029.44	7,044.38	144.30	122.13	80.16	-93.89	-4,383.63	1,068.18	806.74	261.44	4.086		
11,400.00	7,226.47	11,129.44	7,043.95	147.52	124.89	80.16	-94.49	-4,483.63	1,068.15	800.77	267.38	3.995		
11,500.00	7,225.94	11,229.44	7,043.52	150.76	127.67	80.17	-95.09	-4,583.63	1,068.12	794.79	273.33	3.908		
11,600.00	7,225.41	11,329.44	7,043.08	153.99	130.44	80.17	-95.68	-4,683.62	1,068.09	788.80	279.28	3.824		
11,700.00	7,224.88	11,429.44	7,042.65	157.23	133.22	80.18	-96.28	-4,783.62	1,068.06	782.81	285.25	3.744		
11,800.00	7,224.35	11,529.44	7,042.21	160.48	136.00	80.18	-96.88	-4,883.62	1,068.03	776.81	291.22	3.667		
11,900.00	7,223.82	11,629.44	7,041.78	163.72	138.78	80.19	-97.48	-4,983.62	1,067.99	770.80	297.20	3.594		
12,000.00	7,223.29	11,729.44	7,041.35	166.98	141.57	80.19	-98.08	-5,083.61	1,067.96	764.79	303.18	3.523		
12,100.00	7,222.77	11,829.44	7,040.91	170.23	144.36	80.20	-98.68	-5,183.61	1,067.93	758.77	309.17	3.454		
12,200.00	7,222.24	11,929.44	7,040.48	173.49	147.15	80.20	-99.28	-5,283.61	1,067.90	752.74	315.16	3.388		
12,300.00	7,221.71	12,029.44	7,040.04	176.75	149.95	80.21	-99.88	-5,383.60	1,067.87	746.72	321.16	3.325		
12,400.00	7,221.18	12,129.44	7,039.61	180.01	152.75	80.21	-100.47	-5,483.60	1,067.84	740.68	327.16	3.264		
12,500.00	7,220.65	12,229.44	7,039.18	183.28	155.55	80.22	-101.07	-5,583.60	1,067.81	734.65	333.17	3.205		
12,600.00	7,220.12	12,329.44	7,038.74	186.54	158.35	80.22	-101.67	-5,683.60	1,067.78	728.60	339.18	3.148		
12,700.00	7,219.59	12,429.44	7,038.31	189.81	161.15	80.22	-102.27	-5,783.59	1,067.75	722.56	345.19	3.093		
12,800.00	7,219.06	12,529.44	7,037.87	193.09	163.96	80.23	-102.87	-5,883.59	1,067.72	716.51	351.21	3.040		
12,900.00	7,218.54	12,629.44	7,037.44	196.36	166.77	80.23	-103.47	-5,983.59	1,067.69	710.46	357.23	2.989		
13,000.00	7,218.01	12,729.44	7,037.01	199.64	169.58	80.24	-104.07	-6,083.59	1,067.66	704.40	363.26	2.939		
13,100.00	7,217.48	12,829.44	7,036.57	202.92	172.39	80.24	-104.67	-6,183.58	1,067.63	698.34	369.29	2.891		
13,200.00	7,216.95	12,929.44	7,036.14	206.20	175.20	80.25	-105.26	-6,283.58	1,067.60	692.28	375.32	2.845		
13,300.00	7,216.42	13,029.44	7,035.70	209.48	178.02	80.25	-105.86	-6,383.58	1,067.57	686.22	381.35	2.799		
13,400.00	7,215.89	13,129.44	7,035.27	212.76	180.83	80.26	-106.46	-6,483.57	1,067.54	680.15	387.39	2.756		
13,500.00	7,215.36	13,229.44	7,034.84	216.05	183.65	80.26	-107.06	-6,583.57	1,067.51	674.08	393.43	2.713		
13,600.00	7,214.84	13,329.44	7,034.40	219.33	186.47	80.27	-107.66	-6,683.57	1,067.48	668.00	399.48	2.672		
13,700.00	7,214.31	13,429.44	7,033.97	222.62	189.29	80.27	-108.26	-6,783.57	1,067.45	661.93	405.52	2.632		
13,800.00	7,213.78	13,529.44	7,033.53	225.91	192.11	80.28	-108.86	-6,883.56	1,067.42	655.85	411.57	2.594		
13,900.00	7,213.25	13,629.44	7,033.10	229.20	194.93	80.28	-109.46	-6,983.56	1,067.39	649.77	417.62	2.556		
14,000.00	7,212.72	13,729.44	7,032.67	232.49	197.75	80.29	-110.06	-7,083.56	1,067.36	643.69	423.67	2.519		
14,100.00	7,212.19	13,829.44	7,032.23	235.79	200.57	80.29	-110.65	-7,183.55	1,067.33	637.60	429.72	2.484		
14,200.00	7,211.66	13,929.44	7,031.80	239.08	203.40	80.30	-111.25	-7,283.55	1,067.30	631.52	435.78	2.449		
14,300.00	7,211.13	14,029.44	7,031.36	242.38	206.22	80.30	-111.85	-7,383.55	1,067.27	625.43	441.84	2.416		
14,400.00	7,210.61	14,129.44	7,030.93	245.67	209.05	80.31	-112.45	-7,483.55	1,067.24	619.34	447.90	2.383		
14,500.00	7,210.08	14,229.44	7,030.50	248.97	211.88	80.31	-113.05	-7,583.54	1,067.21	613.25	453.96	2.351		
14,600.00	7,209.55	14,329.44	7,030.06	252.27	214.71	80.32	-113.65	-7,683.54	1,067.18	607.15	460.02	2.320		
14,700.00	7,209.02	14,429.44	7,029.63	255.57	217.54	80.32	-114.25	-7,783.54	1,067.15	601.06	466.09	2.290		
14,800.00	7,208.49	14,529.44	7,029.19	258.87	220.37	80.33	-114.85	-7,883.54	1,067.12	594.96	472.16	2.260		
14,900.00	7,207.96	14,629.44	7,028.76	262.17	223.20	80.33	-115.44	-7,983.53	1,067.09	588.86	478.22	2.231		
15,000.00	7,207.43	14,729.44	7,028.33	265.47	226.03	80.34	-116.04	-8,083.53	1,067.06	582.76	484.29	2.203		
15,081.89	7,207.00	14,811.33	7,027.97	268.17	228.35	80.34	-116.53	-8,165.42	1,067.03	577.77	489.27	2.181 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.40	159.93	1.11	159.93					
100.00	100.00	101.00	100.00	3.28	3.28	0.40	159.93	1.11	159.93	153.36	6.57	24.344		
200.00	200.00	201.00	200.00	3.34	3.34	0.40	159.93	1.11	159.93	153.26	6.67	23.961	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	172.44	159.93	1.11	161.66	154.78	6.89	23.476		
400.00	399.84	400.84	399.84	3.59	3.60	172.66	159.93	1.11	166.85	159.66	7.20	23.183		
500.00	499.45	500.45	499.45	3.80	3.81	173.00	159.93	1.11	175.50	167.90	7.60	23.093		
600.00	598.70	600.20	598.79	4.06	4.04	172.93	159.93	-0.49	187.57	179.49	8.07	23.229		
700.00	697.49	701.39	697.57	4.38	4.30	172.74	159.93	-2.96	202.92	194.29	8.62	23.539		
800.00	796.13	802.71	796.21	4.74	4.60	172.63	159.93	-5.42	219.15	209.94	9.21	23.790		
900.00	894.78	904.04	894.85	5.15	4.92	172.53	159.93	-7.89	235.39	225.54	9.85	23.895		
1,000.00	993.43	1,005.37	993.49	5.58	5.25	172.45	159.93	-10.35	251.63	241.10	10.53	23.899		
1,100.00	1,092.07	1,106.70	1,092.13	6.03	5.60	172.38	159.93	-12.82	267.87	256.63	11.24	23.834		
1,200.00	1,190.72	1,208.03	1,190.77	6.50	5.97	172.31	159.93	-15.28	284.11	272.13	11.97	23.726		
1,300.00	1,289.36	1,309.35	1,289.41	6.98	6.34	172.25	159.93	-17.75	300.35	287.61	12.73	23.589		
1,400.00	1,388.01	1,389.32	1,388.06	7.47	6.64	172.20	159.93	-20.21	316.59	303.16	13.43	23.579		
1,500.00	1,486.65	1,487.99	1,486.70	7.97	7.02	172.15	159.93	-22.68	332.83	318.62	14.21	23.430		
1,600.00	1,585.30	1,586.66	1,585.34	8.48	7.40	172.11	159.93	-25.15	349.07	334.07	15.00	23.276		
1,700.00	1,683.94	1,685.33	1,683.98	9.00	7.79	172.07	159.93	-27.61	365.31	349.51	15.80	23.122		
1,800.00	1,782.59	1,784.01	1,782.62	9.52	8.19	172.04	159.93	-30.08	381.55	364.94	16.61	22.970		
1,900.00	1,881.24	1,882.68	1,881.26	10.05	8.59	172.00	159.93	-32.54	397.79	380.36	17.43	22.822		
2,000.00	1,979.88	1,981.35	1,979.90	10.58	8.99	171.97	159.93	-35.01	414.03	395.77	18.26	22.679		
2,100.00	2,078.53	2,080.02	2,078.54	11.11	9.39	171.95	159.93	-37.47	430.27	411.18	19.09	22.541		
2,200.00	2,177.17	2,178.70	2,177.19	11.64	9.80	171.92	159.93	-39.94	446.51	426.58	19.93	22.409		
2,300.00	2,275.82	2,277.37	2,275.83	12.18	10.21	171.90	159.93	-42.40	462.75	441.98	20.77	22.282		
2,400.00	2,374.46	2,376.04	2,374.47	12.72	10.62	171.87	159.93	-44.87	478.99	457.38	21.61	22.162		
2,500.00	2,473.11	2,474.71	2,473.11	13.26	11.03	171.85	159.93	-47.34	495.23	472.77	22.46	22.047		
2,600.00	2,571.76	2,573.38	2,571.75	13.80	11.45	171.83	159.93	-49.80	511.47	488.16	23.32	21.937		
2,700.00	2,670.40	2,672.06	2,670.39	14.35	11.86	171.82	159.93	-52.27	527.72	503.54	24.17	21.832		
2,800.00	2,769.05	2,770.73	2,769.03	14.89	12.28	171.80	159.93	-54.73	543.96	518.93	25.03	21.733		
2,900.00	2,867.69	2,869.40	2,867.68	15.44	12.70	171.78	159.93	-57.20	560.20	534.31	25.89	21.638		
3,000.00	2,966.34	2,968.07	2,966.32	15.99	13.12	171.77	159.93	-59.66	576.44	549.69	26.75	21.547		
3,100.00	3,064.98	3,066.74	3,064.96	16.53	13.54	171.75	159.93	-62.13	592.68	565.07	27.62	21.461		
3,200.00	3,163.63	3,165.42	3,163.60	17.08	13.96	171.74	159.93	-64.59	608.92	580.44	28.48	21.379		
3,300.00	3,262.27	3,264.09	3,262.24	17.63	14.38	171.73	159.93	-67.06	625.16	595.81	29.35	21.300		
3,400.00	3,360.92	3,362.76	3,360.88	18.18	14.81	171.71	159.93	-69.52	641.41	611.19	30.22	21.225		
3,500.00	3,459.57	3,461.43	3,459.52	18.74	15.23	171.70	159.93	-71.99	657.65	626.56	31.09	21.153		
3,600.00	3,558.21	3,560.11	3,558.17	19.29	15.65	171.69	159.93	-74.46	673.89	641.93	31.96	21.084		
3,700.00	3,656.86	3,658.78	3,656.81	19.84	16.08	171.68	159.93	-76.92	690.13	657.30	32.83	21.018		
3,800.00	3,755.50	3,757.45	3,755.45	20.39	16.50	171.67	159.93	-79.39	706.37	672.66	33.71	20.955		
3,900.00	3,854.15	3,856.12	3,854.09	20.95	16.93	171.66	159.93	-81.85	722.61	688.03	34.58	20.895		
4,000.00	3,952.79	3,954.79	3,952.73	21.50	17.36	171.65	159.93	-84.32	738.86	703.40	35.46	20.837		
4,100.00	4,051.44	4,053.47	4,051.37	22.05	17.78	171.64	159.93	-86.78	755.10	718.76	36.34	20.781		
4,200.00	4,150.08	4,152.14	4,150.01	22.61	18.21	171.63	159.93	-89.25	771.34	734.13	37.21	20.728		
4,300.00	4,248.73	4,250.81	4,248.65	23.16	18.64	171.63	159.93	-91.71	787.58	749.49	38.09	20.677		
4,400.00	4,347.38	4,349.48	4,347.30	23.72	19.06	171.62	159.93	-94.18	803.82	764.85	38.97	20.627		
4,500.00	4,446.02	4,448.15	4,445.94	24.27	19.49	171.61	159.93	-96.65	820.07	780.22	39.85	20.580		
4,600.00	4,544.67	4,546.83	4,544.58	24.83	19.92	171.60	159.93	-99.11	836.31	795.58	40.73	20.534		
4,700.00	4,643.31	4,645.50	4,643.22	25.39	20.35	171.60	159.93	-101.58	852.55	810.94	41.61	20.490		
4,800.00	4,741.96	4,744.17	4,741.86	25.94	20.78	171.59	159.93	-104.04	868.79	826.30	42.49	20.447		
4,900.00	4,840.60	4,842.84	4,840.50	26.50	21.21	171.58	159.93	-106.51	885.03	841.66	43.37	20.406		
5,000.00	4,939.25	4,941.52	4,939.14	27.05	21.63	171.58	159.93	-108.97	901.27	857.02	44.25	20.367		
5,100.00	5,037.90	5,040.19	5,037.79	27.61	22.06	171.57	159.93	-111.44	917.52	872.38	45.13	20.329		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	5,136.54	5,138.86	5,136.43	28.17	22.49	171.56	159.93	-113.90	933.76	887.74	46.02	20.292		
5,300.00	5,235.19	5,237.53	5,235.07	28.72	22.92	171.56	159.93	-116.37	950.00	903.10	46.90	20.256		
5,400.00	5,333.83	5,336.20	5,333.71	29.28	23.35	171.55	159.93	-118.84	966.24	918.46	47.78	20.221		
5,500.00	5,432.48	5,434.88	5,432.35	29.84	23.78	171.55	159.93	-121.30	982.48	933.82	48.67	20.188		
5,600.00	5,531.12	5,533.55	5,530.99	30.40	24.21	171.54	159.93	-123.77	998.73	949.18	49.55	20.156		
5,700.00	5,629.77	5,632.22	5,629.63	30.95	24.64	171.54	159.93	-126.23	1,014.97	964.53	50.43	20.124		
5,800.00	5,728.41	5,730.89	5,728.27	31.51	25.07	171.53	159.93	-128.70	1,031.21	979.89	51.32	20.094		
5,900.00	5,827.06	5,829.57	5,826.92	32.07	25.50	171.53	159.93	-131.16	1,047.45	995.25	52.20	20.064		
6,000.00	5,925.71	5,928.24	5,925.56	32.63	25.94	171.52	159.93	-133.63	1,063.69	1,010.60	53.09	20.036		
6,100.00	6,024.35	6,026.91	6,024.20	33.19	26.37	171.52	159.93	-136.09	1,079.94	1,025.96	53.98	20.008		
6,200.00	6,123.00	6,125.58	6,122.84	33.74	26.80	171.52	159.93	-138.56	1,096.18	1,041.32	54.86	19.981		
6,300.00	6,221.64	6,224.25	6,221.48	34.30	27.23	171.51	159.93	-141.03	1,112.42	1,056.67	55.75	19.955		
6,400.00	6,320.29	6,322.93	6,320.12	34.86	27.66	171.51	159.93	-143.49	1,128.66	1,072.03	56.63	19.929		
6,500.00	6,418.93	6,421.60	6,418.76	35.42	28.09	171.50	159.93	-145.96	1,144.90	1,087.38	57.52	19.905		
6,600.00	6,517.58	6,520.48	6,517.61	35.98	28.52	171.50	159.93	-148.48	1,161.14	1,102.74	58.41	19.880		
6,700.00	6,616.23	6,620.61	6,616.96	36.54	28.97	171.04	159.75	-160.13	1,177.30	1,117.97	59.33	19.845		
6,800.00	6,714.51	6,717.15	6,709.88	37.10	29.40	134.14	159.29	-185.96	1,193.45	1,133.22	60.24	19.813		
6,900.00	6,810.42	6,811.19	6,795.64	37.66	29.82	113.20	158.58	-224.33	1,209.29	1,148.15	61.14	19.780		
7,000.00	6,901.58	6,903.15	6,873.14	38.21	30.25	102.91	157.65	-273.67	1,224.36	1,162.32	62.04	19.734		
7,100.00	6,985.76	6,993.35	6,941.49	38.76	30.70	96.70	156.54	-332.41	1,238.24	1,175.25	62.99	19.657		
7,200.00	7,060.88	7,082.10	6,999.98	39.32	31.21	92.50	155.26	-399.05	1,250.54	1,186.49	64.05	19.524		
7,300.00	7,125.09	7,169.66	7,048.06	39.90	31.80	89.51	153.86	-472.13	1,260.92	1,195.62	65.30	19.310		
7,400.00	7,176.81	7,256.23	7,085.30	40.55	32.50	87.38	152.35	-550.20	1,269.08	1,202.27	66.81	18.995		
7,500.00	7,214.77	7,342.04	7,111.42	41.30	33.31	85.93	150.77	-631.85	1,274.78	1,206.13	68.65	18.570		
7,600.00	7,238.02	7,427.23	7,126.27	42.22	34.24	85.08	149.13	-715.66	1,277.87	1,207.05	70.82	18.043		
7,700.00	7,246.01	7,514.43	7,129.94	43.32	35.30	84.79	147.43	-802.70	1,278.23	1,204.88	73.36	17.425		
7,800.00	7,245.50	7,614.42	7,129.58	44.65	36.65	84.79	145.48	-902.67	1,276.86	1,200.35	76.51	16.689		
7,900.00	7,244.97	7,714.41	7,129.21	46.21	38.18	84.80	143.52	-1,002.64	1,275.48	1,195.47	80.01	15.941		
8,000.00	7,244.44	7,814.40	7,128.84	47.99	39.85	84.80	141.57	-1,102.62	1,274.10	1,190.28	83.82	15.200		
8,100.00	7,243.91	7,914.39	7,128.48	49.96	41.65	84.80	139.61	-1,202.59	1,272.72	1,184.82	87.90	14.479		
8,200.00	7,243.39	8,014.38	7,128.11	52.10	43.56	84.80	137.66	-1,302.56	1,271.34	1,179.13	92.21	13.788		
8,300.00	7,242.86	8,114.37	7,127.75	54.38	45.57	84.80	135.70	-1,402.53	1,269.96	1,173.24	96.72	13.131		
8,400.00	7,242.33	8,214.36	7,127.38	56.78	47.67	84.80	133.75	-1,502.50	1,268.58	1,167.18	101.40	12.510		
8,500.00	7,241.80	8,314.35	7,127.01	59.28	49.84	84.81	131.79	-1,602.47	1,267.20	1,160.96	106.24	11.928		
8,600.00	7,241.27	8,414.34	7,126.65	61.88	52.08	84.81	129.83	-1,702.44	1,265.82	1,154.61	111.20	11.383		
8,700.00	7,240.74	8,514.33	7,126.28	64.54	54.38	84.81	127.88	-1,802.41	1,264.44	1,148.15	116.29	10.874		
8,800.00	7,240.21	8,614.32	7,125.92	67.27	56.72	84.81	125.92	-1,902.38	1,263.06	1,141.59	121.47	10.398		
8,900.00	7,239.68	8,714.31	7,125.55	70.06	59.11	84.81	123.97	-2,002.35	1,261.68	1,134.94	126.74	9.955		
9,000.00	7,239.16	8,814.31	7,125.18	72.89	61.54	84.82	122.01	-2,102.32	1,260.30	1,128.21	132.09	9.542		
9,100.00	7,238.63	8,914.30	7,124.82	75.77	64.01	84.82	120.06	-2,202.29	1,258.91	1,121.41	137.50	9.156		
9,200.00	7,238.10	9,014.29	7,124.45	78.69	66.51	84.82	118.10	-2,302.26	1,257.53	1,114.56	142.98	8.795		
9,300.00	7,237.57	9,114.28	7,124.09	81.64	69.03	84.82	116.15	-2,402.23	1,256.15	1,107.65	148.51	8.458		
9,400.00	7,237.04	9,214.27	7,123.72	84.62	71.58	84.82	114.19	-2,502.20	1,254.77	1,100.69	154.09	8.143		
9,500.00	7,236.51	9,314.26	7,123.35	87.63	74.15	84.82	112.24	-2,602.18	1,253.39	1,093.68	159.71	7.848		
9,600.00	7,235.98	9,414.25	7,122.99	90.66	76.74	84.83	110.28	-2,702.15	1,252.01	1,086.64	165.37	7.571		
9,700.00	7,235.45	9,514.24	7,122.62	93.72	79.35	84.83	108.33	-2,802.12	1,250.63	1,079.57	171.07	7.311		
9,800.00	7,234.93	9,614.23	7,122.25	96.79	81.98	84.83	106.37	-2,902.09	1,249.25	1,072.46	176.79	7.066		
9,900.00	7,234.40	9,714.22	7,121.89	99.88	84.62	84.83	104.42	-3,002.06	1,247.87	1,065.32	182.55	6.836		
10,000.00	7,233.87	9,814.21	7,121.52	102.98	87.27	84.83	102.46	-3,102.03	1,246.49	1,058.16	188.33	6.619		
10,100.00	7,233.34	9,914.20	7,121.16	106.10	89.94	84.83	100.50	-3,202.00	1,245.11	1,050.97	194.14	6.414		
10,200.00	7,232.81	10,014.19	7,120.79	109.23	92.62	84.84	98.55	-3,301.97	1,243.73	1,043.77	199.96	6.220		
10,300.00	7,232.28	10,114.18	7,120.42	112.38	95.31	84.84	96.59	-3,401.94	1,242.35	1,036.54	205.81	6.036		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	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	7,231.75	10,214.17	7,120.06	115.53	98.00	84.84	94.64	-3,501.91	1,240.97	1,029.29	211.68	5.863		
10,500.00	7,231.23	10,314.16	7,119.69	118.70	100.71	84.84	92.68	-3,601.88	1,239.59	1,022.03	217.56	5.698		
10,600.00	7,230.70	10,414.15	7,119.33	121.87	103.42	84.84	90.73	-3,701.85	1,238.21	1,014.75	223.46	5.541		
10,700.00	7,230.17	10,514.14	7,118.96	125.05	106.14	84.84	88.77	-3,801.82	1,236.83	1,007.46	229.37	5.392		
10,800.00	7,229.64	10,614.13	7,118.59	128.25	108.87	84.85	86.82	-3,901.79	1,235.45	1,000.16	235.29	5.251		
10,900.00	7,229.11	10,714.12	7,118.23	131.44	111.61	84.85	84.86	-4,001.77	1,234.07	992.84	241.23	5.116		
11,000.00	7,228.58	10,814.11	7,117.86	134.65	114.35	84.85	82.91	-4,101.74	1,232.69	985.51	247.18	4.987		
11,100.00	7,228.05	10,914.11	7,117.49	137.86	117.09	84.85	80.95	-4,201.71	1,231.31	978.17	253.14	4.864		
11,200.00	7,227.52	11,014.10	7,117.13	141.08	119.84	84.85	79.00	-4,301.68	1,229.93	970.82	259.10	4.747		
11,300.00	7,227.00	11,114.09	7,116.76	144.30	122.60	84.86	77.04	-4,401.65	1,228.55	963.47	265.08	4.635		
11,400.00	7,226.47	11,214.08	7,116.40	147.52	125.36	84.86	75.08	-4,501.62	1,227.17	956.10	271.07	4.527		
11,500.00	7,225.94	11,314.07	7,116.03	150.76	128.12	84.86	73.13	-4,601.59	1,225.79	948.73	277.06	4.424		
11,600.00	7,225.41	11,414.06	7,115.66	153.99	130.89	84.86	71.17	-4,701.56	1,224.41	941.34	283.06	4.326		
11,700.00	7,224.88	11,514.05	7,115.30	157.23	133.66	84.86	69.22	-4,801.53	1,223.03	933.96	289.07	4.231		
11,800.00	7,224.35	11,614.04	7,114.93	160.48	136.43	84.86	67.26	-4,901.50	1,221.65	926.56	295.08	4.140		
11,900.00	7,223.82	11,714.03	7,114.57	163.72	139.21	84.87	65.31	-5,001.47	1,220.27	919.16	301.11	4.053		
12,000.00	7,223.29	11,814.02	7,114.20	166.98	141.99	84.87	63.35	-5,101.44	1,218.89	911.75	307.13	3.969		
12,100.00	7,222.77	11,914.01	7,113.83	170.23	144.78	84.87	61.40	-5,201.41	1,217.50	904.34	313.17	3.888		
12,200.00	7,222.24	12,014.00	7,113.47	173.49	147.56	84.87	59.44	-5,301.38	1,216.12	896.92	319.20	3.810		
12,300.00	7,221.71	12,113.99	7,113.10	176.75	150.35	84.87	57.49	-5,401.35	1,214.74	889.50	325.24	3.735		
12,400.00	7,221.18	12,213.98	7,112.73	180.01	153.14	84.88	55.53	-5,501.33	1,213.36	882.07	331.29	3.663		
12,500.00	7,220.65	12,313.97	7,112.37	183.28	155.94	84.88	53.58	-5,601.30	1,211.98	874.64	337.34	3.593		
12,600.00	7,220.12	12,413.96	7,112.00	186.54	158.73	84.88	51.62	-5,701.27	1,210.60	867.20	343.40	3.525		
12,700.00	7,219.59	12,513.95	7,111.64	189.81	161.53	84.88	49.66	-5,801.24	1,209.22	859.76	349.46	3.460		
12,800.00	7,219.06	12,613.94	7,111.27	193.09	164.33	84.88	47.71	-5,901.21	1,207.84	852.32	355.52	3.397		
12,900.00	7,218.54	12,713.93	7,110.90	196.36	167.13	84.89	45.75	-6,001.18	1,206.46	844.87	361.59	3.337		
13,000.00	7,218.01	12,813.92	7,110.54	199.64	169.94	84.89	43.80	-6,101.15	1,205.08	837.42	367.66	3.278		
13,100.00	7,217.48	12,913.91	7,110.17	202.92	172.74	84.89	41.84	-6,201.12	1,203.70	829.97	373.73	3.221		
13,200.00	7,216.95	13,013.91	7,109.81	206.20	175.55	84.89	39.89	-6,301.09	1,202.32	822.51	379.81	3.166		
13,300.00	7,216.42	13,113.90	7,109.44	209.48	178.35	84.89	37.93	-6,401.06	1,200.94	815.05	385.89	3.112		
13,400.00	7,215.89	13,213.89	7,109.07	212.76	181.16	84.89	35.98	-6,501.03	1,199.56	807.59	391.97	3.060		
13,500.00	7,215.36	13,313.88	7,108.71	216.05	183.98	84.90	34.02	-6,601.00	1,198.18	800.13	398.05	3.010		
13,600.00	7,214.84	13,413.87	7,108.34	219.33	186.79	84.90	32.07	-6,700.97	1,196.80	792.66	404.14	2.961		
13,700.00	7,214.31	13,513.86	7,107.97	222.62	189.60	84.90	30.11	-6,800.94	1,195.42	785.19	410.23	2.914		
13,800.00	7,213.78	13,613.85	7,107.61	225.91	192.42	84.90	28.16	-6,900.91	1,194.04	777.72	416.32	2.868		
13,900.00	7,213.25	13,713.84	7,107.24	229.20	195.23	84.90	26.20	-7,000.89	1,192.66	770.24	422.42	2.823		
14,000.00	7,212.72	13,813.83	7,106.88	232.49	198.05	84.91	24.24	-7,100.86	1,191.28	762.77	428.51	2.780		
14,100.00	7,212.19	13,913.82	7,106.51	235.79	200.87	84.91	22.29	-7,200.83	1,189.90	755.29	434.61	2.738		
14,200.00	7,211.66	14,013.81	7,106.14	239.08	203.68	84.91	20.33	-7,300.80	1,188.52	747.81	440.71	2.697		
14,300.00	7,211.13	14,113.80	7,105.78	242.38	206.50	84.91	18.38	-7,400.77	1,187.14	740.32	446.82	2.657		
14,400.00	7,210.61	14,213.79	7,105.41	245.67	209.33	84.91	16.42	-7,500.74	1,185.76	732.84	452.92	2.618		
14,500.00	7,210.08	14,313.78	7,105.05	248.97	212.15	84.92	14.47	-7,600.71	1,184.38	725.35	459.03	2.580		
14,600.00	7,209.55	14,413.77	7,104.68	252.27	214.97	84.92	12.51	-7,700.68	1,183.00	717.87	465.13	2.543		
14,700.00	7,209.02	14,513.76	7,104.31	255.57	217.79	84.92	10.56	-7,800.65	1,181.62	710.38	471.24	2.507		
14,800.00	7,208.49	14,613.75	7,103.95	258.87	220.62	84.92	8.60	-7,900.62	1,180.24	702.88	477.35	2.472		
14,900.00	7,207.96	14,713.74	7,103.58	262.17	223.44	84.92	6.65	-8,000.59	1,178.86	695.39	483.46	2.438		
15,000.00	7,207.43	14,813.73	7,103.22	265.47	226.27	84.93	4.69	-8,100.56	1,177.48	687.90	489.58	2.405		
15,074.92	7,207.04	14,872.41	7,103.00	267.94	227.93	84.93	3.54	-8,159.23	1,176.55	683.05	493.51	2.384		
15,081.89	7,207.00	14,872.41	7,103.00	268.17	227.93	84.93	3.54	-8,159.23	1,176.58	682.95	493.63	2.384 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	60.00	3.28	3.28	-114.59	-4,115.74	-8,993.76	9,890.93				
100.00	100.00	40.00	100.00	3.28	3.35	-114.59	-4,115.74	-8,993.76	9,890.75	9,884.11	6.64	1,489.972	
200.00	200.00	140.00	200.00	3.34	4.54	-114.59	-4,115.74	-8,993.76	9,890.75	9,882.87	7.88	1,255.323	
300.00	299.98	239.98	299.98	3.44	7.40	57.39	-4,115.74	-8,993.76	9,889.81	9,878.97	10.84	912.465	
400.00	399.84	339.84	399.84	3.59	10.64	57.47	-4,115.74	-8,993.76	9,886.99	9,872.76	14.23	694.923	
500.00	499.45	439.45	499.45	3.80	13.99	57.59	-4,115.74	-8,993.76	9,882.30	9,864.52	17.78	555.792	
600.00	598.70	538.70	598.70	4.06	17.37	57.76	-4,115.74	-8,993.76	9,875.75	9,854.32	21.42	460.974	
700.00	697.49	637.49	697.49	4.38	20.77	57.93	-4,115.74	-8,993.76	9,867.42	9,842.30	25.13	392.677	
800.00	796.13	736.13	796.13	4.74	24.18	58.01	-4,115.74	-8,993.76	9,858.64	9,829.76	28.88	341.334	
900.00	894.78	834.78	894.78	5.15	27.59	58.09	-4,115.74	-8,993.76	9,849.88	9,817.20	32.68	301.419	
1,000.00	993.43	933.43	993.43	5.58	31.01	58.17	-4,115.74	-8,993.76	9,841.13	9,804.63	36.51	269.575	
1,100.00	1,092.07	1,032.07	1,092.07	6.03	34.44	58.25	-4,115.74	-8,993.76	9,832.41	9,792.05	40.36	243.626	
1,200.00	1,190.72	1,130.72	1,190.72	6.50	37.87	58.34	-4,115.74	-8,993.76	9,823.70	9,779.47	44.23	222.100	
1,300.00	1,289.36	1,229.36	1,289.36	6.98	41.30	58.42	-4,115.74	-8,993.76	9,815.02	9,766.90	48.12	203.974	
1,400.00	1,388.01	1,328.01	1,388.01	7.47	44.74	58.50	-4,115.74	-8,993.76	9,806.35	9,754.33	52.02	188.513	
1,500.00	1,486.65	1,426.65	1,486.65	7.97	48.17	58.58	-4,115.74	-8,993.76	9,797.70	9,741.77	55.93	175.176	
1,600.00	1,585.30	1,525.30	1,585.30	8.48	51.61	58.66	-4,115.74	-8,993.76	9,789.08	9,729.23	59.85	163.559	
1,700.00	1,683.94	1,623.94	1,683.94	9.00	55.04	58.74	-4,115.74	-8,993.76	9,780.47	9,716.69	63.78	153.354	
1,800.00	1,782.59	1,722.59	1,782.59	9.52	58.48	58.82	-4,115.74	-8,993.76	9,771.88	9,704.17	67.71	144.319	
1,900.00	1,881.24	1,821.24	1,881.24	10.05	61.92	58.90	-4,115.74	-8,993.76	9,763.32	9,691.67	71.65	136.267	
2,000.00	1,979.88	1,919.88	1,979.88	10.58	65.36	58.98	-4,115.74	-8,993.76	9,754.77	9,679.18	75.59	129.047	
2,100.00	2,078.53	2,018.53	2,078.53	11.11	68.80	59.07	-4,115.74	-8,993.76	9,746.24	9,666.71	79.54	122.537	
2,200.00	2,177.17	2,117.17	2,177.17	11.64	72.24	59.15	-4,115.74	-8,993.76	9,737.74	9,654.25	83.49	116.637	
2,300.00	2,275.82	2,215.82	2,275.82	12.18	75.68	59.23	-4,115.74	-8,993.76	9,729.25	9,641.81	87.44	111.267	
2,400.00	2,374.46	2,314.46	2,374.46	12.72	79.12	59.31	-4,115.74	-8,993.76	9,720.79	9,629.39	91.40	106.359	
2,500.00	2,473.11	2,413.11	2,473.11	13.26	82.56	59.40	-4,115.74	-8,993.76	9,712.34	9,616.99	95.35	101.856	
2,600.00	2,571.76	2,511.76	2,571.76	13.80	86.00	59.48	-4,115.74	-8,993.76	9,703.92	9,604.60	99.31	97.710	
2,700.00	2,670.40	2,610.40	2,670.40	14.35	89.44	59.56	-4,115.74	-8,993.76	9,695.51	9,592.24	103.28	93.880	
2,800.00	2,769.05	2,709.05	2,769.05	14.89	92.89	59.64	-4,115.74	-8,993.76	9,687.13	9,579.89	107.24	90.332	
2,900.00	2,867.69	2,807.69	2,867.69	15.44	96.33	59.73	-4,115.74	-8,993.76	9,678.76	9,567.56	111.20	87.036	
3,000.00	2,966.34	2,906.34	2,966.34	15.99	99.77	59.81	-4,115.74	-8,993.76	9,670.42	9,555.25	115.17	83.966	
3,100.00	3,064.98	3,004.98	3,064.98	16.53	103.21	59.89	-4,115.74	-8,993.76	9,662.10	9,542.96	119.14	81.100	
3,200.00	3,163.63	3,103.63	3,163.63	17.08	106.65	59.98	-4,115.74	-8,993.76	9,653.80	9,530.69	123.11	78.418	
3,300.00	3,262.27	3,202.27	3,262.27	17.63	110.09	60.06	-4,115.74	-8,993.76	9,645.52	9,518.44	127.08	75.903	
3,400.00	3,360.92	3,300.92	3,360.92	18.18	113.54	60.14	-4,115.74	-8,993.76	9,637.26	9,506.21	131.05	73.539	
3,500.00	3,459.57	3,400.43	3,459.57	18.74	117.01	60.23	-4,115.74	-8,993.76	9,629.02	9,493.97	135.05	71.299	
3,600.00	3,558.21	3,501.79	3,558.21	19.29	120.55	60.31	-4,115.74	-8,993.76	9,620.80	9,481.68	139.12	69.155	
3,700.00	3,656.86	3,603.14	3,656.86	19.84	124.08	60.39	-4,115.74	-8,993.76	9,612.60	9,469.41	143.19	67.133	
3,800.00	3,755.50	3,704.50	3,755.50	20.39	127.62	60.48	-4,115.74	-8,993.76	9,604.42	9,457.17	147.26	65.222	
3,900.00	3,854.15	3,805.85	3,854.15	20.95	131.16	60.56	-4,115.74	-8,993.76	9,596.27	9,444.94	151.33	63.414	
4,000.00	3,952.79	3,907.21	3,952.79	21.50	134.70	60.65	-4,115.74	-8,993.76	9,588.14	9,432.74	155.40	61.700	
4,100.00	4,051.44	4,008.56	4,051.44	22.05	138.23	60.73	-4,115.74	-8,993.76	9,580.02	9,420.55	159.47	60.074	
4,200.00	4,150.08	4,109.92	4,150.08	22.61	141.77	60.82	-4,115.74	-8,993.76	9,571.93	9,408.39	163.54	58.529	
4,300.00	4,248.73	4,188.73	4,248.73	23.16	144.52	60.90	-4,115.74	-8,993.76	9,563.86	9,397.03	166.83	57.328	
4,400.00	4,347.38	4,287.38	4,347.38	23.72	147.96	60.99	-4,115.74	-8,993.76	9,555.81	9,385.00	170.81	55.945	
4,500.00	4,446.02	4,386.02	4,446.02	24.27	151.41	61.07	-4,115.74	-8,993.76	9,547.78	9,373.00	174.79	54.625	
4,600.00	4,544.67	4,484.67	4,544.67	24.83	154.85	61.16	-4,115.74	-8,993.76	9,539.78	9,361.01	178.77	53.364	
4,700.00	4,643.31	4,583.31	4,643.31	25.39	158.29	61.24	-4,115.74	-8,993.76	9,531.79	9,349.04	182.75	52.158	
4,800.00	4,741.96	4,681.96	4,741.96	25.94	161.74	61.33	-4,115.74	-8,993.76	9,523.83	9,337.10	186.73	51.004	
4,900.00	4,840.60	4,780.60	4,840.60	26.50	165.18	61.41	-4,115.74	-8,993.76	9,515.89	9,325.18	190.71	49.897	
5,000.00	4,939.25	4,879.25	4,939.25	27.05	168.62	61.50	-4,115.74	-8,993.76	9,507.97	9,313.28	194.69	48.836	
5,100.00	5,037.90	4,977.90	5,037.90	27.61	172.06	61.59	-4,115.74	-8,993.76	9,500.07	9,301.39	198.67	47.817	

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,076.54	5,136.54	28.17	175.51	61.67	-4,115.74	-8,993.76	9,492.19	9,289.53	202.66	46.839		
5,300.00	5,235.19	5,175.19	5,235.19	28.72	178.95	61.76	-4,115.74	-8,993.76	9,484.34	9,277.70	206.64	45.898		
5,400.00	5,333.83	5,273.83	5,333.83	29.28	182.39	61.85	-4,115.74	-8,993.76	9,476.51	9,265.88	210.62	44.992		
5,500.00	5,432.48	5,372.48	5,432.48	29.84	185.84	61.93	-4,115.74	-8,993.76	9,468.69	9,254.08	214.61	44.121		
5,600.00	5,531.12	5,471.12	5,531.12	30.40	189.28	62.02	-4,115.74	-8,993.76	9,460.91	9,242.31	218.59	43.281		
5,700.00	5,629.77	5,569.77	5,629.77	30.95	192.72	62.11	-4,115.74	-8,993.76	9,453.14	9,230.56	222.58	42.471		
5,800.00	5,728.41	5,668.41	5,728.41	31.51	196.17	62.19	-4,115.74	-8,993.76	9,445.39	9,218.83	226.56	41.690		
5,900.00	5,827.06	5,767.06	5,827.06	32.07	199.61	62.28	-4,115.74	-8,993.76	9,437.67	9,207.12	230.55	40.935		
6,000.00	5,925.71	5,865.71	5,925.71	32.63	203.05	62.37	-4,115.74	-8,993.76	9,429.97	9,195.43	234.54	40.207		
6,100.00	6,024.35	5,964.35	6,024.35	33.19	206.50	62.45	-4,115.74	-8,993.76	9,422.29	9,183.77	238.52	39.502		
6,200.00	6,123.00	6,063.00	6,123.00	33.74	209.94	62.54	-4,115.74	-8,993.76	9,414.64	9,172.13	242.51	38.821		
6,300.00	6,221.64	6,161.64	6,221.64	34.30	213.38	62.63	-4,115.74	-8,993.76	9,407.00	9,160.51	246.50	38.163		
6,400.00	6,320.29	6,260.29	6,320.29	34.86	216.83	62.72	-4,115.74	-8,993.76	9,399.39	9,148.91	250.49	37.525		
6,500.00	6,418.93	6,358.93	6,418.93	35.42	220.27	62.81	-4,115.74	-8,993.76	9,391.80	9,137.33	254.47	36.907		
6,600.00	6,517.58	6,457.58	6,517.58	35.98	223.71	62.89	-4,115.74	-8,993.76	9,384.24	9,125.78	258.46	36.308		
6,700.00	6,616.23	6,556.23	6,616.23	36.54	227.16	62.98	-4,115.74	-8,993.76	9,376.69	9,114.24	262.45	35.727		
6,800.00	6,714.51	6,654.51	6,714.51	37.10	230.59	27.94	-4,115.74	-8,993.76	9,364.08	9,097.67	266.41	35.149		
6,900.00	6,810.42	6,750.42	6,810.42	37.66	233.94	8.47	-4,115.74	-8,993.76	9,337.15	9,066.94	270.21	34.555		
7,000.00	6,901.58	6,841.58	6,901.58	38.21	237.12	-1.14	-4,115.74	-8,993.76	9,296.36	9,022.59	273.77	33.957		
7,100.00	6,985.76	6,925.76	6,985.76	38.76	240.06	-7.66	-4,115.74	-8,993.76	9,242.69	8,965.69	277.00	33.368		
7,200.00	7,060.88	7,000.88	7,060.88	39.32	242.68	-13.58	-4,115.74	-8,993.76	9,177.48	8,897.67	279.81	32.799		
7,300.00	7,125.09	7,065.09	7,125.09	39.90	244.92	-20.35	-4,115.74	-8,993.76	9,102.35	8,820.20	282.15	32.261		
7,400.00	7,176.81	7,116.81	7,176.81	40.55	246.72	-29.54	-4,115.74	-8,993.76	9,019.17	8,735.22	283.95	31.763		
7,500.00	7,214.77	7,154.77	7,214.77	41.30	248.05	-43.35	-4,115.74	-8,993.76	8,930.03	8,644.84	285.19	31.313		
7,600.00	7,238.02	7,178.02	7,238.02	42.22	248.86	-64.11	-4,115.74	-8,993.76	8,837.15	8,551.30	285.85	30.916		
7,700.00	7,246.01	7,186.01	7,246.01	43.32	249.14	-89.59	-4,115.74	-8,993.76	8,742.86	8,456.94	285.92	30.577		
7,800.00	7,245.50	7,185.50	7,245.50	44.65	249.12	-90.84	-4,115.74	-8,993.76	8,648.76	8,363.05	285.71	30.271		
7,900.00	7,244.97	7,184.97	7,244.97	46.21	249.10	-90.83	-4,115.74	-8,993.76	8,554.79	8,269.27	285.53	29.961		
8,000.00	7,244.44	7,184.44	7,244.44	47.99	249.09	-90.82	-4,115.74	-8,993.76	8,460.97	8,175.58	285.39	29.647		
8,100.00	7,243.91	7,183.91	7,243.91	49.96	249.07	-90.81	-4,115.74	-8,993.76	8,367.28	8,081.99	285.29	29.329		
8,200.00	7,243.39	7,183.39	7,243.39	52.10	249.05	-90.80	-4,115.74	-8,993.76	8,273.74	7,988.50	285.25	29.005		
8,300.00	7,242.86	7,182.86	7,242.86	54.38	249.03	-90.79	-4,115.74	-8,993.76	8,180.36	7,895.11	285.25	28.678		
8,400.00	7,242.33	7,182.33	7,242.33	56.78	249.01	-90.78	-4,115.74	-8,993.76	8,087.13	7,801.82	285.31	28.345		
8,500.00	7,241.80	7,181.80	7,241.80	59.28	248.99	-90.77	-4,115.74	-8,993.76	7,994.07	7,708.65	285.43	28.007		
8,600.00	7,241.27	7,181.27	7,241.27	61.88	248.97	-90.75	-4,115.74	-8,993.76	7,901.18	7,615.58	285.60	27.665		
8,700.00	7,240.74	7,180.74	7,240.74	64.54	248.96	-90.74	-4,115.74	-8,993.76	7,808.46	7,522.62	285.84	27.317		
8,800.00	7,240.21	7,180.21	7,240.21	67.27	248.94	-90.73	-4,115.74	-8,993.76	7,715.93	7,429.77	286.15	26.964		
8,900.00	7,239.68	7,179.68	7,239.68	70.06	248.92	-90.72	-4,115.74	-8,993.76	7,623.58	7,337.05	286.53	26.606		
9,000.00	7,239.16	7,179.16	7,239.16	72.89	248.90	-90.71	-4,115.74	-8,993.76	7,531.43	7,244.44	286.98	26.243		
9,100.00	7,238.63	7,178.63	7,238.63	75.77	248.88	-90.70	-4,115.74	-8,993.76	7,439.48	7,151.97	287.51	25.875		
9,200.00	7,238.10	7,178.10	7,238.10	78.69	248.86	-90.69	-4,115.74	-8,993.76	7,347.74	7,059.62	288.12	25.503		
9,300.00	7,237.57	7,177.57	7,237.57	81.64	248.85	-90.68	-4,115.74	-8,993.76	7,256.22	6,967.42	288.80	25.125		
9,400.00	7,237.04	7,177.04	7,237.04	84.62	248.83	-90.67	-4,115.74	-8,993.76	7,164.93	6,875.36	289.57	24.743		
9,500.00	7,236.51	7,176.51	7,236.51	87.63	248.81	-90.66	-4,115.74	-8,993.76	7,073.87	6,783.45	290.42	24.357		
9,600.00	7,235.98	7,175.98	7,235.98	90.66	248.79	-90.65	-4,115.74	-8,993.76	6,983.06	6,691.70	291.36	23.967		
9,700.00	7,235.45	7,175.45	7,235.45	93.72	248.77	-90.64	-4,115.74	-8,993.76	6,892.50	6,600.12	292.38	23.574		
9,800.00	7,234.93	7,174.93	7,234.93	96.79	248.75	-90.63	-4,115.74	-8,993.76	6,802.20	6,508.71	293.49	23.177		
9,900.00	7,234.40	7,174.40	7,234.40	99.88	248.73	-90.62	-4,115.74	-8,993.76	6,712.18	6,417.50	294.69	22.777		
10,000.00	7,233.87	7,173.87	7,233.87	102.98	248.72	-90.61	-4,115.74	-8,993.76	6,622.45	6,326.47	295.97	22.375		
10,100.00	7,233.34	7,173.34	7,233.34	106.10	248.70	-90.60	-4,115.74	-8,993.76	6,533.01	6,235.66	297.35	21.971		
10,200.00	7,232.81	7,172.81	7,232.81	109.23	248.68	-90.59	-4,115.74	-8,993.76	6,443.89	6,145.07	298.82	21.564		
10,300.00	7,232.28	7,172.28	7,232.28	112.38	248.66	-90.58	-4,115.74	-8,993.76	6,355.09	6,054.71	300.38	21.157		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,171.75	7,231.75	115.53	248.64	-90.57	-4,115.74	-8,993.76	6,266.62	5,964.59	302.03	20.748		
10,500.00	7,231.23	7,171.23	7,231.23	118.70	248.62	-90.56	-4,115.74	-8,993.76	6,178.51	5,874.73	303.78	20.339		
10,600.00	7,230.70	7,170.70	7,230.70	121.87	248.61	-90.55	-4,115.74	-8,993.76	6,090.77	5,785.15	305.62	19.929		
10,700.00	7,230.17	7,170.17	7,230.17	125.05	248.59	-90.54	-4,115.74	-8,993.76	6,003.41	5,695.85	307.56	19.519		
10,800.00	7,229.64	7,169.64	7,229.64	128.25	248.57	-90.53	-4,115.74	-8,993.76	5,916.45	5,606.85	309.59	19.110		
10,900.00	7,229.11	7,169.11	7,229.11	131.44	248.55	-90.52	-4,115.74	-8,993.76	5,829.90	5,518.18	311.73	18.702		
11,000.00	7,228.58	7,168.58	7,228.58	134.65	248.53	-90.51	-4,115.74	-8,993.76	5,743.80	5,429.84	313.96	18.295		
11,100.00	7,228.05	7,168.05	7,228.05	137.86	248.51	-90.50	-4,115.74	-8,993.76	5,658.15	5,341.86	316.29	17.889		
11,200.00	7,227.52	7,167.52	7,227.52	141.08	248.49	-90.49	-4,115.74	-8,993.76	5,572.98	5,254.25	318.72	17.485		
11,300.00	7,227.00	7,167.00	7,227.00	144.30	248.48	-90.48	-4,115.74	-8,993.76	5,488.30	5,167.05	321.26	17.084		
11,400.00	7,226.47	7,166.47	7,226.47	147.52	248.46	-90.47	-4,115.74	-8,993.76	5,404.16	5,080.26	323.90	16.685		
11,500.00	7,225.94	7,165.94	7,225.94	150.76	248.44	-90.46	-4,115.74	-8,993.76	5,320.56	4,993.91	326.65	16.288		
11,600.00	7,225.41	7,165.41	7,225.41	153.99	248.42	-90.45	-4,115.74	-8,993.76	5,237.54	4,908.03	329.51	15.895		
11,700.00	7,224.88	7,164.88	7,224.88	157.23	248.40	-90.44	-4,115.74	-8,993.76	5,155.11	4,822.63	332.48	15.505		
11,800.00	7,224.35	7,164.35	7,224.35	160.48	248.38	-90.43	-4,115.74	-8,993.76	5,073.33	4,737.76	335.57	15.119		
11,900.00	7,223.82	7,163.82	7,223.82	163.72	248.37	-90.42	-4,115.74	-8,993.76	4,992.20	4,653.43	338.77	14.736		
12,000.00	7,223.29	7,163.29	7,223.29	166.98	248.35	-90.40	-4,115.74	-8,993.76	4,911.77	4,569.69	342.08	14.358		
12,100.00	7,222.77	7,162.77	7,222.77	170.23	248.33	-90.39	-4,115.74	-8,993.76	4,832.07	4,486.55	345.52	13.985		
12,200.00	7,222.24	7,162.24	7,222.24	173.49	248.31	-90.38	-4,115.74	-8,993.76	4,753.14	4,404.06	349.08	13.616		
12,300.00	7,221.71	7,161.71	7,221.71	176.75	248.29	-90.37	-4,115.74	-8,993.76	4,675.02	4,322.24	352.77	13.252		
12,400.00	7,221.18	7,161.18	7,221.18	180.01	248.27	-90.36	-4,115.74	-8,993.76	4,597.74	4,241.15	356.58	12.894		
12,500.00	7,220.65	7,160.65	7,220.65	183.28	248.25	-90.35	-4,115.74	-8,993.76	4,521.35	4,160.83	360.53	12.541		
12,600.00	7,220.12	7,160.12	7,220.12	186.54	248.24	-90.34	-4,115.74	-8,993.76	4,445.90	4,081.30	364.60	12.194		
12,700.00	7,219.59	7,159.59	7,219.59	189.81	248.22	-90.33	-4,115.74	-8,993.76	4,371.44	4,002.63	368.81	11.853		
12,800.00	7,219.06	7,159.06	7,219.06	193.09	248.20	-90.32	-4,115.74	-8,993.76	4,298.01	3,924.86	373.15	11.518		
12,900.00	7,218.54	7,158.54	7,218.54	196.36	248.18	-90.31	-4,115.74	-8,993.76	4,225.67	3,848.05	377.62	11.190		
13,000.00	7,218.01	7,158.01	7,218.01	199.64	248.16	-90.30	-4,115.74	-8,993.76	4,154.48	3,772.25	382.24	10.869		
13,100.00	7,217.48	7,157.48	7,217.48	202.92	248.14	-90.29	-4,115.74	-8,993.76	4,084.50	3,697.52	386.99	10.555		
13,200.00	7,216.95	7,156.95	7,216.95	206.20	248.13	-90.28	-4,115.74	-8,993.76	4,015.79	3,623.92	391.87	10.248		
13,300.00	7,216.42	7,156.42	7,216.42	209.48	248.11	-90.27	-4,115.74	-8,993.76	3,948.42	3,551.52	396.89	9.948		
13,400.00	7,215.89	7,155.89	7,215.89	212.76	248.09	-90.26	-4,115.74	-8,993.76	3,882.45	3,480.40	402.05	9.657		
13,500.00	7,215.36	7,155.36	7,215.36	216.05	248.07	-90.25	-4,115.74	-8,993.76	3,817.96	3,410.63	407.33	9.373		
13,600.00	7,214.84	7,154.84	7,214.84	219.33	248.05	-90.24	-4,115.74	-8,993.76	3,755.03	3,342.28	412.75	9.098		
13,700.00	7,214.31	7,154.31	7,214.31	222.62	248.03	-90.23	-4,115.74	-8,993.76	3,693.73	3,275.45	418.28	8.831		
13,800.00	7,213.78	7,153.78	7,213.78	225.91	248.02	-90.22	-4,115.74	-8,993.76	3,634.16	3,210.22	423.94	8.572		
13,900.00	7,213.25	7,153.25	7,213.25	229.20	248.00	-90.21	-4,115.74	-8,993.76	3,576.38	3,146.68	429.70	8.323		
14,000.00	7,212.72	7,152.72	7,212.72	232.49	247.98	-90.20	-4,115.74	-8,993.76	3,520.50	3,084.93	435.57	8.083		
14,100.00	7,212.19	7,152.19	7,212.19	235.79	247.96	-90.19	-4,115.74	-8,993.76	3,466.60	3,025.08	441.52	7.851		
14,200.00	7,211.66	7,151.66	7,211.66	239.08	247.94	-90.18	-4,115.74	-8,993.76	3,414.79	2,967.23	447.56	7.630		
14,300.00	7,211.13	7,151.13	7,211.13	242.38	247.92	-90.17	-4,115.74	-8,993.76	3,365.14	2,911.49	453.66	7.418		
14,400.00	7,210.61	7,150.61	7,210.61	245.67	247.90	-90.16	-4,115.74	-8,993.76	3,317.77	2,857.97	459.80	7.216		
14,500.00	7,210.08	7,150.08	7,210.08	248.97	247.89	-90.15	-4,115.74	-8,993.76	3,272.77	2,806.79	465.98	7.023		
14,600.00	7,209.55	7,149.55	7,209.55	252.27	247.87	-90.14	-4,115.74	-8,993.76	3,230.23	2,758.06	472.17	6.841		
14,700.00	7,209.02	7,149.02	7,209.02	255.57	247.85	-90.13	-4,115.74	-8,993.76	3,190.27	2,711.92	478.35	6.669		
14,800.00	7,208.49	7,148.49	7,208.49	258.87	247.83	-90.12	-4,115.74	-8,993.76	3,152.97	2,668.47	484.50	6.508		
14,900.00	7,207.96	7,147.96	7,207.96	262.17	247.81	-90.11	-4,115.74	-8,993.76	3,118.44	2,627.85	490.59	6.357		
15,000.00	7,207.43	7,147.43	7,207.43	265.47	247.79	-90.10	-4,115.74	-8,993.76	3,086.76	2,590.16	496.59	6.216		
15,081.89	7,207.00	7,147.00	7,207.00	268.17	247.78	-90.09	-4,115.74	-8,993.76	3,063.00	2,561.57	501.43	6.109 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	678.50	711.29	3.28	4.35	-107.34	-2,789.48	-8,934.98	9,387.28					
100.00	100.00	724.00	756.32	3.28	4.49	-107.37	-2,793.94	-8,930.17	9,380.02	9,372.27	7.75	1,210.634		
200.00	200.00	724.00	756.32	3.34	4.49	-107.37	-2,793.94	-8,930.17	9,373.55	9,365.76	7.79	1,203.465		
300.00	299.98	724.00	756.32	3.44	4.49	64.70	-2,793.94	-8,930.17	9,367.40	9,359.52	7.88	1,188.314		
400.00	399.84	766.89	798.70	3.59	4.63	64.80	-2,799.04	-8,926.09	9,360.17	9,352.00	8.17	1,145.904		
500.00	499.45	818.00	849.05	3.80	4.81	64.91	-2,806.94	-8,922.20	9,353.11	9,344.57	8.54	1,094.818		
600.00	598.70	818.00	849.05	4.06	4.81	65.06	-2,806.94	-8,922.20	9,344.70	9,335.91	8.80	1,062.362		
700.00	697.49	818.00	849.05	4.38	4.81	65.17	-2,806.94	-8,922.20	9,335.95	9,326.85	9.11	1,025.347		
800.00	796.13	818.00	849.05	4.74	4.81	65.17	-2,806.94	-8,922.20	9,327.88	9,318.42	9.46	986.235		
900.00	894.78	818.00	849.05	5.15	4.81	65.17	-2,806.94	-8,922.20	9,320.88	9,311.03	9.85	946.640		
1,000.00	993.43	818.00	849.05	5.58	4.81	65.17	-2,806.94	-8,922.20	9,314.94	9,304.68	10.26	907.685		
1,100.00	1,092.07	871.42	901.52	6.03	5.00	65.16	-2,816.58	-8,919.49	9,309.07	9,298.17	10.89	854.606		
1,200.00	1,190.72	912.00	941.33	6.50	5.15	65.15	-2,824.38	-8,918.49	9,304.85	9,293.35	11.50	809.240		
1,300.00	1,289.36	912.00	941.33	6.98	5.15	65.15	-2,824.38	-8,918.49	9,301.12	9,289.16	11.97	777.331		
1,400.00	1,388.01	912.00	941.33	7.47	5.15	65.15	-2,824.38	-8,918.49	9,298.47	9,286.03	12.44	747.249		
1,500.00	1,486.65	912.00	941.33	7.97	5.15	65.15	-2,824.38	-8,918.49	9,296.89	9,283.96	12.93	718.993		
1,600.00	1,585.30	912.00	941.33	8.48	5.15	65.15	-2,824.38	-8,918.49	9,296.39	9,282.96	13.42	692.511		
1,639.36	1,624.12	950.91	979.48	8.69	5.29	65.14	-2,832.00	-8,918.49	9,295.92	9,282.15	13.77	675.139		
1,646.21	1,630.88	951.90	980.45	8.72	5.30	65.14	-2,832.20	-8,918.51	9,295.93	9,282.12	13.81	673.283		
1,700.00	1,683.94	959.65	988.06	9.00	5.32	65.14	-2,833.70	-8,918.63	9,296.11	9,282.01	14.11	659.032		
1,800.00	1,782.59	1,006.00	1,033.51	9.52	5.50	65.13	-2,842.63	-8,920.27	9,297.55	9,282.76	14.79	628.620		
1,900.00	1,881.24	1,006.00	1,033.51	10.05	5.50	65.13	-2,842.63	-8,920.27	9,299.27	9,283.97	15.30	607.948		
2,000.00	1,979.88	1,006.00	1,033.51	10.58	5.50	65.13	-2,842.63	-8,920.27	9,302.05	9,286.25	15.80	588.579		
2,100.00	2,078.53	1,006.00	1,033.51	11.11	5.50	65.13	-2,842.63	-8,920.27	9,305.92	9,289.60	16.31	570.423		
2,200.00	2,177.17	1,006.00	1,033.51	11.64	5.50	65.13	-2,842.63	-8,920.27	9,310.85	9,294.03	16.82	553.397		
2,300.00	2,275.82	1,058.94	1,085.43	12.18	5.69	65.13	-2,852.37	-8,923.76	9,316.07	9,298.52	17.54	531.028		
2,400.00	2,374.46	1,101.00	1,126.68	12.72	5.85	65.13	-2,859.59	-8,927.64	9,322.62	9,304.40	18.22	511.583		
2,500.00	2,473.11	1,101.00	1,126.68	13.26	5.85	65.13	-2,859.59	-8,927.64	9,329.75	9,311.01	18.73	498.009		
2,600.00	2,571.76	1,101.00	1,126.68	13.80	5.85	65.13	-2,859.59	-8,927.64	9,337.94	9,318.69	19.24	485.232		
2,700.00	2,670.40	1,101.00	1,126.68	14.35	5.85	65.13	-2,859.59	-8,927.64	9,347.19	9,327.44	19.75	473.196		
2,800.00	2,769.05	1,151.47	1,176.03	14.89	6.04	65.14	-2,868.44	-8,933.38	9,356.75	9,336.29	20.47	457.122		
2,900.00	2,867.69	1,197.00	1,220.30	15.44	6.23	65.14	-2,877.21	-8,939.39	9,367.71	9,346.55	21.17	442.569		
3,000.00	2,966.34	1,197.00	1,220.30	15.99	6.23	65.14	-2,877.21	-8,939.39	9,379.12	9,357.45	21.67	432.791		
3,100.00	3,064.98	1,197.00	1,220.30	16.53	6.23	65.14	-2,877.21	-8,939.39	9,391.57	9,369.40	22.17	423.548		
3,200.00	3,163.63	1,197.00	1,220.30	17.08	6.23	65.14	-2,877.21	-8,939.39	9,405.07	9,382.40	22.67	414.808		
3,300.00	3,262.27	1,246.60	1,268.24	17.63	6.44	65.13	-2,887.55	-8,946.78	9,418.97	9,395.58	23.40	402.601		
3,400.00	3,360.92	1,292.00	1,311.86	18.18	6.64	65.13	-2,897.67	-8,954.28	9,434.10	9,410.00	24.10	391.442		
3,500.00	3,459.57	1,292.00	1,311.86	18.74	6.64	65.13	-2,897.67	-8,954.28	9,449.72	9,425.13	24.59	384.242		
3,600.00	3,558.21	1,292.00	1,311.86	19.29	6.64	65.13	-2,897.67	-8,954.28	9,466.37	9,441.29	25.08	377.416		
3,700.00	3,656.86	1,292.00	1,311.86	19.84	6.64	65.13	-2,897.67	-8,954.28	9,484.05	9,458.48	25.57	370.942		
3,800.00	3,755.50	1,345.93	1,363.32	20.39	6.91	65.12	-2,910.50	-8,964.07	9,501.99	9,475.67	26.32	361.079		
3,900.00	3,854.15	1,387.00	1,402.23	20.95	7.12	65.11	-2,920.84	-8,972.17	9,521.16	9,494.15	27.01	352.532		
4,000.00	3,952.79	1,387.00	1,402.23	21.50	7.12	65.11	-2,920.84	-8,972.17	9,540.90	9,513.42	27.48	347.147		
4,100.00	4,051.44	1,461.87	1,472.83	22.05	7.55	65.09	-2,940.59	-8,987.35	9,561.30	9,532.93	28.37	337.046		
4,200.00	4,150.08	1,509.70	1,517.80	22.61	7.84	65.07	-2,953.71	-8,997.01	9,582.00	9,552.89	29.11	329.130		
4,300.00	4,248.73	1,547.02	1,552.74	23.16	8.08	65.05	-2,964.37	-9,004.66	9,603.30	9,573.50	29.80	322.267		
4,400.00	4,347.38	1,695.82	1,691.23	23.72	9.12	64.97	-3,010.05	-9,034.21	9,624.74	9,593.54	31.20	308.506		
4,500.00	4,446.02	1,760.00	1,750.48	24.27	9.60	64.92	-3,031.51	-9,046.34	9,646.09	9,614.00	32.09	300.559		
4,600.00	4,544.67	1,789.02	1,777.12	24.83	9.83	64.90	-3,041.62	-9,051.83	9,667.92	9,635.16	32.76	295.093		
4,700.00	4,643.31	2,475.57	2,394.50	25.39	16.07	63.99	-3,326.18	-9,142.02	9,684.52	9,645.59	38.93	248.787		
4,800.00	4,741.96	2,513.00	2,428.24	25.94	16.42	63.94	-3,341.89	-9,146.00	9,701.22	9,661.49	39.73	244.183		
4,900.00	4,840.60	2,543.93	2,456.11	26.50	16.71	63.90	-3,354.82	-9,149.52	9,718.59	9,678.12	40.47	240.140		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,939.25	2,584.33	2,492.55	27.05	17.10	63.85	-3,371.58	-9,154.37	9,736.56	9,695.27	41.29	235.799		
5,100.00	5,037.90	2,608.00	2,513.91	27.61	17.33	63.82	-3,381.33	-9,157.36	9,755.16	9,713.19	41.96	232.473		
5,200.00	5,136.54	2,673.18	2,572.64	28.17	17.96	63.73	-3,408.28	-9,165.89	9,774.22	9,731.22	43.00	227.314		
5,300.00	5,235.19	2,703.00	2,599.44	28.72	18.24	63.70	-3,420.72	-9,169.91	9,793.89	9,750.17	43.72	224.023		
5,400.00	5,333.83	2,739.01	2,631.69	29.28	18.61	63.65	-3,435.94	-9,174.92	9,814.20	9,769.71	44.50	220.559		
5,500.00	5,432.48	2,765.50	2,655.30	29.84	18.87	63.61	-3,447.33	-9,178.76	9,835.25	9,790.07	45.18	217.668		
5,600.00	5,531.12	2,798.00	2,684.12	30.40	19.20	63.57	-3,461.53	-9,183.63	9,857.02	9,811.10	45.92	214.640		
5,700.00	5,629.77	3,082.00	2,935.59	30.95	22.12	63.17	-3,587.04	-9,224.11	9,878.91	9,829.87	49.04	201.438		
5,800.00	5,728.41	3,135.35	2,983.58	31.51	22.66	63.10	-3,609.08	-9,231.66	9,899.29	9,849.32	49.97	198.091		
5,900.00	5,827.06	3,420.08	3,237.64	32.07	25.55	62.71	-3,732.11	-9,268.78	9,919.61	9,866.53	53.08	186.873		
6,000.00	5,925.71	3,501.23	3,310.12	32.63	26.38	62.60	-3,767.33	-9,278.32	9,938.60	9,884.31	54.29	183.058		
6,100.00	6,024.35	3,550.00	3,353.63	33.19	26.88	62.53	-3,788.56	-9,284.20	9,957.98	9,902.79	55.20	180.414		
6,200.00	6,123.00	3,798.35	3,576.91	33.74	29.37	62.22	-3,892.89	-9,314.56	9,976.93	9,918.99	57.94	172.199		
6,300.00	6,221.64	3,831.00	3,606.48	34.30	29.69	62.18	-3,906.12	-9,318.61	9,995.50	9,936.82	58.68	170.349		
7,100.00	6,985.76	7,143.42	6,731.34	38.76	52.89	-10.41	-4,748.00	-9,548.67	9,986.39	9,903.26	83.13	120.127		
7,200.00	7,060.88	7,228.31	6,816.20	39.32	53.14	-16.48	-4,749.65	-9,550.31	9,923.53	9,839.99	83.53	118.797		
7,300.00	7,125.09	7,301.31	6,889.18	39.90	53.35	-23.39	-4,750.83	-9,551.75	9,850.65	9,766.86	83.79	117.559		
7,400.00	7,176.81	7,360.65	6,948.50	40.55	53.52	-32.50	-4,751.64	-9,552.94	9,769.63	9,685.72	83.91	116.429		
7,500.00	7,214.77	7,391.78	6,979.62	41.30	53.60	-45.44	-4,752.02	-9,553.61	9,682.55	9,598.70	83.85	115.469		
7,600.00	7,238.02	7,415.68	7,003.51	42.22	53.66	-63.79	-4,752.29	-9,554.13	9,591.57	9,507.86	83.71	114.582		
7,700.00	7,246.01	7,425.29	7,013.11	43.32	53.69	-85.91	-4,752.40	-9,554.34	9,498.96	9,415.48	83.48	113.788		
7,800.00	7,245.50	7,426.90	7,014.73	44.65	53.70	-87.04	-4,752.41	-9,554.38	9,406.41	9,323.17	83.23	113.011		
7,900.00	7,244.97	7,428.51	7,016.34	46.21	53.70	-87.07	-4,752.43	-9,554.41	9,314.01	9,230.98	83.04	112.168		
8,000.00	7,244.44	7,430.12	7,017.95	47.99	53.70	-87.09	-4,752.45	-9,554.45	9,221.78	9,138.89	82.89	111.254		
8,100.00	7,243.91	7,431.74	7,019.56	49.96	53.71	-87.12	-4,752.46	-9,554.48	9,129.71	9,046.91	82.80	110.267		
8,200.00	7,243.39	7,433.36	7,021.19	52.10	53.71	-87.15	-4,752.48	-9,554.52	9,037.80	8,955.04	82.76	109.203		
8,300.00	7,242.86	7,434.99	7,022.82	54.38	53.72	-87.17	-4,752.50	-9,554.56	8,946.07	8,863.28	82.79	108.061		
8,400.00	7,242.33	7,436.63	7,024.45	56.78	53.72	-87.20	-4,752.51	-9,554.59	8,854.52	8,771.64	82.88	106.838		
8,500.00	7,241.80	7,438.27	7,026.10	59.28	53.73	-87.22	-4,752.53	-9,554.63	8,763.15	8,680.11	83.04	105.535		
8,600.00	7,241.27	7,439.92	7,027.74	61.88	53.73	-87.25	-4,752.55	-9,554.67	8,671.97	8,588.71	83.26	104.151		
8,700.00	7,240.74	7,441.57	7,029.40	64.54	53.74	-87.28	-4,752.56	-9,554.70	8,580.99	8,497.42	83.56	102.687		
8,800.00	7,240.21	7,443.24	7,031.06	67.27	53.74	-87.30	-4,752.58	-9,554.74	8,490.21	8,406.27	83.94	101.145		
8,900.00	7,239.68	7,444.90	7,032.73	70.06	53.74	-87.33	-4,752.60	-9,554.78	8,399.64	8,315.25	84.39	99.529		
9,000.00	7,239.16	7,446.58	7,034.40	72.89	53.75	-87.36	-4,752.61	-9,554.82	8,309.29	8,224.36	84.93	97.842		
9,100.00	7,238.63	7,448.26	7,036.08	75.77	53.75	-87.38	-4,752.63	-9,554.85	8,219.15	8,133.62	85.54	96.088		
9,200.00	7,238.10	7,449.95	7,037.77	78.69	53.76	-87.41	-4,752.65	-9,554.89	8,129.25	8,043.02	86.23	94.273		
9,300.00	7,237.57	7,451.64	7,039.46	81.64	53.76	-87.44	-4,752.66	-9,554.93	8,039.59	7,952.59	87.01	92.403		
9,400.00	7,237.04	7,453.34	7,041.16	84.62	53.77	-87.46	-4,752.68	-9,554.97	7,950.17	7,862.31	87.86	90.483		
9,500.00	7,236.51	7,455.05	7,042.87	87.63	53.77	-87.49	-4,752.70	-9,555.01	7,861.01	7,772.21	88.80	88.521		
9,600.00	7,235.98	7,456.77	7,044.58	90.66	53.78	-87.52	-4,752.71	-9,555.05	7,772.11	7,682.29	89.83	86.523		
9,700.00	7,235.45	7,458.49	7,046.30	93.72	53.78	-87.55	-4,752.73	-9,555.09	7,683.49	7,592.56	90.93	84.495		
9,800.00	7,234.93	7,460.21	7,048.03	96.79	53.79	-87.57	-4,752.75	-9,555.13	7,595.15	7,503.02	92.12	82.446		
9,900.00	7,234.40	7,461.95	7,049.77	99.88	53.79	-87.60	-4,752.76	-9,555.17	7,507.09	7,413.70	93.39	80.380		
10,000.00	7,233.87	7,463.69	7,051.51	102.98	53.80	-87.63	-4,752.78	-9,555.21	7,419.34	7,324.60	94.75	78.305		
10,100.00	7,233.34	7,465.44	7,053.26	106.10	53.80	-87.66	-4,752.79	-9,555.25	7,331.91	7,235.72	96.19	76.226		
10,200.00	7,232.81	7,467.19	7,055.01	109.23	53.81	-87.69	-4,752.81	-9,555.29	7,244.80	7,147.09	97.70	74.150		
10,300.00	7,232.28	7,468.96	7,056.77	112.38	53.81	-87.71	-4,752.83	-9,555.33	7,158.02	7,058.72	99.30	72.081		
10,400.00	7,231.75	7,470.73	7,058.54	115.53	53.82	-87.74	-4,752.84	-9,555.37	7,071.60	6,970.61	100.99	70.025		
10,500.00	7,231.23	7,472.50	7,060.32	118.70	53.82	-87.77	-4,752.86	-9,555.41	6,985.53	6,882.78	102.75	67.985		
10,600.00	7,230.70	7,474.29	7,062.10	121.87	53.82	-87.80	-4,752.88	-9,555.45	6,899.84	6,795.25	104.60	65.967		
10,700.00	7,230.17	7,476.08	7,063.89	125.05	53.83	-87.83	-4,752.89	-9,555.49	6,814.55	6,708.02	106.52	63.973		
10,800.00	7,229.64	7,477.88	7,065.69	128.25	53.83	-87.86	-4,752.91	-9,555.53	6,729.65	6,621.12	108.53	62.007		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWDD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,900.00	7,229.11	7,479.68	7,067.49	131.44	53.84	-87.89	-4,752.92	-9,555.57	6,645.18	6,534.55	110.62	60.071		
11,000.00	7,228.58	7,481.49	7,069.30	134.65	53.84	-87.91	-4,752.94	-9,555.62	6,561.14	6,448.34	112.79	58.169		
11,100.00	7,228.05	7,483.31	7,071.12	137.86	53.85	-87.94	-4,752.96	-9,555.66	6,477.55	6,362.50	115.05	56.302		
11,200.00	7,227.52	7,485.14	7,072.95	141.08	53.85	-87.97	-4,752.97	-9,555.70	6,394.44	6,277.04	117.39	54.471		
11,300.00	7,227.00	7,486.98	7,074.79	144.30	53.86	-88.00	-4,752.99	-9,555.74	6,311.81	6,191.99	119.82	52.680		
11,400.00	7,226.47	7,488.82	7,076.63	147.52	53.86	-88.03	-4,753.00	-9,555.79	6,229.69	6,107.37	122.32	50.928		
11,500.00	7,225.94	7,490.67	7,078.48	150.76	53.87	-88.06	-4,753.02	-9,555.83	6,148.10	6,023.19	124.92	49.217		
11,600.00	7,225.41	7,492.53	7,080.33	153.99	53.87	-88.09	-4,753.03	-9,555.88	6,067.07	5,939.47	127.60	47.547		
11,700.00	7,224.88	7,494.39	7,082.20	157.23	53.88	-88.12	-4,753.05	-9,555.92	5,986.60	5,856.23	130.37	45.920		
11,800.00	7,224.35	7,496.26	7,084.07	160.48	53.89	-88.15	-4,753.07	-9,555.96	5,906.73	5,773.51	133.23	44.335		
11,900.00	7,223.82	7,498.14	7,085.95	163.72	53.89	-88.18	-4,753.08	-9,556.01	5,827.49	5,691.31	136.18	42.793		
12,000.00	7,223.29	7,500.03	7,087.84	166.98	53.90	-88.21	-4,753.10	-9,556.05	5,748.89	5,609.67	139.22	41.294		
12,100.00	7,222.77	7,501.93	7,089.73	170.23	53.90	-88.24	-4,753.11	-9,556.10	5,670.96	5,528.61	142.35	39.838		
12,200.00	7,222.24	7,503.83	7,091.64	173.49	53.91	-88.27	-4,753.13	-9,556.14	5,593.73	5,448.16	145.58	38.425		
12,300.00	7,221.71	7,505.74	7,093.55	176.75	53.91	-88.30	-4,753.14	-9,556.19	5,517.24	5,368.34	148.90	37.054		
12,400.00	7,221.18	7,507.66	7,095.47	180.01	53.92	-88.33	-4,753.16	-9,556.23	5,441.50	5,289.19	152.31	35.726		
12,500.00	7,220.65	7,509.59	7,097.39	183.28	53.92	-88.36	-4,753.17	-9,556.28	5,366.57	5,210.74	155.82	34.440		
12,600.00	7,220.12	7,511.53	7,099.33	186.54	53.93	-88.40	-4,753.19	-9,556.33	5,292.45	5,133.02	159.44	33.195		
12,700.00	7,219.59	7,513.47	7,101.27	189.81	53.93	-88.43	-4,753.20	-9,556.37	5,219.21	5,056.06	163.15	31.991		
12,800.00	7,219.06	7,515.42	7,103.22	193.09	53.94	-88.46	-4,753.22	-9,556.42	5,146.86	4,979.90	166.96	30.828		
12,900.00	7,218.54	7,517.38	7,105.18	196.36	53.94	-88.49	-4,753.23	-9,556.47	5,075.45	4,904.58	170.87	29.704		
13,000.00	7,218.01	7,519.35	7,107.15	199.64	53.95	-88.52	-4,753.25	-9,556.51	5,005.02	4,830.14	174.88	28.620		
13,100.00	7,217.48	7,521.33	7,109.13	202.92	53.95	-88.55	-4,753.26	-9,556.56	4,935.60	4,756.61	178.99	27.574		
13,200.00	7,216.95	7,523.31	7,111.11	206.20	53.96	-88.58	-4,753.28	-9,556.61	4,867.26	4,684.05	183.21	26.567		
13,300.00	7,216.42	7,525.31	7,113.10	209.48	53.96	-88.62	-4,753.29	-9,556.66	4,800.02	4,612.49	187.53	25.597		
13,400.00	7,215.89	7,527.31	7,115.10	212.76	53.97	-88.65	-4,753.31	-9,556.71	4,733.94	4,541.99	191.95	24.663		
13,500.00	7,215.36	7,529.32	7,117.11	216.05	53.98	-88.68	-4,753.32	-9,556.75	4,669.06	4,472.60	196.47	23.765		
13,600.00	7,214.84	7,531.34	7,119.13	219.33	53.98	-88.71	-4,753.34	-9,556.80	4,605.44	4,404.36	201.09	22.903		
13,700.00	7,214.31	7,533.36	7,121.16	222.62	53.99	-88.75	-4,753.35	-9,556.85	4,543.14	4,337.33	205.81	22.075		
13,800.00	7,213.78	7,535.40	7,123.20	225.91	53.99	-88.78	-4,753.37	-9,556.90	4,482.19	4,271.57	210.62	21.281		
13,900.00	7,213.25	7,537.45	7,125.24	229.20	54.00	-88.81	-4,753.38	-9,556.95	4,422.67	4,207.13	215.53	20.520		
14,000.00	7,212.72	7,539.50	7,127.29	232.49	54.00	-88.84	-4,753.39	-9,557.00	4,364.62	4,144.09	220.54	19.791		
14,100.00	7,212.19	7,541.56	7,129.36	235.79	54.01	-88.88	-4,753.41	-9,557.05	4,308.11	4,082.49	225.63	19.094		
14,200.00	7,211.66	7,543.63	7,131.43	239.08	54.01	-88.91	-4,753.42	-9,557.10	4,253.21	4,022.41	230.80	18.428		
14,300.00	7,211.13	7,545.72	7,133.51	242.38	54.02	-88.94	-4,753.44	-9,557.15	4,199.96	3,963.91	236.05	17.792		
14,400.00	7,210.61	7,547.80	7,135.60	245.67	54.03	-88.98	-4,753.45	-9,557.21	4,148.45	3,907.07	241.38	17.186		
14,500.00	7,210.08	7,549.90	7,137.69	248.97	54.03	-89.01	-4,753.46	-9,557.26	4,098.72	3,851.95	246.77	16.609		
14,600.00	7,209.55	7,552.01	7,139.80	252.27	54.04	-89.04	-4,753.48	-9,557.31	4,050.85	3,798.62	252.23	16.060		
14,700.00	7,209.02	7,554.13	7,141.92	255.57	54.04	-89.08	-4,753.49	-9,557.36	4,004.91	3,747.17	257.73	15.539		
14,800.00	7,208.49	7,556.26	7,144.04	258.87	54.05	-89.11	-4,753.50	-9,557.41	3,960.95	3,697.67	263.28	15.045		
14,900.00	7,207.96	7,558.39	7,146.18	262.17	54.06	-89.15	-4,753.52	-9,557.47	3,919.06	3,650.20	268.86	14.577		
15,000.00	7,207.43	7,560.54	7,148.32	265.47	54.06	-89.18	-4,753.53	-9,557.52	3,879.29	3,604.83	274.46	14.134		
15,081.89	7,207.00	7,562.30	7,150.09	268.17	54.07	-89.21	-4,753.54	-9,557.57	3,848.35	3,569.29	279.06	13.791	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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	63.00	3.28	3.28	-129.44	-4,042.93	-4,915.53	6,364.88					
100.00	100.00	48.17	111.17	3.28	3.28	-129.44	-4,042.78	-4,915.61	6,364.54	6,357.97	6.57	969.247		
200.00	200.00	179.03	242.02	3.34	3.33	-129.42	-4,040.97	-4,916.39	6,364.12	6,357.46	6.67	954.594		
300.00	299.98	275.61	338.58	3.44	3.43	42.59	-4,039.10	-4,917.07	6,362.16	6,355.30	6.87	926.542		
400.00	399.84	373.39	436.34	3.59	3.57	42.70	-4,037.54	-4,917.63	6,357.74	6,350.58	7.16	887.741		
500.00	499.45	476.58	539.52	3.80	3.77	42.86	-4,036.09	-4,918.02	6,350.73	6,343.17	7.56	840.107		
600.00	598.70	593.68	656.61	4.06	4.03	43.10	-4,034.51	-4,918.18	6,341.04	6,332.96	8.08	784.879		
700.00	697.49	682.43	745.35	4.38	4.26	43.31	-4,033.38	-4,918.13	6,328.83	6,320.22	8.61	735.236		
800.00	796.13	782.16	845.07	4.74	4.55	43.42	-4,032.33	-4,918.02	6,316.08	6,306.86	9.22	684.997		
900.00	894.78	871.07	933.98	5.15	4.82	43.52	-4,031.40	-4,917.95	6,303.38	6,293.53	9.85	639.913		
1,000.00	993.43	962.98	1,025.89	5.58	5.11	43.62	-4,030.52	-4,918.01	6,290.87	6,280.34	10.53	597.524		
1,100.00	1,092.07	1,068.01	1,130.91	6.03	5.46	43.73	-4,029.50	-4,918.10	6,278.39	6,267.11	11.28	556.470		
1,200.00	1,190.72	1,162.01	1,224.91	6.50	5.79	43.84	-4,028.54	-4,918.12	6,265.85	6,253.83	12.03	520.958		
1,300.00	1,289.36	1,247.66	1,310.55	6.98	6.10	43.94	-4,027.70	-4,918.29	6,253.51	6,240.74	12.76	489.897		
1,400.00	1,388.01	1,333.86	1,396.75	7.47	6.41	44.03	-4,027.12	-4,918.50	6,241.40	6,227.88	13.52	461.606		
1,500.00	1,486.65	1,428.36	1,491.24	7.97	6.76	44.14	-4,026.72	-4,918.73	6,229.46	6,215.14	14.32	434.961		
1,600.00	1,585.30	1,533.66	1,596.55	8.48	7.16	44.25	-4,026.24	-4,918.90	6,217.47	6,202.29	15.18	409.683		
1,700.00	1,683.94	1,631.16	1,694.04	9.00	7.54	44.36	-4,025.96	-4,918.92	6,205.50	6,189.49	16.01	387.509		
1,800.00	1,782.59	1,732.06	1,794.94	9.52	7.93	44.47	-4,025.60	-4,918.95	6,193.50	6,176.63	16.87	367.039		
1,900.00	1,881.24	1,820.06	1,882.94	10.05	8.27	44.57	-4,025.37	-4,918.97	6,181.59	6,163.89	17.69	349.365		
2,000.00	1,979.88	1,895.53	1,958.42	10.58	8.57	44.65	-4,025.34	-4,919.14	6,169.99	6,151.52	18.47	334.029		
2,100.00	2,078.53	1,982.57	2,045.46	11.11	8.91	44.74	-4,025.44	-4,919.55	6,158.70	6,139.40	19.30	319.129		
2,200.00	2,177.17	2,075.99	2,138.88	11.64	9.29	44.85	-4,025.64	-4,920.10	6,147.57	6,127.42	20.16	305.006		
2,300.00	2,275.82	2,173.35	2,236.23	12.18	9.67	44.95	-4,025.92	-4,920.67	6,136.51	6,115.48	21.03	291.753		
2,400.00	2,374.46	2,265.44	2,328.32	12.72	10.04	45.06	-4,026.08	-4,921.34	6,125.52	6,103.63	21.90	279.764		
2,500.00	2,473.11	2,362.49	2,425.36	13.26	10.44	45.17	-4,026.26	-4,922.16	6,114.66	6,091.88	22.78	268.410		
2,600.00	2,571.76	2,458.26	2,521.13	13.80	10.83	45.27	-4,026.42	-4,922.99	6,103.81	6,080.15	23.67	257.919		
2,700.00	2,670.40	2,550.10	2,612.96	14.35	11.20	45.38	-4,026.61	-4,923.86	6,093.09	6,068.55	24.54	248.309		
2,800.00	2,769.05	2,637.76	2,700.61	14.89	11.56	45.48	-4,026.68	-4,924.92	6,082.52	6,057.12	25.40	239.491		
2,900.00	2,867.69	2,722.75	2,785.61	15.44	11.91	45.58	-4,026.84	-4,926.13	6,072.20	6,045.95	26.25	231.328		
3,000.00	2,966.34	2,813.21	2,876.04	15.99	12.28	45.69	-4,027.14	-4,927.51	6,062.07	6,034.95	27.12	223.486		
3,100.00	3,064.98	2,904.89	2,967.72	16.53	12.66	45.79	-4,027.67	-4,928.88	6,052.09	6,024.09	28.01	216.085		
3,200.00	3,163.63	2,996.09	3,058.91	17.08	13.04	45.90	-4,028.30	-4,930.31	6,042.26	6,013.37	28.89	209.139		
3,300.00	3,262.27	3,118.74	3,181.54	17.63	13.55	46.04	-4,029.08	-4,932.19	6,032.42	6,002.51	29.90	201.738		
3,400.00	3,360.92	3,262.22	3,325.01	18.18	14.14	46.21	-4,029.50	-4,933.17	6,021.58	5,990.59	31.00	194.261		
3,500.00	3,459.57	3,367.25	3,430.04	18.74	14.58	46.33	-4,029.65	-4,933.86	6,010.78	5,978.84	31.94	188.180		
3,600.00	3,558.21	3,466.56	3,529.35	19.29	15.00	46.44	-4,029.69	-4,934.37	5,999.83	5,966.96	32.87	182.559		
3,700.00	3,656.86	3,548.78	3,611.57	19.84	15.34	46.54	-4,029.89	-4,934.82	5,989.04	5,955.32	33.72	177.598		
3,800.00	3,755.50	3,626.36	3,689.14	20.39	15.66	46.63	-4,030.06	-4,935.59	5,978.63	5,944.07	34.56	172.978		
3,900.00	3,854.15	3,705.75	3,768.53	20.95	16.00	46.73	-4,030.23	-4,936.72	5,968.57	5,933.16	35.41	168.548		
4,000.00	3,952.79	3,794.09	3,856.86	21.50	16.37	46.84	-4,030.49	-4,938.18	5,958.78	5,922.49	36.30	164.164		
4,100.00	4,051.44	3,884.43	3,947.18	22.05	16.75	46.94	-4,030.98	-4,939.70	5,949.18	5,911.99	37.19	159.955		
4,200.00	4,150.08	3,956.95	4,019.69	22.61	17.05	47.03	-4,031.62	-4,940.97	5,939.86	5,901.84	38.02	156.241		
4,300.00	4,248.73	4,027.87	4,090.58	23.16	17.35	47.11	-4,032.53	-4,942.45	5,931.05	5,892.22	38.84	152.722		
4,400.00	4,347.38	4,100.01	4,162.69	23.72	17.65	47.20	-4,033.80	-4,944.08	5,922.70	5,883.04	39.66	149.340		
4,500.00	4,446.02	4,173.58	4,236.22	24.27	17.96	47.28	-4,035.43	-4,945.91	5,914.81	5,874.32	40.49	146.084		
4,600.00	4,544.67	4,293.77	4,356.33	24.83	18.47	47.42	-4,038.25	-4,949.07	5,907.14	5,865.63	41.51	142.302		
4,700.00	4,643.31	4,411.76	4,474.28	25.39	18.97	47.56	-4,040.33	-4,951.95	5,899.00	5,856.47	42.53	138.716		
4,800.00	4,741.96	4,528.08	4,590.55	25.94	19.46	47.70	-4,041.79	-4,954.88	5,890.67	5,847.13	43.53	135.311		
4,900.00	4,840.60	4,679.74	4,742.17	26.50	20.10	47.88	-4,043.19	-4,957.76	5,881.63	5,836.95	44.69	131.624		
5,000.00	4,939.25	4,812.25	4,874.67	27.05	20.66	48.04	-4,044.00	-4,959.42	5,871.95	5,826.19	45.76	128.327		
5,100.00	5,037.90	4,904.58	4,966.99	27.61	21.05	48.15	-4,044.58	-4,960.35	5,862.10	5,815.43	46.67	125.603		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,012.99	5,075.39	28.17	21.51	48.29	-4,045.03	-4,961.53	5,852.23	5,804.58	47.65	122.817		
5,300.00	5,235.19	5,123.88	5,186.28	28.72	21.98	48.43	-4,045.12	-4,962.70	5,842.16	5,793.52	48.64	120.113		
5,400.00	5,333.83	5,224.00	5,286.39	29.28	22.40	48.56	-4,044.77	-4,963.95	5,832.05	5,782.46	49.59	117.614		
5,500.00	5,432.48	5,323.29	5,385.67	29.84	22.83	48.69	-4,044.23	-4,965.20	5,821.88	5,771.35	50.53	115.213		
5,600.00	5,531.12	5,401.26	5,463.63	30.40	23.16	48.79	-4,044.02	-4,966.26	5,811.97	5,760.58	51.39	113.087		
5,700.00	5,629.77	5,526.92	5,589.28	30.95	23.69	48.96	-4,043.57	-4,967.77	5,801.87	5,749.42	52.44	110.631		
5,800.00	5,728.41	5,600.20	5,662.56	31.51	24.00	49.05	-4,043.56	-4,968.58	5,791.94	5,738.65	53.29	108.689		
5,900.00	5,827.06	5,682.83	5,745.18	32.07	24.35	49.16	-4,043.80	-4,969.68	5,782.40	5,728.23	54.17	106.742		
6,000.00	5,925.71	5,778.13	5,840.47	32.63	24.76	49.28	-4,044.14	-4,971.13	5,773.08	5,717.97	55.11	104.764		
6,100.00	6,024.35	5,860.47	5,922.80	33.19	25.11	49.39	-4,044.51	-4,972.44	5,763.90	5,707.91	55.99	102.949		
6,200.00	6,123.00	5,947.82	6,010.12	33.74	25.48	49.50	-4,044.68	-4,974.32	5,755.06	5,698.17	56.89	101.158		
6,300.00	6,221.64	6,054.07	6,116.35	34.30	25.93	49.65	-4,044.75	-4,976.71	5,746.28	5,688.41	57.87	99.293		
6,400.00	6,320.29	6,147.56	6,209.82	34.86	26.33	49.78	-4,044.94	-4,978.58	5,737.40	5,678.60	58.80	97.573		
6,500.00	6,418.93	6,226.70	6,288.94	35.42	26.67	49.89	-4,044.82	-4,980.63	5,728.84	5,669.17	59.67	96.001		
6,600.00	6,517.58	6,310.21	6,372.42	35.98	27.02	50.00	-4,045.10	-4,982.85	5,720.64	5,660.07	60.57	94.454		
6,700.00	6,616.23	6,417.33	6,479.49	36.54	27.48	50.15	-4,045.35	-4,985.79	5,712.48	5,650.93	61.55	92.806		
6,800.00	6,714.51	6,511.68	6,573.81	37.10	27.88	14.93	-4,045.39	-4,988.46	5,699.75	5,637.29	62.46	91.255		
6,900.00	6,810.42	6,602.78	6,664.87	37.66	28.27	-5.02	-4,045.85	-4,990.88	5,674.26	5,611.00	63.26	89.696		
7,000.00	6,901.58	6,673.17	6,735.24	38.21	28.57	-15.34	-4,046.26	-4,992.92	5,636.57	5,572.69	63.88	88.239		
7,100.00	6,985.76	6,738.21	6,800.23	38.76	28.84	-22.82	-4,046.36	-4,995.25	5,587.72	5,523.35	64.37	86.805		
7,200.00	7,060.88	6,800.01	6,861.98	39.32	29.11	-29.87	-4,046.24	-4,997.88	5,528.91	5,464.16	64.75	85.392		
7,300.00	7,125.09	6,842.96	6,904.88	39.90	29.29	-37.63	-4,046.14	-4,999.91	5,461.60	5,396.65	64.95	84.085		
7,400.00	7,176.81	6,881.20	6,943.07	40.55	29.45	-46.97	-4,046.13	-5,001.82	5,387.51	5,322.44	65.06	82.803		
7,500.00	7,214.77	6,900.01	6,961.86	41.30	29.53	-58.15	-4,046.16	-5,002.79	5,308.48	5,243.43	65.05	81.605		
7,600.00	7,238.02	6,925.51	6,987.31	42.22	29.64	-71.30	-4,046.25	-5,004.16	5,226.49	5,161.44	65.05	80.342		
7,700.00	7,246.01	6,933.43	6,995.22	43.32	29.68	-84.83	-4,046.28	-5,004.60	5,143.66	5,078.65	65.01	79.116		
7,800.00	7,245.50	6,936.44	6,998.22	44.65	29.69	-85.55	-4,046.30	-5,004.77	5,061.45	4,996.41	65.05	77.812		
7,900.00	7,244.97	6,939.47	7,001.26	46.21	29.70	-85.61	-4,046.31	-5,004.94	4,979.89	4,914.67	65.22	76.354		
8,000.00	7,244.44	6,942.55	7,004.33	47.99	29.72	-85.67	-4,046.33	-5,005.11	4,899.01	4,833.46	65.55	74.739		
8,100.00	7,243.91	6,945.66	7,007.44	49.96	29.73	-85.73	-4,046.35	-5,005.29	4,818.85	4,752.81	66.04	72.970		
8,200.00	7,243.39	6,948.82	7,010.59	52.10	29.74	-85.79	-4,046.37	-5,005.47	4,739.43	4,672.73	66.70	71.054		
8,300.00	7,242.86	6,952.02	7,013.79	54.38	29.76	-85.86	-4,046.39	-5,005.65	4,660.81	4,593.26	67.55	69.002		
8,400.00	7,242.33	6,955.26	7,017.02	56.78	29.77	-85.92	-4,046.41	-5,005.84	4,583.01	4,514.44	68.58	66.832		
8,500.00	7,241.80	6,958.55	7,020.30	59.28	29.78	-85.99	-4,046.43	-5,006.03	4,506.09	4,436.29	69.79	64.562		
8,600.00	7,241.27	6,961.88	7,023.63	61.88	29.80	-86.05	-4,046.45	-5,006.23	4,430.08	4,358.87	71.21	62.215		
8,700.00	7,240.74	6,965.26	7,027.00	64.54	29.81	-86.12	-4,046.48	-5,006.43	4,355.04	4,282.23	72.81	59.813		
8,800.00	7,240.21	6,968.68	7,030.42	67.27	29.83	-86.18	-4,046.51	-5,006.63	4,281.02	4,206.41	74.61	57.381		
8,900.00	7,239.68	6,972.15	7,033.88	70.06	29.84	-86.25	-4,046.53	-5,006.84	4,208.06	4,131.47	76.59	54.941		
9,000.00	7,239.16	6,975.67	7,037.39	72.89	29.86	-86.32	-4,046.56	-5,007.05	4,136.23	4,057.47	78.77	52.513		
9,100.00	7,238.63	6,979.24	7,040.96	75.77	29.87	-86.39	-4,046.59	-5,007.27	4,065.59	3,984.47	81.12	50.117		
9,200.00	7,238.10	6,982.86	7,044.57	78.69	29.89	-86.46	-4,046.62	-5,007.49	3,996.20	3,912.54	83.66	47.767		
9,300.00	7,237.57	6,986.53	7,048.23	81.64	29.90	-86.54	-4,046.66	-5,007.72	3,928.12	3,841.75	86.37	45.479		
9,400.00	7,237.04	7,000.01	7,061.69	84.62	29.96	-86.80	-4,046.79	-5,008.56	3,861.45	3,772.16	89.29	43.247		
9,500.00	7,236.51	7,000.01	7,061.69	87.63	29.96	-86.80	-4,046.79	-5,008.56	3,796.20	3,703.87	92.33	41.116		
9,600.00	7,235.98	7,000.01	7,061.69	90.66	29.96	-86.80	-4,046.79	-5,008.56	3,732.49	3,636.96	95.53	39.070		
9,700.00	7,235.45	7,002.22	7,063.89	93.72	29.97	-86.84	-4,046.81	-5,008.70	3,670.40	3,571.50	98.90	37.112		
9,800.00	7,234.93	7,007.18	7,068.84	96.79	29.99	-86.94	-4,046.87	-5,009.01	3,610.00	3,507.57	102.43	35.243		
9,900.00	7,234.40	7,012.14	7,073.79	99.88	30.01	-87.04	-4,046.92	-5,009.32	3,551.39	3,445.28	106.11	33.470		
10,000.00	7,233.87	7,017.11	7,078.75	102.98	30.03	-87.14	-4,046.97	-5,009.64	3,494.64	3,384.72	109.92	31.792		
10,100.00	7,233.34	7,022.08	7,083.71	106.10	30.06	-87.24	-4,047.03	-5,009.95	3,439.86	3,325.99	113.87	30.209		
10,200.00	7,232.81	7,027.05	7,088.67	109.23	30.08	-87.33	-4,047.09	-5,010.26	3,387.14	3,269.20	117.94	28.719		
10,300.00	7,232.28	7,032.03	7,093.64	112.38	30.10	-87.43	-4,047.15	-5,010.58	3,336.58	3,214.45	122.13	27.320		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,037.01	7,098.61	115.53	30.12	-87.53	-4,047.21	-5,010.89	3,288.27	3,161.84	126.43	26.009		
10,500.00	7,231.23	7,042.00	7,103.58	118.70	30.14	-87.63	-4,047.27	-5,011.21	3,242.31	3,111.50	130.82	24.785		
10,600.00	7,230.70	7,046.99	7,108.56	121.87	30.16	-87.73	-4,047.34	-5,011.52	3,198.82	3,063.53	135.29	23.644		
10,700.00	7,230.17	7,051.98	7,113.55	125.05	30.18	-87.83	-4,047.40	-5,011.84	3,157.88	3,018.05	139.83	22.584		
10,800.00	7,229.64	7,056.98	7,118.54	128.25	30.20	-87.92	-4,047.47	-5,012.16	3,119.60	2,975.18	144.42	21.600		
10,900.00	7,229.11	7,061.98	7,123.53	131.44	30.23	-88.02	-4,047.54	-5,012.47	3,084.09	2,935.03	149.06	20.691		
11,000.00	7,228.58	7,066.99	7,128.53	134.65	30.25	-88.12	-4,047.61	-5,012.79	3,051.43	2,897.72	153.71	19.852		
11,100.00	7,228.05	7,072.00	7,133.53	137.86	30.27	-88.22	-4,047.68	-5,013.11	3,021.71	2,863.35	158.36	19.081		
11,200.00	7,227.52	7,077.02	7,138.53	141.08	30.29	-88.32	-4,047.75	-5,013.43	2,995.03	2,832.03	163.00	18.375		
11,300.00	7,227.00	7,082.04	7,143.54	144.30	30.31	-88.42	-4,047.82	-5,013.75	2,971.47	2,803.88	167.60	17.730		
11,400.00	7,226.47	7,087.07	7,148.56	147.52	30.33	-88.52	-4,047.90	-5,014.07	2,951.11	2,778.97	172.14	17.144		
11,500.00	7,225.94	7,092.09	7,153.58	150.76	30.35	-88.62	-4,047.97	-5,014.38	2,934.00	2,757.40	176.59	16.614		
11,600.00	7,225.41	7,097.13	7,158.60	153.99	30.38	-88.72	-4,048.05	-5,014.70	2,920.20	2,739.25	180.95	16.138		
11,700.00	7,224.88	7,102.51	7,163.97	157.23	30.40	-88.82	-4,048.14	-5,015.05	2,909.77	2,724.58	185.19	15.712		
11,800.00	7,224.35	7,108.34	7,169.79	160.48	30.42	-88.94	-4,048.23	-5,015.42	2,902.74	2,713.45	189.30	15.334		
11,900.00	7,223.82	7,114.18	7,175.62	163.72	30.45	-89.05	-4,048.32	-5,015.79	2,899.13	2,705.89	193.24	15.003		
11,955.06	7,223.53	7,117.39	7,178.82	165.51	30.46	-89.12	-4,048.37	-5,015.99	2,898.61	2,703.27	195.34	14.839 CC		
12,000.00	7,223.29	7,120.02	7,181.44	166.98	30.47	-89.17	-4,048.41	-5,016.16	2,898.96	2,701.94	197.02	14.714		
12,100.00	7,222.77	7,125.85	7,187.26	170.23	30.50	-89.28	-4,048.50	-5,016.53	2,902.22	2,701.62	200.60	14.468 ES		
12,200.00	7,222.24	7,131.69	7,193.09	173.49	30.52	-89.40	-4,048.60	-5,016.90	2,908.91	2,704.92	203.99	14.260		
12,300.00	7,221.71	7,137.53	7,198.91	176.75	30.55	-89.51	-4,048.69	-5,017.27	2,918.99	2,711.83	207.16	14.090		
12,400.00	7,221.18	7,143.36	7,204.73	180.01	30.57	-89.63	-4,048.78	-5,017.64	2,932.45	2,722.32	210.12	13.956		
12,500.00	7,220.65	7,149.20	7,210.56	183.28	30.60	-89.74	-4,048.87	-5,018.01	2,949.22	2,736.36	212.86	13.855		
12,600.00	7,220.12	7,155.03	7,216.38	186.54	30.62	-89.86	-4,048.96	-5,018.38	2,969.26	2,753.88	215.38	13.786		
12,700.00	7,219.59	7,160.86	7,222.20	189.81	30.65	-89.97	-4,049.06	-5,018.75	2,992.49	2,774.82	217.67	13.748		
12,800.00	7,219.06	7,166.70	7,228.02	193.09	30.68	-90.09	-4,049.15	-5,019.12	3,018.85	2,799.11	219.74	13.739 SF		
12,900.00	7,218.54	7,172.53	7,233.84	196.36	30.70	-90.20	-4,049.24	-5,019.50	3,048.25	2,826.66	221.59	13.756		
13,000.00	7,218.01	7,178.37	7,239.66	199.64	30.73	-90.32	-4,049.33	-5,019.87	3,080.61	2,857.38	223.23	13.800		
13,100.00	7,217.48	7,184.20	7,245.48	202.92	30.75	-90.43	-4,049.42	-5,020.24	3,115.83	2,891.16	224.66	13.869		
13,200.00	7,216.95	7,190.03	7,251.30	206.20	30.78	-90.55	-4,049.52	-5,020.61	3,153.81	2,927.91	225.90	13.961		
13,300.00	7,216.42	7,195.86	7,257.12	209.48	30.80	-90.66	-4,049.61	-5,020.98	3,194.47	2,967.51	226.96	14.075		
13,400.00	7,215.89	7,201.70	7,262.94	212.76	30.83	-90.78	-4,049.70	-5,021.35	3,237.70	3,009.86	227.84	14.211		
13,500.00	7,215.36	7,207.53	7,268.76	216.05	30.85	-90.89	-4,049.79	-5,021.72	3,283.39	3,054.84	228.55	14.366		
13,600.00	7,214.84	7,213.36	7,274.58	219.33	30.88	-91.01	-4,049.88	-5,022.09	3,331.45	3,102.34	229.11	14.541		
13,700.00	7,214.31	7,219.19	7,280.40	222.62	30.90	-91.12	-4,049.98	-5,022.46	3,381.77	3,152.25	229.52	14.734		
13,800.00	7,213.78	7,225.02	7,286.22	225.91	30.93	-91.24	-4,050.07	-5,022.83	3,434.26	3,204.45	229.81	14.944		
13,900.00	7,213.25	7,230.85	7,292.04	229.20	30.95	-91.35	-4,050.16	-5,023.20	3,488.82	3,258.85	229.97	15.171		
14,000.00	7,212.72	7,236.68	7,297.85	232.49	30.98	-91.47	-4,050.25	-5,023.57	3,545.35	3,315.32	230.03	15.413		
14,100.00	7,212.19	7,242.51	7,303.67	235.79	31.00	-91.58	-4,050.34	-5,023.94	3,603.75	3,373.77	229.98	15.670		
14,200.00	7,211.66	7,248.34	7,309.49	239.08	31.03	-91.70	-4,050.43	-5,024.31	3,663.95	3,434.11	229.85	15.941		
14,300.00	7,211.13	7,254.17	7,315.30	242.38	31.05	-91.81	-4,050.53	-5,024.68	3,725.85	3,496.22	229.63	16.226		
14,400.00	7,210.61	7,260.00	7,321.12	245.67	31.08	-91.93	-4,050.62	-5,025.05	3,789.37	3,560.03	229.34	16.523		
14,500.00	7,210.08	7,265.83	7,326.94	248.97	31.10	-92.04	-4,050.71	-5,025.42	3,854.43	3,625.45	228.98	16.833		
14,600.00	7,209.55	7,271.65	7,332.75	252.27	31.13	-92.16	-4,050.80	-5,025.79	3,920.95	3,692.38	228.57	17.154		
14,700.00	7,209.02	7,277.48	7,338.57	255.57	31.15	-92.27	-4,050.89	-5,026.16	3,988.86	3,760.75	228.11	17.487		
14,800.00	7,208.49	7,283.31	7,344.38	258.87	31.18	-92.39	-4,050.99	-5,026.53	4,058.09	3,830.49	227.60	17.830		
14,900.00	7,207.96	7,289.14	7,350.20	262.17	31.20	-92.50	-4,051.08	-5,026.90	4,128.57	3,901.52	227.05	18.183		
15,000.00	7,207.43	7,294.96	7,356.01	265.47	31.23	-92.62	-4,051.17	-5,027.27	4,200.24	3,973.77	226.48	18.546		
15,081.89	7,207.00	7,299.73	7,360.77	268.17	31.25	-92.71	-4,051.24	-5,027.57	4,259.78	4,033.80	225.98	18.850		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	72.00	3.28	3.28	-147.53	-5,173.22	-3,292.47	6,132.52				
100.00	100.00	90.68	137.68	3.28	3.28	-147.53	-5,173.07	-3,292.34	6,132.01	6,125.44	6.57	933.611	
200.00	200.00	192.46	239.46	3.34	3.33	-147.52	-5,172.31	-3,292.16	6,131.28	6,124.62	6.67	919.793	
300.00	299.98	263.48	310.47	3.44	3.39	24.46	-5,171.81	-3,292.37	6,129.27	6,122.44	6.83	896.956	
400.00	399.84	354.26	401.25	3.59	3.51	24.52	-5,171.72	-3,292.49	6,124.49	6,117.38	7.11	861.966	
500.00	499.45	1,500.00	1,533.17	3.80	7.65	26.07	-5,027.11	-3,324.02	6,100.73	6,089.39	11.34	538.082	
600.00	598.70	1,568.24	1,599.64	4.06	8.01	26.47	-5,011.88	-3,326.56	6,073.29	6,061.41	11.89	510.961	
700.00	697.49	1,642.00	1,671.47	4.38	8.42	26.83	-4,995.40	-3,329.72	6,043.34	6,030.83	12.51	483.059	
800.00	796.13	1,707.15	1,734.93	4.74	8.78	26.99	-4,980.97	-3,332.80	6,013.07	5,999.95	13.11	458.544	
900.00	894.78	1,832.71	1,857.21	5.15	9.49	27.29	-4,953.16	-3,338.92	5,982.95	5,968.89	14.06	425.613	
1,000.00	993.43	1,925.15	1,947.16	5.58	10.02	27.51	-4,932.33	-3,343.43	5,952.61	5,937.74	14.87	400.399	
1,100.00	1,092.07	2,017.59	2,037.11	6.03	10.56	27.74	-4,911.50	-3,347.95	5,922.36	5,906.66	15.70	377.170	
1,200.00	1,190.72	2,110.03	2,127.06	6.50	11.10	27.97	-4,890.67	-3,352.47	5,892.20	5,875.64	16.56	355.819	
1,300.00	1,289.36	2,202.47	2,217.01	6.98	11.65	28.20	-4,869.84	-3,356.98	5,862.13	5,844.70	17.44	336.211	
1,400.00	1,388.01	2,305.09	2,306.96	7.47	12.27	28.44	-4,849.01	-3,361.50	5,832.16	5,813.78	18.38	317.257	
1,500.00	1,486.65	2,387.35	2,396.91	7.97	12.76	28.68	-4,828.18	-3,366.02	5,802.29	5,783.05	19.24	301.646	
1,600.00	1,585.30	2,479.79	2,486.86	8.48	13.32	28.92	-4,807.35	-3,370.54	5,772.51	5,752.35	20.15	286.409	
1,700.00	1,683.94	2,572.23	2,576.81	9.00	13.88	29.16	-4,786.52	-3,375.05	5,742.83	5,721.74	21.09	272.363	
1,800.00	1,782.59	2,664.67	2,666.76	9.52	14.45	29.40	-4,765.69	-3,379.57	5,713.25	5,691.22	22.03	259.392	
1,900.00	1,881.24	2,757.11	2,756.70	10.05	15.01	29.65	-4,744.86	-3,384.09	5,683.77	5,660.80	22.97	247.391	
2,000.00	1,979.88	2,854.46	2,846.65	10.58	15.61	29.90	-4,724.03	-3,388.60	5,654.40	5,630.44	23.96	235.998	
2,100.00	2,078.53	2,941.99	2,936.60	11.11	16.15	30.15	-4,703.20	-3,393.12	5,625.13	5,600.23	24.90	225.933	
2,200.00	2,177.17	3,034.43	3,026.55	11.64	16.72	30.40	-4,682.37	-3,397.64	5,595.97	5,570.10	25.87	216.318	
2,300.00	2,275.82	3,126.87	3,116.50	12.18	17.30	30.66	-4,661.54	-3,402.16	5,566.92	5,540.07	26.85	207.353	
2,400.00	2,374.46	3,219.31	3,206.45	12.72	17.87	30.92	-4,640.71	-3,406.67	5,537.97	5,510.14	27.83	198.979	
2,500.00	2,473.11	3,311.75	3,296.40	13.26	18.44	31.18	-4,619.88	-3,411.19	5,509.14	5,480.32	28.82	191.143	
2,600.00	2,571.76	3,404.19	3,386.35	13.80	19.02	31.44	-4,599.05	-3,415.71	5,480.43	5,450.61	29.82	183.798	
2,700.00	2,670.40	3,503.37	3,476.30	14.35	19.64	31.71	-4,578.22	-3,420.22	5,451.83	5,420.97	30.86	176.682	
2,800.00	2,769.05	3,589.07	3,566.25	14.89	20.17	31.98	-4,557.39	-3,424.74	5,423.34	5,391.52	31.82	170.415	
2,900.00	2,867.69	3,681.51	3,656.20	15.44	20.75	32.25	-4,536.56	-3,429.26	5,394.98	5,362.14	32.83	164.306	
3,000.00	2,966.34	3,773.95	3,746.14	15.99	21.33	32.52	-4,515.72	-3,433.78	5,366.74	5,332.89	33.85	158.544	
3,100.00	3,064.98	10,703.20	7,244.57	16.53	120.30	-12.24	-3,692.03	23.29	5,300.84	5,209.60	91.24	58.098	
3,200.00	3,163.63	10,700.89	7,244.64	17.08	120.23	-12.15	-3,692.04	19.21	5,213.33	5,121.17	92.17	56.564	
3,300.00	3,262.27	10,704.97	7,244.71	17.63	120.36	-12.06	-3,692.05	15.12	5,126.28	5,033.01	93.27	54.965	
3,400.00	3,360.92	10,690.95	7,244.78	18.18	119.91	-11.97	-3,692.07	11.04	5,039.70	4,945.68	94.01	53.606	
3,500.00	3,459.57	10,686.86	7,244.86	18.74	119.78	-11.88	-3,692.08	6.96	4,953.62	4,858.61	95.01	52.139	
3,600.00	3,558.21	10,682.78	7,244.93	19.29	119.65	-11.78	-3,692.10	2.87	4,868.07	4,772.03	96.04	50.689	
3,700.00	3,656.86	10,678.70	7,245.00	19.84	119.52	-11.69	-3,692.11	-1.21	4,783.08	4,685.98	97.10	49.257	
3,800.00	3,755.50	10,674.61	7,245.07	20.39	119.40	-11.60	-3,692.12	-5.29	4,698.68	4,600.47	98.21	47.844	
3,900.00	3,854.15	10,670.53	7,245.14	20.95	119.27	-11.51	-3,692.14	-9.37	4,614.89	4,515.55	99.35	46.452	
4,000.00	3,952.79	10,666.44	7,245.21	21.50	119.14	-11.42	-3,692.15	-13.46	4,531.76	4,431.24	100.52	45.081	
4,100.00	4,051.44	10,662.36	7,245.29	22.05	119.01	-11.33	-3,692.16	-17.54	4,449.33	4,347.59	101.74	43.733	
4,200.00	4,150.08	10,658.28	7,245.36	22.61	118.88	-11.23	-3,692.18	-21.62	4,367.62	4,264.62	102.99	42.407	
4,300.00	4,248.73	10,654.19	7,245.43	23.16	118.75	-11.14	-3,692.19	-25.71	4,286.68	4,182.40	104.28	41.106	
4,400.00	4,347.38	10,650.11	7,245.50	23.72	118.62	-11.05	-3,692.20	-29.79	4,206.56	4,100.85	105.70	39.796	
4,500.00	4,446.02	10,646.03	7,245.57	24.27	118.49	-10.96	-3,692.22	-33.87	4,127.30	4,020.32	106.98	38.581	
4,600.00	4,544.67	10,641.94	7,245.65	24.83	118.36	-10.87	-3,692.23	-37.96	4,048.95	3,940.57	108.38	37.358	
4,700.00	4,643.31	10,637.86	7,245.72	25.39	118.23	-10.77	-3,692.25	-42.04	3,971.58	3,861.75	109.83	36.163	
4,800.00	4,741.96	10,633.78	7,245.79	25.94	118.10	-10.68	-3,692.26	-46.12	3,895.23	3,783.92	111.30	34.996	
4,900.00	4,840.60	10,629.69	7,245.86	26.50	117.97	-10.59	-3,692.27	-50.20	3,819.97	3,707.15	112.82	33.859	
5,000.00	4,939.25	10,625.61	7,245.93	27.05	117.84	-10.50	-3,692.29	-54.29	3,745.86	3,631.49	114.37	32.752	
5,100.00	5,037.90	10,621.52	7,246.00	27.61	117.72	-10.41	-3,692.30	-58.37	3,672.97	3,557.02	115.95	31.677	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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-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	5,136.54	10,617.44	7,246.08	28.17	117.59	-10.31	-3,692.31	-62.45	3,601.38	3,483.82	117.57	30.633		
5,300.00	5,235.19	10,613.36	7,246.15	28.72	117.46	-10.22	-3,692.33	-66.54	3,531.17	3,411.96	119.21	29.622		
5,400.00	5,333.83	10,609.27	7,246.22	29.28	117.33	-10.13	-3,692.34	-70.62	3,462.42	3,341.55	120.87	28.645		
5,500.00	5,432.48	10,605.19	7,246.29	29.84	117.20	-10.04	-3,692.35	-74.70	3,395.21	3,272.65	122.56	27.703		
5,600.00	5,531.12	10,601.11	7,246.36	30.40	117.07	-9.95	-3,692.37	-78.79	3,329.65	3,205.39	124.26	26.795		
5,700.00	5,629.77	10,602.98	7,246.44	30.95	117.13	-9.85	-3,692.38	-82.87	3,265.83	3,139.69	126.14	25.890		
5,800.00	5,728.41	10,592.94	7,246.51	31.51	116.81	-9.76	-3,692.40	-86.95	3,203.86	3,076.16	127.70	25.089		
5,900.00	5,827.06	10,588.86	7,246.58	32.07	116.68	-9.67	-3,692.41	-91.03	3,143.83	3,014.42	129.42	24.292		
6,000.00	5,925.71	10,584.77	7,246.65	32.63	116.55	-9.58	-3,692.42	-95.12	3,085.88	2,954.76	131.12	23.534		
6,100.00	6,024.35	10,580.69	7,246.72	33.19	116.43	-9.49	-3,692.44	-99.20	3,030.12	2,897.30	132.81	22.815		
6,200.00	6,123.00	10,576.60	7,246.80	33.74	116.30	-9.39	-3,692.45	-103.28	2,976.66	2,842.19	134.47	22.136		
6,300.00	6,221.64	10,572.52	7,246.87	34.30	116.17	-9.30	-3,692.46	-107.37	2,925.64	2,789.55	136.09	21.498		
6,400.00	6,320.29	10,568.44	7,246.94	34.86	116.04	-9.21	-3,692.48	-111.45	2,877.19	2,739.54	137.65	20.902		
6,500.00	6,418.93	10,564.35	7,247.01	35.42	115.91	-9.12	-3,692.49	-115.53	2,831.44	2,692.28	139.15	20.348		
6,600.00	6,517.58	10,560.27	7,247.08	35.98	115.78	-9.03	-3,692.50	-119.62	2,788.51	2,647.94	140.57	19.837		
6,700.00	6,616.23	10,556.19	7,247.15	36.54	115.65	-8.93	-3,692.52	-123.70	2,748.55	2,606.66	141.89	19.370		
6,800.00	6,714.51	10,546.71	7,247.32	37.10	115.35	-46.43	-3,692.55	-133.18	2,711.82	2,568.87	142.94	18.971		
6,900.00	6,810.42	10,522.00	7,247.76	37.66	114.57	-67.70	-3,692.63	-157.88	2,679.04	2,535.66	143.38	18.685		
7,000.00	6,901.58	10,482.46	7,248.45	38.21	113.33	-77.73	-3,692.76	-197.41	2,650.77	2,507.57	143.20	18.511		
7,100.00	6,985.76	10,429.06	7,249.39	38.76	111.65	-83.22	-3,692.94	-250.80	2,627.21	2,484.76	142.45	18.443		
7,200.00	7,060.88	10,361.61	7,250.49	39.32	109.53	-86.38	-3,693.17	-318.25	2,608.27	2,467.09	141.18	18.474		
7,300.00	7,125.09	10,284.01	7,250.62	39.90	107.10	-88.21	-3,693.43	-395.84	2,593.59	2,453.98	139.62	18.577		
7,400.00	7,176.81	10,201.00	7,250.62	40.55	104.51	-89.23	-3,693.71	-480.85	2,582.81	2,444.82	138.00	18.716		
7,500.00	7,214.77	10,106.83	7,250.62	41.30	101.59	-89.76	-3,694.02	-573.03	2,575.46	2,439.24	136.21	18.908		
7,600.00	7,238.02	10,009.76	7,250.62	42.22	98.59	-90.01	-3,694.34	-670.09	2,571.08	2,436.52	134.56	19.107		
7,700.00	7,246.01	9,910.20	7,250.62	43.32	95.52	-90.10	-3,694.68	-769.65	2,569.41	2,436.35	133.06	19.310		
7,800.00	7,245.50	9,810.20	7,250.62	44.65	92.46	-90.11	-3,695.01	-869.65	2,569.16	2,437.40	131.75	19.500		
7,900.00	7,244.97	9,710.20	7,250.62	46.21	89.42	-90.13	-3,695.34	-969.65	2,568.91	2,438.25	130.65	19.662		
8,000.00	7,244.44	9,610.20	7,250.62	47.99	86.40	-90.14	-3,695.68	-1,069.65	2,568.66	2,438.93	129.73	19.800		
8,100.00	7,243.91	9,510.21	7,250.62	49.96	83.41	-90.15	-3,696.01	-1,169.64	2,568.41	2,439.44	128.97	19.915		
8,200.00	7,243.39	9,410.21	7,250.62	52.10	80.44	-90.16	-3,696.35	-1,269.64	2,568.16	2,439.81	128.35	20.009		
8,300.00	7,242.86	9,310.21	7,250.62	54.38	77.51	-90.17	-3,696.68	-1,369.64	2,567.91	2,440.04	127.87	20.083		
8,400.00	7,242.33	9,210.21	7,250.62	56.78	74.61	-90.19	-3,697.01	-1,469.64	2,567.66	2,440.16	127.50	20.139		
8,500.00	7,241.80	9,110.21	7,250.62	59.28	71.75	-90.20	-3,697.35	-1,569.64	2,567.41	2,440.17	127.24	20.177		
8,600.00	7,241.27	9,010.21	7,250.62	61.88	68.93	-90.21	-3,697.68	-1,669.63	2,567.16	2,440.07	127.09	20.200		
8,700.00	7,240.74	8,910.22	7,250.62	64.54	66.16	-90.22	-3,698.02	-1,769.63	2,566.92	2,439.88	127.04	20.206		
8,800.00	7,240.21	8,810.22	7,250.62	67.27	63.45	-90.23	-3,698.35	-1,869.63	2,566.67	2,439.58	127.09	20.196		
8,900.00	7,239.68	8,710.22	7,250.62	70.06	60.81	-90.24	-3,698.68	-1,969.63	2,566.42	2,439.19	127.23	20.171		
9,000.00	7,239.16	8,610.22	7,250.62	72.89	58.25	-90.26	-3,699.02	-2,069.62	2,566.17	2,438.69	127.48	20.129		
9,100.00	7,238.63	8,510.22	7,250.62	75.77	55.78	-90.27	-3,699.35	-2,169.62	2,565.92	2,438.08	127.84	20.071		
9,200.00	7,238.10	8,410.22	7,250.62	78.69	53.43	-90.28	-3,699.68	-2,269.62	2,565.68	2,437.36	128.32	19.995		
9,300.00	7,237.57	8,310.23	7,250.62	81.64	51.22	-90.29	-3,700.02	-2,369.62	2,565.43	2,436.51	128.91	19.900		
9,400.00	7,237.04	8,210.23	7,250.62	84.62	49.18	-90.30	-3,700.35	-2,469.62	2,565.18	2,435.53	129.65	19.786		
9,500.00	7,236.51	8,110.23	7,250.62	87.63	47.38	-90.32	-3,700.69	-2,569.61	2,564.93	2,434.40	130.54	19.649		
9,600.00	7,235.98	8,010.23	7,250.62	90.66	45.86	-90.33	-3,701.02	-2,669.61	2,564.68	2,433.09	131.60	19.489		
9,700.00	7,235.45	7,910.23	7,250.62	93.72	44.70	-90.34	-3,701.35	-2,769.61	2,564.44	2,431.59	132.84	19.304		
9,800.00	7,234.93	7,810.23	7,250.62	96.79	43.89	-90.35	-3,701.69	-2,869.61	2,564.19	2,429.88	134.31	19.092		
9,885.76	7,234.47	7,730.87	7,250.58	99.44	43.47	-90.36	-3,701.96	-2,948.97	2,564.00	2,428.11	135.88	18.869 CC		
9,900.00	7,234.40	7,723.31	7,250.45	99.88	43.43	-90.36	-3,702.02	-2,956.53	2,564.01	2,427.74	136.27	18.816		
10,000.00	7,233.87	7,670.46	7,247.13	102.98	43.23	-90.29	-3,702.97	-3,009.25	2,565.20	2,426.18	139.02	18.453 ES		
10,100.00	7,233.34	7,618.49	7,239.71	106.10	43.08	-90.13	-3,704.86	-3,060.64	2,568.24	2,426.45	141.79	18.113		
10,200.00	7,232.81	7,568.02	7,228.62	109.23	42.95	-89.89	-3,707.59	-3,109.78	2,573.21	2,428.62	144.59	17.797		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.28	7,519.62	7,214.46	112.38	42.85	-89.58	-3,711.03	-3,155.93	2,580.19	2,432.77	147.42	17.502		
10,400.00	7,231.75	7,473.65	7,197.88	115.53	42.75	-89.22	-3,715.01	-3,198.61	2,589.30	2,439.03	150.27	17.231		
10,500.00	7,231.23	7,430.39	7,179.58	118.70	42.66	-88.81	-3,719.38	-3,237.55	2,600.65	2,447.53	153.12	16.984		
10,600.00	7,230.70	7,400.00	7,165.20	121.87	42.61	-88.50	-3,722.80	-3,264.10	2,614.39	2,458.37	156.02	16.757		
10,700.00	7,230.17	7,352.01	7,140.03	125.05	42.51	-87.95	-3,728.77	-3,304.50	2,630.51	2,471.82	158.69	16.576		
10,800.00	7,229.64	7,317.32	7,120.02	128.25	42.43	-87.52	-3,733.50	-3,332.44	2,649.23	2,487.84	161.39	16.415		
10,900.00	7,229.11	7,285.59	7,100.44	131.44	42.35	-87.09	-3,738.12	-3,356.98	2,670.56	2,506.56	164.01	16.283		
11,000.00	7,228.58	7,252.01	7,078.46	134.65	42.27	-86.62	-3,743.30	-3,381.82	2,694.58	2,528.10	166.48	16.186		
11,100.00	7,228.05	7,228.88	7,062.58	137.86	42.21	-86.28	-3,747.03	-3,398.23	2,721.28	2,552.40	168.88	16.113		
11,200.00	7,227.52	7,203.87	7,044.78	141.08	42.15	-85.90	-3,751.22	-3,415.28	2,750.71	2,579.58	171.13	16.074		
11,300.00	7,227.00	7,180.85	7,027.82	144.30	42.07	-85.54	-3,755.19	-3,430.34	2,782.83	2,609.58	173.25	16.063 SF		
11,400.00	7,226.47	7,152.01	7,005.86	147.52	41.99	-85.07	-3,760.34	-3,448.29	2,817.67	2,642.48	175.19	16.083		
11,500.00	7,225.94	7,152.01	7,005.86	150.76	41.99	-85.07	-3,760.34	-3,448.29	2,855.16	2,678.08	177.08	16.123		
11,600.00	7,225.41	7,122.03	6,982.20	153.99	41.89	-84.57	-3,765.89	-3,465.85	2,895.11	2,716.36	178.75	16.197		
11,700.00	7,224.88	7,100.00	6,964.32	157.23	41.82	-84.19	-3,770.07	-3,478.01	2,937.67	2,757.39	180.28	16.295		
11,800.00	7,224.35	7,100.00	6,964.32	160.48	41.82	-84.19	-3,770.07	-3,478.01	2,982.72	2,800.99	181.72	16.414		
11,900.00	7,223.82	7,075.52	6,943.98	163.72	41.73	-83.77	-3,774.83	-3,490.78	3,030.03	2,847.04	182.99	16.558		
12,000.00	7,223.29	7,052.01	6,924.01	166.98	41.65	-83.35	-3,779.49	-3,502.27	3,079.75	2,895.62	184.13	16.726		
12,100.00	7,222.77	7,049.69	6,922.02	170.23	41.64	-83.31	-3,779.96	-3,503.36	3,131.55	2,946.38	185.17	16.912		
12,200.00	7,222.24	7,049.69	6,922.02	173.49	41.64	-83.31	-3,779.96	-3,503.36	3,185.62	2,999.52	186.09	17.119		
12,300.00	7,221.71	7,027.36	6,902.64	176.75	41.55	-82.91	-3,784.48	-3,513.50	3,241.54	3,054.65	186.89	17.344		
12,400.00	7,221.18	7,010.76	6,888.02	180.01	41.48	-82.61	-3,787.89	-3,520.58	3,299.52	3,111.92	187.59	17.589		
12,500.00	7,220.65	7,010.76	6,888.02	183.28	41.48	-82.61	-3,787.89	-3,520.58	3,359.30	3,171.09	188.21	17.849		
12,600.00	7,220.12	7,000.00	6,878.45	186.54	41.44	-82.41	-3,790.13	-3,524.96	3,420.86	3,232.13	188.73	18.126		
12,700.00	7,219.59	7,000.00	6,878.45	189.81	41.44	-82.41	-3,790.13	-3,524.96	3,484.17	3,295.01	189.16	18.419		
12,800.00	7,219.06	7,000.00	6,878.45	193.09	41.44	-82.41	-3,790.13	-3,524.96	3,549.17	3,359.66	189.51	18.728		
12,900.00	7,218.54	6,975.13	6,856.05	196.36	41.33	-81.95	-3,795.35	-3,534.44	3,615.33	3,425.51	189.82	19.046		
13,000.00	7,218.01	6,952.01	6,834.94	199.64	41.23	-81.52	-3,800.27	-3,542.44	3,683.34	3,493.28	190.06	19.380		
13,100.00	7,217.48	6,952.01	6,834.94	202.92	41.23	-81.52	-3,800.27	-3,542.44	3,752.41	3,562.18	190.23	19.726		
13,200.00	7,216.95	6,952.01	6,834.94	206.20	41.23	-81.52	-3,800.27	-3,542.44	3,822.85	3,632.51	190.34	20.084		
13,300.00	7,216.42	6,952.01	6,834.94	209.48	41.23	-81.52	-3,800.27	-3,542.44	3,894.59	3,704.18	190.40	20.454		
13,400.00	7,215.89	6,952.01	6,834.94	212.76	41.23	-81.52	-3,800.27	-3,542.44	3,967.55	3,777.13	190.42	20.836		
13,500.00	7,215.36	6,952.01	6,834.94	216.05	41.23	-81.52	-3,800.27	-3,542.44	4,041.66	3,851.27	190.40	21.228		
13,600.00	7,214.84	6,952.01	6,834.94	219.33	41.23	-81.52	-3,800.27	-3,542.44	4,116.87	3,926.54	190.33	21.630		
13,700.00	7,214.31	6,928.15	6,812.85	222.62	41.12	-81.07	-3,805.41	-3,549.87	4,192.69	4,002.40	190.30	22.033		
13,800.00	7,213.78	6,923.49	6,808.51	225.91	41.09	-80.99	-3,806.42	-3,551.21	4,269.74	4,079.55	190.19	22.450		
13,900.00	7,213.25	6,900.00	6,786.47	229.20	40.98	-80.54	-3,811.55	-3,557.53	4,347.96	4,157.87	190.09	22.874		
14,000.00	7,212.72	6,900.00	6,786.47	232.49	40.98	-80.54	-3,811.55	-3,557.53	4,426.65	4,236.73	189.93	23.307		
14,100.00	7,212.19	6,900.00	6,786.47	235.79	40.98	-80.54	-3,811.55	-3,557.53	4,506.20	4,316.45	189.75	23.749		
14,200.00	7,211.66	6,900.00	6,786.47	239.08	40.98	-80.54	-3,811.55	-3,557.53	4,586.54	4,396.99	189.55	24.197		
14,300.00	7,211.13	6,900.00	6,786.47	242.38	40.98	-80.54	-3,811.55	-3,557.53	4,667.64	4,478.31	189.33	24.653		
14,400.00	7,210.61	6,900.00	6,786.47	245.67	40.98	-80.54	-3,811.55	-3,557.53	4,749.46	4,560.36	189.10	25.116		
14,500.00	7,210.08	6,900.00	6,786.47	248.97	40.98	-80.54	-3,811.55	-3,557.53	4,831.97	4,643.11	188.86	25.584		
14,600.00	7,209.55	6,900.00	6,786.47	252.27	40.98	-80.54	-3,811.55	-3,557.53	4,915.13	4,726.51	188.61	26.059		
14,700.00	7,209.02	6,900.00	6,786.47	255.57	40.98	-80.54	-3,811.55	-3,557.53	4,998.90	4,810.55	188.35	26.540		
14,800.00	7,208.49	6,900.00	6,786.47	258.87	40.98	-80.54	-3,811.55	-3,557.53	5,083.26	4,895.17	188.09	27.026		
14,900.00	7,207.96	6,900.00	6,786.47	262.17	40.98	-80.54	-3,811.55	-3,557.53	5,168.18	4,980.37	187.81	27.518		
15,000.00	7,207.43	6,900.00	6,786.47	265.47	40.98	-80.54	-3,811.55	-3,557.53	5,253.63	5,066.09	187.54	28.014		
15,081.89	7,207.00	6,878.74	6,766.34	268.17	40.87	-80.14	-3,816.23	-3,562.52	5,323.62	5,136.25	187.37	28.413		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	72.00	3.28	3.28	-147.42	-5,153.19	-3,292.47	6,115.63					
100.00	100.00	1,204.41	1,235.18	3.28	6.77	-146.37	-4,996.29	-3,323.31	6,107.04	6,097.07	9.97	612.416		
200.00	200.00	1,321.77	1,348.27	3.34	7.46	-146.15	-4,965.74	-3,330.47	6,088.45	6,077.84	10.61	573.798		
300.00	299.98	1,426.69	1,449.43	3.44	8.09	26.19	-4,938.43	-3,335.84	6,067.82	6,056.58	11.25	539.497		
400.00	399.84	1,537.43	1,556.42	3.59	8.77	26.62	-4,910.28	-3,340.64	6,044.34	6,032.37	11.97	504.944		
500.00	499.45	1,600.00	1,616.92	3.80	9.15	27.00	-4,894.49	-3,343.03	6,017.81	6,005.33	12.48	482.285		
600.00	598.70	1,674.39	1,689.00	4.06	9.61	27.45	-4,876.30	-3,345.81	5,988.90	5,975.81	13.09	457.442		
700.00	697.49	1,841.48	1,837.98	4.38	10.66	28.06	-4,837.31	-3,352.31	5,956.83	5,942.56	14.27	417.299		
800.00	796.13	1,919.48	1,925.66	4.74	11.17	28.31	-4,813.51	-3,356.53	5,923.64	5,908.65	14.99	395.181		
900.00	894.78	2,010.44	2,013.34	5.15	11.76	28.56	-4,789.70	-3,360.76	5,890.55	5,874.74	15.81	372.571		
1,000.00	993.43	2,101.39	2,101.02	5.58	12.36	28.81	-4,765.90	-3,364.98	5,857.57	5,840.91	16.66	351.584		
1,100.00	1,092.07	2,192.34	2,188.70	6.03	12.96	29.06	-4,742.09	-3,369.20	5,824.70	5,807.16	17.54	332.170		
1,200.00	1,190.72	2,283.29	2,276.38	6.50	13.57	29.32	-4,718.29	-3,373.43	5,791.94	5,773.51	18.43	314.244		
1,300.00	1,289.36	2,374.24	2,364.06	6.98	14.18	29.58	-4,694.48	-3,377.65	5,759.30	5,739.95	19.35	297.702		
1,400.00	1,388.01	2,465.20	2,451.74	7.47	14.78	29.84	-4,670.68	-3,381.88	5,726.77	5,706.49	20.28	282.437		
1,500.00	1,486.65	2,556.15	2,539.42	7.97	15.39	30.11	-4,646.87	-3,386.10	5,694.35	5,673.13	21.22	268.338		
1,600.00	1,585.30	2,647.10	2,627.10	8.48	16.01	30.38	-4,623.06	-3,390.32	5,662.06	5,639.88	22.18	255.303		
1,700.00	1,683.94	2,738.05	2,714.78	9.00	16.62	30.65	-4,599.26	-3,394.55	5,629.89	5,606.74	23.15	243.234		
1,800.00	1,782.59	2,841.01	2,802.46	9.52	17.32	30.92	-4,575.45	-3,398.77	5,597.84	5,573.65	24.20	231.359		
1,900.00	1,881.24	2,919.96	2,890.14	10.05	17.85	31.20	-4,551.65	-3,403.00	5,565.92	5,540.81	25.11	221.645		
2,000.00	1,979.88	3,010.91	2,977.82	10.58	18.47	31.48	-4,527.84	-3,407.22	5,534.13	5,508.02	26.11	211.971		
2,100.00	2,078.53	3,101.86	3,065.50	11.11	19.09	31.76	-4,504.04	-3,411.44	5,502.47	5,475.35	27.11	202.953		
2,200.00	2,177.17	3,192.81	3,153.18	11.64	19.70	32.05	-4,480.23	-3,415.67	5,470.94	5,442.81	28.12	194.533		
2,300.00	2,275.82	3,283.77	3,240.86	12.18	20.32	32.33	-4,456.43	-3,419.89	5,439.54	5,410.40	29.14	186.658		
2,400.00	2,374.46	3,374.72	3,328.54	12.72	20.94	32.63	-4,432.62	-3,424.11	5,408.28	5,378.12	30.17	179.279		
2,500.00	2,473.11	3,465.67	3,416.22	13.26	21.57	32.92	-4,408.81	-3,428.34	5,377.16	5,345.97	31.20	172.355		
2,600.00	2,571.76	3,556.62	3,503.90	13.80	22.19	33.22	-4,385.01	-3,432.56	5,346.19	5,313.95	32.24	165.847		
2,700.00	2,670.40	3,647.57	3,591.58	14.35	22.81	33.52	-4,361.20	-3,436.79	5,315.36	5,282.08	33.28	159.720		
2,800.00	2,769.05	10,480.80	7,076.95	14.89	117.76	-10.35	-3,429.11	-66.07	5,275.48	5,189.70	85.78	61.498		
2,900.00	2,867.69	10,478.64	7,076.95	15.44	117.69	-10.29	-3,429.10	-68.22	5,185.73	5,099.14	86.59	59.889		
3,000.00	2,966.34	10,476.49	7,076.95	15.99	117.62	-10.24	-3,429.10	-70.38	5,096.36	5,008.93	87.43	58.289		
3,100.00	3,064.98	10,474.33	7,076.95	16.53	117.55	-10.18	-3,429.09	-72.53	5,007.40	4,919.09	88.31	56.701		
3,200.00	3,163.63	10,472.18	7,076.94	17.08	117.49	-10.13	-3,429.09	-74.69	4,918.85	4,829.63	89.23	55.127		
3,300.00	3,262.27	10,470.02	7,076.94	17.63	117.42	-10.08	-3,429.08	-76.85	4,830.76	4,740.57	90.18	53.567		
3,400.00	3,360.92	10,467.86	7,076.94	18.18	117.35	-10.02	-3,429.07	-79.00	4,743.13	4,651.95	91.17	52.022		
3,500.00	3,459.57	10,465.71	7,076.94	18.74	117.28	-9.97	-3,429.07	-81.16	4,656.00	4,563.79	92.21	50.496		
3,600.00	3,558.21	10,463.55	7,076.94	19.29	117.21	-9.92	-3,429.06	-83.31	4,569.40	4,476.12	93.28	48.987		
3,700.00	3,656.86	10,461.40	7,076.93	19.84	117.15	-9.86	-3,429.06	-85.47	4,483.35	4,388.96	94.39	47.498		
3,800.00	3,755.50	10,459.24	7,076.93	20.39	117.08	-9.81	-3,429.05	-87.63	4,397.89	4,302.35	95.54	46.030		
3,900.00	3,854.15	10,457.08	7,076.93	20.95	117.01	-9.76	-3,429.05	-89.78	4,313.06	4,216.32	96.74	44.585		
4,000.00	3,952.79	10,454.93	7,076.93	21.50	116.94	-9.70	-3,429.04	-91.94	4,228.89	4,130.91	97.98	43.162		
4,100.00	4,051.44	10,452.77	7,076.92	22.05	116.88	-9.65	-3,429.04	-94.09	4,145.42	4,046.16	99.26	41.764		
4,200.00	4,150.08	10,450.61	7,076.92	22.61	116.81	-9.60	-3,429.03	-96.25	4,062.70	3,962.11	100.58	40.391		
4,300.00	4,248.73	10,448.46	7,076.92	23.16	116.74	-9.54	-3,429.03	-98.41	3,980.76	3,878.81	101.95	39.045		
4,400.00	4,347.38	10,446.30	7,076.92	23.72	116.67	-9.49	-3,429.02	-100.56	3,899.67	3,796.31	103.37	37.726		
4,500.00	4,446.02	10,444.15	7,076.92	24.27	116.60	-9.44	-3,429.02	-102.72	3,819.48	3,714.65	104.83	36.436		
4,600.00	4,544.67	10,441.99	7,076.91	24.83	116.54	-9.38	-3,429.01	-104.88	3,740.24	3,633.91	106.33	35.175		
4,700.00	4,643.31	10,439.83	7,076.91	25.39	116.47	-9.33	-3,429.01	-107.03	3,662.01	3,554.13	107.88	33.945		
4,800.00	4,741.96	10,437.68	7,076.91	25.94	116.40	-9.27	-3,429.00	-109.19	3,584.87	3,475.40	109.47	32.746		
4,900.00	4,840.60	10,435.52	7,076.91	26.50	116.33	-9.22	-3,428.99	-111.34	3,508.88	3,397.77	111.11	31.580		
5,000.00	4,939.25	10,433.36	7,076.91	27.05	116.27	-9.17	-3,428.99	-113.50	3,434.11	3,321.24	112.87	30.425		
5,100.00	5,037.90	10,431.20	7,076.90	27.61	116.20	-9.11	-3,428.98	-115.66	3,360.66	3,245.96	114.70	29.300		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	10,440.99	7,076.90	28.17	116.50	-9.06	-3,428.98	-117.81	3,288.61	3,172.04	116.57	28.212		
5,300.00	5,235.19	10,426.90	7,076.90	28.72	116.06	-9.01	-3,428.97	-119.97	3,218.05	3,100.00	118.05	27.261		
5,400.00	5,333.83	10,424.74	7,076.90	29.28	115.99	-8.95	-3,428.97	-122.12	3,149.08	3,029.22	119.86	26.272		
5,500.00	5,432.48	10,422.59	7,076.89	29.84	115.93	-8.90	-3,428.96	-124.28	3,081.82	2,960.11	121.71	25.321		
5,600.00	5,531.12	10,420.43	7,076.89	30.40	115.86	-8.85	-3,428.96	-126.44	3,016.37	2,892.80	123.57	24.410		
5,700.00	5,629.77	10,418.27	7,076.89	30.95	115.79	-8.79	-3,428.95	-128.59	2,952.85	2,827.41	125.44	23.539		
5,800.00	5,728.41	10,416.12	7,076.89	31.51	115.72	-8.74	-3,428.95	-130.75	2,891.40	2,764.08	127.32	22.710		
5,900.00	5,827.06	10,413.96	7,076.89	32.07	115.65	-8.69	-3,428.94	-132.90	2,832.14	2,702.95	129.19	21.922		
6,000.00	5,925.71	10,411.80	7,076.88	32.63	115.59	-8.63	-3,428.94	-135.06	2,775.22	2,644.18	131.04	21.178		
6,100.00	6,024.35	10,409.65	7,076.88	33.19	115.52	-8.58	-3,428.93	-137.22	2,720.78	2,587.92	132.87	20.478		
6,200.00	6,123.00	10,407.49	7,076.88	33.74	115.45	-8.52	-3,428.93	-139.37	2,668.98	2,534.34	134.64	19.822		
6,300.00	6,221.64	10,405.34	7,076.88	34.30	115.38	-8.47	-3,428.92	-141.53	2,619.98	2,483.61	136.36	19.213		
6,400.00	6,320.29	10,403.18	7,076.88	34.86	115.32	-8.42	-3,428.91	-143.69	2,573.92	2,435.92	138.00	18.651		
6,500.00	6,418.93	10,401.02	7,076.87	35.42	115.25	-8.36	-3,428.91	-145.84	2,530.98	2,391.43	139.54	18.138		
6,600.00	6,517.58	10,398.87	7,076.87	35.98	115.18	-8.31	-3,428.90	-148.00	2,491.31	2,350.34	140.97	17.672		
6,700.00	6,616.23	10,403.29	7,076.87	36.54	115.32	-8.26	-3,428.90	-150.15	2,455.07	2,312.61	142.47	17.232		
6,800.00	6,714.51	10,389.15	7,076.86	37.10	114.88	-45.40	-3,428.88	-157.71	2,422.49	2,279.25	143.23	16.913		
6,900.00	6,810.42	10,366.32	7,076.84	37.66	114.16	-66.20	-3,428.82	-180.54	2,394.12	2,250.57	143.55	16.678		
7,000.00	6,901.58	10,341.48	7,076.80	38.21	113.38	-75.74	-3,428.73	-218.31	2,370.39	2,226.78	143.61	16.506		
7,100.00	6,985.76	10,276.79	7,076.75	38.76	111.35	-80.71	-3,428.60	-270.07	2,351.34	2,209.09	142.26	16.529		
7,200.00	7,060.88	10,212.30	7,076.69	39.32	109.34	-83.39	-3,428.44	-334.56	2,336.69	2,195.85	140.84	16.591		
7,300.00	7,125.09	10,136.67	7,076.61	39.90	106.98	-84.77	-3,428.26	-410.19	2,325.88	2,186.78	139.10	16.721		
7,400.00	7,176.81	10,051.76	7,076.53	40.55	104.35	-85.40	-3,428.05	-495.10	2,318.26	2,181.05	137.21	16.896		
7,500.00	7,214.77	9,959.67	7,076.43	41.30	101.50	-85.64	-3,427.82	-587.20	2,313.14	2,177.81	135.32	17.093		
7,600.00	7,238.02	9,862.65	7,076.34	42.22	98.52	-85.72	-3,427.58	-684.21	2,309.95	2,176.37	133.57	17.293		
7,700.00	7,246.01	9,763.11	7,076.24	43.32	95.48	-85.78	-3,427.33	-783.76	2,308.30	2,176.27	132.03	17.483		
7,800.00	7,245.50	9,663.11	7,076.14	44.65	92.44	-85.79	-3,427.09	-883.75	2,307.44	2,176.72	130.72	17.651		
7,900.00	7,244.97	9,563.12	7,076.04	46.21	89.42	-85.80	-3,426.84	-983.75	2,306.58	2,176.96	129.62	17.795		
8,000.00	7,244.44	9,463.12	7,075.94	47.99	86.43	-85.81	-3,426.59	-1,083.74	2,305.72	2,177.02	128.70	17.916		
8,100.00	7,243.91	9,363.12	7,075.84	49.96	83.47	-85.82	-3,426.34	-1,183.74	2,304.86	2,176.93	127.93	18.016		
8,200.00	7,243.39	9,263.13	7,075.74	52.10	80.54	-85.83	-3,426.10	-1,283.73	2,304.00	2,176.69	127.31	18.098		
8,300.00	7,242.86	9,164.35	7,075.25	54.38	77.68	-85.83	-3,425.85	-1,382.51	2,303.17	2,176.30	126.87	18.154		
8,400.00	7,242.33	9,064.36	7,074.42	56.78	74.82	-85.82	-3,425.60	-1,482.50	2,302.36	2,175.87	126.49	18.202		
8,500.00	7,241.80	8,964.36	7,073.60	59.28	72.00	-85.81	-3,425.36	-1,582.49	2,301.55	2,175.33	126.22	18.234		
8,600.00	7,241.27	8,864.36	7,072.77	61.88	69.24	-85.80	-3,425.11	-1,682.49	2,300.74	2,174.69	126.06	18.251		
8,700.00	7,240.74	8,764.37	7,071.94	64.54	66.54	-85.79	-3,424.86	-1,782.48	2,299.94	2,173.94	126.00	18.254		
8,800.00	7,240.21	8,664.37	7,071.11	67.27	63.91	-85.78	-3,424.62	-1,882.47	2,299.13	2,173.09	126.04	18.242		
8,900.00	7,239.68	8,564.37	7,070.29	70.06	61.37	-85.78	-3,424.37	-1,982.46	2,298.32	2,172.15	126.18	18.215		
9,000.00	7,239.16	8,464.38	7,069.46	72.89	58.93	-85.77	-3,424.12	-2,082.45	2,297.52	2,171.09	126.42	18.174		
9,100.00	7,238.63	8,364.38	7,068.63	75.77	56.62	-85.76	-3,423.87	-2,182.45	2,296.71	2,169.93	126.77	18.116		
9,200.00	7,238.10	8,264.39	7,067.80	78.69	54.47	-85.75	-3,423.63	-2,282.44	2,295.90	2,168.66	127.25	18.043		
9,300.00	7,237.57	8,164.39	7,066.98	81.64	52.51	-85.74	-3,423.38	-2,382.43	2,295.09	2,167.25	127.84	17.952		
9,400.00	7,237.04	8,064.39	7,066.15	84.62	50.81	-85.73	-3,423.13	-2,482.42	2,294.29	2,165.70	128.58	17.843		
9,500.00	7,236.51	7,964.40	7,065.32	87.63	49.41	-85.72	-3,422.89	-2,582.42	2,293.48	2,164.00	129.48	17.713		
9,600.00	7,235.98	7,864.40	7,064.50	90.66	48.32	-85.71	-3,422.64	-2,682.41	2,292.67	2,162.12	130.55	17.562		
9,700.00	7,235.45	7,764.41	7,063.67	93.72	47.55	-85.70	-3,422.39	-2,782.40	2,291.87	2,160.05	131.82	17.386		
9,800.00	7,234.93	7,664.41	7,062.84	96.79	47.02	-85.69	-3,422.14	-2,882.39	2,291.06	2,157.75	133.31	17.186		
9,895.57	7,234.42	7,588.62	7,062.01	99.74	46.75	-85.68	-3,422.01	-2,958.18	2,290.44	2,155.08	135.37	16.920 CC		
9,900.00	7,234.40	7,586.60	7,061.94	99.88	46.74	-85.68	-3,422.02	-2,960.19	2,290.45	2,154.95	135.50	16.904		
10,000.00	7,233.87	7,541.36	7,058.75	102.98	46.62	-85.61	-3,422.67	-3,005.31	2,291.81	2,153.39	138.42	16.557 ES		
10,100.00	7,233.34	7,500.00	7,053.13	106.10	46.52	-85.48	-3,424.00	-3,046.26	2,295.58	2,154.20	141.38	16.238		
10,200.00	7,232.81	7,450.00	7,042.94	109.23	46.40	-85.23	-3,426.54	-3,095.13	2,301.80	2,157.67	144.13	15.970		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.28	7,411.10	7,032.47	112.38	46.32	-84.98	-3,429.20	-3,132.49	2,310.52	2,163.49	147.03	15.714		
10,400.00	7,231.75	7,370.65	7,019.27	115.53	46.23	-84.67	-3,432.60	-3,170.56	2,321.83	2,171.99	149.84	15.495		
10,500.00	7,231.23	7,335.01	7,005.72	118.70	46.16	-84.35	-3,436.12	-3,203.34	2,335.79	2,183.16	152.63	15.304		
10,600.00	7,230.70	7,300.00	6,990.71	121.87	46.08	-83.99	-3,440.05	-3,234.72	2,352.48	2,197.14	155.33	15.145		
10,700.00	7,230.17	7,250.00	6,966.45	125.05	45.97	-83.41	-3,446.43	-3,277.95	2,371.99	2,214.23	157.76	15.036		
10,800.00	7,229.64	7,228.78	6,955.17	128.25	45.92	-83.15	-3,449.40	-3,295.69	2,394.20	2,233.81	160.39	14.927		
10,900.00	7,229.11	7,200.00	6,938.98	131.44	45.85	-82.77	-3,453.68	-3,319.09	2,419.34	2,256.53	162.80	14.860		
11,000.00	7,228.58	7,170.22	6,921.18	134.65	45.77	-82.35	-3,458.40	-3,342.48	2,447.34	2,282.27	165.07	14.826		
11,100.00	7,228.05	7,143.86	6,904.55	137.86	45.70	-81.97	-3,462.82	-3,362.45	2,478.21	2,311.00	167.21	14.821 SF		
11,200.00	7,227.52	7,121.76	6,890.01	141.08	45.64	-81.63	-3,466.69	-3,378.63	2,511.93	2,342.70	169.23	14.843		
11,300.00	7,227.00	7,100.00	6,875.16	144.30	45.57	-81.29	-3,470.64	-3,394.05	2,548.46	2,377.36	171.10	14.895		
11,400.00	7,226.47	7,075.11	6,857.58	147.52	45.49	-80.89	-3,475.33	-3,411.02	2,587.73	2,414.92	172.80	14.975		
11,500.00	7,225.94	7,050.00	6,839.20	150.76	45.42	-80.47	-3,480.24	-3,427.41	2,629.71	2,455.37	174.34	15.084		
11,600.00	7,225.41	7,035.01	6,827.94	153.99	45.36	-80.22	-3,483.25	-3,436.83	2,674.28	2,498.49	175.79	15.213		
11,700.00	7,224.88	7,019.53	6,816.09	157.23	45.31	-79.95	-3,486.42	-3,446.27	2,721.40	2,544.30	177.10	15.367		
11,800.00	7,224.35	7,000.00	6,800.83	160.48	45.24	-79.61	-3,490.51	-3,457.75	2,770.97	2,592.73	178.24	15.546		
11,900.00	7,223.82	7,000.00	6,800.83	163.72	45.24	-79.61	-3,490.51	-3,457.75	2,822.97	2,643.65	179.32	15.742		
12,000.00	7,223.29	6,974.31	6,780.25	166.98	45.14	-79.15	-3,496.02	-3,472.10	2,877.04	2,696.84	180.20	15.966		
12,100.00	7,222.77	6,950.00	6,760.27	170.23	45.05	-78.71	-3,501.38	-3,484.88	2,933.45	2,752.49	180.96	16.211		
12,200.00	7,222.24	6,950.00	6,760.27	173.49	45.05	-78.71	-3,501.38	-3,484.88	2,991.75	2,810.07	181.68	16.468		
12,300.00	7,221.71	6,935.01	6,747.73	176.75	44.98	-78.43	-3,504.74	-3,492.36	3,052.09	2,869.83	182.25	16.746		
12,400.00	7,221.18	6,935.01	6,747.73	180.01	44.98	-78.43	-3,504.74	-3,492.36	3,114.34	2,931.58	182.76	17.041		
12,500.00	7,220.65	6,915.95	6,731.54	183.28	44.90	-78.08	-3,509.09	-3,501.43	3,178.25	2,995.10	183.15	17.353		
12,600.00	7,220.12	6,900.00	6,717.80	186.54	44.83	-77.78	-3,512.79	-3,508.64	3,243.93	3,060.46	183.47	17.681		
12,700.00	7,219.59	6,900.00	6,717.80	189.81	44.83	-77.78	-3,512.79	-3,508.64	3,311.14	3,127.41	183.73	18.022		
12,800.00	7,219.06	6,900.00	6,717.80	193.09	44.83	-77.78	-3,512.79	-3,508.64	3,379.98	3,196.07	183.91	18.378		
12,900.00	7,218.54	6,880.31	6,700.60	196.36	44.74	-77.41	-3,517.42	-3,517.03	3,450.04	3,266.00	184.04	18.746		
13,000.00	7,218.01	6,872.56	6,693.77	199.64	44.71	-77.26	-3,519.25	-3,520.18	3,521.56	3,337.44	184.12	19.127		
13,100.00	7,217.48	6,850.00	6,673.66	202.92	44.60	-76.83	-3,524.67	-3,528.87	3,594.52	3,410.37	184.15	19.520		
13,200.00	7,216.95	6,850.00	6,673.66	206.20	44.60	-76.83	-3,524.67	-3,528.87	3,668.39	3,484.26	184.13	19.923		
13,300.00	7,216.42	6,850.00	6,673.66	209.48	44.60	-76.83	-3,524.67	-3,528.87	3,743.47	3,559.40	184.07	20.338		
13,400.00	7,215.89	6,850.00	6,673.66	212.76	44.60	-76.83	-3,524.67	-3,528.87	3,819.69	3,635.73	183.96	20.763		
13,500.00	7,215.36	6,835.01	6,660.14	216.05	44.53	-76.54	-3,528.31	-3,534.22	3,896.91	3,713.06	183.86	21.196		
13,600.00	7,214.84	6,835.01	6,660.14	219.33	44.53	-76.54	-3,528.31	-3,534.22	3,975.09	3,791.39	183.70	21.639		
13,700.00	7,214.31	6,835.01	6,660.14	222.62	44.53	-76.54	-3,528.31	-3,534.22	4,054.22	3,870.71	183.51	22.093		
13,800.00	7,213.78	6,835.01	6,660.14	225.91	44.53	-76.54	-3,528.31	-3,534.22	4,134.26	3,950.96	183.30	22.554		
13,900.00	7,213.25	6,817.95	6,644.61	229.20	44.44	-76.21	-3,532.49	-3,539.92	4,214.92	4,031.80	183.12	23.017		
14,000.00	7,212.72	6,800.00	6,628.13	232.49	44.35	-75.87	-3,536.94	-3,545.45	4,296.60	4,113.69	182.92	23.489		
14,100.00	7,212.19	6,800.00	6,628.13	235.79	44.35	-75.87	-3,536.94	-3,545.45	4,378.80	4,196.13	182.67	23.971		
14,200.00	7,211.66	6,800.00	6,628.13	239.08	44.35	-75.87	-3,536.94	-3,545.45	4,461.73	4,279.32	182.41	24.460		
14,300.00	7,211.13	6,800.00	6,628.13	242.38	44.35	-75.87	-3,536.94	-3,545.45	4,545.34	4,363.21	182.13	24.956		
14,400.00	7,210.61	6,800.00	6,628.13	245.67	44.35	-75.87	-3,536.94	-3,545.45	4,629.60	4,447.75	181.85	25.458		
14,500.00	7,210.08	6,800.00	6,628.13	248.97	44.35	-75.87	-3,536.94	-3,545.45	4,714.48	4,532.92	181.56	25.967		
14,600.00	7,209.55	6,800.00	6,628.13	252.27	44.35	-75.87	-3,536.94	-3,545.45	4,799.94	4,618.68	181.26	26.480		
14,700.00	7,209.02	6,800.00	6,628.13	255.57	44.35	-75.87	-3,536.94	-3,545.45	4,885.95	4,704.99	180.96	27.000		
14,800.00	7,208.49	6,800.00	6,628.13	258.87	44.35	-75.87	-3,536.94	-3,545.45	4,972.49	4,791.83	180.66	27.524		
14,900.00	7,207.96	6,778.08	6,607.80	262.17	44.23	-75.44	-3,542.43	-3,551.54	5,059.13	4,878.70	180.43	28.039		
15,000.00	7,207.43	6,774.88	6,604.81	265.47	44.22	-75.38	-3,543.23	-3,552.37	5,146.51	4,966.37	180.14	28.570		
15,081.89	7,207.00	6,772.35	6,602.45	268.17	44.20	-75.33	-3,543.87	-3,553.01	5,218.39	5,038.49	179.89	29.008		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	65.00	3.28	3.28	-123.95	-4,270.66	-6,343.80	7,647.65				
100.00	100.00	35.00	100.00	3.28	3.34	-123.95	-4,270.66	-6,343.80	7,647.37	7,640.75	6.62	1,154.994	
200.00	200.00	135.00	200.00	3.34	4.42	-123.95	-4,270.66	-6,343.80	7,647.37	7,639.61	7.76	985.473	
300.00	299.98	234.98	299.98	3.44	7.24	48.04	-4,270.66	-6,343.80	7,646.20	7,635.52	10.68	715.761	
400.00	399.84	334.84	399.84	3.59	10.47	48.12	-4,270.66	-6,343.80	7,642.70	7,628.64	14.06	543.506	
500.00	499.45	434.45	499.45	3.80	13.82	48.25	-4,270.66	-6,343.80	7,636.88	7,619.27	17.61	433.657	
600.00	598.70	533.70	598.70	4.06	17.20	48.44	-4,270.66	-6,343.80	7,628.75	7,607.50	21.25	359.021	
700.00	697.49	632.49	697.49	4.38	20.60	48.64	-4,270.66	-6,343.80	7,618.41	7,593.47	24.95	305.390	
800.00	796.13	731.13	796.13	4.74	24.00	48.73	-4,270.66	-6,343.80	7,607.50	7,578.81	28.69	265.170	
900.00	894.78	829.78	894.78	5.15	27.42	48.83	-4,270.66	-6,343.80	7,596.61	7,564.14	32.47	233.944	
1,000.00	993.43	928.43	993.43	5.58	30.84	48.92	-4,270.66	-6,343.80	7,585.74	7,549.45	36.29	209.055	
1,100.00	1,092.07	1,027.07	1,092.07	6.03	34.27	49.01	-4,270.66	-6,343.80	7,574.88	7,534.76	40.12	188.787	
1,200.00	1,190.72	1,125.72	1,190.72	6.50	37.70	49.10	-4,270.66	-6,343.80	7,564.05	7,520.07	43.98	171.983	
1,300.00	1,289.36	1,224.36	1,289.36	6.98	41.13	49.20	-4,270.66	-6,343.80	7,553.24	7,505.39	47.85	157.839	
1,400.00	1,388.01	1,323.01	1,388.01	7.47	44.56	49.29	-4,270.66	-6,343.80	7,542.45	7,490.71	51.74	145.777	
1,500.00	1,486.65	1,421.65	1,486.65	7.97	48.00	49.38	-4,270.66	-6,343.80	7,531.68	7,476.04	55.64	135.376	
1,600.00	1,585.30	1,520.30	1,585.30	8.48	51.43	49.48	-4,270.66	-6,343.80	7,520.93	7,461.39	59.54	126.318	
1,700.00	1,683.94	1,618.94	1,683.94	9.00	54.87	49.57	-4,270.66	-6,343.80	7,510.19	7,446.74	63.45	118.362	
1,800.00	1,782.59	1,717.59	1,782.59	9.52	58.31	49.67	-4,270.66	-6,343.80	7,499.48	7,432.12	67.37	111.320	
1,900.00	1,881.24	1,816.24	1,881.24	10.05	61.75	49.76	-4,270.66	-6,343.80	7,488.79	7,417.50	71.29	105.044	
2,000.00	1,979.88	1,914.88	1,979.88	10.58	65.19	49.86	-4,270.66	-6,343.80	7,478.13	7,402.91	75.22	99.418	
2,100.00	2,078.53	2,013.53	2,078.53	11.11	68.63	49.95	-4,270.66	-6,343.80	7,467.48	7,388.33	79.15	94.345	
2,200.00	2,177.17	2,112.17	2,177.17	11.64	72.07	50.05	-4,270.66	-6,343.80	7,456.85	7,373.76	83.09	89.749	
2,300.00	2,275.82	2,210.82	2,275.82	12.18	75.51	50.14	-4,270.66	-6,343.80	7,446.24	7,359.22	87.02	85.566	
2,400.00	2,374.46	2,309.46	2,374.46	12.72	78.95	50.24	-4,270.66	-6,343.80	7,435.66	7,344.69	90.96	81.743	
2,500.00	2,473.11	2,408.11	2,473.11	13.26	82.39	50.34	-4,270.66	-6,343.80	7,425.09	7,330.19	94.91	78.235	
2,600.00	2,571.76	2,506.76	2,571.76	13.80	85.83	50.43	-4,270.66	-6,343.80	7,414.55	7,315.70	98.85	75.006	
2,700.00	2,670.40	2,605.40	2,670.40	14.35	89.27	50.53	-4,270.66	-6,343.80	7,404.03	7,301.23	102.80	72.024	
2,800.00	2,769.05	2,704.05	2,769.05	14.89	92.71	50.63	-4,270.66	-6,343.80	7,393.53	7,286.78	106.75	69.261	
2,900.00	2,867.69	2,802.69	2,867.69	15.44	96.15	50.73	-4,270.66	-6,343.80	7,383.05	7,272.35	110.70	66.694	
3,000.00	2,966.34	2,901.34	2,966.34	15.99	99.59	50.82	-4,270.66	-6,343.80	7,372.59	7,257.94	114.65	64.304	
3,100.00	3,064.98	3,000.02	3,064.98	16.53	103.04	50.92	-4,270.66	-6,343.80	7,362.16	7,243.55	118.61	62.072	
3,200.00	3,163.63	3,101.37	3,163.63	17.08	106.57	51.02	-4,270.66	-6,343.80	7,351.74	7,229.09	122.66	59.938	
3,300.00	3,262.27	3,202.73	3,262.27	17.63	110.11	51.12	-4,270.66	-6,343.80	7,341.35	7,214.64	126.71	57.939	
3,400.00	3,360.92	3,304.08	3,360.92	18.18	113.65	51.22	-4,270.66	-6,343.80	7,330.98	7,200.22	130.76	56.065	
3,500.00	3,459.57	3,405.43	3,459.57	18.74	117.18	51.32	-4,270.66	-6,343.80	7,320.63	7,185.82	134.81	54.302	
3,600.00	3,558.21	3,506.79	3,558.21	19.29	120.72	51.42	-4,270.66	-6,343.80	7,310.31	7,171.44	138.87	52.643	
3,700.00	3,656.86	3,608.14	3,656.86	19.84	124.26	51.52	-4,270.66	-6,343.80	7,300.01	7,157.08	142.92	51.077	
3,800.00	3,755.50	3,709.50	3,755.50	20.39	127.80	51.62	-4,270.66	-6,343.80	7,289.72	7,142.75	146.98	49.597	
3,900.00	3,854.15	3,789.15	3,854.15	20.95	130.58	51.72	-4,270.66	-6,343.80	7,279.47	7,129.19	150.28	48.440	
4,000.00	3,952.79	3,887.79	3,952.79	21.50	134.02	51.82	-4,270.66	-6,343.80	7,269.23	7,114.99	154.24	47.129	
4,100.00	4,051.44	3,986.44	4,051.44	22.05	137.46	51.92	-4,270.66	-6,343.80	7,259.02	7,100.81	158.20	45.884	
4,200.00	4,150.08	4,085.08	4,150.08	22.61	140.90	52.02	-4,270.66	-6,343.80	7,248.83	7,086.66	162.17	44.699	
4,300.00	4,248.73	4,183.73	4,248.73	23.16	144.35	52.12	-4,270.66	-6,343.80	7,238.66	7,072.52	166.14	43.571	
4,400.00	4,347.38	4,282.38	4,347.38	23.72	147.79	52.22	-4,270.66	-6,343.80	7,228.51	7,058.41	170.10	42.495	
4,500.00	4,446.02	4,381.02	4,446.02	24.27	151.23	52.33	-4,270.66	-6,343.80	7,218.39	7,044.32	174.07	41.469	
4,600.00	4,544.67	4,479.67	4,544.67	24.83	154.67	52.43	-4,270.66	-6,343.80	7,208.29	7,030.26	178.04	40.488	
4,700.00	4,643.31	4,578.31	4,643.31	25.39	158.12	52.53	-4,270.66	-6,343.80	7,198.22	7,016.21	182.00	39.550	
4,800.00	4,741.96	4,676.96	4,741.96	25.94	161.56	52.63	-4,270.66	-6,343.80	7,188.16	7,002.19	185.97	38.652	
4,900.00	4,840.60	4,775.60	4,840.60	26.50	165.00	52.74	-4,270.66	-6,343.80	7,178.14	6,988.19	189.94	37.791	
5,000.00	4,939.25	4,874.25	4,939.25	27.05	168.45	52.84	-4,270.66	-6,343.80	7,168.13	6,974.22	193.91	36.966	
5,100.00	5,037.90	4,972.90	5,037.90	27.61	171.89	52.94	-4,270.66	-6,343.80	7,158.15	6,960.26	197.88	36.173	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,071.54	5,136.54	28.17	175.33	53.05	-4,270.66	-6,343.80	7,148.19	6,946.33	201.86	35.412		
5,300.00	5,235.19	5,170.19	5,235.19	28.72	178.78	53.15	-4,270.66	-6,343.80	7,138.26	6,932.43	205.83	34.681		
5,400.00	5,333.83	5,268.83	5,333.83	29.28	182.22	53.26	-4,270.66	-6,343.80	7,128.35	6,918.55	209.80	33.977		
5,500.00	5,432.48	5,367.48	5,432.48	29.84	185.66	53.36	-4,270.66	-6,343.80	7,118.46	6,904.69	213.77	33.299		
5,600.00	5,531.12	5,466.12	5,531.12	30.40	189.11	53.47	-4,270.66	-6,343.80	7,108.60	6,890.85	217.75	32.646		
5,700.00	5,629.77	5,564.77	5,629.77	30.95	192.55	53.57	-4,270.66	-6,343.80	7,098.76	6,877.04	221.72	32.017		
5,800.00	5,728.41	5,663.41	5,728.41	31.51	195.99	53.68	-4,270.66	-6,343.80	7,088.94	6,863.25	225.70	31.409		
5,900.00	5,827.06	5,762.06	5,827.06	32.07	199.44	53.78	-4,270.66	-6,343.80	7,079.16	6,849.48	229.67	30.823		
6,000.00	5,925.71	5,860.71	5,925.71	32.63	202.88	53.89	-4,270.66	-6,343.80	7,069.39	6,835.74	233.65	30.257		
6,100.00	6,024.35	5,959.35	6,024.35	33.19	206.32	54.00	-4,270.66	-6,343.80	7,059.65	6,822.03	237.62	29.710		
6,200.00	6,123.00	6,058.00	6,123.00	33.74	209.77	54.10	-4,270.66	-6,343.80	7,049.93	6,808.34	241.60	29.180		
6,300.00	6,221.64	6,156.64	6,221.64	34.30	213.21	54.21	-4,270.66	-6,343.80	7,040.24	6,794.67	245.58	28.668		
6,400.00	6,320.29	6,255.29	6,320.29	34.86	216.65	54.32	-4,270.66	-6,343.80	7,030.58	6,781.02	249.55	28.173		
6,500.00	6,418.93	6,353.93	6,418.93	35.42	220.10	54.43	-4,270.66	-6,343.80	7,020.94	6,767.40	253.53	27.692		
6,600.00	6,517.58	6,452.58	6,517.58	35.98	223.54	54.53	-4,270.66	-6,343.80	7,011.32	6,753.81	257.51	27.227		
6,700.00	6,616.23	6,551.23	6,616.23	36.54	226.98	54.64	-4,270.66	-6,343.80	7,001.73	6,740.24	261.49	26.776		
6,800.00	6,714.51	6,649.51	6,714.51	37.10	230.41	19.42	-4,270.66	-6,343.80	6,987.39	6,721.96	265.43	26.325		
6,900.00	6,810.42	6,745.42	6,810.42	37.66	233.76	-0.47	-4,270.66	-6,343.80	6,959.66	6,690.45	269.20	25.853		
7,000.00	6,901.58	6,836.58	6,901.58	38.21	236.94	-10.70	-4,270.66	-6,343.80	6,919.01	6,646.30	272.71	25.371		
7,100.00	6,985.76	6,920.76	6,985.76	38.76	239.88	-18.11	-4,270.66	-6,343.80	6,866.46	6,590.58	275.88	24.889		
7,200.00	7,060.88	7,004.12	7,060.88	39.32	242.79	-25.18	-4,270.66	-6,343.80	6,803.35	6,524.43	278.92	24.392		
7,300.00	7,125.09	7,060.09	7,125.09	39.90	244.74	-33.31	-4,270.66	-6,343.80	6,731.28	6,450.38	280.90	23.964		
7,400.00	7,176.81	7,111.81	7,176.81	40.55	246.55	-43.60	-4,270.66	-6,343.80	6,652.10	6,369.46	282.64	23.535		
7,500.00	7,214.77	7,149.77	7,214.77	41.30	247.88	-56.91	-4,270.66	-6,343.80	6,567.85	6,284.01	283.84	23.139		
7,600.00	7,238.02	7,173.02	7,238.02	42.22	248.69	-73.01	-4,270.66	-6,343.80	6,480.70	6,196.20	284.49	22.780		
7,700.00	7,246.01	7,181.01	7,246.01	43.32	248.97	-89.74	-4,270.66	-6,343.80	6,392.87	6,108.26	284.61	22.462		
7,800.00	7,245.50	7,180.50	7,245.50	44.65	248.95	-90.53	-4,270.66	-6,343.80	6,305.72	6,021.23	284.49	22.165		
7,900.00	7,244.97	7,179.97	7,244.97	46.21	248.93	-90.52	-4,270.66	-6,343.80	6,218.95	5,934.49	284.46	21.862		
8,000.00	7,244.44	7,179.44	7,244.44	47.99	248.91	-90.51	-4,270.66	-6,343.80	6,132.58	5,848.05	284.53	21.553		
8,100.00	7,243.91	7,178.91	7,243.91	49.96	248.89	-90.50	-4,270.66	-6,343.80	6,046.64	5,761.91	284.72	21.237		
8,200.00	7,243.39	7,178.39	7,243.39	52.10	248.87	-90.49	-4,270.66	-6,343.80	5,961.13	5,676.10	285.03	20.914		
8,300.00	7,242.86	7,177.86	7,242.86	54.38	248.86	-90.49	-4,270.66	-6,343.80	5,876.08	5,590.62	285.46	20.585		
8,400.00	7,242.33	7,177.33	7,242.33	56.78	248.84	-90.48	-4,270.66	-6,343.80	5,791.51	5,505.48	286.03	20.248		
8,500.00	7,241.80	7,176.80	7,241.80	59.28	248.82	-90.47	-4,270.66	-6,343.80	5,707.43	5,420.70	286.73	19.905		
8,600.00	7,241.27	7,176.27	7,241.27	61.88	248.80	-90.46	-4,270.66	-6,343.80	5,623.88	5,336.31	287.57	19.557		
8,700.00	7,240.74	7,175.74	7,240.74	64.54	248.78	-90.45	-4,270.66	-6,343.80	5,540.87	5,252.31	288.56	19.202		
8,800.00	7,240.21	7,175.21	7,240.21	67.27	248.76	-90.44	-4,270.66	-6,343.80	5,458.43	5,168.74	289.69	18.842		
8,900.00	7,239.68	7,174.68	7,239.68	70.06	248.74	-90.43	-4,270.66	-6,343.80	5,376.59	5,085.62	290.97	18.478		
9,000.00	7,239.16	7,174.16	7,239.16	72.89	248.73	-90.42	-4,270.66	-6,343.80	5,295.37	5,002.97	292.40	18.110		
9,100.00	7,238.63	7,173.63	7,238.63	75.77	248.71	-90.41	-4,270.66	-6,343.80	5,214.81	4,920.83	293.98	17.739		
9,200.00	7,238.10	7,173.10	7,238.10	78.69	248.69	-90.40	-4,270.66	-6,343.80	5,134.92	4,839.22	295.70	17.365		
9,300.00	7,237.57	7,172.57	7,237.57	81.64	248.67	-90.39	-4,270.66	-6,343.80	5,055.76	4,758.18	297.58	16.990		
9,400.00	7,237.04	7,172.04	7,237.04	84.62	248.65	-90.38	-4,270.66	-6,343.80	4,977.34	4,677.75	299.59	16.614		
9,500.00	7,236.51	7,171.51	7,236.51	87.63	248.63	-90.37	-4,270.66	-6,343.80	4,899.71	4,597.96	301.75	16.237		
9,600.00	7,235.98	7,170.98	7,235.98	90.66	248.62	-90.36	-4,270.66	-6,343.80	4,822.90	4,518.84	304.06	15.862		
9,700.00	7,235.45	7,170.45	7,235.45	93.72	248.60	-90.35	-4,270.66	-6,343.80	4,746.96	4,440.46	306.50	15.487		
9,800.00	7,234.93	7,169.93	7,234.93	96.79	248.58	-90.34	-4,270.66	-6,343.80	4,671.92	4,362.83	309.09	15.115		
9,900.00	7,234.40	7,169.40	7,234.40	99.88	248.56	-90.33	-4,270.66	-6,343.80	4,597.84	4,286.02	311.82	14.745		
10,000.00	7,233.87	7,168.87	7,233.87	102.98	248.54	-90.32	-4,270.66	-6,343.80	4,524.75	4,210.07	314.68	14.379		
10,100.00	7,233.34	7,168.34	7,233.34	106.10	248.52	-90.31	-4,270.66	-6,343.80	4,452.70	4,135.02	317.68	14.016		
10,200.00	7,232.81	7,167.81	7,232.81	109.23	248.50	-90.30	-4,270.66	-6,343.80	4,381.76	4,060.94	320.82	13.658		
10,300.00	7,232.28	7,167.28	7,232.28	112.38	248.49	-90.29	-4,270.66	-6,343.80	4,311.96	3,987.87	324.09	13.305		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,166.75	7,231.75	115.53	248.47	-90.28	-4,270.66	-6,343.80	4,243.38	3,915.88	327.50	12.957		
10,500.00	7,231.23	7,166.23	7,231.23	118.70	248.45	-90.27	-4,270.66	-6,343.80	4,176.06	3,845.03	331.03	12.615		
10,600.00	7,230.70	7,165.70	7,230.70	121.87	248.43	-90.26	-4,270.66	-6,343.80	4,110.08	3,775.38	334.70	12.280		
10,700.00	7,230.17	7,165.17	7,230.17	125.05	248.41	-90.25	-4,270.66	-6,343.80	4,045.49	3,706.99	338.50	11.951		
10,800.00	7,229.64	7,164.64	7,229.64	128.25	248.39	-90.24	-4,270.66	-6,343.80	3,982.36	3,639.94	342.42	11.630		
10,900.00	7,229.11	7,164.11	7,229.11	131.44	248.38	-90.23	-4,270.66	-6,343.80	3,920.77	3,574.31	346.46	11.317		
11,000.00	7,228.58	7,163.58	7,228.58	134.65	248.36	-90.22	-4,270.66	-6,343.80	3,860.78	3,510.16	350.62	11.011		
11,100.00	7,228.05	7,163.05	7,228.05	137.86	248.34	-90.21	-4,270.66	-6,343.80	3,802.48	3,447.58	354.90	10.714		
11,200.00	7,227.52	7,162.52	7,227.52	141.08	248.32	-90.20	-4,270.66	-6,343.80	3,745.94	3,386.66	359.28	10.426		
11,300.00	7,227.00	7,162.00	7,227.00	144.30	248.30	-90.19	-4,270.66	-6,343.80	3,691.25	3,327.48	363.77	10.147		
11,400.00	7,226.47	7,161.47	7,226.47	147.52	248.28	-90.18	-4,270.66	-6,343.80	3,638.48	3,270.12	368.36	9.877		
11,500.00	7,225.94	7,160.94	7,225.94	150.76	248.27	-90.17	-4,270.66	-6,343.80	3,587.73	3,214.69	373.04	9.618		
11,600.00	7,225.41	7,160.41	7,225.41	153.99	248.25	-90.16	-4,270.66	-6,343.80	3,539.07	3,161.27	377.79	9.368		
11,700.00	7,224.88	7,159.88	7,224.88	157.23	248.23	-90.15	-4,270.66	-6,343.80	3,492.59	3,109.97	382.62	9.128		
11,800.00	7,224.35	7,159.35	7,224.35	160.48	248.21	-90.14	-4,270.66	-6,343.80	3,448.40	3,060.89	387.51	8.899		
11,900.00	7,223.82	7,158.82	7,223.82	163.72	248.19	-90.13	-4,270.66	-6,343.80	3,406.56	3,014.13	392.44	8.681		
12,000.00	7,223.29	7,158.29	7,223.29	166.98	248.17	-90.12	-4,270.66	-6,343.80	3,367.18	2,969.78	397.40	8.473		
12,100.00	7,222.77	7,157.77	7,222.77	170.23	248.15	-90.12	-4,270.66	-6,343.80	3,330.33	2,927.95	402.38	8.277		
12,200.00	7,222.24	7,157.24	7,222.24	173.49	248.14	-90.11	-4,270.66	-6,343.80	3,296.11	2,888.75	407.36	8.091		
12,300.00	7,221.71	7,156.71	7,221.71	176.75	248.12	-90.10	-4,270.66	-6,343.80	3,264.59	2,852.26	412.33	7.917		
12,400.00	7,221.18	7,156.18	7,221.18	180.01	248.10	-90.09	-4,270.66	-6,343.80	3,235.86	2,818.60	417.26	7.755		
12,500.00	7,220.65	7,155.65	7,220.65	183.28	248.08	-90.08	-4,270.66	-6,343.80	3,209.98	2,787.84	422.14	7.604		
12,600.00	7,220.12	7,155.12	7,220.12	186.54	248.06	-90.07	-4,270.66	-6,343.80	3,187.04	2,760.09	426.95	7.465		
12,700.00	7,219.59	7,154.59	7,219.59	189.81	248.04	-90.06	-4,270.66	-6,343.80	3,167.09	2,735.42	431.66	7.337		
12,800.00	7,219.06	7,154.06	7,219.06	193.09	248.03	-90.05	-4,270.66	-6,343.80	3,150.18	2,713.92	436.27	7.221		
12,900.00	7,218.54	7,153.54	7,218.54	196.36	248.01	-90.04	-4,270.66	-6,343.80	3,136.38	2,695.64	440.74	7.116		
13,000.00	7,218.01	7,153.01	7,218.01	199.64	247.99	-90.03	-4,270.66	-6,343.80	3,125.71	2,680.64	445.07	7.023		
13,100.00	7,217.48	7,152.48	7,217.48	202.92	247.97	-90.02	-4,270.66	-6,343.80	3,118.22	2,668.99	449.23	6.941		
13,200.00	7,216.95	7,151.95	7,216.95	206.20	247.95	-90.01	-4,270.66	-6,343.80	3,113.92	2,660.71	453.22	6.871		
13,283.93	7,216.51	7,151.51	7,216.51	208.95	247.94	-90.00	-4,270.66	-6,343.80	3,112.79	2,656.38	456.41	6.820 CC		
13,300.00	7,216.42	7,151.42	7,216.42	209.48	247.93	-90.00	-4,270.66	-6,343.80	3,112.83	2,655.83	457.00	6.811		
13,400.00	7,215.89	7,150.89	7,215.89	212.76	247.91	-89.99	-4,270.66	-6,343.80	3,114.95	2,654.37	460.58	6.763 ES		
13,500.00	7,215.36	7,150.36	7,215.36	216.05	247.90	-89.98	-4,270.66	-6,343.80	3,120.28	2,656.34	463.94	6.726		
13,600.00	7,214.84	7,149.84	7,214.84	219.33	247.88	-89.97	-4,270.66	-6,343.80	3,128.80	2,661.72	467.08	6.699		
13,700.00	7,214.31	7,149.31	7,214.31	222.62	247.86	-89.96	-4,270.66	-6,343.80	3,140.48	2,670.50	469.98	6.682		
13,800.00	7,213.78	7,148.78	7,213.78	225.91	247.84	-89.95	-4,270.66	-6,343.80	3,155.28	2,682.64	472.64	6.676 SF		
13,900.00	7,213.25	7,148.25	7,213.25	229.20	247.82	-89.94	-4,270.66	-6,343.80	3,173.17	2,698.11	475.06	6.679		
14,000.00	7,212.72	7,147.72	7,212.72	232.49	247.80	-89.93	-4,270.66	-6,343.80	3,194.09	2,716.84	477.25	6.693		
14,100.00	7,212.19	7,147.19	7,212.19	235.79	247.79	-89.92	-4,270.66	-6,343.80	3,217.99	2,738.79	479.20	6.715		
14,200.00	7,211.66	7,146.66	7,211.66	239.08	247.77	-89.91	-4,270.66	-6,343.80	3,244.79	2,763.87	480.92	6.747		
14,300.00	7,211.13	7,146.13	7,211.13	242.38	247.75	-89.90	-4,270.66	-6,343.80	3,274.42	2,792.02	482.41	6.788		
14,400.00	7,210.61	7,145.61	7,210.61	245.67	247.73	-89.89	-4,270.66	-6,343.80	3,306.82	2,823.14	483.68	6.837		
14,500.00	7,210.08	7,145.08	7,210.08	248.97	247.71	-89.88	-4,270.66	-6,343.80	3,341.90	2,857.15	484.74	6.894		
14,600.00	7,209.55	7,144.55	7,209.55	252.27	247.69	-89.87	-4,270.66	-6,343.80	3,379.57	2,893.96	485.60	6.960		
14,700.00	7,209.02	7,144.02	7,209.02	255.57	247.67	-89.86	-4,270.66	-6,343.80	3,419.75	2,933.47	486.28	7.033		
14,800.00	7,208.49	7,143.49	7,208.49	258.87	247.66	-89.85	-4,270.66	-6,343.80	3,462.35	2,975.58	486.77	7.113		
14,900.00	7,207.96	7,142.96	7,207.96	262.17	247.64	-89.84	-4,270.66	-6,343.80	3,507.29	3,020.19	487.10	7.200		
15,000.00	7,207.43	7,142.43	7,207.43	265.47	247.62	-89.83	-4,270.66	-6,343.80	3,554.48	3,067.21	487.27	7.295		
15,081.89	7,207.00	7,142.00	7,207.00	268.17	247.60	-89.83	-4,270.66	-6,343.80	3,594.73	3,107.42	487.30	7.377		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	18.00	3.28	3.28	-68.31	2,528.37	-6,356.23	6,840.66				
100.00	100.00	82.00	100.00	3.28	3.58	-68.31	2,528.37	-6,356.23	6,840.64	6,833.78	6.86	996.683	
200.00	200.00	182.00	200.00	3.34	5.66	-68.31	2,528.37	-6,356.23	6,840.64	6,831.65	8.99	760.639	
300.00	299.98	281.98	299.98	3.44	8.74	103.66	2,528.37	-6,356.23	6,841.05	6,828.87	12.18	561.804	
400.00	399.84	381.84	399.84	3.59	12.04	103.68	2,528.37	-6,356.23	6,842.29	6,826.66	15.63	437.756	
500.00	499.45	481.45	499.45	3.80	15.42	103.71	2,528.37	-6,356.23	6,844.36	6,825.15	19.21	356.280	
600.00	598.70	580.70	598.70	4.06	18.81	103.75	2,528.37	-6,356.23	6,847.27	6,824.40	22.87	299.385	
700.00	697.49	679.49	697.49	4.38	22.22	103.82	2,528.37	-6,356.23	6,851.01	6,824.42	26.59	257.632	
800.00	796.13	778.13	796.13	4.74	25.63	103.95	2,528.37	-6,356.23	6,855.00	6,824.63	30.37	225.742	
900.00	894.78	876.78	894.78	5.15	29.05	104.08	2,528.37	-6,356.23	6,859.02	6,824.84	34.18	200.657	
1,000.00	993.43	975.43	993.43	5.58	32.47	104.21	2,528.37	-6,356.23	6,863.08	6,825.05	38.03	180.459	
1,100.00	1,092.07	1,074.07	1,092.07	6.03	35.90	104.35	2,528.37	-6,356.23	6,867.18	6,825.28	41.90	163.876	
1,200.00	1,190.72	1,172.72	1,190.72	6.50	39.33	104.48	2,528.37	-6,356.23	6,871.31	6,825.52	45.80	150.037	
1,300.00	1,289.36	1,271.36	1,289.36	6.98	42.76	104.61	2,528.37	-6,356.23	6,875.49	6,825.78	49.71	138.323	
1,400.00	1,388.01	1,370.01	1,388.01	7.47	46.20	104.74	2,528.37	-6,356.23	6,879.69	6,826.07	53.63	128.289	
1,500.00	1,486.65	1,468.65	1,486.65	7.97	49.63	104.87	2,528.37	-6,356.23	6,883.94	6,826.38	57.56	119.602	
1,600.00	1,585.30	1,567.30	1,585.30	8.48	53.07	105.00	2,528.37	-6,356.23	6,888.22	6,826.72	61.50	112.011	
1,700.00	1,683.94	1,665.94	1,683.94	9.00	56.51	105.13	2,528.37	-6,356.23	6,892.54	6,827.09	65.44	105.324	
1,800.00	1,782.59	1,764.59	1,782.59	9.52	59.95	105.26	2,528.37	-6,356.23	6,896.89	6,827.50	69.39	99.389	
1,900.00	1,881.24	1,863.24	1,881.24	10.05	63.39	105.39	2,528.37	-6,356.23	6,901.28	6,827.93	73.35	94.089	
2,000.00	1,979.88	1,961.88	1,979.88	10.58	66.82	105.52	2,528.37	-6,356.23	6,905.71	6,828.40	77.31	89.327	
2,100.00	2,078.53	2,060.53	2,078.53	11.11	70.26	105.65	2,528.37	-6,356.23	6,910.17	6,828.90	81.27	85.026	
2,200.00	2,177.17	2,159.17	2,177.17	11.64	73.70	105.78	2,528.37	-6,356.23	6,914.67	6,829.43	85.24	81.123	
2,300.00	2,275.82	2,257.82	2,275.82	12.18	77.14	105.91	2,528.37	-6,356.23	6,919.20	6,829.99	89.21	77.565	
2,400.00	2,374.46	2,356.46	2,374.46	12.72	80.59	106.03	2,528.37	-6,356.23	6,923.77	6,830.59	93.18	74.308	
2,500.00	2,473.11	2,455.11	2,473.11	13.26	84.03	106.16	2,528.37	-6,356.23	6,928.38	6,831.23	97.15	71.317	
2,600.00	2,571.76	2,553.76	2,571.76	13.80	87.47	106.29	2,528.37	-6,356.23	6,933.02	6,831.90	101.12	68.561	
2,700.00	2,670.40	2,652.40	2,670.40	14.35	90.91	106.42	2,528.37	-6,356.23	6,937.69	6,832.60	105.10	66.012	
2,800.00	2,769.05	2,751.05	2,769.05	14.89	94.35	106.55	2,528.37	-6,356.23	6,942.41	6,833.33	109.07	63.649	
2,900.00	2,867.69	2,849.69	2,867.69	15.44	97.79	106.68	2,528.37	-6,356.23	6,947.16	6,834.10	113.05	61.451	
3,000.00	2,966.34	2,948.34	2,966.34	15.99	101.23	106.80	2,528.37	-6,356.23	6,951.94	6,834.91	117.03	59.403	
3,100.00	3,064.98	3,046.98	3,064.98	16.53	104.68	106.93	2,528.37	-6,356.23	6,956.76	6,835.75	121.01	57.490	
3,200.00	3,163.63	3,145.63	3,163.63	17.08	108.12	107.06	2,528.37	-6,356.23	6,961.61	6,836.62	124.99	55.698	
3,300.00	3,262.27	3,244.27	3,262.27	17.63	111.56	107.19	2,528.37	-6,356.23	6,966.50	6,837.53	128.97	54.017	
3,400.00	3,360.92	3,342.92	3,360.92	18.18	115.00	107.31	2,528.37	-6,356.23	6,971.43	6,838.48	132.95	52.437	
3,500.00	3,459.57	3,441.57	3,459.57	18.74	118.45	107.44	2,528.37	-6,356.23	6,976.39	6,839.46	136.93	50.948	
3,600.00	3,558.21	3,540.21	3,558.21	19.29	121.89	107.57	2,528.37	-6,356.23	6,981.38	6,840.47	140.91	49.544	
3,700.00	3,656.86	3,638.86	3,656.86	19.84	125.33	107.69	2,528.37	-6,356.23	6,986.41	6,841.52	144.89	48.217	
3,800.00	3,755.50	3,737.50	3,755.50	20.39	128.77	107.82	2,528.37	-6,356.23	6,991.48	6,842.60	148.88	46.961	
3,900.00	3,854.15	3,836.15	3,854.15	20.95	132.22	107.95	2,528.37	-6,356.23	6,996.58	6,843.72	152.86	45.771	
4,000.00	3,952.79	3,934.79	3,952.79	21.50	135.66	108.07	2,528.37	-6,356.23	7,001.71	6,844.87	156.84	44.642	
4,100.00	4,051.44	4,033.44	4,051.44	22.05	139.10	108.20	2,528.37	-6,356.23	7,006.88	6,846.06	160.83	43.568	
4,200.00	4,150.08	4,132.08	4,150.08	22.61	142.54	108.33	2,528.37	-6,356.23	7,012.08	6,847.28	164.81	42.547	
4,300.00	4,248.73	4,230.73	4,248.73	23.16	145.99	108.45	2,528.37	-6,356.23	7,017.32	6,848.53	168.79	41.574	
4,400.00	4,347.38	4,329.38	4,347.38	23.72	149.43	108.58	2,528.37	-6,356.23	7,022.59	6,849.82	172.77	40.646	
4,500.00	4,446.02	4,428.02	4,446.02	24.27	152.87	108.70	2,528.37	-6,356.23	7,027.90	6,851.14	176.76	39.760	
4,600.00	4,544.67	4,526.67	4,544.67	24.83	156.32	108.83	2,528.37	-6,356.23	7,033.24	6,852.50	180.74	38.914	
4,700.00	4,643.31	4,625.31	4,643.31	25.39	159.76	108.95	2,528.37	-6,356.23	7,038.62	6,853.89	184.72	38.104	
4,800.00	4,741.96	4,723.96	4,741.96	25.94	163.20	109.08	2,528.37	-6,356.23	7,044.03	6,855.32	188.71	37.328	
4,900.00	4,840.60	4,822.60	4,840.60	26.50	166.64	109.20	2,528.37	-6,356.23	7,049.47	6,856.78	192.69	36.585	
5,000.00	4,939.25	4,921.25	4,939.25	27.05	170.09	109.32	2,528.37	-6,356.23	7,054.95	6,858.27	196.67	35.872	
5,100.00	5,037.90	5,019.90	5,037.90	27.61	173.53	109.45	2,528.37	-6,356.23	7,060.46	6,859.80	200.66	35.187	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,118.54	5,136.54	28.17	176.97	109.57	2,528.37	-6,356.23	7,066.00	6,861.36	204.64	34.529		
5,300.00	5,235.19	5,217.19	5,235.19	28.72	180.42	109.70	2,528.37	-6,356.23	7,071.58	6,862.96	208.62	33.897		
5,400.00	5,333.83	5,315.83	5,333.83	29.28	183.86	109.82	2,528.37	-6,356.23	7,077.19	6,864.59	212.60	33.288		
5,500.00	5,432.48	5,414.48	5,432.48	29.84	187.30	109.94	2,528.37	-6,356.23	7,082.84	6,866.25	216.59	32.702		
5,600.00	5,531.12	5,513.12	5,531.12	30.40	190.75	110.07	2,528.37	-6,356.23	7,088.52	6,867.95	220.57	32.137		
5,700.00	5,629.77	5,611.77	5,629.77	30.95	194.19	110.19	2,528.37	-6,356.23	7,094.23	6,869.68	224.55	31.593		
5,800.00	5,728.41	5,710.41	5,728.41	31.51	197.63	110.31	2,528.37	-6,356.23	7,099.98	6,871.44	228.53	31.068		
5,900.00	5,827.06	5,809.06	5,827.06	32.07	201.08	110.43	2,528.37	-6,356.23	7,105.75	6,873.24	232.51	30.560		
6,000.00	5,925.71	5,907.71	5,925.71	32.63	204.52	110.56	2,528.37	-6,356.23	7,111.57	6,875.07	236.50	30.071		
6,100.00	6,024.35	6,006.35	6,024.35	33.19	207.96	110.68	2,528.37	-6,356.23	7,117.41	6,876.93	240.48	29.597		
6,200.00	6,123.00	6,105.00	6,123.00	33.74	211.41	110.80	2,528.37	-6,356.23	7,123.29	6,878.83	244.46	29.139		
6,300.00	6,221.64	6,203.64	6,221.64	34.30	214.85	110.92	2,528.37	-6,356.23	7,129.20	6,880.76	248.44	28.696		
6,400.00	6,320.29	6,302.29	6,320.29	34.86	218.29	111.04	2,528.37	-6,356.23	7,135.15	6,882.72	252.42	28.267		
6,500.00	6,418.93	6,400.93	6,418.93	35.42	221.74	111.17	2,528.37	-6,356.23	7,141.12	6,884.72	256.40	27.851		
6,600.00	6,517.58	6,500.42	6,517.58	35.98	225.21	111.29	2,528.37	-6,356.23	7,147.13	6,886.72	260.41	27.445		
6,700.00	6,616.23	6,601.77	6,616.23	36.54	228.75	111.41	2,528.37	-6,356.23	7,153.17	6,888.69	264.49	27.045		
6,800.00	6,714.51	6,703.49	6,714.51	37.10	232.30	76.75	2,528.37	-6,356.23	7,154.55	6,885.95	268.59	26.637		
6,900.00	6,810.42	6,807.58	6,810.42	37.66	235.93	58.80	2,528.37	-6,356.23	7,142.61	6,869.78	272.83	26.180		
7,000.00	6,901.58	6,883.58	6,901.58	38.21	238.58	52.07	2,528.37	-6,356.23	7,117.52	6,841.41	276.11	25.778		
7,100.00	6,985.76	6,967.76	6,985.76	38.76	241.52	50.05	2,528.37	-6,356.23	7,080.01	6,800.30	279.71	25.312		
7,200.00	7,060.88	7,042.88	7,060.88	39.32	244.14	50.82	2,528.37	-6,356.23	7,031.08	6,748.04	283.04	24.842		
7,300.00	7,125.09	7,107.09	7,125.09	39.90	246.39	53.84	2,528.37	-6,356.23	6,972.03	6,686.01	286.02	24.376		
7,400.00	7,176.81	7,158.81	7,176.81	40.55	248.19	59.11	2,528.37	-6,356.23	6,904.41	6,615.79	288.62	23.922		
7,500.00	7,214.77	7,203.23	7,214.77	41.30	249.74	66.85	2,528.37	-6,356.23	6,829.94	6,538.91	291.03	23.468		
7,600.00	7,238.02	7,220.02	7,238.02	42.22	250.33	77.20	2,528.37	-6,356.23	6,750.51	6,457.98	292.53	23.076		
7,700.00	7,246.01	7,228.01	7,246.01	43.32	250.61	89.78	2,528.37	-6,356.23	6,668.08	6,374.31	293.77	22.698		
7,800.00	7,245.50	7,227.50	7,245.50	44.65	250.59	90.45	2,528.37	-6,356.23	6,584.98	6,290.21	294.77	22.339		
7,900.00	7,244.97	7,226.97	7,244.97	46.21	250.57	90.44	2,528.37	-6,356.23	6,502.36	6,206.50	295.86	21.978		
8,000.00	7,244.44	7,226.44	7,244.44	47.99	250.55	90.43	2,528.37	-6,356.23	6,420.23	6,123.20	297.03	21.614		
8,100.00	7,243.91	7,225.91	7,243.91	49.96	250.53	90.42	2,528.37	-6,356.23	6,338.62	6,040.32	298.30	21.249		
8,200.00	7,243.39	7,225.39	7,243.39	52.10	250.51	90.42	2,528.37	-6,356.23	6,257.54	5,957.89	299.65	20.883		
8,300.00	7,242.86	7,224.86	7,242.86	54.38	250.50	90.41	2,528.37	-6,356.23	6,177.01	5,875.92	301.09	20.515		
8,400.00	7,242.33	7,224.33	7,242.33	56.78	250.48	90.40	2,528.37	-6,356.23	6,097.07	5,794.44	302.62	20.147		
8,500.00	7,241.80	7,223.80	7,241.80	59.28	250.46	90.39	2,528.37	-6,356.23	6,017.72	5,713.47	304.24	19.779		
8,600.00	7,241.27	7,223.27	7,241.27	61.88	250.44	90.38	2,528.37	-6,356.23	5,938.99	5,633.04	305.95	19.411		
8,700.00	7,240.74	7,222.74	7,240.74	64.54	250.42	90.37	2,528.37	-6,356.23	5,860.91	5,553.16	307.75	19.044		
8,800.00	7,240.21	7,222.21	7,240.21	67.27	250.40	90.37	2,528.37	-6,356.23	5,783.51	5,473.87	309.64	18.678		
8,900.00	7,239.68	7,221.68	7,239.68	70.06	250.39	90.36	2,528.37	-6,356.23	5,706.81	5,395.20	311.61	18.314		
9,000.00	7,239.16	7,221.16	7,239.16	72.89	250.37	90.35	2,528.37	-6,356.23	5,630.84	5,317.17	313.68	17.951		
9,100.00	7,238.63	7,220.63	7,238.63	75.77	250.35	90.34	2,528.37	-6,356.23	5,555.64	5,239.80	315.83	17.590		
9,200.00	7,238.10	7,220.10	7,238.10	78.69	250.33	90.33	2,528.37	-6,356.23	5,481.22	5,163.15	318.08	17.232		
9,300.00	7,237.57	7,219.57	7,237.57	81.64	250.31	90.33	2,528.37	-6,356.23	5,407.63	5,087.23	320.41	16.877		
9,400.00	7,237.04	7,219.04	7,237.04	84.62	250.29	90.32	2,528.37	-6,356.23	5,334.90	5,012.08	322.83	16.526		
9,500.00	7,236.51	7,218.51	7,236.51	87.63	250.27	90.31	2,528.37	-6,356.23	5,263.07	4,937.74	325.33	16.177		
9,600.00	7,235.98	7,217.98	7,235.98	90.66	250.26	90.30	2,528.37	-6,356.23	5,192.17	4,864.24	327.93	15.833		
9,700.00	7,235.45	7,217.45	7,235.45	93.72	250.24	90.29	2,528.37	-6,356.23	5,122.23	4,791.62	330.61	15.493		
9,800.00	7,234.93	7,216.93	7,234.93	96.79	250.22	90.28	2,528.37	-6,356.23	5,053.31	4,719.93	333.38	15.158		
9,900.00	7,234.40	7,216.40	7,234.40	99.88	250.20	90.28	2,528.37	-6,356.23	4,985.45	4,649.21	336.24	14.827		
10,000.00	7,233.87	7,215.87	7,233.87	102.98	250.18	90.27	2,528.37	-6,356.23	4,918.67	4,579.49	339.18	14.502		
10,100.00	7,233.34	7,215.34	7,233.34	106.10	250.16	90.26	2,528.37	-6,356.23	4,853.05	4,510.84	342.21	14.182		
10,200.00	7,232.81	7,214.81	7,232.81	109.23	250.15	90.25	2,528.37	-6,356.23	4,788.61	4,443.28	345.32	13.867		
10,300.00	7,232.28	7,214.28	7,232.28	112.38	250.13	90.24	2,528.37	-6,356.23	4,725.40	4,376.89	348.51	13.559		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,213.75	7,231.75	115.53	250.11	90.23	2,528.37	-6,356.23	4,663.49	4,311.70	351.79	13.256		
10,500.00	7,231.23	7,213.23	7,231.23	118.70	250.09	90.23	2,528.37	-6,356.23	4,602.91	4,247.77	355.14	12.961		
10,600.00	7,230.70	7,212.70	7,230.70	121.87	250.07	90.22	2,528.37	-6,356.23	4,543.73	4,185.16	358.57	12.672		
10,700.00	7,230.17	7,212.17	7,230.17	125.05	250.05	90.21	2,528.37	-6,356.23	4,486.00	4,123.92	362.08	12.390		
10,800.00	7,229.64	7,211.64	7,229.64	128.25	250.03	90.20	2,528.37	-6,356.23	4,429.77	4,064.12	365.65	12.115		
10,900.00	7,229.11	7,211.11	7,229.11	131.44	250.02	90.19	2,528.37	-6,356.23	4,375.11	4,005.81	369.29	11.847		
11,000.00	7,228.58	7,210.58	7,228.58	134.65	250.00	90.19	2,528.37	-6,356.23	4,322.07	3,949.07	373.00	11.587		
11,100.00	7,228.05	7,210.05	7,228.05	137.86	249.98	90.18	2,528.37	-6,356.23	4,270.71	3,893.94	376.76	11.335		
11,200.00	7,227.52	7,209.52	7,227.52	141.08	249.96	90.17	2,528.37	-6,356.23	4,221.09	3,840.51	380.58	11.091		
11,300.00	7,227.00	7,209.00	7,227.00	144.30	249.94	90.16	2,528.37	-6,356.23	4,173.29	3,788.84	384.45	10.855		
11,400.00	7,226.47	7,208.47	7,226.47	147.52	249.92	90.15	2,528.37	-6,356.23	4,127.35	3,739.00	388.35	10.628		
11,500.00	7,225.94	7,207.94	7,225.94	150.76	249.91	90.14	2,528.37	-6,356.23	4,083.34	3,691.05	392.29	10.409		
11,600.00	7,225.41	7,207.41	7,225.41	153.99	249.89	90.14	2,528.37	-6,356.23	4,041.33	3,645.07	396.26	10.199		
11,700.00	7,224.88	7,206.88	7,224.88	157.23	249.87	90.13	2,528.37	-6,356.23	4,001.38	3,601.13	400.25	9.997		
11,800.00	7,224.35	7,206.35	7,224.35	160.48	249.85	90.12	2,528.37	-6,356.23	3,963.55	3,559.31	404.24	9.805		
11,900.00	7,223.82	7,205.82	7,223.82	163.72	249.83	90.11	2,528.37	-6,356.23	3,927.90	3,519.66	408.24	9.622		
12,000.00	7,223.29	7,205.29	7,223.29	166.98	249.81	90.10	2,528.37	-6,356.23	3,894.50	3,482.27	412.23	9.447		
12,100.00	7,222.77	7,204.77	7,222.77	170.23	249.79	90.10	2,528.37	-6,356.23	3,863.39	3,447.19	416.20	9.283		
12,200.00	7,222.24	7,204.24	7,222.24	173.49	249.78	90.09	2,528.37	-6,356.23	3,834.64	3,414.50	420.14	9.127		
12,300.00	7,221.71	7,203.71	7,221.71	176.75	249.76	90.08	2,528.37	-6,356.23	3,808.30	3,384.26	424.04	8.981		
12,400.00	7,221.18	7,203.18	7,221.18	180.01	249.74	90.07	2,528.37	-6,356.23	3,784.42	3,356.53	427.89	8.844		
12,500.00	7,220.65	7,202.65	7,220.65	183.28	249.72	90.06	2,528.37	-6,356.23	3,763.04	3,331.37	431.67	8.717		
12,600.00	7,220.12	7,202.12	7,220.12	186.54	249.70	90.05	2,528.37	-6,356.23	3,744.22	3,308.84	435.38	8.600		
12,700.00	7,219.59	7,201.59	7,219.59	189.81	249.68	90.05	2,528.37	-6,356.23	3,727.98	3,288.97	439.01	8.492		
12,800.00	7,219.06	7,201.06	7,219.06	193.09	249.67	90.04	2,528.37	-6,356.23	3,714.37	3,271.83	442.54	8.393		
12,900.00	7,218.54	7,200.54	7,218.54	196.36	249.65	90.03	2,528.37	-6,356.23	3,703.40	3,257.44	445.96	8.304		
13,000.00	7,218.01	7,200.01	7,218.01	199.64	249.63	90.02	2,528.37	-6,356.23	3,695.12	3,245.85	449.27	8.225		
13,100.00	7,217.48	7,200.52	7,217.48	202.92	249.65	90.01	2,528.37	-6,356.23	3,689.52	3,237.04	452.48	8.154		
13,200.00	7,216.95	7,201.05	7,216.95	206.20	249.67	90.00	2,528.37	-6,356.23	3,686.63	3,231.06	455.57	8.092		
13,256.63	7,216.65	7,201.35	7,216.65	208.06	249.68	90.00	2,528.37	-6,356.23	3,686.19	3,228.94	457.25	8.062 CC		
13,300.00	7,216.42	7,201.58	7,216.42	209.48	249.68	90.00	2,528.37	-6,356.23	3,686.45	3,227.94	458.51	8.040		
13,400.00	7,215.89	7,202.11	7,215.89	212.76	249.70	89.99	2,528.37	-6,356.23	3,688.98	3,227.68	461.30	7.997 ES		
13,500.00	7,215.36	7,202.64	7,215.36	216.05	249.72	89.98	2,528.37	-6,356.23	3,694.22	3,230.28	463.94	7.963		
13,600.00	7,214.84	7,203.17	7,214.84	219.33	249.74	89.97	2,528.37	-6,356.23	3,702.15	3,235.73	466.42	7.937		
13,700.00	7,214.31	7,203.69	7,214.31	222.62	249.76	89.96	2,528.37	-6,356.23	3,712.76	3,244.03	468.73	7.921		
13,800.00	7,213.78	7,204.22	7,213.78	225.91	249.78	89.96	2,528.37	-6,356.23	3,726.03	3,255.14	470.88	7.913 SF		
13,900.00	7,213.25	7,204.75	7,213.25	229.20	249.79	89.95	2,528.37	-6,356.23	3,741.92	3,269.05	472.87	7.913		
14,000.00	7,212.72	7,205.28	7,212.72	232.49	249.81	89.94	2,528.37	-6,356.23	3,760.40	3,285.71	474.69	7.922		
14,100.00	7,212.19	7,205.81	7,212.19	235.79	249.83	89.93	2,528.37	-6,356.23	3,781.44	3,305.10	476.34	7.938		
14,200.00	7,211.66	7,206.34	7,211.66	239.08	249.85	89.92	2,528.37	-6,356.23	3,804.99	3,327.16	477.83	7.963		
14,300.00	7,211.13	7,206.87	7,211.13	242.38	249.87	89.91	2,528.37	-6,356.23	3,831.01	3,351.85	479.16	7.995		
14,400.00	7,210.61	7,207.39	7,210.61	245.67	249.89	89.91	2,528.37	-6,356.23	3,859.44	3,379.11	480.33	8.035		
14,500.00	7,210.08	7,207.92	7,210.08	248.97	249.91	89.90	2,528.37	-6,356.23	3,890.24	3,408.89	481.35	8.082		
14,600.00	7,209.55	7,208.45	7,209.55	252.27	249.92	89.89	2,528.37	-6,356.23	3,923.34	3,441.12	482.22	8.136		
14,700.00	7,209.02	7,208.98	7,209.02	255.57	249.94	89.88	2,528.37	-6,356.23	3,958.70	3,475.75	482.95	8.197		
14,800.00	7,208.49	7,209.51	7,208.49	258.87	249.96	89.87	2,528.37	-6,356.23	3,996.24	3,512.70	483.54	8.265		
14,900.00	7,207.96	7,189.96	7,207.96	262.17	249.28	89.86	2,528.37	-6,356.23	4,035.92	3,552.62	483.30	8.351		
15,000.00	7,207.43	7,189.43	7,207.43	265.47	249.26	89.86	2,528.37	-6,356.23	4,077.66	3,594.06	483.60	8.432		
15,081.89	7,207.00	7,189.00	7,207.00	268.17	249.24	89.85	2,528.37	-6,356.23	4,113.33	3,629.57	483.76	8.503		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15.00	3.28	3.28	-72.58	2,463.23	-7,852.49	8,229.78					
100.00	100.00	85.00	100.00	3.28	3.60	-72.58	2,463.23	-7,852.49	8,229.77	8,222.88	6.88	1,195.377		
200.00	200.00	185.00	200.00	3.34	5.74	-72.58	2,463.23	-7,852.49	8,229.77	8,220.69	9.08	906.469		
300.00	299.98	284.98	299.98	3.44	8.83	99.38	2,463.23	-7,852.49	8,230.05	8,217.78	12.27	670.524		
400.00	399.84	384.84	399.84	3.59	12.14	99.40	2,463.23	-7,852.49	8,230.91	8,215.18	15.73	523.225		
500.00	499.45	484.45	499.45	3.80	15.52	99.43	2,463.23	-7,852.49	8,232.34	8,213.03	19.31	426.258		
600.00	598.70	583.70	598.70	4.06	18.92	99.47	2,463.23	-7,852.49	8,234.36	8,211.38	22.97	358.407		
700.00	697.49	682.49	697.49	4.38	22.32	99.54	2,463.23	-7,852.49	8,236.95	8,210.25	26.70	308.527		
800.00	796.13	781.13	796.13	4.74	25.73	99.66	2,463.23	-7,852.49	8,239.72	8,209.25	30.47	270.382		
900.00	894.78	879.78	894.78	5.15	29.15	99.77	2,463.23	-7,852.49	8,242.52	8,208.23	34.29	240.354		
1,000.00	993.43	978.43	993.43	5.58	32.58	99.88	2,463.23	-7,852.49	8,245.36	8,207.21	38.14	216.160		
1,100.00	1,092.07	1,077.07	1,092.07	6.03	36.00	99.99	2,463.23	-7,852.49	8,248.23	8,206.20	42.02	196.287		
1,200.00	1,190.72	1,175.72	1,190.72	6.50	39.44	100.10	2,463.23	-7,852.49	8,251.12	8,205.21	45.92	179.695		
1,300.00	1,289.36	1,274.36	1,289.36	6.98	42.87	100.21	2,463.23	-7,852.49	8,254.05	8,204.23	49.83	165.647		
1,400.00	1,388.01	1,373.01	1,388.01	7.47	46.30	100.32	2,463.23	-7,852.49	8,257.02	8,203.26	53.75	153.610		
1,500.00	1,486.65	1,471.65	1,486.65	7.97	49.74	100.43	2,463.23	-7,852.49	8,260.01	8,202.32	57.69	143.185		
1,600.00	1,585.30	1,570.30	1,585.30	8.48	53.17	100.54	2,463.23	-7,852.49	8,263.03	8,201.40	61.63	134.075		
1,700.00	1,683.94	1,668.94	1,683.94	9.00	56.61	100.65	2,463.23	-7,852.49	8,266.09	8,200.51	65.58	126.047		
1,800.00	1,782.59	1,767.59	1,782.59	9.52	60.05	100.76	2,463.23	-7,852.49	8,269.18	8,199.64	69.53	118.922		
1,900.00	1,881.24	1,866.24	1,881.24	10.05	63.49	100.87	2,463.23	-7,852.49	8,272.30	8,198.80	73.49	112.557		
2,000.00	1,979.88	1,964.88	1,979.88	10.58	66.93	100.98	2,463.23	-7,852.49	8,275.45	8,197.99	77.46	106.838		
2,100.00	2,078.53	2,063.53	2,078.53	11.11	70.37	101.09	2,463.23	-7,852.49	8,278.63	8,197.20	81.43	101.671		
2,200.00	2,177.17	2,162.17	2,177.17	11.64	73.81	101.20	2,463.23	-7,852.49	8,281.84	8,196.44	85.40	96.982		
2,300.00	2,275.82	2,260.82	2,275.82	12.18	77.25	101.31	2,463.23	-7,852.49	8,285.08	8,195.72	89.37	92.707		
2,400.00	2,374.46	2,359.46	2,374.46	12.72	80.69	101.42	2,463.23	-7,852.49	8,288.36	8,195.02	93.34	88.794		
2,500.00	2,473.11	2,458.11	2,473.11	13.26	84.13	101.53	2,463.23	-7,852.49	8,291.67	8,194.35	97.32	85.200		
2,600.00	2,571.76	2,556.76	2,571.76	13.80	87.57	101.64	2,463.23	-7,852.49	8,295.00	8,193.70	101.30	81.887		
2,700.00	2,670.40	2,655.40	2,670.40	14.35	91.01	101.75	2,463.23	-7,852.49	8,298.37	8,193.09	105.28	78.823		
2,800.00	2,769.05	2,754.05	2,769.05	14.89	94.46	101.86	2,463.23	-7,852.49	8,301.77	8,192.51	109.26	75.982		
2,900.00	2,867.69	2,852.69	2,867.69	15.44	97.90	101.97	2,463.23	-7,852.49	8,305.20	8,191.96	113.24	73.340		
3,000.00	2,966.34	2,951.34	2,966.34	15.99	101.34	102.08	2,463.23	-7,852.49	8,308.66	8,191.44	117.23	70.878		
3,100.00	3,064.98	3,049.98	3,064.98	16.53	104.78	102.19	2,463.23	-7,852.49	8,312.16	8,190.95	121.21	68.577		
3,200.00	3,163.63	3,148.63	3,163.63	17.08	108.22	102.30	2,463.23	-7,852.49	8,315.68	8,190.48	125.19	66.422		
3,300.00	3,262.27	3,247.27	3,262.27	17.63	111.67	102.40	2,463.23	-7,852.49	8,319.23	8,190.05	129.18	64.400		
3,400.00	3,360.92	3,345.92	3,360.92	18.18	115.11	102.51	2,463.23	-7,852.49	8,322.82	8,189.65	133.17	62.499		
3,500.00	3,459.57	3,444.57	3,459.57	18.74	118.55	102.62	2,463.23	-7,852.49	8,326.43	8,189.28	137.15	60.709		
3,600.00	3,558.21	3,543.21	3,558.21	19.29	121.99	102.73	2,463.23	-7,852.49	8,330.08	8,188.94	141.14	59.020		
3,700.00	3,656.86	3,641.86	3,656.86	19.84	125.43	102.84	2,463.23	-7,852.49	8,333.76	8,188.63	145.13	57.423		
3,800.00	3,755.50	3,740.50	3,755.50	20.39	128.88	102.95	2,463.23	-7,852.49	8,337.46	8,188.35	149.12	55.913		
3,900.00	3,854.15	3,839.15	3,854.15	20.95	132.32	103.06	2,463.23	-7,852.49	8,341.20	8,188.10	153.10	54.480		
4,000.00	3,952.79	3,937.79	3,952.79	21.50	135.76	103.16	2,463.23	-7,852.49	8,344.97	8,187.88	157.09	53.121		
4,100.00	4,051.44	4,036.44	4,051.44	22.05	139.21	103.27	2,463.23	-7,852.49	8,348.77	8,187.69	161.08	51.829		
4,200.00	4,150.08	4,135.08	4,150.08	22.61	142.65	103.38	2,463.23	-7,852.49	8,352.60	8,187.53	165.07	50.600		
4,300.00	4,248.73	4,233.73	4,248.73	23.16	146.09	103.49	2,463.23	-7,852.49	8,356.46	8,187.40	169.06	49.429		
4,400.00	4,347.38	4,332.38	4,347.38	23.72	149.53	103.60	2,463.23	-7,852.49	8,360.35	8,187.30	173.05	48.312		
4,500.00	4,446.02	4,431.02	4,446.02	24.27	152.98	103.70	2,463.23	-7,852.49	8,364.27	8,187.23	177.04	47.245		
4,600.00	4,544.67	4,529.67	4,544.67	24.83	156.42	103.81	2,463.23	-7,852.49	8,368.22	8,187.20	181.03	46.226		
4,700.00	4,643.31	4,628.31	4,643.31	25.39	159.86	103.92	2,463.23	-7,852.49	8,372.21	8,187.19	185.02	45.251		
4,800.00	4,741.96	4,726.96	4,741.96	25.94	163.31	104.03	2,463.23	-7,852.49	8,376.22	8,187.21	189.01	44.317		
4,900.00	4,840.60	4,825.60	4,840.60	26.50	166.75	104.13	2,463.23	-7,852.49	8,380.26	8,187.26	193.00	43.421		
5,000.00	4,939.25	4,924.25	4,939.25	27.05	170.19	104.24	2,463.23	-7,852.49	8,384.33	8,187.35	196.99	42.563		
5,100.00	5,037.90	5,022.90	5,037.90	27.61	173.64	104.35	2,463.23	-7,852.49	8,388.44	8,187.46	200.98	41.738		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,121.54	5,136.54	28.17	177.08	104.46	2,463.23	-7,852.49	8,392.57	8,187.60	204.97	40.946		
5,300.00	5,235.19	5,220.19	5,235.19	28.72	180.52	104.56	2,463.23	-7,852.49	8,396.73	8,187.77	208.96	40.184		
5,400.00	5,333.83	5,318.83	5,333.83	29.28	183.96	104.67	2,463.23	-7,852.49	8,400.92	8,187.98	212.95	39.451		
5,500.00	5,432.48	5,417.48	5,432.48	29.84	187.41	104.78	2,463.23	-7,852.49	8,405.14	8,188.21	216.94	38.745		
5,600.00	5,531.12	5,516.12	5,531.12	30.40	190.85	104.88	2,463.23	-7,852.49	8,409.40	8,188.47	220.93	38.064		
5,700.00	5,629.77	5,614.77	5,629.77	30.95	194.29	104.99	2,463.23	-7,852.49	8,413.68	8,188.76	224.92	37.408		
5,800.00	5,728.41	5,713.41	5,728.41	31.51	197.74	105.10	2,463.23	-7,852.49	8,417.99	8,189.08	228.91	36.775		
5,900.00	5,827.06	5,812.06	5,827.06	32.07	201.18	105.20	2,463.23	-7,852.49	8,422.33	8,189.44	232.90	36.164		
6,000.00	5,925.71	5,910.71	5,925.71	32.63	204.62	105.31	2,463.23	-7,852.49	8,426.70	8,189.82	236.89	35.573		
6,100.00	6,024.35	6,009.35	6,024.35	33.19	208.07	105.42	2,463.23	-7,852.49	8,431.10	8,190.23	240.87	35.002		
6,200.00	6,123.00	6,108.00	6,123.00	33.74	211.51	105.52	2,463.23	-7,852.49	8,435.53	8,190.67	244.86	34.450		
6,300.00	6,221.64	6,206.64	6,221.64	34.30	214.95	105.63	2,463.23	-7,852.49	8,439.99	8,191.14	248.85	33.916		
6,400.00	6,320.29	6,305.29	6,320.29	34.86	218.40	105.73	2,463.23	-7,852.49	8,444.48	8,191.64	252.84	33.398		
6,500.00	6,418.93	6,403.93	6,418.93	35.42	221.84	105.84	2,463.23	-7,852.49	8,449.00	8,192.17	256.83	32.897		
6,600.00	6,517.58	6,502.58	6,517.58	35.98	225.28	105.94	2,463.23	-7,852.49	8,453.55	8,192.73	260.82	32.411		
6,700.00	6,616.23	6,601.23	6,616.23	36.54	228.73	106.05	2,463.23	-7,852.49	8,458.13	8,193.32	264.81	31.941		
6,800.00	6,714.51	6,700.49	6,714.51	37.10	232.19	71.43	2,463.23	-7,852.49	8,457.81	8,188.97	268.84	31.461		
6,900.00	6,810.42	6,804.58	6,810.42	37.66	235.83	53.45	2,463.23	-7,852.49	8,443.52	8,170.45	273.06	30.921		
7,000.00	6,901.58	6,886.58	6,901.58	38.21	238.69	46.59	2,463.23	-7,852.49	8,415.46	8,138.91	276.55	30.431		
7,100.00	6,985.76	6,970.76	6,985.76	38.76	241.63	44.40	2,463.23	-7,852.49	8,374.38	8,094.25	280.12	29.895		
7,200.00	7,060.88	7,045.88	7,060.88	39.32	244.25	44.97	2,463.23	-7,852.49	8,321.34	8,037.94	283.40	29.362		
7,300.00	7,125.09	7,110.09	7,125.09	39.90	246.49	47.84	2,463.23	-7,852.49	8,257.71	7,971.39	286.33	28.840		
7,400.00	7,176.81	7,161.81	7,176.81	40.55	248.30	53.20	2,463.23	-7,852.49	8,185.11	7,896.27	288.84	28.338		
7,500.00	7,214.77	7,200.23	7,214.77	41.30	249.64	61.64	2,463.23	-7,852.49	8,105.34	7,814.42	290.92	27.861		
7,600.00	7,238.02	7,223.02	7,238.02	42.22	250.43	73.85	2,463.23	-7,852.49	8,020.40	7,727.92	292.48	27.422		
7,700.00	7,246.01	7,231.01	7,246.01	43.32	250.71	89.72	2,463.23	-7,852.49	7,932.37	7,638.84	293.54	27.023		
7,800.00	7,245.50	7,230.50	7,245.50	44.65	250.69	90.58	2,463.23	-7,852.49	7,843.59	7,549.26	294.33	26.649		
7,900.00	7,244.97	7,229.97	7,244.97	46.21	250.67	90.57	2,463.23	-7,852.49	7,755.08	7,459.89	295.19	26.271		
8,000.00	7,244.44	7,229.44	7,244.44	47.99	250.66	90.56	2,463.23	-7,852.49	7,666.86	7,370.74	296.11	25.892		
8,100.00	7,243.91	7,228.91	7,243.91	49.96	250.64	90.56	2,463.23	-7,852.49	7,578.92	7,281.82	297.10	25.510		
8,200.00	7,243.39	7,228.39	7,243.39	52.10	250.62	90.55	2,463.23	-7,852.49	7,491.29	7,193.14	298.15	25.126		
8,300.00	7,242.86	7,227.86	7,242.86	54.38	250.60	90.54	2,463.23	-7,852.49	7,403.98	7,104.70	299.27	24.740		
8,400.00	7,242.33	7,227.33	7,242.33	56.78	250.58	90.53	2,463.23	-7,852.49	7,316.98	7,016.53	300.46	24.353		
8,500.00	7,241.80	7,226.80	7,241.80	59.28	250.56	90.52	2,463.23	-7,852.49	7,230.33	6,928.62	301.71	23.965		
8,600.00	7,241.27	7,226.27	7,241.27	61.88	250.55	90.51	2,463.23	-7,852.49	7,144.02	6,840.99	303.03	23.575		
8,700.00	7,240.74	7,225.74	7,240.74	64.54	250.53	90.51	2,463.23	-7,852.49	7,058.07	6,753.66	304.42	23.186		
8,800.00	7,240.21	7,225.21	7,240.21	67.27	250.51	90.50	2,463.23	-7,852.49	6,972.50	6,666.63	305.87	22.795		
8,900.00	7,239.68	7,224.68	7,239.68	70.06	250.49	90.49	2,463.23	-7,852.49	6,887.32	6,579.92	307.40	22.405		
9,000.00	7,239.16	7,224.16	7,239.16	72.89	250.47	90.48	2,463.23	-7,852.49	6,802.54	6,493.54	308.99	22.015		
9,100.00	7,238.63	7,223.63	7,238.63	75.77	250.45	90.47	2,463.23	-7,852.49	6,718.18	6,407.52	310.66	21.625		
9,200.00	7,238.10	7,223.10	7,238.10	78.69	250.43	90.46	2,463.23	-7,852.49	6,634.25	6,321.85	312.40	21.237		
9,300.00	7,237.57	7,222.57	7,237.57	81.64	250.42	90.46	2,463.23	-7,852.49	6,550.78	6,236.57	314.21	20.849		
9,400.00	7,237.04	7,222.04	7,237.04	84.62	250.40	90.45	2,463.23	-7,852.49	6,467.77	6,151.68	316.09	20.462		
9,500.00	7,236.51	7,221.51	7,236.51	87.63	250.38	90.44	2,463.23	-7,852.49	6,385.25	6,067.21	318.04	20.077		
9,600.00	7,235.98	7,220.98	7,235.98	90.66	250.36	90.43	2,463.23	-7,852.49	6,303.24	5,983.17	320.07	19.693		
9,700.00	7,235.45	7,220.45	7,235.45	93.72	250.34	90.42	2,463.23	-7,852.49	6,221.75	5,899.58	322.17	19.312		
9,800.00	7,234.93	7,219.93	7,234.93	96.79	250.32	90.41	2,463.23	-7,852.49	6,140.81	5,816.46	324.35	18.933		
9,900.00	7,234.40	7,219.40	7,234.40	99.88	250.31	90.41	2,463.23	-7,852.49	6,060.44	5,733.84	326.60	18.556		
10,000.00	7,233.87	7,218.87	7,233.87	102.98	250.29	90.40	2,463.23	-7,852.49	5,980.66	5,651.73	328.93	18.182		
10,100.00	7,233.34	7,218.34	7,233.34	106.10	250.27	90.39	2,463.23	-7,852.49	5,901.50	5,570.16	331.34	17.811		
10,200.00	7,232.81	7,217.81	7,232.81	109.23	250.25	90.38	2,463.23	-7,852.49	5,822.98	5,489.15	333.83	17.443		
10,300.00	7,232.28	7,217.28	7,232.28	112.38	250.23	90.37	2,463.23	-7,852.49	5,745.12	5,408.73	336.39	17.079		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,216.75	7,231.75	115.53	250.21	90.36	2,463.23	-7,852.49	5,667.96	5,328.92	339.04	16.718		
10,500.00	7,231.23	7,216.23	7,231.23	118.70	250.19	90.35	2,463.23	-7,852.49	5,591.53	5,249.76	341.77	16.361		
10,600.00	7,230.70	7,215.70	7,230.70	121.87	250.18	90.35	2,463.23	-7,852.49	5,515.84	5,171.26	344.58	16.007		
10,700.00	7,230.17	7,215.17	7,230.17	125.05	250.16	90.34	2,463.23	-7,852.49	5,440.95	5,093.47	347.47	15.659		
10,800.00	7,229.64	7,214.64	7,229.64	128.25	250.14	90.33	2,463.23	-7,852.49	5,366.87	5,016.42	350.45	15.314		
10,900.00	7,229.11	7,214.11	7,229.11	131.44	250.12	90.32	2,463.23	-7,852.49	5,293.64	4,940.13	353.51	14.974		
11,000.00	7,228.58	7,213.58	7,228.58	134.65	250.10	90.31	2,463.23	-7,852.49	5,221.30	4,864.64	356.66	14.639		
11,100.00	7,228.05	7,213.05	7,228.05	137.86	250.08	90.30	2,463.23	-7,852.49	5,149.89	4,790.00	359.89	14.310		
11,200.00	7,227.52	7,212.52	7,227.52	141.08	250.07	90.30	2,463.23	-7,852.49	5,079.44	4,716.24	363.21	13.985		
11,300.00	7,227.00	7,212.00	7,227.00	144.30	250.05	90.29	2,463.23	-7,852.49	5,010.00	4,643.39	366.61	13.666		
11,400.00	7,226.47	7,211.47	7,226.47	147.52	250.03	90.28	2,463.23	-7,852.49	4,941.61	4,571.51	370.09	13.352		
11,500.00	7,225.94	7,210.94	7,225.94	150.76	250.01	90.27	2,463.23	-7,852.49	4,874.30	4,500.64	373.67	13.045		
11,600.00	7,225.41	7,210.41	7,225.41	153.99	249.99	90.26	2,463.23	-7,852.49	4,808.14	4,430.82	377.32	12.743		
11,700.00	7,224.88	7,209.88	7,224.88	157.23	249.97	90.25	2,463.23	-7,852.49	4,743.16	4,362.10	381.06	12.447		
11,800.00	7,224.35	7,209.35	7,224.35	160.48	249.95	90.25	2,463.23	-7,852.49	4,679.42	4,294.54	384.88	12.158		
11,900.00	7,223.82	7,208.82	7,223.82	163.72	249.94	90.24	2,463.23	-7,852.49	4,616.96	4,228.18	388.77	11.876		
12,000.00	7,223.29	7,208.29	7,223.29	166.98	249.92	90.23	2,463.23	-7,852.49	4,555.84	4,163.09	392.75	11.600		
12,100.00	7,222.77	7,207.77	7,222.77	170.23	249.90	90.22	2,463.23	-7,852.49	4,496.11	4,099.31	396.80	11.331		
12,200.00	7,222.24	7,207.24	7,222.24	173.49	249.88	90.21	2,463.23	-7,852.49	4,437.84	4,036.92	400.92	11.069		
12,300.00	7,221.71	7,206.71	7,221.71	176.75	249.86	90.20	2,463.23	-7,852.49	4,381.07	3,975.96	405.11	10.815		
12,400.00	7,221.18	7,206.18	7,221.18	180.01	249.84	90.20	2,463.23	-7,852.49	4,325.86	3,916.51	409.36	10.567		
12,500.00	7,220.65	7,205.65	7,220.65	183.28	249.83	90.19	2,463.23	-7,852.49	4,272.29	3,858.62	413.67	10.328		
12,600.00	7,220.12	7,205.12	7,220.12	186.54	249.81	90.18	2,463.23	-7,852.49	4,220.41	3,802.38	418.03	10.096		
12,700.00	7,219.59	7,204.59	7,219.59	189.81	249.79	90.17	2,463.23	-7,852.49	4,170.27	3,747.84	422.44	9.872		
12,800.00	7,219.06	7,204.06	7,219.06	193.09	249.77	90.16	2,463.23	-7,852.49	4,121.96	3,695.08	426.88	9.656		
12,900.00	7,218.54	7,203.54	7,218.54	196.36	249.75	90.15	2,463.23	-7,852.49	4,075.52	3,644.16	431.36	9.448		
13,000.00	7,218.01	7,203.01	7,218.01	199.64	249.73	90.15	2,463.23	-7,852.49	4,031.04	3,595.18	435.86	9.248		
13,100.00	7,217.48	7,202.48	7,217.48	202.92	249.72	90.14	2,463.23	-7,852.49	3,988.56	3,548.19	440.37	9.057		
13,200.00	7,216.95	7,201.95	7,216.95	206.20	249.70	90.13	2,463.23	-7,852.49	3,948.16	3,503.27	444.89	8.874		
13,300.00	7,216.42	7,201.42	7,216.42	209.48	249.68	90.12	2,463.23	-7,852.49	3,909.90	3,460.50	449.40	8.700		
13,400.00	7,215.89	7,200.89	7,215.89	212.76	249.66	90.11	2,463.23	-7,852.49	3,873.85	3,419.96	453.89	8.535		
13,500.00	7,215.36	7,200.36	7,215.36	216.05	249.64	90.10	2,463.23	-7,852.49	3,840.06	3,381.71	458.35	8.378		
13,600.00	7,214.84	7,200.17	7,214.84	219.33	249.63	90.10	2,463.23	-7,852.49	3,808.59	3,345.82	462.78	8.230		
13,700.00	7,214.31	7,200.69	7,214.31	222.62	249.65	90.09	2,463.23	-7,852.49	3,779.52	3,312.34	467.17	8.090		
13,800.00	7,213.78	7,201.22	7,213.78	225.91	249.67	90.08	2,463.23	-7,852.49	3,752.88	3,281.38	471.50	7.959		
13,900.00	7,213.25	7,201.75	7,213.25	229.20	249.69	90.07	2,463.23	-7,852.49	3,728.73	3,252.99	475.75	7.838		
14,000.00	7,212.72	7,202.28	7,212.72	232.49	249.71	90.06	2,463.23	-7,852.49	3,707.13	3,227.23	479.90	7.725		
14,100.00	7,212.19	7,202.81	7,212.19	235.79	249.73	90.05	2,463.23	-7,852.49	3,688.11	3,204.17	483.94	7.621		
14,200.00	7,211.66	7,203.34	7,211.66	239.08	249.75	90.05	2,463.23	-7,852.49	3,671.72	3,183.86	487.85	7.526		
14,300.00	7,211.13	7,203.87	7,211.13	242.38	249.76	90.04	2,463.23	-7,852.49	3,657.98	3,166.35	491.64	7.440		
14,400.00	7,210.61	7,204.39	7,210.61	245.67	249.78	90.03	2,463.23	-7,852.49	3,646.94	3,151.67	495.27	7.363		
14,500.00	7,210.08	7,204.92	7,210.08	248.97	249.80	90.02	2,463.23	-7,852.49	3,638.62	3,139.87	498.75	7.295		
14,600.00	7,209.55	7,205.45	7,209.55	252.27	249.82	90.01	2,463.23	-7,852.49	3,633.03	3,130.97	502.06	7.236		
14,700.00	7,209.02	7,205.98	7,209.02	255.57	249.84	90.00	2,463.23	-7,852.49	3,630.19	3,124.99	505.19	7.186		
14,753.26	7,208.74	7,206.26	7,208.74	257.33	249.85	90.00	2,463.23	-7,852.49	3,629.79	3,123.01	506.79	7.162 CC		
14,800.00	7,208.49	7,206.51	7,208.49	258.87	249.86	90.00	2,463.23	-7,852.49	3,630.10	3,121.95	508.14	7.144		
14,900.00	7,207.96	7,207.04	7,207.96	262.17	249.87	89.99	2,463.23	-7,852.49	3,632.76	3,121.86	510.90	7.111 ES		
15,000.00	7,207.43	7,207.57	7,207.43	265.47	249.89	89.98	2,463.23	-7,852.49	3,638.17	3,124.72	513.45	7.086		
15,081.89	7,207.00	7,208.00	7,207.00	268.17	249.91	89.97	2,463.23	-7,852.49	3,644.64	3,129.24	515.40	7.072 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-54.59	2,578.82	-3,627.95	4,451.11				
100.00	100.00	102.00	100.00	3.28	3.75	-54.59	2,578.82	-3,627.95	4,451.11	4,444.08	7.03	632.841	
200.00	200.00	202.00	200.00	3.34	6.24	-54.59	2,578.82	-3,627.95	4,451.11	4,441.53	9.58	464.855	
300.00	299.98	301.98	299.98	3.44	9.39	117.37	2,578.82	-3,627.95	4,451.91	4,439.08	12.83	347.051	
400.00	399.84	401.84	399.84	3.59	12.71	117.39	2,578.82	-3,627.95	4,454.32	4,438.02	16.30	273.206	
500.00	499.45	501.45	499.45	3.80	16.10	117.42	2,578.82	-3,627.95	4,458.34	4,438.45	19.89	224.115	
600.00	598.70	600.70	598.70	4.06	19.50	117.45	2,578.82	-3,627.95	4,463.99	4,440.44	23.56	189.510	
700.00	697.49	700.51	697.49	4.38	22.95	117.54	2,578.82	-3,627.95	4,471.22	4,443.91	27.31	163.729	
800.00	796.13	801.87	796.13	4.74	26.45	117.72	2,578.82	-3,627.95	4,478.91	4,447.74	31.17	143.705	
900.00	894.78	903.22	894.78	5.15	29.97	117.90	2,578.82	-3,627.95	4,486.64	4,451.58	35.07	127.949	
1,000.00	993.43	1,004.57	993.43	5.58	33.49	118.09	2,578.82	-3,627.95	4,494.42	4,455.43	39.00	115.256	
1,100.00	1,092.07	1,105.93	1,092.07	6.03	37.01	118.27	2,578.82	-3,627.95	4,502.25	4,459.30	42.95	104.830	
1,200.00	1,190.72	1,207.28	1,190.72	6.50	40.53	118.45	2,578.82	-3,627.95	4,510.13	4,463.21	46.92	96.124	
1,300.00	1,289.36	1,308.64	1,289.36	6.98	44.06	118.63	2,578.82	-3,627.95	4,518.04	4,467.14	50.91	88.753	
1,400.00	1,388.01	1,409.99	1,388.01	7.47	47.59	118.81	2,578.82	-3,627.95	4,526.01	4,471.11	54.90	82.435	
1,500.00	1,486.65	1,488.65	1,486.65	7.97	50.33	118.99	2,578.82	-3,627.95	4,534.02	4,475.90	58.12	78.010	
1,600.00	1,585.30	1,587.30	1,585.30	8.48	53.77	119.17	2,578.82	-3,627.95	4,542.08	4,480.04	62.04	73.210	
1,700.00	1,683.94	1,685.94	1,683.94	9.00	57.21	119.35	2,578.82	-3,627.95	4,550.18	4,484.21	65.97	68.975	
1,800.00	1,782.59	1,784.59	1,782.59	9.52	60.64	119.53	2,578.82	-3,627.95	4,558.32	4,488.42	69.90	65.212	
1,900.00	1,881.24	1,883.24	1,881.24	10.05	64.08	119.71	2,578.82	-3,627.95	4,566.51	4,492.68	73.84	61.846	
2,000.00	1,979.88	1,981.88	1,979.88	10.58	67.52	119.88	2,578.82	-3,627.95	4,574.75	4,496.97	77.78	58.819	
2,100.00	2,078.53	2,080.53	2,078.53	11.11	70.96	120.06	2,578.82	-3,627.95	4,583.02	4,501.30	81.72	56.082	
2,200.00	2,177.17	2,179.17	2,177.17	11.64	74.40	120.23	2,578.82	-3,627.95	4,591.35	4,505.68	85.67	53.596	
2,300.00	2,275.82	2,277.82	2,275.82	12.18	77.84	120.41	2,578.82	-3,627.95	4,599.71	4,510.10	89.61	51.328	
2,400.00	2,374.46	2,376.46	2,374.46	12.72	81.28	120.58	2,578.82	-3,627.95	4,608.12	4,514.56	93.56	49.252	
2,500.00	2,473.11	2,475.11	2,473.11	13.26	84.72	120.76	2,578.82	-3,627.95	4,616.57	4,519.06	97.51	47.343	
2,600.00	2,571.76	2,573.76	2,571.76	13.80	88.17	120.93	2,578.82	-3,627.95	4,625.06	4,523.60	101.47	45.582	
2,700.00	2,670.40	2,672.40	2,670.40	14.35	91.61	121.10	2,578.82	-3,627.95	4,633.60	4,528.18	105.42	43.954	
2,800.00	2,769.05	2,771.05	2,769.05	14.89	95.05	121.27	2,578.82	-3,627.95	4,642.18	4,532.80	109.37	42.443	
2,900.00	2,867.69	2,869.69	2,867.69	15.44	98.49	121.44	2,578.82	-3,627.95	4,650.80	4,537.47	113.33	41.038	
3,000.00	2,966.34	2,968.34	2,966.34	15.99	101.93	121.61	2,578.82	-3,627.95	4,659.46	4,542.18	117.28	39.728	
3,100.00	3,064.98	3,066.98	3,064.98	16.53	105.37	121.78	2,578.82	-3,627.95	4,668.17	4,546.92	121.24	38.503	
3,200.00	3,163.63	3,165.63	3,163.63	17.08	108.82	121.95	2,578.82	-3,627.95	4,676.91	4,551.71	125.20	37.356	
3,300.00	3,262.27	3,264.27	3,262.27	17.63	112.26	122.12	2,578.82	-3,627.95	4,685.70	4,556.54	129.15	36.280	
3,400.00	3,360.92	3,362.92	3,360.92	18.18	115.70	122.29	2,578.82	-3,627.95	4,694.52	4,561.41	133.11	35.268	
3,500.00	3,459.57	3,461.57	3,459.57	18.74	119.14	122.46	2,578.82	-3,627.95	4,703.39	4,566.32	137.07	34.314	
3,600.00	3,558.21	3,560.21	3,558.21	19.29	122.59	122.62	2,578.82	-3,627.95	4,712.30	4,571.27	141.03	33.414	
3,700.00	3,656.86	3,658.86	3,656.86	19.84	126.03	122.79	2,578.82	-3,627.95	4,721.25	4,576.26	144.98	32.564	
3,800.00	3,755.50	3,757.50	3,755.50	20.39	129.47	122.95	2,578.82	-3,627.95	4,730.24	4,581.30	148.94	31.759	
3,900.00	3,854.15	3,856.15	3,854.15	20.95	132.91	123.12	2,578.82	-3,627.95	4,739.26	4,586.37	152.90	30.996	
4,000.00	3,952.79	3,954.79	3,952.79	21.50	136.36	123.28	2,578.82	-3,627.95	4,748.33	4,591.48	156.86	30.272	
4,100.00	4,051.44	4,053.44	4,051.44	22.05	139.80	123.45	2,578.82	-3,627.95	4,757.44	4,596.63	160.81	29.584	
4,200.00	4,150.08	4,152.08	4,150.08	22.61	143.24	123.61	2,578.82	-3,627.95	4,766.59	4,601.81	164.77	28.929	
4,300.00	4,248.73	4,250.73	4,248.73	23.16	146.68	123.77	2,578.82	-3,627.95	4,775.77	4,607.04	168.73	28.305	
4,400.00	4,347.38	4,349.38	4,347.38	23.72	150.13	123.93	2,578.82	-3,627.95	4,784.99	4,612.31	172.68	27.709	
4,500.00	4,446.02	4,448.02	4,446.02	24.27	153.57	124.10	2,578.82	-3,627.95	4,794.25	4,617.61	176.64	27.141	
4,600.00	4,544.67	4,546.67	4,544.67	24.83	157.01	124.26	2,578.82	-3,627.95	4,803.55	4,622.96	180.60	26.598	
4,700.00	4,643.31	4,645.31	4,643.31	25.39	160.46	124.42	2,578.82	-3,627.95	4,812.89	4,628.34	184.55	26.079	
4,800.00	4,741.96	4,743.96	4,741.96	25.94	163.90	124.58	2,578.82	-3,627.95	4,822.27	4,633.76	188.51	25.581	
4,900.00	4,840.60	4,842.60	4,840.60	26.50	167.34	124.73	2,578.82	-3,627.95	4,831.68	4,639.22	192.47	25.104	
5,000.00	4,939.25	4,941.25	4,939.25	27.05	170.79	124.89	2,578.82	-3,627.95	4,841.13	4,644.71	196.42	24.647	
5,100.00	5,037.90	5,039.90	5,037.90	27.61	174.23	125.05	2,578.82	-3,627.95	4,850.62	4,650.24	200.38	24.208	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,138.54	5,136.54	28.17	177.67	125.21	2,578.82	-3,627.95	4,860.14	4,655.81	204.33	23.786		
5,300.00	5,235.19	5,237.19	5,235.19	28.72	181.11	125.36	2,578.82	-3,627.95	4,869.70	4,661.42	208.29	23.380		
5,400.00	5,333.83	5,335.83	5,333.83	29.28	184.56	125.52	2,578.82	-3,627.95	4,879.30	4,667.06	212.24	22.990		
5,500.00	5,432.48	5,434.48	5,432.48	29.84	188.00	125.67	2,578.82	-3,627.95	4,888.93	4,672.74	216.19	22.614		
5,600.00	5,531.12	5,533.12	5,531.12	30.40	191.44	125.83	2,578.82	-3,627.95	4,898.60	4,678.46	220.15	22.251		
5,700.00	5,629.77	5,631.77	5,629.77	30.95	194.89	125.98	2,578.82	-3,627.95	4,908.31	4,684.21	224.10	21.902		
5,800.00	5,728.41	5,730.41	5,728.41	31.51	198.33	126.13	2,578.82	-3,627.95	4,918.05	4,690.00	228.05	21.565		
5,900.00	5,827.06	5,829.06	5,827.06	32.07	201.77	126.29	2,578.82	-3,627.95	4,927.82	4,695.82	232.01	21.240		
6,000.00	5,925.71	5,927.71	5,925.71	32.63	205.22	126.44	2,578.82	-3,627.95	4,937.64	4,701.68	235.96	20.926		
6,100.00	6,024.35	6,026.35	6,024.35	33.19	208.66	126.59	2,578.82	-3,627.95	4,947.48	4,707.57	239.91	20.622		
6,200.00	6,123.00	6,125.00	6,123.00	33.74	212.10	126.74	2,578.82	-3,627.95	4,957.36	4,713.50	243.86	20.329		
6,300.00	6,221.64	6,223.64	6,221.64	34.30	215.55	126.89	2,578.82	-3,627.95	4,967.28	4,719.47	247.81	20.045		
6,400.00	6,320.29	6,322.29	6,320.29	34.86	218.99	127.04	2,578.82	-3,627.95	4,977.23	4,725.46	251.76	19.770		
6,500.00	6,418.93	6,420.93	6,418.93	35.42	222.43	127.19	2,578.82	-3,627.95	4,987.21	4,731.50	255.71	19.503		
6,600.00	6,517.58	6,519.58	6,517.58	35.98	225.88	127.34	2,578.82	-3,627.95	4,997.23	4,737.57	259.66	19.245		
6,700.00	6,616.23	6,618.23	6,616.23	36.54	229.32	127.49	2,578.82	-3,627.95	5,007.28	4,743.67	263.61	18.995		
6,800.00	6,714.51	6,716.51	6,714.51	37.10	232.75	92.60	2,578.82	-3,627.95	5,013.60	4,746.03	267.57	18.737		
6,900.00	6,810.42	6,812.42	6,810.42	37.66	236.10	74.49	2,578.82	-3,627.95	5,009.23	4,737.72	271.51	18.450		
7,000.00	6,901.58	6,903.58	6,901.58	38.21	239.28	67.69	2,578.82	-3,627.95	4,994.30	4,718.97	275.32	18.140		
7,100.00	6,985.76	6,987.76	6,985.76	38.76	242.22	65.60	2,578.82	-3,627.95	4,969.40	4,690.45	278.95	17.815		
7,200.00	7,060.88	7,062.88	7,060.88	39.32	244.84	66.14	2,578.82	-3,627.95	4,935.40	4,653.08	282.32	17.481		
7,300.00	7,125.09	7,127.09	7,125.09	39.90	247.08	68.52	2,578.82	-3,627.95	4,893.43	4,608.02	285.42	17.145		
7,400.00	7,176.81	7,178.81	7,176.81	40.55	248.89	72.36	2,578.82	-3,627.95	4,844.79	4,556.59	288.19	16.811		
7,500.00	7,214.77	7,216.77	7,214.77	41.30	250.21	77.39	2,578.82	-3,627.95	4,790.90	4,500.28	290.62	16.485		
7,600.00	7,238.02	7,240.02	7,238.02	42.22	251.03	83.34	2,578.82	-3,627.95	4,733.28	4,440.60	292.68	16.172		
7,700.00	7,246.01	7,248.01	7,246.01	43.32	251.30	89.89	2,578.82	-3,627.95	4,673.47	4,379.13	294.34	15.878		
7,800.00	7,245.50	7,247.50	7,245.50	44.65	251.29	90.22	2,578.82	-3,627.95	4,613.65	4,317.82	295.83	15.596		
7,900.00	7,244.97	7,246.97	7,244.97	46.21	251.27	90.21	2,578.82	-3,627.95	4,555.23	4,257.77	297.46	15.314		
8,000.00	7,244.44	7,246.44	7,244.44	47.99	251.25	90.21	2,578.82	-3,627.95	4,498.28	4,199.05	299.24	15.033		
8,100.00	7,243.91	7,245.91	7,243.91	49.96	251.23	90.20	2,578.82	-3,627.95	4,442.85	4,141.71	301.15	14.753		
8,200.00	7,243.39	7,245.39	7,243.39	52.10	251.21	90.19	2,578.82	-3,627.95	4,389.00	4,085.81	303.19	14.476		
8,300.00	7,242.86	7,244.86	7,242.86	54.38	251.19	90.18	2,578.82	-3,627.95	4,336.79	4,031.44	305.35	14.203		
8,400.00	7,242.33	7,244.33	7,242.33	56.78	251.18	90.17	2,578.82	-3,627.95	4,286.27	3,978.64	307.64	13.933		
8,500.00	7,241.80	7,243.80	7,241.80	59.28	251.16	90.17	2,578.82	-3,627.95	4,237.52	3,927.49	310.03	13.668		
8,600.00	7,241.27	7,243.27	7,241.27	61.88	251.14	90.16	2,578.82	-3,627.95	4,190.58	3,878.05	312.53	13.409		
8,700.00	7,240.74	7,242.74	7,240.74	64.54	251.12	90.15	2,578.82	-3,627.95	4,145.52	3,830.40	315.12	13.155		
8,800.00	7,240.21	7,242.21	7,240.21	67.27	251.10	90.14	2,578.82	-3,627.95	4,102.41	3,784.61	317.80	12.909		
8,900.00	7,239.68	7,241.68	7,239.68	70.06	251.08	90.13	2,578.82	-3,627.95	4,061.30	3,740.73	320.56	12.669		
9,000.00	7,239.16	7,241.16	7,239.16	72.89	251.07	90.12	2,578.82	-3,627.95	4,022.25	3,698.86	323.40	12.438		
9,100.00	7,238.63	7,240.63	7,238.63	75.77	251.05	90.12	2,578.82	-3,627.95	3,985.34	3,659.04	326.30	12.214		
9,200.00	7,238.10	7,240.10	7,238.10	78.69	251.03	90.11	2,578.82	-3,627.95	3,950.61	3,621.36	329.25	11.999		
9,300.00	7,237.57	7,239.57	7,237.57	81.64	251.01	90.10	2,578.82	-3,627.95	3,918.13	3,585.87	332.26	11.793		
9,400.00	7,237.04	7,239.04	7,237.04	84.62	250.99	90.09	2,578.82	-3,627.95	3,887.94	3,552.65	335.30	11.595		
9,500.00	7,236.51	7,238.51	7,236.51	87.63	250.97	90.08	2,578.82	-3,627.95	3,860.12	3,521.75	338.37	11.408		
9,600.00	7,235.98	7,237.98	7,235.98	90.66	250.95	90.08	2,578.82	-3,627.95	3,834.70	3,493.23	341.46	11.230		
9,700.00	7,235.45	7,237.45	7,235.45	93.72	250.94	90.07	2,578.82	-3,627.95	3,811.73	3,467.16	344.57	11.062		
9,800.00	7,234.93	7,236.93	7,234.93	96.79	250.92	90.06	2,578.82	-3,627.95	3,791.26	3,443.59	347.67	10.905		
9,900.00	7,234.40	7,236.40	7,234.40	99.88	250.90	90.05	2,578.82	-3,627.95	3,773.34	3,422.56	350.77	10.757		
10,000.00	7,233.87	7,235.87	7,233.87	102.98	250.88	90.04	2,578.82	-3,627.95	3,757.99	3,404.13	353.86	10.620		
10,100.00	7,233.34	7,235.34	7,233.34	106.10	250.86	90.03	2,578.82	-3,627.95	3,745.24	3,388.33	356.91	10.493		
10,200.00	7,232.81	7,234.81	7,232.81	109.23	250.84	90.03	2,578.82	-3,627.95	3,735.14	3,375.20	359.93	10.377		
10,300.00	7,232.28	7,234.28	7,232.28	112.38	250.83	90.02	2,578.82	-3,627.95	3,727.68	3,364.77	362.91	10.272		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,233.75	7,231.75	115.53	250.81	90.01	2,578.82	-3,627.95	3,722.90	3,357.07	365.83	10.177		
10,500.00	7,231.23	7,233.23	7,231.23	118.70	250.79	90.00	2,578.82	-3,627.95	3,720.81	3,352.11	368.70	10.092		
10,528.06	7,231.08	7,233.08	7,231.08	119.59	250.78	90.00	2,578.82	-3,627.95	3,720.70	3,351.21	369.49	10.070 CC		
10,600.00	7,230.70	7,232.70	7,230.70	121.87	250.77	89.99	2,578.82	-3,627.95	3,721.40	3,349.90	371.49	10.017 ES		
10,700.00	7,230.17	7,232.17	7,230.17	125.05	250.75	89.99	2,578.82	-3,627.95	3,724.67	3,350.46	374.21	9.953		
10,800.00	7,229.64	7,231.64	7,229.64	128.25	250.73	89.98	2,578.82	-3,627.95	3,730.62	3,353.78	376.85	9.900		
10,900.00	7,229.11	7,231.11	7,229.11	131.44	250.71	89.97	2,578.82	-3,627.95	3,739.24	3,359.85	379.40	9.856		
11,000.00	7,228.58	7,230.58	7,228.58	134.65	250.70	89.96	2,578.82	-3,627.95	3,750.51	3,368.65	381.86	9.822		
11,100.00	7,228.05	7,230.05	7,228.05	137.86	250.68	89.95	2,578.82	-3,627.95	3,764.40	3,380.18	384.22	9.798		
11,200.00	7,227.52	7,229.52	7,227.52	141.08	250.66	89.95	2,578.82	-3,627.95	3,780.89	3,394.41	386.48	9.783		
11,300.00	7,227.00	7,229.00	7,227.00	144.30	250.64	89.94	2,578.82	-3,627.95	3,799.93	3,411.30	388.63	9.778 SF		
11,400.00	7,226.47	7,228.47	7,226.47	147.52	250.62	89.93	2,578.82	-3,627.95	3,821.50	3,430.81	390.69	9.781		
11,500.00	7,225.94	7,227.94	7,225.94	150.76	250.60	89.92	2,578.82	-3,627.95	3,845.55	3,452.92	392.63	9.794		
11,600.00	7,225.41	7,227.41	7,225.41	153.99	250.59	89.91	2,578.82	-3,627.95	3,872.03	3,477.56	394.47	9.816		
11,700.00	7,224.88	7,226.88	7,224.88	157.23	250.57	89.90	2,578.82	-3,627.95	3,900.90	3,504.69	396.21	9.846		
11,800.00	7,224.35	7,226.35	7,224.35	160.48	250.55	89.90	2,578.82	-3,627.95	3,932.10	3,534.27	397.83	9.884		
11,900.00	7,223.82	7,225.82	7,223.82	163.72	250.53	89.89	2,578.82	-3,627.95	3,965.57	3,566.22	399.35	9.930		
12,000.00	7,223.29	7,225.29	7,223.29	166.98	250.51	89.88	2,578.82	-3,627.95	4,001.27	3,600.49	400.77	9.984		
12,100.00	7,222.77	7,224.77	7,222.77	170.23	250.49	89.87	2,578.82	-3,627.95	4,039.12	3,637.03	402.09	10.045		
12,200.00	7,222.24	7,224.24	7,222.24	173.49	250.47	89.86	2,578.82	-3,627.95	4,079.08	3,675.77	403.31	10.114		
12,300.00	7,221.71	7,223.71	7,221.71	176.75	250.46	89.86	2,578.82	-3,627.95	4,121.08	3,716.64	404.44	10.190		
12,400.00	7,221.18	7,223.18	7,221.18	180.01	250.44	89.85	2,578.82	-3,627.95	4,165.05	3,759.58	405.48	10.272		
12,500.00	7,220.65	7,222.65	7,220.65	183.28	250.42	89.84	2,578.82	-3,627.95	4,210.94	3,804.52	406.42	10.361		
12,600.00	7,220.12	7,222.12	7,220.12	186.54	250.40	89.83	2,578.82	-3,627.95	4,258.69	3,851.40	407.28	10.456		
12,700.00	7,219.59	7,221.59	7,219.59	189.81	250.38	89.82	2,578.82	-3,627.95	4,308.22	3,900.16	408.07	10.558		
12,800.00	7,219.06	7,221.06	7,219.06	193.09	250.36	89.82	2,578.82	-3,627.95	4,359.49	3,950.72	408.77	10.665		
12,900.00	7,218.54	7,220.54	7,218.54	196.36	250.35	89.81	2,578.82	-3,627.95	4,412.43	4,003.03	409.40	10.778		
13,000.00	7,218.01	7,220.01	7,218.01	199.64	250.33	89.80	2,578.82	-3,627.95	4,466.98	4,057.01	409.97	10.896		
13,100.00	7,217.48	7,219.48	7,217.48	202.92	250.31	89.79	2,578.82	-3,627.95	4,523.08	4,112.62	410.46	11.019		
13,200.00	7,216.95	7,218.95	7,216.95	206.20	250.29	89.78	2,578.82	-3,627.95	4,580.68	4,169.78	410.90	11.148		
13,300.00	7,216.42	7,218.42	7,216.42	209.48	250.27	89.77	2,578.82	-3,627.95	4,639.72	4,228.45	411.28	11.281		
13,400.00	7,215.89	7,217.89	7,215.89	212.76	250.25	89.77	2,578.82	-3,627.95	4,700.15	4,288.55	411.60	11.419		
13,500.00	7,215.36	7,217.36	7,215.36	216.05	250.23	89.76	2,578.82	-3,627.95	4,761.91	4,350.04	411.87	11.562		
13,600.00	7,214.84	7,216.84	7,214.84	219.33	250.22	89.75	2,578.82	-3,627.95	4,824.95	4,412.85	412.10	11.708		
13,700.00	7,214.31	7,216.31	7,214.31	222.62	250.20	89.74	2,578.82	-3,627.95	4,889.22	4,476.94	412.28	11.859		
13,800.00	7,213.78	7,215.78	7,213.78	225.91	250.18	89.73	2,578.82	-3,627.95	4,954.68	4,542.26	412.42	12.014		
13,900.00	7,213.25	7,215.25	7,213.25	229.20	250.16	89.73	2,578.82	-3,627.95	5,021.28	4,608.76	412.52	12.172		
14,000.00	7,212.72	7,214.72	7,212.72	232.49	250.14	89.72	2,578.82	-3,627.95	5,088.97	4,676.38	412.59	12.334		
14,100.00	7,212.19	7,214.19	7,212.19	235.79	250.12	89.71	2,578.82	-3,627.95	5,157.71	4,745.09	412.62	12.500		
14,200.00	7,211.66	7,213.66	7,211.66	239.08	250.11	89.70	2,578.82	-3,627.95	5,227.46	4,814.84	412.62	12.669		
14,300.00	7,211.13	7,213.13	7,211.13	242.38	250.09	89.69	2,578.82	-3,627.95	5,298.18	4,885.58	412.60	12.841		
14,400.00	7,210.61	7,212.61	7,210.61	245.67	250.07	89.68	2,578.82	-3,627.95	5,369.83	4,957.28	412.55	13.016		
14,500.00	7,210.08	7,212.08	7,210.08	248.97	250.05	89.68	2,578.82	-3,627.95	5,442.38	5,029.90	412.47	13.194		
14,600.00	7,209.55	7,211.55	7,209.55	252.27	250.03	89.67	2,578.82	-3,627.95	5,515.78	5,103.40	412.38	13.376		
14,700.00	7,209.02	7,211.02	7,209.02	255.57	250.01	89.66	2,578.82	-3,627.95	5,590.01	5,177.75	412.26	13.559		
14,800.00	7,208.49	7,210.49	7,208.49	258.87	249.99	89.65	2,578.82	-3,627.95	5,665.03	5,252.90	412.13	13.746		
14,900.00	7,207.96	7,209.96	7,207.96	262.17	249.98	89.64	2,578.82	-3,627.95	5,740.81	5,328.83	411.98	13.935		
15,000.00	7,207.43	7,209.43	7,207.43	265.47	249.96	89.64	2,578.82	-3,627.95	5,817.32	5,405.51	411.81	14.126		
15,081.89	7,207.00	7,209.00	7,207.00	268.17	249.94	89.63	2,578.82	-3,627.95	5,880.51	5,468.84	411.67	14.285		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	38.00	3.28	3.28	-62.23	2,549.89	-4,843.30	5,473.66					
100.00	100.00	62.00	100.00	3.28	3.45	-62.23	2,549.89	-4,843.30	5,473.53	5,466.79	6.74	812.259		
200.00	200.00	162.00	200.00	3.34	5.10	-62.23	2,549.89	-4,843.30	5,473.53	5,465.09	8.44	648.480		
300.00	299.98	261.98	299.98	3.44	8.09	109.73	2,549.89	-4,843.30	5,474.12	5,462.58	11.53	474.604		
400.00	399.84	361.84	399.84	3.59	11.37	109.75	2,549.89	-4,843.30	5,475.89	5,460.93	14.96	366.028		
500.00	499.45	461.45	499.45	3.80	14.73	109.78	2,549.89	-4,843.30	5,478.84	5,460.31	18.53	295.690		
600.00	598.70	560.70	598.70	4.06	18.13	109.82	2,549.89	-4,843.30	5,483.00	5,460.82	22.18	247.175		
700.00	697.49	659.49	697.49	4.38	21.53	109.90	2,549.89	-4,843.30	5,488.32	5,462.42	25.90	211.919		
800.00	796.13	758.13	796.13	4.74	24.94	110.06	2,549.89	-4,843.30	5,493.99	5,464.33	29.67	185.193		
900.00	894.78	856.78	894.78	5.15	28.36	110.22	2,549.89	-4,843.30	5,499.71	5,466.23	33.48	164.287		
1,000.00	993.43	955.43	993.43	5.58	31.78	110.38	2,549.89	-4,843.30	5,505.47	5,468.15	37.32	147.527		
1,100.00	1,092.07	1,054.07	1,092.07	6.03	35.21	110.53	2,549.89	-4,843.30	5,511.27	5,470.08	41.19	133.817		
1,200.00	1,190.72	1,152.72	1,190.72	6.50	38.64	110.69	2,549.89	-4,843.30	5,517.11	5,472.04	45.07	122.408		
1,300.00	1,289.36	1,251.36	1,289.36	6.98	42.07	110.85	2,549.89	-4,843.30	5,523.00	5,474.03	48.97	112.777		
1,400.00	1,388.01	1,350.01	1,388.01	7.47	45.50	111.01	2,549.89	-4,843.30	5,528.93	5,476.04	52.89	104.543		
1,500.00	1,486.65	1,448.65	1,486.65	7.97	48.94	111.16	2,549.89	-4,843.30	5,534.90	5,478.09	56.81	97.428		
1,600.00	1,585.30	1,547.30	1,585.30	8.48	52.37	111.32	2,549.89	-4,843.30	5,540.91	5,480.17	60.74	91.221		
1,700.00	1,683.94	1,645.94	1,683.94	9.00	55.81	111.47	2,549.89	-4,843.30	5,546.97	5,482.29	64.68	85.761		
1,800.00	1,782.59	1,744.59	1,782.59	9.52	59.25	111.63	2,549.89	-4,843.30	5,553.06	5,484.44	68.62	80.921		
1,900.00	1,881.24	1,843.24	1,881.24	10.05	62.69	111.79	2,549.89	-4,843.30	5,559.20	5,486.63	72.57	76.603		
2,000.00	1,979.88	1,941.88	1,979.88	10.58	66.13	111.94	2,549.89	-4,843.30	5,565.38	5,488.86	76.52	72.728		
2,100.00	2,078.53	2,040.53	2,078.53	11.11	69.57	112.09	2,549.89	-4,843.30	5,571.60	5,491.13	80.48	69.231		
2,200.00	2,177.17	2,139.17	2,177.17	11.64	73.01	112.25	2,549.89	-4,843.30	5,577.87	5,493.43	84.44	66.060		
2,300.00	2,275.82	2,237.82	2,275.82	12.18	76.45	112.40	2,549.89	-4,843.30	5,584.17	5,495.77	88.40	63.172		
2,400.00	2,374.46	2,336.46	2,374.46	12.72	79.89	112.56	2,549.89	-4,843.30	5,590.52	5,498.16	92.36	60.531		
2,500.00	2,473.11	2,435.11	2,473.11	13.26	83.33	112.71	2,549.89	-4,843.30	5,596.90	5,500.58	96.32	58.106		
2,600.00	2,571.76	2,533.76	2,571.76	13.80	86.77	112.86	2,549.89	-4,843.30	5,603.33	5,503.04	100.29	55.873		
2,700.00	2,670.40	2,632.40	2,670.40	14.35	90.21	113.02	2,549.89	-4,843.30	5,609.80	5,505.54	104.25	53.809		
2,800.00	2,769.05	2,731.05	2,769.05	14.89	93.65	113.17	2,549.89	-4,843.30	5,616.30	5,508.08	108.22	51.896		
2,900.00	2,867.69	2,829.69	2,867.69	15.44	97.09	113.32	2,549.89	-4,843.30	5,622.85	5,510.66	112.19	50.119		
3,000.00	2,966.34	2,928.34	2,966.34	15.99	100.54	113.47	2,549.89	-4,843.30	5,629.44	5,513.28	116.16	48.463		
3,100.00	3,064.98	3,026.98	3,064.98	16.53	103.98	113.62	2,549.89	-4,843.30	5,636.07	5,515.94	120.13	46.917		
3,200.00	3,163.63	3,125.63	3,163.63	17.08	107.42	113.77	2,549.89	-4,843.30	5,642.74	5,518.64	124.10	45.470		
3,300.00	3,262.27	3,224.27	3,262.27	17.63	110.86	113.92	2,549.89	-4,843.30	5,649.44	5,521.37	128.07	44.112		
3,400.00	3,360.92	3,322.92	3,360.92	18.18	114.30	114.07	2,549.89	-4,843.30	5,656.19	5,524.15	132.04	42.837		
3,500.00	3,459.57	3,421.57	3,459.57	18.74	117.75	114.22	2,549.89	-4,843.30	5,662.98	5,526.96	136.01	41.636		
3,600.00	3,558.21	3,520.21	3,558.21	19.29	121.19	114.37	2,549.89	-4,843.30	5,669.80	5,529.82	139.98	40.503		
3,700.00	3,656.86	3,618.86	3,656.86	19.84	124.63	114.52	2,549.89	-4,843.30	5,676.67	5,532.71	143.96	39.433		
3,800.00	3,755.50	3,717.50	3,755.50	20.39	128.07	114.67	2,549.89	-4,843.30	5,683.57	5,535.65	147.93	38.421		
3,900.00	3,854.15	3,816.15	3,854.15	20.95	131.52	114.82	2,549.89	-4,843.30	5,690.52	5,538.62	151.90	37.462		
4,000.00	3,952.79	3,914.79	3,952.79	21.50	134.96	114.97	2,549.89	-4,843.30	5,697.50	5,541.63	155.87	36.552		
4,100.00	4,051.44	4,013.44	4,051.44	22.05	138.40	115.12	2,549.89	-4,843.30	5,704.52	5,544.68	159.84	35.688		
4,200.00	4,150.08	4,112.08	4,150.08	22.61	141.85	115.26	2,549.89	-4,843.30	5,711.58	5,547.76	163.82	34.866		
4,300.00	4,248.73	4,210.73	4,248.73	23.16	145.29	115.41	2,549.89	-4,843.30	5,718.68	5,550.89	167.79	34.083		
4,400.00	4,347.38	4,309.38	4,347.38	23.72	148.73	115.56	2,549.89	-4,843.30	5,725.81	5,554.05	171.76	33.336		
4,500.00	4,446.02	4,408.02	4,446.02	24.27	152.17	115.70	2,549.89	-4,843.30	5,732.99	5,557.25	175.73	32.623		
4,600.00	4,544.67	4,506.67	4,544.67	24.83	155.62	115.85	2,549.89	-4,843.30	5,740.20	5,560.49	179.70	31.942		
4,700.00	4,643.31	4,605.31	4,643.31	25.39	159.06	115.99	2,549.89	-4,843.30	5,747.45	5,563.77	183.68	31.291		
4,800.00	4,741.96	4,703.96	4,741.96	25.94	162.50	116.14	2,549.89	-4,843.30	5,754.73	5,567.09	187.65	30.668		
4,900.00	4,840.60	4,802.60	4,840.60	26.50	165.95	116.28	2,549.89	-4,843.30	5,762.06	5,570.44	191.62	30.070		
5,000.00	4,939.25	4,901.25	4,939.25	27.05	169.39	116.43	2,549.89	-4,843.30	5,769.42	5,573.83	195.59	29.497		
5,100.00	5,037.90	5,000.10	5,037.90	27.61	172.84	116.57	2,549.89	-4,843.30	5,776.82	5,577.25	199.57	28.946		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,101.46	5,136.54	28.17	176.38	116.72	2,549.89	-4,843.30	5,784.26	5,580.62	203.63	28.405		
5,300.00	5,235.19	5,202.81	5,235.19	28.72	179.91	116.86	2,549.89	-4,843.30	5,791.73	5,584.03	207.70	27.885		
5,400.00	5,333.83	5,304.17	5,333.83	29.28	183.45	117.00	2,549.89	-4,843.30	5,799.24	5,587.47	211.76	27.385		
5,500.00	5,432.48	5,405.52	5,432.48	29.84	186.99	117.15	2,549.89	-4,843.30	5,806.79	5,590.96	215.83	26.905		
5,600.00	5,531.12	5,506.88	5,531.12	30.40	190.53	117.29	2,549.89	-4,843.30	5,814.37	5,594.47	219.89	26.442		
5,700.00	5,629.77	5,608.23	5,629.77	30.95	194.07	117.43	2,549.89	-4,843.30	5,821.99	5,598.03	223.96	25.996		
5,800.00	5,728.41	5,709.59	5,728.41	31.51	197.60	117.57	2,549.89	-4,843.30	5,829.64	5,601.62	228.02	25.566		
5,900.00	5,827.06	5,789.06	5,827.06	32.07	200.38	117.71	2,549.89	-4,843.30	5,837.33	5,606.01	231.32	25.235		
6,000.00	5,925.71	5,887.71	5,925.71	32.63	203.82	117.85	2,549.89	-4,843.30	5,845.06	5,609.77	235.29	24.842		
6,100.00	6,024.35	5,986.35	6,024.35	33.19	207.26	117.99	2,549.89	-4,843.30	5,852.82	5,613.57	239.26	24.462		
6,200.00	6,123.00	6,085.00	6,123.00	33.74	210.71	118.13	2,549.89	-4,843.30	5,860.62	5,617.40	243.23	24.095		
6,300.00	6,221.64	6,183.64	6,221.64	34.30	214.15	118.27	2,549.89	-4,843.30	5,868.46	5,621.26	247.20	23.740		
6,400.00	6,320.29	6,282.29	6,320.29	34.86	217.59	118.41	2,549.89	-4,843.30	5,876.33	5,625.16	251.16	23.397		
6,500.00	6,418.93	6,380.93	6,418.93	35.42	221.04	118.55	2,549.89	-4,843.30	5,884.23	5,629.10	255.13	23.064		
6,600.00	6,517.58	6,479.58	6,517.58	35.98	224.48	118.69	2,549.89	-4,843.30	5,892.17	5,633.08	259.10	22.741		
6,700.00	6,616.23	6,578.23	6,616.23	36.54	227.92	118.83	2,549.89	-4,843.30	5,900.15	5,637.08	263.06	22.429		
6,800.00	6,714.51	6,676.51	6,714.51	37.10	231.36	84.09	2,549.89	-4,843.30	5,903.85	5,636.81	267.04	22.108		
6,900.00	6,810.42	6,772.42	6,810.42	37.66	234.70	66.12	2,549.89	-4,843.30	5,895.32	5,624.34	270.99	21.755		
7,000.00	6,901.58	6,863.58	6,901.58	38.21	237.89	59.42	2,549.89	-4,843.30	5,874.73	5,599.93	274.81	21.378		
7,100.00	6,985.76	6,947.76	6,985.76	38.76	240.82	57.48	2,549.89	-4,843.30	5,842.73	5,564.30	278.43	20.985		
7,200.00	7,060.88	7,022.88	7,060.88	39.32	243.45	58.29	2,549.89	-4,843.30	5,800.26	5,518.47	281.79	20.584		
7,300.00	7,125.09	7,087.09	7,125.09	39.90	245.69	61.17	2,549.89	-4,843.30	5,748.55	5,463.71	284.84	20.182		
7,400.00	7,176.81	7,138.81	7,176.81	40.55	247.49	65.92	2,549.89	-4,843.30	5,689.02	5,401.48	287.54	19.785		
7,500.00	7,214.77	7,176.77	7,214.77	41.30	248.82	72.44	2,549.89	-4,843.30	5,623.28	5,333.42	289.86	19.400		
7,600.00	7,238.02	7,200.02	7,238.02	42.22	249.63	80.55	2,549.89	-4,843.30	5,553.06	5,261.29	291.77	19.032		
7,700.00	7,246.01	7,208.01	7,246.01	43.32	249.91	89.84	2,549.89	-4,843.30	5,480.12	5,186.89	293.23	18.689		
7,800.00	7,245.50	7,207.50	7,245.50	44.65	249.89	90.32	2,549.89	-4,843.30	5,406.75	5,112.27	294.49	18.360		
7,900.00	7,244.97	7,206.97	7,244.97	46.21	249.87	90.31	2,549.89	-4,843.30	5,334.26	5,038.39	295.87	18.029		
8,000.00	7,244.44	7,206.44	7,244.44	47.99	249.85	90.31	2,549.89	-4,843.30	5,262.66	4,965.30	297.36	17.698		
8,100.00	7,243.91	7,205.91	7,243.91	49.96	249.83	90.30	2,549.89	-4,843.30	5,192.00	4,893.03	298.98	17.366		
8,200.00	7,243.39	7,205.39	7,243.39	52.10	249.82	90.29	2,549.89	-4,843.30	5,122.33	4,821.62	300.71	17.034		
8,300.00	7,242.86	7,204.86	7,242.86	54.38	249.80	90.28	2,549.89	-4,843.30	5,053.66	4,751.11	302.55	16.704		
8,400.00	7,242.33	7,204.33	7,242.33	56.78	249.78	90.27	2,549.89	-4,843.30	4,986.06	4,681.56	304.51	16.374		
8,500.00	7,241.80	7,203.80	7,241.80	59.28	249.76	90.27	2,549.89	-4,843.30	4,919.57	4,612.99	306.57	16.047		
8,600.00	7,241.27	7,203.27	7,241.27	61.88	249.74	90.26	2,549.89	-4,843.30	4,854.22	4,545.47	308.75	15.722		
8,700.00	7,240.74	7,202.74	7,240.74	64.54	249.72	90.25	2,549.89	-4,843.30	4,790.07	4,479.04	311.03	15.401		
8,800.00	7,240.21	7,202.21	7,240.21	67.27	249.71	90.24	2,549.89	-4,843.30	4,727.16	4,413.75	313.41	15.083		
8,900.00	7,239.68	7,201.68	7,239.68	70.06	249.69	90.23	2,549.89	-4,843.30	4,665.55	4,349.66	315.89	14.769		
9,000.00	7,239.16	7,201.16	7,239.16	72.89	249.67	90.22	2,549.89	-4,843.30	4,605.28	4,286.81	318.47	14.461		
9,100.00	7,238.63	7,200.63	7,238.63	75.77	249.65	90.22	2,549.89	-4,843.30	4,546.42	4,225.27	321.15	14.157		
9,200.00	7,238.10	7,200.10	7,238.10	78.69	249.63	90.21	2,549.89	-4,843.30	4,489.01	4,165.10	323.91	13.859		
9,300.00	7,237.57	7,200.43	7,237.57	81.64	249.64	90.20	2,549.89	-4,843.30	4,433.12	4,106.32	326.79	13.566		
9,400.00	7,237.04	7,200.96	7,237.04	84.62	249.66	90.19	2,549.89	-4,843.30	4,378.79	4,049.03	329.77	13.278		
9,500.00	7,236.51	7,201.49	7,236.51	87.63	249.68	90.18	2,549.89	-4,843.30	4,326.10	3,993.28	332.82	12.998		
9,600.00	7,235.98	7,202.02	7,235.98	90.66	249.70	90.18	2,549.89	-4,843.30	4,275.09	3,939.15	335.95	12.726		
9,700.00	7,235.45	7,202.55	7,235.45	93.72	249.72	90.17	2,549.89	-4,843.30	4,225.84	3,886.70	339.14	12.460		
9,800.00	7,234.93	7,203.07	7,234.93	96.79	249.74	90.16	2,549.89	-4,843.30	4,178.40	3,835.99	342.41	12.203		
9,900.00	7,234.40	7,203.60	7,234.40	99.88	249.75	90.15	2,549.89	-4,843.30	4,132.83	3,787.10	345.73	11.954		
10,000.00	7,233.87	7,204.13	7,233.87	102.98	249.77	90.14	2,549.89	-4,843.30	4,089.21	3,740.10	349.10	11.713		
10,100.00	7,233.34	7,204.66	7,233.34	106.10	249.79	90.13	2,549.89	-4,843.30	4,047.58	3,695.05	352.53	11.482		
10,200.00	7,232.81	7,205.19	7,232.81	109.23	249.81	90.13	2,549.89	-4,843.30	4,008.02	3,652.03	355.99	11.259		
10,300.00	7,232.28	7,205.72	7,232.28	112.38	249.83	90.12	2,549.89	-4,843.30	3,970.58	3,611.09	359.48	11.045		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	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	7,231.75	7,206.25	7,231.75	115.53	249.85	90.11	2,549.89	-4,843.30	3,935.32	3,572.32	363.00	10.841		
10,500.00	7,231.23	7,206.78	7,231.23	118.70	249.87	90.10	2,549.89	-4,843.30	3,902.32	3,535.78	366.54	10.646		
10,600.00	7,230.70	7,207.30	7,230.70	121.87	249.88	90.09	2,549.89	-4,843.30	3,871.61	3,501.53	370.08	10.462		
10,700.00	7,230.17	7,207.83	7,230.17	125.05	249.90	90.09	2,549.89	-4,843.30	3,843.26	3,469.64	373.62	10.286		
10,800.00	7,229.64	7,208.36	7,229.64	128.25	249.92	90.08	2,549.89	-4,843.30	3,817.32	3,440.17	377.15	10.121		
10,900.00	7,229.11	7,208.89	7,229.11	131.44	249.94	90.07	2,549.89	-4,843.30	3,793.84	3,413.18	380.66	9.966		
11,000.00	7,228.58	7,209.42	7,228.58	134.65	249.96	90.06	2,549.89	-4,843.30	3,772.87	3,388.73	384.14	9.822		
11,100.00	7,228.05	7,209.95	7,228.05	137.86	249.98	90.05	2,549.89	-4,843.30	3,754.44	3,366.86	387.58	9.687		
11,200.00	7,227.52	7,189.52	7,227.52	141.08	249.26	90.04	2,549.89	-4,843.30	3,738.59	3,348.36	390.23	9.580		
11,300.00	7,227.00	7,189.00	7,227.00	144.30	249.24	90.04	2,549.89	-4,843.30	3,725.37	3,331.85	393.52	9.467		
11,400.00	7,226.47	7,188.47	7,226.47	147.52	249.23	90.03	2,549.89	-4,843.30	3,714.79	3,318.04	396.75	9.363		
11,500.00	7,225.94	7,187.94	7,225.94	150.76	249.21	90.02	2,549.89	-4,843.30	3,706.88	3,306.99	399.89	9.270		
11,600.00	7,225.41	7,187.41	7,225.41	153.99	249.19	90.01	2,549.89	-4,843.30	3,701.65	3,298.71	402.94	9.187		
11,700.00	7,224.88	7,186.88	7,224.88	157.23	249.17	90.00	2,549.89	-4,843.30	3,699.12	3,293.22	405.91	9.113		
11,743.58	7,224.65	7,186.65	7,224.65	158.65	249.16	90.00	2,549.89	-4,843.30	3,698.87	3,291.70	407.16	9.084 CC		
11,800.00	7,224.35	7,186.35	7,224.35	160.48	249.15	90.00	2,549.89	-4,843.30	3,699.30	3,290.53	408.76	9.050 ES		
11,900.00	7,223.82	7,185.82	7,223.82	163.72	249.13	89.99	2,549.89	-4,843.30	3,702.17	3,290.66	411.51	8.997		
12,000.00	7,223.29	7,185.29	7,223.29	166.98	249.12	89.98	2,549.89	-4,843.30	3,707.74	3,293.60	414.14	8.953		
12,100.00	7,222.77	7,184.77	7,222.77	170.23	249.10	89.97	2,549.89	-4,843.30	3,716.00	3,299.34	416.66	8.919		
12,200.00	7,222.24	7,184.24	7,222.24	173.49	249.08	89.96	2,549.89	-4,843.30	3,726.92	3,307.88	419.05	8.894		
12,300.00	7,221.71	7,183.71	7,221.71	176.75	249.06	89.95	2,549.89	-4,843.30	3,740.48	3,319.18	421.31	8.878		
12,400.00	7,221.18	7,183.18	7,221.18	180.01	249.04	89.95	2,549.89	-4,843.30	3,756.66	3,333.23	423.43	8.872 SF		
12,500.00	7,220.65	7,182.65	7,220.65	183.28	249.02	89.94	2,549.89	-4,843.30	3,775.42	3,349.99	425.43	8.874		
12,600.00	7,220.12	7,182.12	7,220.12	186.54	249.00	89.93	2,549.89	-4,843.30	3,796.72	3,369.42	427.30	8.885		
12,700.00	7,219.59	7,181.59	7,219.59	189.81	248.99	89.92	2,549.89	-4,843.30	3,820.52	3,391.49	429.03	8.905		
12,800.00	7,219.06	7,181.06	7,219.06	193.09	248.97	89.91	2,549.89	-4,843.30	3,846.77	3,416.14	430.63	8.933		
12,900.00	7,218.54	7,180.54	7,218.54	196.36	248.95	89.91	2,549.89	-4,843.30	3,875.42	3,443.32	432.10	8.969		
13,000.00	7,218.01	7,180.01	7,218.01	199.64	248.93	89.90	2,549.89	-4,843.30	3,906.43	3,472.98	433.44	9.013		
13,100.00	7,217.48	7,179.48	7,217.48	202.92	248.91	89.89	2,549.89	-4,843.30	3,939.73	3,505.06	434.66	9.064		
13,200.00	7,216.95	7,178.95	7,216.95	206.20	248.89	89.88	2,549.89	-4,843.30	3,975.26	3,539.50	435.76	9.123		
13,300.00	7,216.42	7,178.42	7,216.42	209.48	248.88	89.87	2,549.89	-4,843.30	4,012.98	3,576.24	436.74	9.188		
13,400.00	7,215.89	7,177.89	7,215.89	212.76	248.86	89.86	2,549.89	-4,843.30	4,052.81	3,615.20	437.61	9.261		
13,500.00	7,215.36	7,177.36	7,215.36	216.05	248.84	89.86	2,549.89	-4,843.30	4,094.70	3,656.33	438.37	9.341		
13,600.00	7,214.84	7,176.84	7,214.84	219.33	248.82	89.85	2,549.89	-4,843.30	4,138.58	3,699.55	439.03	9.427		
13,700.00	7,214.31	7,176.31	7,214.31	222.62	248.80	89.84	2,549.89	-4,843.30	4,184.39	3,744.80	439.59	9.519		
13,800.00	7,213.78	7,175.78	7,213.78	225.91	248.78	89.83	2,549.89	-4,843.30	4,232.06	3,792.01	440.06	9.617		
13,900.00	7,213.25	7,175.25	7,213.25	229.20	248.76	89.82	2,549.89	-4,843.30	4,281.55	3,841.11	440.43	9.721		
14,000.00	7,212.72	7,174.72	7,212.72	232.49	248.75	89.82	2,549.89	-4,843.30	4,332.77	3,892.04	440.73	9.831		
14,100.00	7,212.19	7,174.19	7,212.19	235.79	248.73	89.81	2,549.89	-4,843.30	4,385.68	3,944.73	440.95	9.946		
14,200.00	7,211.66	7,173.66	7,211.66	239.08	248.71	89.80	2,549.89	-4,843.30	4,440.21	3,999.11	441.10	10.066		
14,300.00	7,211.13	7,173.13	7,211.13	242.38	248.69	89.79	2,549.89	-4,843.30	4,496.30	4,055.13	441.17	10.192		
14,400.00	7,210.61	7,172.61	7,210.61	245.67	248.67	89.78	2,549.89	-4,843.30	4,553.90	4,112.71	441.19	10.322		
14,500.00	7,210.08	7,172.08	7,210.08	248.97	248.65	89.77	2,549.89	-4,843.30	4,612.95	4,171.80	441.15	10.457		
14,600.00	7,209.55	7,171.55	7,209.55	252.27	248.64	89.77	2,549.89	-4,843.30	4,673.39	4,232.34	441.05	10.596		
14,700.00	7,209.02	7,171.02	7,209.02	255.57	248.62	89.76	2,549.89	-4,843.30	4,735.17	4,294.26	440.91	10.740		
14,800.00	7,208.49	7,170.49	7,208.49	258.87	248.60	89.75	2,549.89	-4,843.30	4,798.24	4,357.52	440.71	10.887		
14,900.00	7,207.96	7,169.96	7,207.96	262.17	248.58	89.74	2,549.89	-4,843.30	4,862.54	4,422.06	440.48	11.039		
15,000.00	7,207.43	7,169.43	7,207.43	265.47	248.56	89.73	2,549.89	-4,843.30	4,928.04	4,487.83	440.21	11.195		
15,081.89	7,207.00	7,169.00	7,207.00	268.17	248.55	89.73	2,549.89	-4,843.30	4,982.53	4,542.57	439.96	11.325		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	65.00	3.28	3.28	-122.67	-4,071.75	-6,350.42	7,543.95					
100.00	100.00	35.00	100.00	3.28	3.34	-122.67	-4,071.75	-6,350.42	7,543.67	7,537.05	6.62	1,139.333		
200.00	200.00	135.00	200.00	3.34	4.42	-122.67	-4,071.75	-6,350.42	7,543.67	7,535.91	7.76	972.110		
300.00	299.98	234.98	299.98	3.44	7.24	49.32	-4,071.75	-6,350.42	7,542.53	7,531.85	10.68	706.057		
400.00	399.84	334.84	399.84	3.59	10.47	49.40	-4,071.75	-6,350.42	7,539.12	7,525.06	14.06	536.141		
500.00	499.45	434.45	499.45	3.80	13.82	49.54	-4,071.75	-6,350.42	7,533.45	7,515.83	17.61	427.781		
600.00	598.70	533.70	598.70	4.06	17.20	49.73	-4,071.75	-6,350.42	7,525.52	7,504.27	21.25	354.155		
700.00	697.49	632.49	697.49	4.38	20.60	49.93	-4,071.75	-6,350.42	7,515.45	7,490.50	24.95	301.245		
800.00	796.13	731.13	796.13	4.74	24.00	50.02	-4,071.75	-6,350.42	7,504.81	7,476.12	28.69	261.564		
900.00	894.78	829.78	894.78	5.15	27.42	50.12	-4,071.75	-6,350.42	7,494.20	7,461.72	32.48	230.756		
1,000.00	993.43	928.43	993.43	5.58	30.84	50.21	-4,071.75	-6,350.42	7,483.61	7,447.32	36.29	206.202		
1,100.00	1,092.07	1,027.07	1,092.07	6.03	34.27	50.31	-4,071.75	-6,350.42	7,473.04	7,432.91	40.13	186.207		
1,200.00	1,190.72	1,125.72	1,190.72	6.50	37.70	50.41	-4,071.75	-6,350.42	7,462.49	7,418.50	43.99	169.631		
1,300.00	1,289.36	1,224.36	1,289.36	6.98	41.13	50.50	-4,071.75	-6,350.42	7,451.96	7,404.09	47.87	155.679		
1,400.00	1,388.01	1,323.01	1,388.01	7.47	44.56	50.60	-4,071.75	-6,350.42	7,441.46	7,389.70	51.76	143.782		
1,500.00	1,486.65	1,421.65	1,486.65	7.97	48.00	50.70	-4,071.75	-6,350.42	7,430.97	7,375.32	55.65	133.522		
1,600.00	1,585.30	1,520.30	1,585.30	8.48	51.43	50.79	-4,071.75	-6,350.42	7,420.51	7,360.95	59.56	124.589		
1,700.00	1,683.94	1,618.94	1,683.94	9.00	54.87	50.89	-4,071.75	-6,350.42	7,410.06	7,346.59	63.47	116.742		
1,800.00	1,782.59	1,717.59	1,782.59	9.52	58.31	50.99	-4,071.75	-6,350.42	7,399.64	7,332.25	67.39	109.797		
1,900.00	1,881.24	1,816.24	1,881.24	10.05	61.75	51.09	-4,071.75	-6,350.42	7,389.24	7,317.92	71.32	103.608		
2,000.00	1,979.88	1,914.88	1,979.88	10.58	65.19	51.18	-4,071.75	-6,350.42	7,378.87	7,303.62	75.25	98.059		
2,100.00	2,078.53	2,013.53	2,078.53	11.11	68.63	51.28	-4,071.75	-6,350.42	7,368.51	7,289.33	79.18	93.057		
2,200.00	2,177.17	2,112.17	2,177.17	11.64	72.07	51.38	-4,071.75	-6,350.42	7,358.18	7,275.06	83.12	88.524		
2,300.00	2,275.82	2,210.82	2,275.82	12.18	75.51	51.48	-4,071.75	-6,350.42	7,347.87	7,260.81	87.06	84.399		
2,400.00	2,374.46	2,309.46	2,374.46	12.72	78.95	51.58	-4,071.75	-6,350.42	7,337.58	7,246.57	91.00	80.629		
2,500.00	2,473.11	2,408.11	2,473.11	13.26	82.39	51.68	-4,071.75	-6,350.42	7,327.31	7,232.36	94.95	77.171		
2,600.00	2,571.76	2,506.76	2,571.76	13.80	85.83	51.78	-4,071.75	-6,350.42	7,317.07	7,218.17	98.90	73.986		
2,700.00	2,670.40	2,605.40	2,670.40	14.35	89.27	51.88	-4,071.75	-6,350.42	7,306.84	7,204.00	102.85	71.046		
2,800.00	2,769.05	2,704.05	2,769.05	14.89	92.71	51.98	-4,071.75	-6,350.42	7,296.64	7,189.85	106.80	68.321		
2,900.00	2,867.69	2,802.69	2,867.69	15.44	96.15	52.08	-4,071.75	-6,350.42	7,286.47	7,175.72	110.75	65.791		
3,000.00	2,966.34	2,901.34	2,966.34	15.99	99.59	52.18	-4,071.75	-6,350.42	7,276.31	7,161.61	114.71	63.434		
3,100.00	3,064.98	3,000.02	3,064.98	16.53	103.04	52.28	-4,071.75	-6,350.42	7,266.18	7,147.52	118.66	61.233		
3,200.00	3,163.63	3,101.37	3,163.63	17.08	106.57	52.39	-4,071.75	-6,350.42	7,256.07	7,133.36	122.72	59.129		
3,300.00	3,262.27	3,202.73	3,262.27	17.63	110.11	52.49	-4,071.75	-6,350.42	7,245.99	7,119.22	126.77	57.159		
3,400.00	3,360.92	3,304.08	3,360.92	18.18	113.65	52.59	-4,071.75	-6,350.42	7,235.93	7,105.10	130.82	55.310		
3,500.00	3,459.57	3,405.43	3,459.57	18.74	117.18	52.69	-4,071.75	-6,350.42	7,225.89	7,091.01	134.88	53.573		
3,600.00	3,558.21	3,506.79	3,558.21	19.29	120.72	52.79	-4,071.75	-6,350.42	7,215.87	7,076.94	138.94	51.936		
3,700.00	3,656.86	3,608.14	3,656.86	19.84	124.26	52.90	-4,071.75	-6,350.42	7,205.88	7,062.89	142.99	50.393		
3,800.00	3,755.50	3,709.50	3,755.50	20.39	127.80	53.00	-4,071.75	-6,350.42	7,195.91	7,048.86	147.05	48.934		
3,900.00	3,854.15	3,789.15	3,854.15	20.95	130.58	53.10	-4,071.75	-6,350.42	7,185.97	7,035.61	150.35	47.793		
4,000.00	3,952.79	3,887.79	3,952.79	21.50	134.02	53.21	-4,071.75	-6,350.42	7,176.05	7,021.73	154.32	46.501		
4,100.00	4,051.44	3,986.44	4,051.44	22.05	137.46	53.31	-4,071.75	-6,350.42	7,166.15	7,007.86	158.29	45.273		
4,200.00	4,150.08	4,085.08	4,150.08	22.61	140.90	53.42	-4,071.75	-6,350.42	7,156.27	6,994.02	162.25	44.105		
4,300.00	4,248.73	4,183.73	4,248.73	23.16	144.35	53.52	-4,071.75	-6,350.42	7,146.42	6,980.20	166.22	42.993		
4,400.00	4,347.38	4,282.38	4,347.38	23.72	147.79	53.63	-4,071.75	-6,350.42	7,136.60	6,966.41	170.19	41.933		
4,500.00	4,446.02	4,381.02	4,446.02	24.27	151.23	53.73	-4,071.75	-6,350.42	7,126.80	6,952.64	174.16	40.921		
4,600.00	4,544.67	4,452.00	4,517.00	24.83	153.71	53.81	-4,071.75	-6,350.42	7,117.07	6,939.90	177.17	40.171		
4,700.00	4,643.31	4,452.00	4,517.00	25.39	153.71	53.81	-4,071.75	-6,350.42	7,108.39	6,930.70	177.69	40.003		
4,800.00	4,741.96	4,452.00	4,517.00	25.94	153.71	53.81	-4,071.75	-6,350.42	7,101.10	6,922.92	178.19	39.852		
4,900.00	4,840.60	4,452.00	4,517.00	26.50	153.71	53.81	-4,071.75	-6,350.42	7,095.22	6,916.58	178.64	39.717		
5,000.00	4,939.25	4,452.00	4,517.00	27.05	153.71	53.81	-4,071.75	-6,350.42	7,090.74	6,911.67	179.07	39.598		
5,100.00	5,037.90	4,452.00	4,517.00	27.61	153.71	53.81	-4,071.75	-6,350.42	7,087.67	6,908.21	179.46	39.495		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	4,452.00	4,517.00	28.17	153.71	53.81	-4,071.75	-6,350.42	7,086.01	6,906.20	179.81	39.408		
5,267.67	5,203.30	4,452.00	4,517.00	28.54	153.71	53.81	-4,071.75	-6,350.42	7,085.69	6,905.66	180.03	39.358		
5,300.00	5,235.19	4,452.00	4,517.00	28.72	153.71	53.81	-4,071.75	-6,350.42	7,085.76	6,905.63	180.13	39.337		
5,400.00	5,333.83	4,452.00	4,517.00	29.28	153.71	53.81	-4,071.75	-6,350.42	7,086.92	6,906.51	180.41	39.281		
5,500.00	5,432.48	4,452.00	4,517.00	29.84	153.71	53.81	-4,071.75	-6,350.42	7,089.50	6,908.83	180.66	39.241		
5,600.00	5,531.12	4,452.00	4,517.00	30.40	153.71	53.81	-4,071.75	-6,350.42	7,093.48	6,912.60	180.88	39.217		
5,700.00	5,629.77	4,452.00	4,517.00	30.95	153.71	53.81	-4,071.75	-6,350.42	7,098.86	6,917.81	181.06	39.208		
5,800.00	5,728.41	4,452.00	4,517.00	31.51	153.71	53.81	-4,071.75	-6,350.42	7,105.66	6,924.46	181.20	39.215		
5,900.00	5,827.06	4,452.00	4,517.00	32.07	153.71	53.81	-4,071.75	-6,350.42	7,113.85	6,932.54	181.31	39.236		
6,000.00	5,925.71	4,452.00	4,517.00	32.63	153.71	53.81	-4,071.75	-6,350.42	7,123.43	6,942.05	181.38	39.274		
6,100.00	6,024.35	4,452.00	4,517.00	33.19	153.71	53.81	-4,071.75	-6,350.42	7,134.41	6,952.99	181.42	39.326		
6,200.00	6,123.00	4,452.00	4,517.00	33.74	153.71	53.81	-4,071.75	-6,350.42	7,146.76	6,965.34	181.42	39.393		
6,300.00	6,221.64	4,452.00	4,517.00	34.30	153.71	53.81	-4,071.75	-6,350.42	7,160.49	6,979.10	181.39	39.475		
6,400.00	6,320.29	4,452.00	4,517.00	34.86	153.71	53.81	-4,071.75	-6,350.42	7,175.59	6,994.27	181.33	39.573		
6,500.00	6,418.93	4,452.00	4,517.00	35.42	153.71	53.81	-4,071.75	-6,350.42	7,192.05	7,010.82	181.23	39.685		
6,600.00	6,517.58	4,452.00	4,517.00	35.98	153.71	53.81	-4,071.75	-6,350.42	7,209.86	7,028.76	181.10	39.811		
6,700.00	6,616.23	4,452.00	4,517.00	36.54	153.71	53.81	-4,071.75	-6,350.42	7,229.01	7,048.07	180.94	39.953		
6,800.00	6,714.51	4,452.00	4,517.00	37.10	153.71	19.55	-4,071.75	-6,350.42	7,244.76	7,064.04	180.71	40.089		
6,900.00	6,810.42	4,452.00	4,517.00	37.66	153.71	1.00	-4,071.75	-6,350.42	7,248.21	7,067.83	180.38	40.183		
7,000.00	6,901.58	4,452.00	4,517.00	38.21	153.71	-7.59	-4,071.75	-6,350.42	7,239.09	7,059.15	179.94	40.230		
7,100.00	6,985.76	4,452.00	4,517.00	38.76	153.71	-12.84	-4,071.75	-6,350.42	7,217.59	7,038.16	179.43	40.226		
7,200.00	7,060.88	4,452.00	4,517.00	39.32	153.71	-16.97	-4,071.75	-6,350.42	7,184.12	7,005.28	178.84	40.170		
7,300.00	7,125.09	4,452.00	4,517.00	39.90	153.71	-20.93	-4,071.75	-6,350.42	7,139.35	6,961.13	178.22	40.060		
7,400.00	7,176.81	4,452.00	4,517.00	40.55	153.71	-25.31	-4,071.75	-6,350.42	7,084.18	6,906.60	177.58	39.893		
7,500.00	7,214.77	4,452.00	4,517.00	41.30	153.71	-30.65	-4,071.75	-6,350.42	7,019.73	6,842.77	176.97	39.667		
7,600.00	7,238.02	4,452.00	4,517.00	42.22	153.71	-37.55	-4,071.75	-6,350.42	6,947.37	6,770.95	176.42	39.380		
7,700.00	7,246.01	4,452.00	4,517.00	43.32	153.71	-46.66	-4,071.75	-6,350.42	6,868.65	6,692.68	175.97	39.033		
7,800.00	7,245.50	4,452.00	4,517.00	44.65	153.71	-47.19	-4,071.75	-6,350.42	6,787.32	6,611.70	175.62	38.648		
7,900.00	7,244.97	4,452.00	4,517.00	46.21	153.71	-47.19	-4,071.75	-6,350.42	6,706.49	6,531.15	175.34	38.249		
8,000.00	7,244.44	4,452.00	4,517.00	47.99	153.71	-47.19	-4,071.75	-6,350.42	6,626.18	6,451.05	175.13	37.836		
8,100.00	7,243.91	4,452.00	4,517.00	49.96	153.71	-47.19	-4,071.75	-6,350.42	6,546.41	6,371.41	175.00	37.408		
8,200.00	7,243.39	4,452.00	4,517.00	52.10	153.71	-47.19	-4,071.75	-6,350.42	6,467.21	6,292.25	174.96	36.964		
8,300.00	7,242.86	4,452.00	4,517.00	54.38	153.71	-47.19	-4,071.75	-6,350.42	6,388.59	6,213.58	175.01	36.505		
8,400.00	7,242.33	4,452.00	4,517.00	56.78	153.71	-47.19	-4,071.75	-6,350.42	6,310.57	6,135.43	175.15	36.030		
8,500.00	7,241.80	4,452.00	4,517.00	59.28	153.71	-47.19	-4,071.75	-6,350.42	6,233.19	6,057.80	175.38	35.540		
8,600.00	7,241.27	4,452.00	4,517.00	61.88	153.71	-47.19	-4,071.75	-6,350.42	6,156.45	5,980.74	175.71	35.037		
8,700.00	7,240.74	4,452.00	4,517.00	64.54	153.71	-47.19	-4,071.75	-6,350.42	6,080.39	5,904.25	176.14	34.519		
8,800.00	7,240.21	4,452.00	4,517.00	67.27	153.71	-47.19	-4,071.75	-6,350.42	6,005.03	5,828.36	176.67	33.989		
8,900.00	7,239.68	4,452.00	4,517.00	70.06	153.71	-47.19	-4,071.75	-6,350.42	5,930.40	5,753.10	177.30	33.448		
9,000.00	7,239.16	4,452.00	4,517.00	72.89	153.71	-47.19	-4,071.75	-6,350.42	5,856.53	5,678.50	178.03	32.897		
9,100.00	7,238.63	4,452.00	4,517.00	75.77	153.71	-47.19	-4,071.75	-6,350.42	5,783.44	5,604.59	178.85	32.337		
9,200.00	7,238.10	4,452.00	4,517.00	78.69	153.71	-47.19	-4,071.75	-6,350.42	5,711.17	5,531.40	179.77	31.769		
9,300.00	7,237.57	4,452.00	4,517.00	81.64	153.71	-47.19	-4,071.75	-6,350.42	5,639.75	5,458.96	180.78	31.196		
9,400.00	7,237.04	4,452.00	4,517.00	84.62	153.71	-47.19	-4,071.75	-6,350.42	5,569.20	5,387.31	181.89	30.618		
9,500.00	7,236.51	4,452.00	4,517.00	87.63	153.71	-47.19	-4,071.75	-6,350.42	5,499.57	5,316.48	183.09	30.038		
9,600.00	7,235.98	4,452.00	4,517.00	90.66	153.71	-47.19	-4,071.75	-6,350.42	5,430.89	5,246.52	184.37	29.456		
9,700.00	7,235.45	4,452.00	4,517.00	93.72	153.71	-47.19	-4,071.75	-6,350.42	5,363.19	5,177.45	185.74	28.874		
9,800.00	7,234.93	4,452.00	4,517.00	96.79	153.71	-47.19	-4,071.75	-6,350.42	5,296.52	5,109.32	187.20	28.293		
9,900.00	7,234.40	4,452.00	4,517.00	99.88	153.71	-47.19	-4,071.75	-6,350.42	5,230.91	5,042.17	188.74	27.715		
10,000.00	7,233.87	4,452.00	4,517.00	102.98	153.71	-47.19	-4,071.75	-6,350.42	5,166.39	4,976.04	190.36	27.141		
10,100.00	7,233.34	4,452.00	4,517.00	106.10	153.71	-47.19	-4,071.75	-6,350.42	5,103.03	4,910.98	192.05	26.571		
10,200.00	7,232.81	4,452.00	4,517.00	109.23	153.71	-47.19	-4,071.75	-6,350.42	5,040.85	4,847.03	193.82	26.008		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	7,232.28	4,452.00	4,517.00	112.38	153.71	-47.19	-4,071.75	-6,350.42	4,979.90	4,784.24	195.67	25.451		
10,400.00	7,231.75	4,452.00	4,517.00	115.53	153.71	-47.19	-4,071.75	-6,350.42	4,920.23	4,722.65	197.58	24.902		
10,500.00	7,231.23	4,452.00	4,517.00	118.70	153.71	-47.19	-4,071.75	-6,350.42	4,861.89	4,662.32	199.57	24.362		
10,600.00	7,230.70	4,452.00	4,517.00	121.87	153.71	-47.19	-4,071.75	-6,350.42	4,804.92	4,603.29	201.62	23.831		
10,700.00	7,230.17	4,452.00	4,517.00	125.05	153.71	-47.19	-4,071.75	-6,350.42	4,749.37	4,545.62	203.74	23.310		
10,800.00	7,229.64	4,452.00	4,517.00	128.25	153.71	-47.19	-4,071.75	-6,350.42	4,695.29	4,489.36	205.93	22.800		
10,900.00	7,229.11	4,452.00	4,517.00	131.44	153.71	-47.19	-4,071.75	-6,350.42	4,642.74	4,434.56	208.18	22.302		
11,000.00	7,228.58	4,452.00	4,517.00	134.65	153.71	-47.19	-4,071.75	-6,350.42	4,591.77	4,381.28	210.48	21.815		
11,100.00	7,228.05	4,452.00	4,517.00	137.86	153.71	-47.19	-4,071.75	-6,350.42	4,542.42	4,329.57	212.85	21.341		
11,200.00	7,227.52	4,452.00	4,517.00	141.08	153.71	-47.19	-4,071.75	-6,350.42	4,494.76	4,279.49	215.27	20.880		
11,300.00	7,227.00	4,452.00	4,517.00	144.30	153.71	-47.19	-4,071.75	-6,350.42	4,448.83	4,231.09	217.75	20.431		
11,400.00	7,226.47	4,452.00	4,517.00	147.52	153.71	-47.19	-4,071.75	-6,350.42	4,404.70	4,184.43	220.27	19.997		
11,500.00	7,225.94	4,452.00	4,517.00	150.76	153.71	-47.19	-4,071.75	-6,350.42	4,362.41	4,139.57	222.85	19.576		
11,600.00	7,225.41	4,452.00	4,517.00	153.99	153.71	-47.19	-4,071.75	-6,350.42	4,322.03	4,096.56	225.47	19.169		
11,700.00	7,224.88	4,452.00	4,517.00	157.23	153.71	-47.19	-4,071.75	-6,350.42	4,283.60	4,055.46	228.14	18.777		
11,800.00	7,224.35	4,452.00	4,517.00	160.48	153.71	-47.19	-4,071.75	-6,350.42	4,247.17	4,016.33	230.84	18.399		
11,900.00	7,223.82	4,452.00	4,517.00	163.72	153.71	-47.19	-4,071.75	-6,350.42	4,212.80	3,979.22	233.58	18.035		
12,000.00	7,223.29	4,452.00	4,517.00	166.98	153.71	-47.19	-4,071.75	-6,350.42	4,180.55	3,944.19	236.36	17.687		
12,100.00	7,222.77	4,452.00	4,517.00	170.23	153.71	-47.19	-4,071.75	-6,350.42	4,150.45	3,911.28	239.17	17.354		
12,200.00	7,222.24	4,452.00	4,517.00	173.49	153.71	-47.19	-4,071.75	-6,350.42	4,122.56	3,880.56	242.01	17.035		
12,300.00	7,221.71	4,452.00	4,517.00	176.75	153.71	-47.19	-4,071.75	-6,350.42	4,096.93	3,852.06	244.86	16.731		
12,400.00	7,221.18	4,452.00	4,517.00	180.01	153.71	-47.19	-4,071.75	-6,350.42	4,073.58	3,825.84	247.74	16.443		
12,500.00	7,220.65	4,452.00	4,517.00	183.28	153.71	-47.19	-4,071.75	-6,350.42	4,052.57	3,801.94	250.63	16.169		
12,600.00	7,220.12	4,452.00	4,517.00	186.54	153.71	-47.19	-4,071.75	-6,350.42	4,033.93	3,780.40	253.54	15.911		
12,700.00	7,219.59	4,452.00	4,517.00	189.81	153.71	-47.19	-4,071.75	-6,350.42	4,017.69	3,761.25	256.44	15.667		
12,800.00	7,219.06	4,452.00	4,517.00	193.09	153.71	-47.19	-4,071.75	-6,350.42	4,003.89	3,744.54	259.35	15.438		
12,900.00	7,218.54	4,452.00	4,517.00	196.36	153.71	-47.19	-4,071.75	-6,350.42	3,992.54	3,730.29	262.25	15.224		
13,000.00	7,218.01	4,452.00	4,517.00	199.64	153.71	-47.19	-4,071.75	-6,350.42	3,983.68	3,718.53	265.15	15.024		
13,100.00	7,217.48	4,452.00	4,517.00	202.92	153.71	-47.19	-4,071.75	-6,350.42	3,977.30	3,709.28	268.02	14.839		
13,200.00	7,216.95	4,452.00	4,517.00	206.20	153.71	-47.19	-4,071.75	-6,350.42	3,973.44	3,702.56	270.88	14.669		
13,300.00	7,216.42	4,452.00	4,517.00	209.48	153.71	-47.19	-4,071.75	-6,350.42	3,972.09	3,698.38	273.71	14.512		
13,303.66	7,216.40	4,452.00	4,517.00	209.60	153.71	-47.19	-4,071.75	-6,350.42	3,972.09	3,698.28	273.81	14.507 CC		
13,400.00	7,215.89	4,452.00	4,517.00	212.76	153.71	-47.19	-4,071.75	-6,350.42	3,973.25	3,696.75	276.50	14.370 ES		
13,500.00	7,215.36	4,452.00	4,517.00	216.05	153.71	-47.19	-4,071.75	-6,350.42	3,976.93	3,697.68	279.26	14.241		
13,600.00	7,214.84	4,452.00	4,517.00	219.33	153.71	-47.19	-4,071.75	-6,350.42	3,983.12	3,701.15	281.97	14.126		
13,700.00	7,214.31	4,452.00	4,517.00	222.62	153.71	-47.19	-4,071.75	-6,350.42	3,991.81	3,707.17	284.64	14.024		
13,800.00	7,213.78	4,452.00	4,517.00	225.91	153.71	-47.19	-4,071.75	-6,350.42	4,002.98	3,715.73	287.24	13.936		
13,900.00	7,213.25	4,452.00	4,517.00	229.20	153.71	-47.19	-4,071.75	-6,350.42	4,016.60	3,726.81	289.79	13.860		
14,000.00	7,212.72	4,452.00	4,517.00	232.49	153.71	-47.19	-4,071.75	-6,350.42	4,032.66	3,740.39	292.27	13.798		
14,100.00	7,212.19	4,452.00	4,517.00	235.79	153.71	-47.19	-4,071.75	-6,350.42	4,051.13	3,756.44	294.69	13.747		
14,200.00	7,211.66	4,452.00	4,517.00	239.08	153.71	-47.19	-4,071.75	-6,350.42	4,071.96	3,774.94	297.03	13.709		
14,300.00	7,211.13	4,452.00	4,517.00	242.38	153.71	-47.19	-4,071.75	-6,350.42	4,095.14	3,795.85	299.29	13.683		
14,400.00	7,210.61	4,452.00	4,517.00	245.67	153.71	-47.19	-4,071.75	-6,350.42	4,120.61	3,819.14	301.47	13.668		
14,500.00	7,210.08	4,452.00	4,517.00	248.97	153.71	-47.19	-4,071.75	-6,350.42	4,148.34	3,844.77	303.57	13.665 SF		
14,600.00	7,209.55	4,452.00	4,517.00	252.27	153.71	-47.19	-4,071.75	-6,350.42	4,178.27	3,872.69	305.58	13.673		
14,700.00	7,209.02	4,452.00	4,517.00	255.57	153.71	-47.19	-4,071.75	-6,350.42	4,210.37	3,902.87	307.50	13.692		
14,800.00	7,208.49	4,452.00	4,517.00	258.87	153.71	-47.19	-4,071.75	-6,350.42	4,244.58	3,935.24	309.34	13.721		
14,900.00	7,207.96	4,452.00	4,517.00	262.17	153.71	-47.19	-4,071.75	-6,350.42	4,280.86	3,969.77	311.09	13.761		
15,000.00	7,207.43	4,452.00	4,517.00	265.47	153.71	-47.19	-4,071.75	-6,350.42	4,319.15	4,006.40	312.75	13.810		
15,081.89	7,207.00	4,452.00	4,517.00	268.17	153.71	-47.19	-4,071.75	-6,350.42	4,351.96	4,037.92	314.04	13.858		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,306.28	3.28	7.39	-106.73	-2,649.09	-8,814.05	9,295.78					
100.00	100.00	1,402.51	1,331.49	3.28	7.51	-106.72	-2,646.17	-8,811.35	9,282.17	9,271.92	10.25	905.541		
200.00	200.00	1,441.46	1,369.96	3.34	7.70	-106.69	-2,641.52	-8,807.51	9,269.23	9,258.78	10.45	886.937		
300.00	299.98	1,493.54	1,421.42	3.44	7.95	65.54	-2,634.97	-8,802.83	9,256.19	9,245.43	10.76	859.976		
400.00	399.84	1,660.00	1,585.91	3.59	8.77	65.95	-2,615.28	-8,786.72	9,241.19	9,229.55	11.64	793.865		
500.00	499.45	1,702.50	1,627.92	3.80	8.98	66.29	-2,610.69	-8,782.23	9,224.81	9,212.80	12.01	767.885		
600.00	598.70	1,755.00	1,679.96	4.06	9.23	66.66	-2,605.36	-8,777.80	9,208.43	9,195.95	12.49	737.541		
700.00	697.49	1,907.11	1,830.51	4.38	9.98	67.12	-2,588.36	-8,764.40	9,190.82	9,177.35	13.47	682.437		
800.00	796.13	2,008.57	1,930.65	4.74	10.50	67.29	-2,574.62	-8,755.49	9,172.06	9,157.78	14.28	642.426		
900.00	894.78	2,303.93	2,221.72	5.15	12.06	67.76	-2,535.13	-8,724.83	9,151.37	9,135.33	16.04	570.507		
1,000.00	993.43	1,000.00	2,421.25	5.58	5.28	68.09	-2,507.05	-8,701.09	9,129.97	9,119.30	10.67	855.269		
1,100.00	1,092.07	2,553.27	2,466.92	6.03	13.43	68.17	-2,500.90	-8,695.26	9,108.19	9,090.14	18.05	504.580		
1,200.00	1,190.72	1,200.00	2,541.65	6.50	6.37	68.28	-2,491.58	-8,686.41	9,087.30	9,074.87	12.43	731.149		
1,300.00	1,289.36	2,775.95	2,686.15	6.98	14.65	68.51	-2,472.67	-8,668.33	9,065.70	9,045.69	20.00	453.249		
1,400.00	1,388.01	2,792.00	2,701.94	7.47	14.74	68.54	-2,470.57	-8,666.35	9,044.51	9,023.96	20.55	440.031		
1,500.00	1,486.65	2,792.00	2,701.94	7.97	14.74	68.54	-2,470.57	-8,666.35	9,024.37	9,003.32	21.04	428.849		
1,600.00	1,585.30	2,837.78	2,747.08	8.48	14.98	68.61	-2,464.97	-8,661.20	9,004.63	8,982.88	21.75	413.988		
1,700.00	1,683.94	2,887.00	2,795.81	9.00	15.23	68.69	-2,459.75	-8,656.66	8,986.37	8,963.88	22.48	399.705		
1,800.00	1,782.59	1,800.00	2,817.58	9.52	9.77	68.72	-2,457.32	-8,654.68	8,968.39	8,950.35	18.04	497.032		
1,900.00	1,881.24	3,061.46	2,968.32	10.05	16.14	68.96	-2,439.49	-8,640.45	8,950.24	8,925.92	24.32	368.067		
2,000.00	1,979.88	3,203.43	3,108.48	10.58	16.89	69.19	-2,421.45	-8,626.80	8,931.67	8,906.17	25.50	350.199		
2,100.00	2,078.53	3,269.13	3,173.38	11.11	17.24	69.30	-2,413.51	-8,620.42	8,913.28	8,886.94	26.34	338.380		
2,200.00	2,177.17	3,393.84	3,296.55	11.64	17.90	69.50	-2,398.42	-8,608.00	8,894.67	8,867.22	27.45	324.004		
2,300.00	2,275.82	3,452.02	3,354.03	12.18	18.20	69.59	-2,391.39	-8,602.36	8,876.43	8,848.17	28.26	314.081		
2,400.00	2,374.46	3,543.00	3,443.90	12.72	18.69	69.74	-2,380.34	-8,593.51	8,858.23	8,829.01	29.23	303.095		
2,500.00	2,473.11	4,488.00	4,367.51	13.26	24.30	71.48	-2,231.96	-8,467.01	8,836.08	8,801.79	34.29	257.674		
2,600.00	2,571.76	4,528.95	4,407.22	13.80	24.56	71.56	-2,225.24	-8,459.58	8,809.45	8,774.40	35.06	251.292		
2,700.00	2,670.40	4,583.00	4,459.81	14.35	24.90	71.66	-2,216.74	-8,450.44	8,783.80	8,747.91	35.89	244.770		
2,800.00	2,769.05	4,583.00	4,459.81	14.89	24.90	71.66	-2,216.74	-8,450.44	8,758.62	8,722.16	36.47	240.191		
2,900.00	2,867.69	4,583.00	4,459.81	15.44	24.90	71.66	-2,216.74	-8,450.44	8,734.52	8,697.48	37.05	235.779		
3,000.00	2,966.34	4,583.00	4,459.81	15.99	24.90	71.66	-2,216.74	-8,450.44	8,711.50	8,673.87	37.63	231.528		
3,100.00	3,064.98	4,631.95	4,507.68	16.53	25.19	71.75	-2,209.66	-8,443.04	8,688.79	8,650.36	38.43	226.088		
3,200.00	3,163.63	4,678.00	4,552.95	17.08	25.46	71.82	-2,203.78	-8,437.08	8,667.61	8,628.39	39.22	220.977		
3,300.00	3,262.27	4,678.00	4,552.95	17.63	25.46	71.82	-2,203.78	-8,437.08	8,646.85	8,607.04	39.81	217.219		
3,400.00	3,360.92	4,678.00	4,552.95	18.18	25.46	71.82	-2,203.78	-8,437.08	8,627.19	8,586.81	40.39	213.602		
3,500.00	3,459.57	4,727.97	4,602.25	18.74	25.73	71.91	-2,198.05	-8,431.29	8,608.30	8,567.11	41.19	208.980		
3,600.00	3,558.21	4,772.00	4,645.77	19.29	25.96	71.98	-2,193.38	-8,426.46	8,590.12	8,548.15	41.97	204.676		
3,700.00	3,656.86	4,817.84	4,691.13	19.84	26.20	72.05	-2,188.81	-8,421.64	8,572.56	8,529.81	42.75	200.527		
3,800.00	3,755.50	4,867.00	4,739.81	20.39	26.45	72.13	-2,184.14	-8,416.66	8,555.56	8,512.01	43.55	196.473		
3,900.00	3,854.15	4,904.64	4,777.12	20.95	26.64	72.18	-2,180.74	-8,413.05	8,539.21	8,494.92	44.29	192.810		
4,000.00	3,952.79	4,961.00	4,833.06	21.50	26.92	72.27	-2,175.93	-8,408.11	8,523.67	8,478.56	45.11	188.947		
4,100.00	4,051.44	4,986.80	4,858.69	22.05	27.04	72.31	-2,173.82	-8,406.00	8,508.71	8,462.91	45.80	185.778		
4,200.00	4,150.08	5,056.00	4,927.46	22.61	27.37	72.41	-2,168.42	-8,400.52	8,494.33	8,447.66	46.67	181.990		
4,300.00	4,248.73	5,056.00	4,927.46	23.16	27.37	72.41	-2,168.42	-8,400.52	8,480.66	8,433.41	47.25	179.481		
4,400.00	4,347.38	5,106.10	4,977.30	23.72	27.60	72.48	-2,164.81	-8,397.01	8,467.61	8,419.57	48.04	176.269		
4,500.00	4,446.02	5,150.00	5,021.04	24.27	27.80	72.55	-2,161.94	-8,394.52	8,455.59	8,406.80	48.80	173.278		
4,600.00	4,544.67	5,176.68	5,047.64	24.83	27.92	72.59	-2,160.33	-8,393.18	8,444.27	8,394.79	49.48	170.662		
4,700.00	4,643.31	5,243.00	5,113.77	25.39	28.20	72.68	-2,156.71	-8,389.92	8,433.47	8,383.14	50.33	167.574		
4,800.00	4,741.96	5,277.31	5,148.01	25.94	28.35	72.72	-2,155.07	-8,388.38	8,423.27	8,372.23	51.03	165.050		
4,900.00	4,840.60	5,336.00	5,206.61	26.50	28.59	72.80	-2,152.62	-8,386.36	8,413.99	8,362.15	51.84	162.300		
5,000.00	4,939.25	5,336.00	5,206.61	27.05	28.59	72.80	-2,152.62	-8,386.36	8,405.27	8,352.87	52.40	160.400		
5,100.00	5,037.90	5,402.98	5,273.53	27.61	28.85	72.88	-2,150.54	-8,384.61	8,397.28	8,344.04	53.23	157.746		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,463.51	5,334.04	28.17	29.08	72.95	-2,149.29	-8,383.24	8,389.80	8,335.76	54.04	155.264		
5,300.00	5,235.19	5,527.66	5,398.16	28.72	29.32	73.03	-2,147.83	-8,382.09	8,382.77	8,327.92	54.85	152.824		
5,400.00	5,333.83	5,591.75	5,462.22	29.28	29.56	73.11	-2,146.15	-8,381.23	8,376.18	8,320.51	55.67	150.464		
5,500.00	5,432.48	5,655.77	5,526.21	29.84	29.80	73.19	-2,144.24	-8,380.68	8,370.02	8,313.54	56.48	148.182		
5,600.00	5,531.12	5,711.00	5,581.41	30.40	30.01	73.26	-2,142.40	-8,380.45	8,364.32	8,307.05	57.26	146.068		
5,700.00	5,629.77	5,790.18	5,660.54	30.95	30.31	73.37	-2,139.70	-8,380.42	8,358.99	8,300.85	58.14	143.766		
5,800.00	5,728.41	5,859.91	5,730.24	31.51	30.57	73.46	-2,137.43	-8,380.63	8,354.05	8,295.07	58.98	141.636		
5,900.00	5,827.06	5,929.69	5,799.98	32.07	30.82	73.55	-2,135.24	-8,381.07	8,349.49	8,289.67	59.82	139.573		
6,000.00	5,925.71	6,002.11	5,872.37	32.63	31.09	73.64	-2,133.07	-8,381.76	8,345.30	8,284.63	60.67	137.548		
6,100.00	6,024.35	6,112.30	5,982.50	33.19	31.50	73.78	-2,129.92	-8,382.86	8,341.22	8,279.54	61.68	135.232		
6,200.00	6,123.00	6,222.54	6,092.71	33.74	31.90	73.92	-2,126.95	-8,383.78	8,337.04	8,274.35	62.69	132.988		
6,300.00	6,221.64	6,323.18	6,193.31	34.30	32.28	74.05	-2,124.29	-8,384.49	8,332.78	8,269.12	63.66	130.888		
6,400.00	6,320.29	6,413.85	6,283.93	34.86	32.62	74.17	-2,121.32	-8,385.26	8,328.63	8,264.03	64.60	128.925		
6,500.00	6,418.93	6,504.26	6,374.25	35.42	32.97	74.29	-2,117.67	-8,386.21	8,324.61	8,259.07	65.54	127.022		
6,600.00	6,517.58	6,614.30	6,484.15	35.98	33.40	74.45	-2,112.29	-8,387.54	8,320.68	8,254.11	66.57	124.987		
6,700.00	6,616.23	6,760.83	6,630.40	36.54	33.99	74.67	-2,103.34	-8,388.90	8,316.38	8,248.59	67.79	122.680		
6,800.00	6,714.51	6,874.51	6,743.78	37.10	34.46	39.96	-2,094.98	-8,389.58	8,306.28	8,237.43	68.85	120.643		
6,900.00	6,810.42	6,941.87	6,810.92	37.66	34.74	21.09	-2,089.70	-8,390.13	8,281.31	8,211.65	69.66	118.878		
7,000.00	6,901.58	7,006.09	6,874.93	38.21	35.01	12.49	-2,084.54	-8,390.88	8,241.96	8,171.56	70.41	117.064		
7,100.00	6,985.76	7,065.68	6,934.31	38.76	35.26	7.48	-2,079.65	-8,391.77	8,189.13	8,118.06	71.06	115.235		
7,200.00	7,060.88	7,129.00	6,997.40	39.32	35.52	3.83	-2,074.33	-8,392.93	8,124.04	8,052.37	71.67	113.354		
7,300.00	7,125.09	7,175.62	7,043.85	39.90	35.71	0.41	-2,070.51	-8,393.85	8,048.15	7,976.04	72.11	111.606		
7,400.00	7,176.81	7,223.76	7,091.85	40.55	35.91	-3.79	-2,066.86	-8,394.79	7,963.23	7,890.75	72.48	109.872		
7,500.00	7,214.77	7,259.68	7,127.67	41.30	36.05	-10.80	-2,064.33	-8,395.49	7,871.34	7,798.64	72.70	108.271		
7,600.00	7,238.02	7,282.42	7,150.36	42.22	36.15	-27.78	-2,062.81	-8,395.93	7,774.73	7,701.94	72.78	106.821		
7,700.00	7,246.01	7,291.38	7,159.29	43.32	36.18	-83.15	-2,062.23	-8,396.10	7,675.76	7,603.03	72.73	105.535		
7,800.00	7,245.50	7,292.65	7,160.56	44.65	36.19	-87.10	-2,062.15	-8,396.13	7,576.45	7,503.84	72.61	104.339		
7,900.00	7,244.97	7,293.89	7,161.80	46.21	36.19	-87.18	-2,062.07	-8,396.15	7,477.16	7,404.66	72.50	103.138		
8,000.00	7,244.44	7,295.14	7,163.04	47.99	36.20	-87.26	-2,061.99	-8,396.17	7,377.88	7,305.50	72.38	101.929		
8,100.00	7,243.91	7,296.38	7,164.29	49.96	36.20	-87.34	-2,061.92	-8,396.20	7,278.63	7,206.36	72.27	100.714		
8,200.00	7,243.39	7,297.63	7,165.53	52.10	36.21	-87.42	-2,061.84	-8,396.22	7,179.39	7,107.23	72.16	99.492		
8,300.00	7,242.86	7,298.87	7,166.77	54.38	36.21	-87.50	-2,061.76	-8,396.25	7,080.18	7,008.13	72.05	98.261		
8,400.00	7,242.33	7,300.11	7,168.01	56.78	36.22	-87.58	-2,061.68	-8,396.27	6,980.99	6,909.04	71.95	97.023		
8,500.00	7,241.80	7,301.36	7,169.25	59.28	36.22	-87.66	-2,061.60	-8,396.29	6,881.82	6,809.97	71.85	95.776		
8,600.00	7,241.27	7,302.60	7,170.49	61.88	36.23	-87.74	-2,061.52	-8,396.32	6,782.68	6,710.92	71.76	94.520		
8,700.00	7,240.74	7,303.84	7,171.72	64.54	36.23	-87.82	-2,061.45	-8,396.34	6,683.56	6,611.89	71.67	93.255		
8,800.00	7,240.21	7,305.08	7,172.96	67.27	36.24	-87.90	-2,061.37	-8,396.37	6,584.47	6,512.88	71.59	91.980		
8,900.00	7,239.68	7,306.32	7,174.20	70.06	36.24	-87.97	-2,061.29	-8,396.39	6,485.41	6,413.90	71.51	90.694		
9,000.00	7,239.16	7,307.56	7,175.44	72.89	36.25	-88.05	-2,061.21	-8,396.41	6,386.37	6,314.93	71.44	89.398		
9,100.00	7,238.63	7,308.79	7,176.67	75.77	36.25	-88.13	-2,061.14	-8,396.44	6,287.37	6,215.99	71.37	88.089		
9,200.00	7,238.10	7,310.03	7,177.91	78.69	36.26	-88.21	-2,061.06	-8,396.46	6,188.39	6,117.07	71.32	86.769		
9,300.00	7,237.57	7,311.27	7,179.14	81.64	36.26	-88.29	-2,060.98	-8,396.48	6,089.45	6,018.18	71.28	85.435		
9,400.00	7,237.04	7,312.50	7,180.37	84.62	36.27	-88.37	-2,060.91	-8,396.51	5,990.55	5,919.31	71.24	84.088		
9,500.00	7,236.51	7,313.74	7,181.60	87.63	36.27	-88.45	-2,060.83	-8,396.53	5,891.68	5,820.46	71.22	82.727		
9,600.00	7,235.98	7,314.97	7,182.84	90.66	36.28	-88.53	-2,060.76	-8,396.56	5,792.85	5,721.64	71.21	81.351		
9,700.00	7,235.45	7,316.21	7,184.07	93.72	36.28	-88.61	-2,060.68	-8,396.58	5,694.06	5,622.85	71.21	79.959		
9,800.00	7,234.93	7,317.44	7,185.30	96.79	36.29	-88.69	-2,060.61	-8,396.60	5,595.32	5,524.09	71.23	78.551		
9,900.00	7,234.40	7,318.67	7,186.53	99.88	36.29	-88.77	-2,060.53	-8,396.63	5,496.62	5,425.35	71.27	77.125		
10,000.00	7,233.87	7,319.90	7,187.76	102.98	36.30	-88.84	-2,060.46	-8,396.65	5,397.96	5,326.64	71.32	75.681		
10,100.00	7,233.34	7,321.13	7,188.98	106.10	36.30	-88.92	-2,060.38	-8,396.67	5,299.36	5,227.96	71.40	74.219		
10,200.00	7,232.81	7,322.36	7,190.21	109.23	36.31	-89.00	-2,060.31	-8,396.70	5,200.81	5,129.31	71.50	72.737		
10,300.00	7,232.28	7,323.59	7,191.44	112.38	36.31	-89.08	-2,060.24	-8,396.72	5,102.32	5,030.69	71.63	71.234		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,324.82	7,192.67	115.53	36.32	-89.16	-2,060.16	-8,396.74	5,003.88	4,932.10	71.78	69.711		
10,500.00	7,231.23	7,326.05	7,193.89	118.70	36.32	-89.24	-2,060.09	-8,396.77	4,905.51	4,833.54	71.96	68.166		
10,600.00	7,230.70	7,327.28	7,195.12	121.87	36.33	-89.32	-2,060.02	-8,396.79	4,807.20	4,735.02	72.18	66.599		
10,700.00	7,230.17	7,328.50	7,196.34	125.05	36.33	-89.40	-2,059.94	-8,396.81	4,708.97	4,636.53	72.43	65.010		
10,800.00	7,229.64	7,329.73	7,197.56	128.25	36.34	-89.47	-2,059.87	-8,396.84	4,610.81	4,538.08	72.73	63.397		
10,900.00	7,229.11	7,330.95	7,198.79	131.44	36.34	-89.55	-2,059.80	-8,396.86	4,512.73	4,439.67	73.07	61.762		
11,000.00	7,228.58	7,332.18	7,200.01	134.65	36.35	-89.63	-2,059.73	-8,396.88	4,414.74	4,341.29	73.45	60.103		
11,100.00	7,228.05	7,333.40	7,201.23	137.86	36.35	-89.71	-2,059.65	-8,396.91	4,316.84	4,242.95	73.89	58.421		
11,200.00	7,227.52	7,334.63	7,202.45	141.08	36.36	-89.79	-2,059.58	-8,396.93	4,219.04	4,144.65	74.39	56.717		
11,300.00	7,227.00	7,335.85	7,203.67	144.30	36.36	-89.87	-2,059.51	-8,396.95	4,121.34	4,046.39	74.95	54.990		
11,400.00	7,226.47	7,337.07	7,204.89	147.52	36.37	-89.95	-2,059.44	-8,396.98	4,023.76	3,948.18	75.57	53.243		
11,500.00	7,225.94	7,338.29	7,206.11	150.76	36.37	-90.02	-2,059.37	-8,397.00	3,926.29	3,850.02	76.28	51.475		
11,600.00	7,225.41	7,339.51	7,207.32	153.99	36.38	-90.10	-2,059.30	-8,397.02	3,828.96	3,751.90	77.06	49.690		
11,700.00	7,224.88	7,340.73	7,208.54	157.23	36.38	-90.18	-2,059.23	-8,397.05	3,731.77	3,653.84	77.93	47.888		
11,800.00	7,224.35	7,341.95	7,209.76	160.48	36.39	-90.26	-2,059.16	-8,397.07	3,634.73	3,555.83	78.89	46.071		
11,900.00	7,223.82	7,343.17	7,210.97	163.72	36.39	-90.34	-2,059.09	-8,397.09	3,537.85	3,457.89	79.96	44.244		
12,000.00	7,223.29	7,344.38	7,212.19	166.98	36.40	-90.42	-2,059.02	-8,397.12	3,441.15	3,360.01	81.15	42.407		
12,100.00	7,222.77	7,345.60	7,213.40	170.23	36.40	-90.50	-2,058.95	-8,397.14	3,344.65	3,262.20	82.45	40.565		
12,200.00	7,222.24	7,346.82	7,214.62	173.49	36.41	-90.57	-2,058.88	-8,397.16	3,248.36	3,164.47	83.89	38.721		
12,300.00	7,221.71	7,348.03	7,215.83	176.75	36.41	-90.65	-2,058.81	-8,397.19	3,152.29	3,066.82	85.47	36.880		
12,400.00	7,221.18	7,349.24	7,217.04	180.01	36.42	-90.73	-2,058.74	-8,397.21	3,056.48	2,969.27	87.22	35.045		
12,500.00	7,220.65	7,350.46	7,218.25	183.28	36.42	-90.81	-2,058.67	-8,397.23	2,960.95	2,871.82	89.13	33.220		
12,600.00	7,220.12	7,351.67	7,219.46	186.54	36.43	-90.89	-2,058.60	-8,397.26	2,865.72	2,774.49	91.23	31.411		
12,700.00	7,219.59	7,352.88	7,220.67	189.81	36.43	-90.96	-2,058.53	-8,397.28	2,770.82	2,677.29	93.54	29.622		
12,800.00	7,219.06	7,354.10	7,221.88	193.09	36.44	-91.04	-2,058.46	-8,397.30	2,676.30	2,580.23	96.07	27.858		
12,900.00	7,218.54	7,355.31	7,223.09	196.36	36.44	-91.12	-2,058.40	-8,397.32	2,582.19	2,483.35	98.84	26.124		
13,000.00	7,218.01	7,356.52	7,224.30	199.64	36.45	-91.20	-2,058.33	-8,397.35	2,488.54	2,386.65	101.89	24.425		
13,100.00	7,217.48	7,357.73	7,225.51	202.92	36.45	-91.28	-2,058.26	-8,397.37	2,395.40	2,290.17	105.22	22.765		
13,200.00	7,216.95	7,358.93	7,226.71	206.20	36.46	-91.35	-2,058.19	-8,397.39	2,302.83	2,193.95	108.89	21.149		
13,300.00	7,216.42	7,360.14	7,227.92	209.48	36.46	-91.43	-2,058.13	-8,397.42	2,210.91	2,098.01	112.91	19.582		
13,400.00	7,215.89	7,361.35	7,229.13	212.76	36.47	-91.51	-2,058.06	-8,397.44	2,119.73	2,002.40	117.32	18.068		
13,500.00	7,215.36	7,362.56	7,230.33	216.05	36.47	-91.59	-2,057.99	-8,397.46	2,029.37	1,907.19	122.17	16.610		
13,600.00	7,214.84	7,363.76	7,231.53	219.33	36.48	-91.67	-2,057.93	-8,397.49	1,939.96	1,812.44	127.51	15.214		
13,700.00	7,214.31	7,364.97	7,232.74	222.62	36.48	-91.74	-2,057.86	-8,397.51	1,851.63	1,718.24	133.38	13.882		
13,800.00	7,213.78	7,366.17	7,233.94	225.91	36.49	-91.82	-2,057.80	-8,397.53	1,764.54	1,624.69	139.85	12.617		
13,900.00	7,213.25	7,367.38	7,235.14	229.20	36.49	-91.90	-2,057.73	-8,397.55	1,678.89	1,531.92	146.97	11.423		
14,000.00	7,212.72	7,368.58	7,236.34	232.49	36.50	-91.98	-2,057.67	-8,397.58	1,594.92	1,440.10	154.82	10.302		
14,100.00	7,212.19	7,369.78	7,237.54	235.79	36.50	-92.05	-2,057.60	-8,397.60	1,512.89	1,349.44	163.46	9.256		
14,200.00	7,211.66	7,370.98	7,238.74	239.08	36.51	-92.13	-2,057.54	-8,397.62	1,433.15	1,260.20	172.95	8.286		
14,300.00	7,211.13	7,372.19	7,239.94	242.38	36.51	-92.21	-2,057.47	-8,397.64	1,356.09	1,172.73	183.37	7.396		
14,400.00	7,210.61	7,373.39	7,241.14	245.67	36.52	-92.29	-2,057.41	-8,397.67	1,282.21	1,087.47	194.73	6.584		
14,500.00	7,210.08	7,374.59	7,242.34	248.97	36.52	-92.36	-2,057.34	-8,397.69	1,212.07	1,005.02	207.06	5.854		
14,600.00	7,209.55	7,375.78	7,243.54	252.27	36.53	-92.44	-2,057.28	-8,397.71	1,146.38	926.10	220.28	5.204		
14,700.00	7,209.02	7,376.98	7,244.73	255.57	36.53	-92.52	-2,057.21	-8,397.74	1,085.93	851.67	234.26	4.636		
14,800.00	7,208.49	7,386.25	7,245.50	258.87	36.57	-92.57	-2,057.17	-8,397.75	1,031.65	782.88	248.76	4.147		
14,900.00	7,207.96	7,384.92	7,246.83	262.17	36.56	-92.65	-2,057.10	-8,397.78	984.56	721.29	263.27	3.740		
15,000.00	7,207.43	7,383.59	7,248.16	265.47	36.56	-92.74	-2,057.03	-8,397.80	945.73	668.50	277.23	3.411		
15,081.89	7,207.00	7,382.50	7,249.25	268.17	36.55	-92.81	-2,056.98	-8,397.82	920.82	633.10	287.73	3.200 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	29.00	3.28	3.28	-81.67	1,337.97	-9,143.35	9,240.77					
100.00	100.00	71.00	100.00	3.28	3.51	-81.67	1,337.97	-9,143.35	9,240.72	9,233.93	6.79	1,360.723		
200.00	200.00	171.00	200.00	3.34	5.35	-81.67	1,337.97	-9,143.35	9,240.72	9,232.04	8.69	1,063.978		
300.00	299.98	270.98	299.98	3.44	8.38	90.29	1,337.97	-9,143.35	9,240.73	9,228.91	11.82	781.643		
400.00	399.84	370.84	399.84	3.59	11.67	90.33	1,337.97	-9,143.35	9,240.76	9,225.50	15.26	605.507		
500.00	499.45	470.45	499.45	3.80	15.04	90.38	1,337.97	-9,143.35	9,240.81	9,221.98	18.84	490.600		
600.00	598.70	569.70	598.70	4.06	18.44	90.45	1,337.97	-9,143.35	9,240.90	9,218.41	22.49	410.811		
700.00	697.49	668.49	697.49	4.38	21.84	90.55	1,337.97	-9,143.35	9,241.04	9,214.82	26.22	352.497		
800.00	796.13	767.13	796.13	4.74	25.25	90.65	1,337.97	-9,143.35	9,241.21	9,211.22	29.99	308.109		
900.00	894.78	865.78	894.78	5.15	28.67	90.75	1,337.97	-9,143.35	9,241.42	9,207.60	33.81	273.303		
1,000.00	993.43	964.43	993.43	5.58	32.09	90.85	1,337.97	-9,143.35	9,241.65	9,203.98	37.67	245.350		
1,100.00	1,092.07	1,063.07	1,092.07	6.03	35.52	90.95	1,337.97	-9,143.35	9,241.91	9,200.36	41.55	222.449		
1,200.00	1,190.72	1,161.72	1,190.72	6.50	38.95	91.05	1,337.97	-9,143.35	9,242.20	9,196.75	45.45	203.371		
1,300.00	1,289.36	1,260.36	1,289.36	6.98	42.38	91.15	1,337.97	-9,143.35	9,242.51	9,193.15	49.36	187.248		
1,400.00	1,388.01	1,359.01	1,388.01	7.47	45.82	91.25	1,337.97	-9,143.35	9,242.86	9,189.57	53.29	173.454		
1,500.00	1,486.65	1,457.65	1,486.65	7.97	49.25	91.35	1,337.97	-9,143.35	9,243.24	9,186.01	57.22	161.525		
1,600.00	1,585.30	1,556.30	1,585.30	8.48	52.69	91.45	1,337.97	-9,143.35	9,243.64	9,182.47	61.17	151.111		
1,700.00	1,683.94	1,654.94	1,683.94	9.00	56.12	91.55	1,337.97	-9,143.35	9,244.08	9,178.95	65.12	141.945		
1,800.00	1,782.59	1,753.59	1,782.59	9.52	59.56	91.65	1,337.97	-9,143.35	9,244.54	9,175.46	69.08	133.818		
1,900.00	1,881.24	1,852.24	1,881.24	10.05	63.00	91.75	1,337.97	-9,143.35	9,245.04	9,171.99	73.05	126.563		
2,000.00	1,979.88	1,950.88	1,979.88	10.58	66.44	91.85	1,337.97	-9,143.35	9,245.56	9,168.54	77.01	120.049		
2,100.00	2,078.53	2,049.53	2,078.53	11.11	69.88	91.95	1,337.97	-9,143.35	9,246.11	9,165.12	80.99	114.168		
2,200.00	2,177.17	2,148.17	2,177.17	11.64	73.32	92.05	1,337.97	-9,143.35	9,246.69	9,161.73	84.96	108.834		
2,300.00	2,275.82	2,246.82	2,275.82	12.18	76.76	92.15	1,337.97	-9,143.35	9,247.30	9,158.36	88.94	103.974		
2,400.00	2,374.46	2,345.46	2,374.46	12.72	80.20	92.25	1,337.97	-9,143.35	9,247.94	9,155.02	92.92	99.528		
2,500.00	2,473.11	2,444.11	2,473.11	13.26	83.64	92.35	1,337.97	-9,143.35	9,248.60	9,151.70	96.90	95.445		
2,600.00	2,571.76	2,542.76	2,571.76	13.80	87.08	92.45	1,337.97	-9,143.35	9,249.30	9,148.42	100.88	91.683		
2,700.00	2,670.40	2,641.40	2,670.40	14.35	90.53	92.55	1,337.97	-9,143.35	9,250.03	9,145.16	104.87	88.206		
2,800.00	2,769.05	2,740.05	2,769.05	14.89	93.97	92.65	1,337.97	-9,143.35	9,250.78	9,141.93	108.85	84.983		
2,900.00	2,867.69	2,838.69	2,867.69	15.44	97.41	92.75	1,337.97	-9,143.35	9,251.56	9,138.72	112.84	81.987		
3,000.00	2,966.34	2,937.34	2,966.34	15.99	100.85	92.85	1,337.97	-9,143.35	9,252.38	9,135.55	116.83	79.194		
3,100.00	3,064.98	3,035.98	3,064.98	16.53	104.29	92.95	1,337.97	-9,143.35	9,253.22	9,132.40	120.82	76.586		
3,200.00	3,163.63	3,134.63	3,163.63	17.08	107.73	93.05	1,337.97	-9,143.35	9,254.09	9,129.28	124.81	74.145		
3,300.00	3,262.27	3,233.27	3,262.27	17.63	111.18	93.15	1,337.97	-9,143.35	9,254.99	9,126.18	128.80	71.854		
3,400.00	3,360.92	3,331.92	3,360.92	18.18	114.62	93.25	1,337.97	-9,143.35	9,255.92	9,123.12	132.80	69.701		
3,500.00	3,459.57	3,430.57	3,459.57	18.74	118.06	93.35	1,337.97	-9,143.35	9,256.87	9,120.09	136.79	67.673		
3,600.00	3,558.21	3,529.21	3,558.21	19.29	121.50	93.45	1,337.97	-9,143.35	9,257.86	9,117.08	140.78	65.761		
3,700.00	3,656.86	3,627.86	3,656.86	19.84	124.95	93.55	1,337.97	-9,143.35	9,258.87	9,114.10	144.78	63.954		
3,800.00	3,755.50	3,726.50	3,755.50	20.39	128.39	93.65	1,337.97	-9,143.35	9,259.92	9,111.15	148.77	62.243		
3,900.00	3,854.15	3,825.15	3,854.15	20.95	131.83	93.75	1,337.97	-9,143.35	9,260.99	9,108.23	152.76	60.623		
4,000.00	3,952.79	3,923.79	3,952.79	21.50	135.27	93.85	1,337.97	-9,143.35	9,262.09	9,105.33	156.76	59.085		
4,100.00	4,051.44	4,022.44	4,051.44	22.05	138.72	93.95	1,337.97	-9,143.35	9,263.23	9,102.47	160.76	57.623		
4,200.00	4,150.08	4,121.08	4,150.08	22.61	142.16	94.05	1,337.97	-9,143.35	9,264.39	9,099.63	164.75	56.233		
4,300.00	4,248.73	4,219.73	4,248.73	23.16	145.60	94.15	1,337.97	-9,143.35	9,265.57	9,096.83	168.75	54.908		
4,400.00	4,347.38	4,318.38	4,347.38	23.72	149.05	94.25	1,337.97	-9,143.35	9,266.79	9,094.05	172.74	53.645		
4,500.00	4,446.02	4,417.02	4,446.02	24.27	152.49	94.35	1,337.97	-9,143.35	9,268.04	9,091.30	176.74	52.439		
4,600.00	4,544.67	4,515.67	4,544.67	24.83	155.93	94.45	1,337.97	-9,143.35	9,269.31	9,088.58	180.74	51.286		
4,700.00	4,643.31	4,614.31	4,643.31	25.39	159.37	94.55	1,337.97	-9,143.35	9,270.62	9,085.88	184.73	50.183		
4,800.00	4,741.96	4,712.96	4,741.96	25.94	162.82	94.65	1,337.97	-9,143.35	9,271.95	9,083.22	188.73	49.128		
4,900.00	4,840.60	4,811.60	4,840.60	26.50	166.26	94.75	1,337.97	-9,143.35	9,273.31	9,080.58	192.73	48.116		
5,000.00	4,939.25	4,910.25	4,939.25	27.05	169.70	94.85	1,337.97	-9,143.35	9,274.70	9,077.98	196.73	47.145		
5,100.00	5,037.90	5,008.90	5,037.90	27.61	173.15	94.95	1,337.97	-9,143.35	9,276.12	9,075.40	200.72	46.213		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,107.54	5,136.54	28.17	176.59	95.05	1,337.97	-9,143.35	9,277.57	9,072.85	204.72	45.318		
5,300.00	5,235.19	5,206.19	5,235.19	28.72	180.03	95.15	1,337.97	-9,143.35	9,279.05	9,070.33	208.72	44.457		
5,400.00	5,333.83	5,304.83	5,333.83	29.28	183.48	95.25	1,337.97	-9,143.35	9,280.55	9,067.84	212.72	43.628		
5,500.00	5,432.48	5,403.48	5,432.48	29.84	186.92	95.35	1,337.97	-9,143.35	9,282.09	9,065.37	216.72	42.830		
5,600.00	5,531.12	5,502.12	5,531.12	30.40	190.36	95.45	1,337.97	-9,143.35	9,283.65	9,062.94	220.72	42.062		
5,700.00	5,629.77	5,600.77	5,629.77	30.95	193.81	95.54	1,337.97	-9,143.35	9,285.24	9,060.53	224.71	41.320		
5,800.00	5,728.41	5,700.59	5,728.41	31.51	197.29	95.64	1,337.97	-9,143.35	9,286.87	9,058.11	228.75	40.598		
5,900.00	5,827.06	5,801.94	5,827.06	32.07	200.83	95.74	1,337.97	-9,143.35	9,288.51	9,055.67	232.85	39.891		
6,000.00	5,925.71	5,903.29	5,925.71	32.63	204.37	95.84	1,337.97	-9,143.35	9,290.19	9,053.25	236.94	39.209		
6,100.00	6,024.35	6,004.65	6,024.35	33.19	207.90	95.94	1,337.97	-9,143.35	9,291.90	9,050.87	241.03	38.551		
6,200.00	6,123.00	6,106.00	6,123.00	33.74	211.44	96.04	1,337.97	-9,143.35	9,293.63	9,048.51	245.12	37.914		
6,300.00	6,221.64	6,207.36	6,221.64	34.30	214.98	96.14	1,337.97	-9,143.35	9,295.40	9,046.18	249.22	37.298		
6,400.00	6,320.29	6,308.71	6,320.29	34.86	218.52	96.24	1,337.97	-9,143.35	9,297.19	9,043.88	253.31	36.703		
6,500.00	6,418.93	6,389.93	6,418.93	35.42	221.35	96.34	1,337.97	-9,143.35	9,299.01	9,042.31	256.70	36.225		
6,600.00	6,517.58	6,488.58	6,517.58	35.98	224.80	96.44	1,337.97	-9,143.35	9,300.86	9,040.16	260.70	35.677		
6,700.00	6,616.23	6,587.23	6,616.23	36.54	228.24	96.54	1,337.97	-9,143.35	9,302.74	9,038.04	264.70	35.145		
6,800.00	6,714.51	6,685.51	6,714.51	37.10	231.67	61.95	1,337.97	-9,143.35	9,299.42	9,030.72	268.69	34.610		
6,900.00	6,810.42	6,781.42	6,810.42	37.66	235.02	43.83	1,337.97	-9,143.35	9,281.30	9,008.68	272.62	34.045		
7,000.00	6,901.58	6,872.58	6,901.58	38.21	238.20	36.64	1,337.97	-9,143.35	9,248.64	8,972.26	276.38	33.463		
7,100.00	6,985.76	6,956.76	6,985.76	38.76	241.14	33.92	1,337.97	-9,143.35	9,202.26	8,922.37	279.89	32.878		
7,200.00	7,060.88	7,031.88	7,060.88	39.32	243.76	33.76	1,337.97	-9,143.35	9,143.34	8,860.26	283.08	32.300		
7,300.00	7,125.09	7,103.91	7,125.09	39.90	246.27	35.77	1,337.97	-9,143.35	9,073.33	8,787.19	286.14	31.709		
7,400.00	7,176.81	7,147.81	7,176.81	40.55	247.81	40.38	1,337.97	-9,143.35	8,993.98	8,705.77	288.21	31.206		
7,500.00	7,214.77	7,185.77	7,214.77	41.30	249.13	48.95	1,337.97	-9,143.35	8,907.24	8,617.18	290.06	30.709		
7,600.00	7,238.02	7,209.02	7,238.02	42.22	249.94	64.36	1,337.97	-9,143.35	8,815.24	8,523.88	291.36	30.255		
7,700.00	7,246.01	7,217.01	7,246.01	43.32	250.22	89.52	1,337.97	-9,143.35	8,720.25	8,428.13	292.12	29.852		
7,800.00	7,245.50	7,216.50	7,245.50	44.65	250.20	90.99	1,337.97	-9,143.35	8,624.54	8,331.96	292.57	29.478		
7,900.00	7,244.97	7,215.97	7,244.97	46.21	250.19	90.98	1,337.97	-9,143.35	8,528.93	8,235.87	293.06	29.103		
8,000.00	7,244.44	7,215.44	7,244.44	47.99	250.17	90.97	1,337.97	-9,143.35	8,433.41	8,139.84	293.58	28.726		
8,100.00	7,243.91	7,214.91	7,243.91	49.96	250.15	90.96	1,337.97	-9,143.35	8,338.01	8,043.88	294.13	28.348		
8,200.00	7,243.39	7,214.39	7,243.39	52.10	250.13	90.95	1,337.97	-9,143.35	8,242.71	7,948.00	294.71	27.969		
8,300.00	7,242.86	7,213.86	7,242.86	54.38	250.11	90.93	1,337.97	-9,143.35	8,147.53	7,852.20	295.33	27.588		
8,400.00	7,242.33	7,213.33	7,242.33	56.78	250.09	90.92	1,337.97	-9,143.35	8,052.46	7,756.48	295.98	27.206		
8,500.00	7,241.80	7,212.80	7,241.80	59.28	250.08	90.91	1,337.97	-9,143.35	7,957.51	7,660.84	296.67	26.823		
8,600.00	7,241.27	7,212.27	7,241.27	61.88	250.06	90.90	1,337.97	-9,143.35	7,862.69	7,565.29	297.40	26.438		
8,700.00	7,240.74	7,211.74	7,240.74	64.54	250.04	90.89	1,337.97	-9,143.35	7,768.00	7,469.84	298.16	26.053		
8,800.00	7,240.21	7,211.21	7,240.21	67.27	250.02	90.87	1,337.97	-9,143.35	7,673.44	7,374.48	298.97	25.667		
8,900.00	7,239.68	7,210.68	7,239.68	70.06	250.00	90.86	1,337.97	-9,143.35	7,579.02	7,279.21	299.81	25.279		
9,000.00	7,239.16	7,210.16	7,239.16	72.89	249.98	90.85	1,337.97	-9,143.35	7,484.75	7,184.05	300.70	24.891		
9,100.00	7,238.63	7,209.63	7,238.63	75.77	249.96	90.84	1,337.97	-9,143.35	7,390.63	7,089.00	301.63	24.503		
9,200.00	7,238.10	7,209.10	7,238.10	78.69	249.95	90.83	1,337.97	-9,143.35	7,296.66	6,994.06	302.60	24.113		
9,300.00	7,237.57	7,208.57	7,237.57	81.64	249.93	90.81	1,337.97	-9,143.35	7,202.86	6,899.24	303.62	23.723		
9,400.00	7,237.04	7,208.04	7,237.04	84.62	249.91	90.80	1,337.97	-9,143.35	7,109.23	6,804.54	304.68	23.333		
9,500.00	7,236.51	7,207.51	7,236.51	87.63	249.89	90.79	1,337.97	-9,143.35	7,015.77	6,709.97	305.80	22.943		
9,600.00	7,235.98	7,206.98	7,235.98	90.66	249.87	90.78	1,337.97	-9,143.35	6,922.49	6,615.53	306.96	22.552		
9,700.00	7,235.45	7,206.45	7,235.45	93.72	249.85	90.77	1,337.97	-9,143.35	6,829.41	6,521.24	308.17	22.161		
9,800.00	7,234.93	7,205.93	7,234.93	96.79	249.84	90.75	1,337.97	-9,143.35	6,736.52	6,427.09	309.43	21.771		
9,900.00	7,234.40	7,205.40	7,234.40	99.88	249.82	90.74	1,337.97	-9,143.35	6,643.84	6,333.09	310.75	21.380		
10,000.00	7,233.87	7,204.87	7,233.87	102.98	249.80	90.73	1,337.97	-9,143.35	6,551.37	6,239.25	312.12	20.990		
10,100.00	7,233.34	7,204.34	7,233.34	106.10	249.78	90.72	1,337.97	-9,143.35	6,459.13	6,145.58	313.55	20.600		
10,200.00	7,232.81	7,203.81	7,232.81	109.23	249.76	90.71	1,337.97	-9,143.35	6,367.12	6,052.09	315.03	20.211		
10,300.00	7,232.28	7,203.28	7,232.28	112.38	249.74	90.69	1,337.97	-9,143.35	6,275.36	5,958.78	316.58	19.822		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,202.75	7,231.75	115.53	249.72	90.68	1,337.97	-9,143.35	6,183.86	5,865.67	318.19	19.435		
10,500.00	7,231.23	7,202.23	7,231.23	118.70	249.71	90.67	1,337.97	-9,143.35	6,092.62	5,772.76	319.86	19.048		
10,600.00	7,230.70	7,201.70	7,230.70	121.87	249.69	90.66	1,337.97	-9,143.35	6,001.65	5,680.06	321.59	18.662		
10,700.00	7,230.17	7,201.17	7,230.17	125.05	249.67	90.65	1,337.97	-9,143.35	5,910.98	5,587.59	323.39	18.278		
10,800.00	7,229.64	7,200.64	7,229.64	128.25	249.65	90.63	1,337.97	-9,143.35	5,820.62	5,495.35	325.27	17.895		
10,900.00	7,229.11	7,200.11	7,229.11	131.44	249.63	90.62	1,337.97	-9,143.35	5,730.58	5,403.37	327.21	17.513		
11,000.00	7,228.58	7,200.42	7,228.58	134.65	249.64	90.61	1,337.97	-9,143.35	5,640.87	5,311.61	329.26	17.132		
11,100.00	7,228.05	7,200.95	7,228.05	137.86	249.66	90.60	1,337.97	-9,143.35	5,551.51	5,220.12	331.39	16.752		
11,200.00	7,227.52	7,201.48	7,227.52	141.08	249.68	90.58	1,337.97	-9,143.35	5,462.53	5,128.92	333.61	16.374		
11,300.00	7,227.00	7,202.00	7,227.00	144.30	249.70	90.57	1,337.97	-9,143.35	5,373.93	5,038.03	335.90	15.999		
11,400.00	7,226.47	7,202.53	7,226.47	147.52	249.72	90.56	1,337.97	-9,143.35	5,285.73	4,947.45	338.28	15.625		
11,500.00	7,225.94	7,203.06	7,225.94	150.76	249.74	90.55	1,337.97	-9,143.35	5,197.97	4,857.22	340.75	15.255		
11,600.00	7,225.41	7,203.59	7,225.41	153.99	249.75	90.54	1,337.97	-9,143.35	5,110.65	4,767.34	343.31	14.887		
11,700.00	7,224.88	7,204.12	7,224.88	157.23	249.77	90.52	1,337.97	-9,143.35	5,023.81	4,677.85	345.96	14.521		
11,800.00	7,224.35	7,204.65	7,224.35	160.48	249.79	90.51	1,337.97	-9,143.35	4,937.46	4,588.75	348.71	14.159		
11,900.00	7,223.82	7,205.18	7,223.82	163.72	249.81	90.50	1,337.97	-9,143.35	4,851.64	4,500.08	351.56	13.800		
12,000.00	7,223.29	7,205.71	7,223.29	166.98	249.83	90.49	1,337.97	-9,143.35	4,766.37	4,411.86	354.51	13.445		
12,100.00	7,222.77	7,206.23	7,222.77	170.23	249.85	90.48	1,337.97	-9,143.35	4,681.68	4,324.11	357.58	13.093		
12,200.00	7,222.24	7,206.76	7,222.24	173.49	249.86	90.46	1,337.97	-9,143.35	4,597.61	4,236.86	360.75	12.745		
12,300.00	7,221.71	7,207.29	7,221.71	176.75	249.88	90.45	1,337.97	-9,143.35	4,514.19	4,150.16	364.04	12.400		
12,400.00	7,221.18	7,207.82	7,221.18	180.01	249.90	90.44	1,337.97	-9,143.35	4,431.46	4,064.01	367.44	12.060		
12,500.00	7,220.65	7,208.35	7,220.65	183.28	249.92	90.43	1,337.97	-9,143.35	4,349.45	3,978.48	370.97	11.724		
12,600.00	7,220.12	7,208.88	7,220.12	186.54	249.94	90.42	1,337.97	-9,143.35	4,268.21	3,893.58	374.63	11.393		
12,700.00	7,219.59	7,209.41	7,219.59	189.81	249.96	90.40	1,337.97	-9,143.35	4,187.77	3,809.37	378.41	11.067		
12,800.00	7,219.06	7,209.94	7,219.06	193.09	249.98	90.39	1,337.97	-9,143.35	4,108.20	3,725.88	382.33	10.745		
12,900.00	7,218.54	7,210.47	7,218.54	196.36	249.26	90.38	1,337.97	-9,143.35	4,029.54	3,643.90	385.65	10.449		
13,000.00	7,218.01	7,210.99	7,218.01	199.64	249.24	90.37	1,337.97	-9,143.35	3,951.85	3,562.05	389.80	10.138		
13,100.00	7,217.48	7,211.52	7,217.48	202.92	249.23	90.36	1,337.97	-9,143.35	3,875.17	3,481.08	394.10	9.833		
13,200.00	7,216.95	7,212.05	7,216.95	206.20	249.21	90.34	1,337.97	-9,143.35	3,799.59	3,401.05	398.53	9.534		
13,300.00	7,216.42	7,212.58	7,216.42	209.48	249.19	90.33	1,337.97	-9,143.35	3,725.15	3,322.03	403.12	9.241		
13,400.00	7,215.89	7,213.11	7,215.89	212.76	249.17	90.32	1,337.97	-9,143.35	3,651.93	3,244.08	407.85	8.954		
13,500.00	7,215.36	7,213.64	7,215.36	216.05	249.15	90.31	1,337.97	-9,143.35	3,580.01	3,167.28	412.73	8.674		
13,600.00	7,214.84	7,214.16	7,214.84	219.33	249.13	90.30	1,337.97	-9,143.35	3,509.47	3,091.71	417.76	8.401		
13,700.00	7,214.31	7,214.69	7,214.31	222.62	249.12	90.28	1,337.97	-9,143.35	3,440.38	3,017.46	422.93	8.135		
13,800.00	7,213.78	7,215.22	7,213.78	225.91	249.10	90.27	1,337.97	-9,143.35	3,372.85	2,944.61	428.24	7.876		
13,900.00	7,213.25	7,215.75	7,213.25	229.20	249.08	90.26	1,337.97	-9,143.35	3,306.96	2,873.27	433.69	7.625		
14,000.00	7,212.72	7,216.28	7,212.72	232.49	249.06	90.25	1,337.97	-9,143.35	3,242.82	2,803.55	439.27	7.382		
14,100.00	7,212.19	7,216.81	7,212.19	235.79	249.04	90.24	1,337.97	-9,143.35	3,180.52	2,735.55	444.97	7.148		
14,200.00	7,211.66	7,217.34	7,211.66	239.08	249.02	90.22	1,337.97	-9,143.35	3,120.19	2,669.40	450.79	6.922		
14,300.00	7,211.13	7,217.87	7,211.13	242.38	249.00	90.21	1,337.97	-9,143.35	3,061.94	2,605.23	456.71	6.704		
14,400.00	7,210.61	7,218.39	7,210.61	245.67	248.99	90.20	1,337.97	-9,143.35	3,005.88	2,543.17	462.71	6.496		
14,500.00	7,210.08	7,218.92	7,210.08	248.97	248.97	90.19	1,337.97	-9,143.35	2,952.15	2,483.37	468.78	6.297		
14,600.00	7,209.55	7,219.45	7,209.55	252.27	248.95	90.17	1,337.97	-9,143.35	2,900.88	2,425.98	474.90	6.108		
14,700.00	7,209.02	7,219.98	7,209.02	255.57	248.93	90.16	1,337.97	-9,143.35	2,852.18	2,371.15	481.04	5.929		
14,800.00	7,208.49	7,220.51	7,208.49	258.87	248.91	90.15	1,337.97	-9,143.35	2,806.21	2,319.04	487.17	5.760		
14,900.00	7,207.96	7,221.04	7,207.96	262.17	248.89	90.14	1,337.97	-9,143.35	2,763.09	2,269.83	493.26	5.602		
15,000.00	7,207.43	7,221.57	7,207.43	265.47	248.88	90.13	1,337.97	-9,143.35	2,722.97	2,223.68	499.29	5.454		
15,081.89	7,207.00	7,222.10	7,207.00	268.17	248.86	90.12	1,337.97	-9,143.35	2,692.43	2,188.29	504.14	5.341	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15.37	1.37	3.28	3.28	2.85	2,384.37	118.75	2,387.32					
100.00	100.00	126.05	112.04	3.28	3.30	2.84	2,384.09	118.37	2,387.06	2,380.48	6.58	362.713		
200.00	200.00	235.10	221.10	3.34	3.37	2.84	2,383.28	118.24	2,386.30	2,379.59	6.71	355.510		
225.62	225.62	260.88	246.88	3.36	3.40	174.80	2,383.05	118.24	2,386.19	2,379.43	6.76	352.900 CC, ES		
300.00	299.98	332.21	318.20	3.44	3.50	174.80	2,382.43	118.21	2,387.17	2,380.23	6.94	344.152		
400.00	399.84	422.41	408.40	3.59	3.65	174.79	2,381.94	117.66	2,391.81	2,384.57	7.24	330.358		
500.00	499.45	511.37	497.36	3.80	3.83	174.77	2,381.87	116.88	2,400.36	2,392.74	7.62	314.892		
600.00	598.70	602.25	588.23	4.06	4.05	174.75	2,382.15	116.01	2,412.76	2,404.68	8.08	298.619		
700.00	697.49	691.03	677.01	4.38	4.28	174.75	2,382.74	115.57	2,428.83	2,420.24	8.59	282.666		
800.00	796.13	810.70	796.68	4.74	4.62	174.79	2,383.29	115.61	2,445.64	2,436.41	9.23	264.904		
900.00	894.78	891.74	877.72	5.15	4.87	174.83	2,383.63	115.77	2,462.38	2,452.58	9.80	251.186		
1,000.00	993.43	1,011.10	997.07	5.58	5.26	174.88	2,384.01	116.11	2,479.06	2,468.52	10.53	235.352		
1,100.00	1,092.07	1,106.46	1,092.43	6.03	5.58	174.92	2,383.96	116.55	2,495.37	2,484.15	11.22	222.498		
1,200.00	1,190.72	1,198.29	1,184.26	6.50	5.90	174.97	2,384.04	117.27	2,511.83	2,499.93	11.91	210.943		
1,300.00	1,289.36	1,313.23	1,299.20	6.98	6.32	175.02	2,383.93	117.99	2,528.12	2,515.41	12.71	198.953		
1,400.00	1,388.01	1,401.15	1,387.12	7.47	6.64	175.05	2,383.84	118.09	2,544.35	2,530.93	13.42	189.590		
1,500.00	1,486.65	1,514.62	1,500.59	7.97	7.07	175.09	2,383.53	118.31	2,560.45	2,546.20	14.25	179.698		
1,600.00	1,585.30	1,619.62	1,605.58	8.48	7.47	175.13	2,382.81	118.47	2,576.12	2,561.06	15.06	171.094		
1,700.00	1,683.94	1,718.95	1,704.91	9.00	7.85	175.15	2,382.06	118.12	2,591.70	2,575.84	15.85	163.490		
1,800.00	1,782.59	1,819.67	1,805.62	9.52	8.24	175.17	2,381.18	117.33	2,607.14	2,590.48	16.66	156.464		
1,900.00	1,881.24	1,906.52	1,892.47	10.05	8.59	175.18	2,380.69	116.59	2,622.87	2,605.45	17.42	150.556		
2,000.00	1,979.88	2,017.14	2,003.08	10.58	9.03	175.20	2,379.92	115.75	2,638.48	2,620.19	18.29	144.269		
2,100.00	2,078.53	2,103.51	2,089.44	11.11	9.37	175.20	2,379.42	114.78	2,654.19	2,635.14	19.06	139.286		
2,200.00	2,177.17	2,194.70	2,180.62	11.64	9.74	175.21	2,379.24	113.68	2,670.27	2,650.42	19.85	134.537		
2,300.00	2,275.82	2,274.06	2,259.99	12.18	10.06	175.21	2,379.45	112.97	2,686.83	2,666.24	20.59	130.498		
2,400.00	2,374.46	2,358.29	2,344.21	12.72	10.40	175.22	2,380.24	112.25	2,704.06	2,682.70	21.35	126.630		
2,500.00	2,473.11	2,442.80	2,428.70	13.26	10.74	175.22	2,381.46	111.04	2,721.74	2,699.62	22.12	123.031		
2,600.00	2,571.76	2,525.92	2,511.79	13.80	11.08	175.21	2,383.13	109.82	2,739.98	2,717.09	22.89	119.725		
2,700.00	2,670.40	2,616.91	2,602.74	14.35	11.46	175.21	2,385.42	108.39	2,758.70	2,735.01	23.69	116.457		
2,800.00	2,769.05	2,731.74	2,717.53	14.89	11.93	175.20	2,387.84	106.62	2,777.01	2,752.40	24.61	112.839		
2,900.00	2,867.69	2,827.29	2,813.05	15.44	12.33	175.19	2,389.84	104.91	2,795.31	2,769.87	25.44	109.874		
3,000.00	2,966.34	2,938.21	2,923.92	15.99	12.79	175.17	2,391.86	102.38	2,813.31	2,786.96	26.35	106.765		
3,100.00	3,064.98	3,033.32	3,019.00	16.53	13.18	175.15	2,393.38	100.38	2,831.12	2,803.94	27.18	104.148		
3,200.00	3,163.63	3,122.35	3,108.00	17.08	13.55	175.14	2,395.16	98.65	2,849.31	2,821.32	27.99	101.807		
3,300.00	3,262.27	3,223.70	3,209.31	17.63	13.97	175.13	2,397.05	96.95	2,867.39	2,838.53	28.85	99.376		
3,400.00	3,360.92	3,300.01	3,285.59	18.18	14.29	175.13	2,398.83	95.74	2,885.94	2,856.34	29.59	97.517		
3,500.00	3,459.57	3,377.23	3,362.76	18.74	14.61	175.12	2,401.20	94.67	2,905.22	2,874.88	30.34	95.763		
3,600.00	3,558.21	3,507.33	3,492.80	19.29	15.16	175.14	2,405.13	93.84	2,924.56	2,893.21	31.36	93.266		
3,700.00	3,656.86	3,588.84	3,574.28	19.84	15.50	175.15	2,407.26	93.57	2,943.45	2,911.32	32.12	91.625		
3,800.00	3,755.50	3,732.64	3,718.05	20.39	16.10	175.17	2,410.06	92.39	2,961.59	2,928.37	33.22	89.157		
3,900.00	3,854.15	3,828.81	3,814.20	20.95	16.50	175.17	2,411.45	91.46	2,979.31	2,945.24	34.07	87.458		
4,000.00	3,952.79	3,951.62	3,936.98	21.50	17.02	175.16	2,412.80	88.98	2,996.63	2,961.58	35.05	85.492		
4,100.00	4,051.44	4,064.44	4,049.76	22.05	17.49	175.13	2,413.18	86.05	3,013.15	2,977.16	35.99	83.728		
4,200.00	4,150.08	4,154.08	4,139.36	22.61	17.87	175.11	2,413.43	83.59	3,029.63	2,992.82	36.81	82.314		
4,300.00	4,248.73	4,242.65	4,227.92	23.16	18.24	175.09	2,414.04	81.77	3,046.53	3,008.91	37.62	80.986		
4,400.00	4,347.38	4,331.86	4,317.11	23.72	18.62	175.09	2,414.82	80.24	3,063.64	3,025.21	38.43	79.713		
4,500.00	4,446.02	4,413.70	4,398.94	24.27	18.96	175.09	2,415.92	79.40	3,081.25	3,042.04	39.21	78.584		
4,600.00	4,544.67	4,506.69	4,491.91	24.83	19.35	175.10	2,417.48	78.44	3,099.19	3,059.14	40.04	77.394		
4,700.00	4,643.31	4,583.89	4,569.08	25.39	19.68	175.10	2,419.14	77.33	3,117.56	3,076.77	40.79	76.423		
4,800.00	4,741.96	4,707.10	4,692.25	25.94	20.20	175.09	2,421.85	75.18	3,136.00	3,094.21	41.79	75.035		
4,900.00	4,840.60	4,822.18	4,807.29	26.50	20.69	175.07	2,423.57	72.75	3,153.71	3,110.96	42.75	73.771		
5,000.00	4,939.25	4,933.17	4,918.24	27.05	21.16	175.05	2,424.49	69.96	3,170.71	3,127.02	43.68	72.582		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,037.90	5,020.74	5,005.76	27.61	21.53	175.02	2,425.44	67.42	3,187.96	3,143.46	44.49	71.649		
5,200.00	5,136.54	5,128.41	5,113.39	28.17	21.98	175.00	2,426.40	64.82	3,205.04	3,159.63	45.41	70.577		
5,300.00	5,235.19	5,214.55	5,199.52	28.72	22.35	175.00	2,427.27	63.59	3,222.29	3,176.08	46.21	69.727		
5,400.00	5,333.83	5,306.24	5,291.19	29.28	22.74	175.00	2,428.46	62.40	3,239.84	3,192.79	47.04	68.868		
5,500.00	5,432.48	5,405.62	5,390.56	29.84	23.16	175.01	2,429.80	61.58	3,257.46	3,209.54	47.92	67.981		
5,600.00	5,531.12	5,500.76	5,485.69	30.40	23.56	175.03	2,431.09	61.28	3,275.12	3,226.36	48.77	67.158		
5,700.00	5,629.77	5,580.82	5,565.75	30.95	23.90	175.05	2,432.43	61.28	3,293.11	3,243.58	49.53	66.483		
5,800.00	5,728.41	5,692.54	5,677.44	31.51	24.37	175.08	2,434.45	61.99	3,311.28	3,260.81	50.48	65.601		
5,900.00	5,827.06	5,823.54	5,808.44	32.07	24.93	175.13	2,435.74	62.86	3,328.62	3,277.10	51.52	64.602		
6,000.00	5,925.71	5,947.41	5,932.30	32.63	25.45	175.16	2,436.05	62.81	3,345.24	3,292.70	52.53	63.681		
6,100.00	6,024.35	6,069.64	6,054.53	33.19	25.97	175.18	2,435.30	62.33	3,360.93	3,307.40	53.53	62.791		
6,200.00	6,123.00	6,174.19	6,159.08	33.74	26.41	175.20	2,434.28	61.77	3,376.28	3,321.85	54.43	62.033		
6,300.00	6,221.64	6,268.43	6,253.31	34.30	26.81	175.21	2,433.33	61.23	3,391.61	3,336.34	55.27	61.360		
6,400.00	6,320.29	6,358.74	6,343.61	34.86	27.19	175.22	2,432.65	60.37	3,407.15	3,351.05	56.10	60.732		
6,500.00	6,418.93	6,439.90	6,424.76	35.42	27.54	175.22	2,432.31	59.29	3,423.02	3,366.14	56.88	60.181		
6,600.00	6,517.58	6,523.30	6,508.15	35.98	27.89	175.22	2,432.53	58.11	3,439.53	3,381.86	57.67	59.645		
6,700.00	6,616.23	6,641.34	6,626.19	36.54	28.40	175.22	2,432.54	56.69	3,455.80	3,397.16	58.65	58.927		
6,800.00	6,714.51	6,746.96	6,731.79	37.10	28.85	139.30	2,432.22	54.99	3,472.06	3,412.50	59.56	58.297		
6,900.00	6,810.42	6,846.39	6,831.21	37.66	29.27	119.42	2,431.75	53.41	3,488.84	3,428.40	60.43	57.729		
7,000.00	6,901.58	6,936.35	6,921.15	38.21	29.65	110.16	2,431.32	52.03	3,506.18	3,444.92	61.26	57.236		
7,100.00	6,985.76	7,020.65	7,005.45	38.76	30.01	104.90	2,430.93	51.25	3,524.16	3,462.09	62.07	56.780		
7,200.00	7,060.88	7,106.68	7,091.48	39.32	30.38	101.55	2,430.37	50.96	3,542.73	3,479.80	62.93	56.295		
7,300.00	7,125.09	7,214.06	7,198.85	39.90	30.83	99.53	2,428.79	50.87	3,561.68	3,497.68	64.00	55.651		
7,400.00	7,176.81	7,260.34	7,245.12	40.55	31.03	97.31	2,427.91	50.84	3,581.53	3,516.65	64.88	55.206		
7,500.00	7,214.77	7,298.48	7,283.25	41.30	31.19	95.29	2,427.18	50.82	3,602.62	3,536.74	65.87	54.690		
7,600.00	7,238.02	7,321.89	7,306.65	42.22	31.29	93.26	2,426.73	50.80	3,624.86	3,557.89	66.97	54.126		
7,700.00	7,246.01	7,329.97	7,314.74	43.32	31.32	91.15	2,426.58	50.80	3,647.98	3,579.84	68.14	53.534		
7,800.00	7,245.50	7,329.54	7,314.30	44.65	31.32	91.03	2,426.58	50.80	3,672.57	3,603.16	69.41	52.910		
7,900.00	7,244.97	7,329.09	7,313.85	46.21	31.32	91.02	2,426.59	50.80	3,699.70	3,628.90	70.81	52.250		
8,000.00	7,244.44	7,328.63	7,313.40	47.99	31.32	91.02	2,426.60	50.80	3,729.32	3,657.02	72.31	51.577		
8,100.00	7,243.91	7,328.18	7,312.95	49.96	31.32	91.01	2,426.61	50.80	3,761.36	3,687.48	73.88	50.910		
8,200.00	7,243.39	7,327.73	7,312.49	52.10	31.31	91.00	2,426.62	50.80	3,795.77	3,720.26	75.51	50.265		
8,300.00	7,242.86	7,327.28	7,312.04	54.38	31.31	90.99	2,426.63	50.80	3,832.48	3,755.29	77.19	49.652		
8,400.00	7,242.33	7,326.82	7,311.59	56.78	31.31	90.99	2,426.64	50.80	3,871.43	3,792.54	78.88	49.078		
8,500.00	7,241.80	7,326.37	7,311.13	59.28	31.31	90.98	2,426.65	50.80	3,912.54	3,831.95	80.59	48.550		
8,600.00	7,241.27	7,325.92	7,310.68	61.88	31.31	90.97	2,426.65	50.80	3,955.75	3,873.46	82.29	48.069		
8,700.00	7,240.74	7,325.46	7,310.23	64.54	31.30	90.96	2,426.66	50.80	4,001.00	3,917.01	83.99	47.638		
8,800.00	7,240.21	7,325.01	7,309.78	67.27	31.30	90.96	2,426.67	50.80	4,048.21	3,962.55	85.66	47.257		
8,900.00	7,239.68	7,324.56	7,309.32	70.06	31.30	90.95	2,426.68	50.80	4,097.32	4,010.01	87.31	46.926		
9,000.00	7,239.16	7,324.11	7,308.87	72.89	31.30	90.94	2,426.69	50.80	4,148.26	4,059.32	88.94	46.643		
9,100.00	7,238.63	7,323.65	7,308.42	75.77	31.30	90.94	2,426.70	50.80	4,200.96	4,110.44	90.53	46.406		
9,200.00	7,238.10	7,323.20	7,307.97	78.69	31.30	90.93	2,426.71	50.80	4,255.36	4,163.28	92.08	46.215		
9,300.00	7,237.57	7,322.75	7,307.51	81.64	31.29	90.92	2,426.71	50.80	4,311.39	4,217.80	93.59	46.067		
9,400.00	7,237.04	7,322.29	7,307.06	84.62	31.29	90.91	2,426.72	50.80	4,369.00	4,273.93	95.06	45.959		
9,500.00	7,236.51	7,321.84	7,306.61	87.63	31.29	90.91	2,426.73	50.80	4,428.11	4,331.62	96.49	45.891		
9,600.00	7,235.98	7,321.39	7,306.15	90.66	31.29	90.90	2,426.74	50.80	4,488.67	4,390.79	97.88	45.859 SF		
9,700.00	7,235.45	7,320.94	7,305.70	93.72	31.29	90.89	2,426.75	50.80	4,550.63	4,451.40	99.23	45.862		
9,800.00	7,234.93	7,320.48	7,305.25	96.79	31.28	90.88	2,426.76	50.81	4,613.91	4,513.39	100.53	45.897		
9,900.00	7,234.40	7,320.03	7,304.80	99.88	31.28	90.88	2,426.77	50.81	4,678.49	4,576.70	101.79	45.964		
10,000.00	7,233.87	7,319.58	7,304.34	102.98	31.28	90.87	2,426.78	50.81	4,744.29	4,641.28	103.00	46.059		
10,100.00	7,233.34	7,319.13	7,303.89	106.10	31.28	90.86	2,426.78	50.81	4,811.26	4,707.08	104.18	46.182		
10,200.00	7,232.81	7,318.67	7,303.44	109.23	31.28	90.85	2,426.79	50.81	4,879.37	4,774.06	105.32	46.331		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.28	7,318.22	7,302.99	112.38	31.27	90.85	2,426.80	50.81	4,948.56	4,842.15	106.41	46.504		
10,400.00	7,231.75	7,317.77	7,302.53	115.53	31.27	90.84	2,426.81	50.81	5,018.79	4,911.33	107.47	46.700		
10,500.00	7,231.23	7,317.31	7,302.08	118.70	31.27	90.83	2,426.82	50.81	5,090.02	4,981.53	108.49	46.918		
10,600.00	7,230.70	7,316.86	7,301.63	121.87	31.27	90.83	2,426.83	50.81	5,162.20	5,052.73	109.47	47.156		
10,700.00	7,230.17	7,316.41	7,301.17	125.05	31.27	90.82	2,426.84	50.81	5,235.30	5,124.88	110.42	47.413		
10,800.00	7,229.64	7,315.96	7,300.72	128.25	31.26	90.81	2,426.85	50.81	5,309.27	5,197.94	111.33	47.688		
10,900.00	7,229.11	7,315.50	7,300.27	131.44	31.26	90.80	2,426.85	50.81	5,384.08	5,271.87	112.21	47.981		
11,000.00	7,228.58	7,315.05	7,299.82	134.65	31.26	90.80	2,426.86	50.81	5,459.71	5,346.64	113.06	48.289		
11,100.00	7,228.05	7,314.60	7,299.36	137.86	31.26	90.79	2,426.87	50.81	5,536.10	5,422.22	113.88	48.613		
11,200.00	7,227.52	7,314.14	7,298.91	141.08	31.26	90.78	2,426.88	50.81	5,613.23	5,498.56	114.67	48.950		
11,300.00	7,227.00	7,313.69	7,298.46	144.30	31.25	90.77	2,426.89	50.81	5,691.08	5,575.65	115.43	49.302		
11,400.00	7,226.47	7,313.24	7,298.01	147.52	31.25	90.77	2,426.90	50.81	5,769.61	5,653.45	116.17	49.666		
11,500.00	7,225.94	7,312.79	7,297.55	150.76	31.25	90.76	2,426.91	50.81	5,848.80	5,731.92	116.88	50.043		
11,600.00	7,225.41	7,312.33	7,297.10	153.99	31.25	90.75	2,426.91	50.81	5,928.61	5,811.05	117.56	50.431		
11,700.00	7,224.88	7,311.88	7,296.65	157.23	31.25	90.74	2,426.92	50.81	6,009.03	5,890.81	118.22	50.830		
11,800.00	7,224.35	7,311.43	7,296.19	160.48	31.25	90.74	2,426.93	50.81	6,090.03	5,971.18	118.85	51.240		
11,900.00	7,223.82	7,310.97	7,295.74	163.72	31.24	90.73	2,426.94	50.81	6,171.59	6,052.12	119.47	51.659		
12,000.00	7,223.29	7,310.52	7,295.29	166.98	31.24	90.72	2,426.95	50.81	6,253.68	6,133.62	120.06	52.088		
12,100.00	7,222.77	7,310.07	7,294.84	170.23	31.24	90.72	2,426.96	50.81	6,336.28	6,215.65	120.63	52.525		
12,200.00	7,222.24	7,309.62	7,294.38	173.49	31.24	90.71	2,426.97	50.81	6,419.38	6,298.20	121.19	52.971		
12,300.00	7,221.71	7,309.16	7,293.93	176.75	31.24	90.70	2,426.98	50.81	6,502.96	6,381.24	121.72	53.425		
12,400.00	7,221.18	7,308.71	7,293.48	180.01	31.23	90.69	2,426.98	50.81	6,587.00	6,464.76	122.24	53.887		
12,500.00	7,220.65	7,308.26	7,293.03	183.28	31.23	90.69	2,426.99	50.81	6,671.47	6,548.73	122.74	54.356		
12,600.00	7,220.12	7,307.80	7,292.57	186.54	31.23	90.68	2,427.00	50.81	6,756.37	6,633.15	123.22	54.831		
12,700.00	7,219.59	7,307.35	7,292.12	189.81	31.23	90.67	2,427.01	50.81	6,841.68	6,717.99	123.69	55.314		
12,800.00	7,219.06	7,306.90	7,291.67	193.09	31.23	90.66	2,427.02	50.81	6,927.38	6,803.23	124.14	55.802		
12,900.00	7,218.54	7,306.45	7,291.21	196.36	31.22	90.66	2,427.03	50.81	7,013.45	6,888.87	124.58	56.297		
13,000.00	7,218.01	7,305.99	7,290.76	199.64	31.22	90.65	2,427.04	50.81	7,099.90	6,974.89	125.00	56.797		
13,100.00	7,217.48	7,305.54	7,290.31	202.92	31.22	90.64	2,427.05	50.81	7,186.69	7,061.28	125.42	57.303		
13,200.00	7,216.95	7,305.09	7,289.86	206.20	31.22	90.64	2,427.05	50.81	7,273.83	7,148.01	125.81	57.814		
13,300.00	7,216.42	7,304.64	7,289.40	209.48	31.22	90.63	2,427.06	50.82	7,361.29	7,235.09	126.20	58.330		
13,400.00	7,215.89	7,304.18	7,288.95	212.76	31.21	90.62	2,427.07	50.82	7,449.06	7,322.49	126.58	58.850		
13,500.00	7,215.36	7,303.73	7,288.50	216.05	31.21	90.61	2,427.08	50.82	7,537.14	7,410.20	126.94	59.375		
13,600.00	7,214.84	7,303.28	7,288.05	219.33	31.21	90.61	2,427.09	50.82	7,625.52	7,498.23	127.29	59.905		
13,700.00	7,214.31	7,302.82	7,287.59	222.62	31.21	90.60	2,427.10	50.82	7,714.18	7,586.54	127.64	60.439		
13,800.00	7,213.78	7,302.37	7,287.14	225.91	31.21	90.59	2,427.11	50.82	7,803.11	7,675.14	127.97	60.976		
13,900.00	7,213.25	7,301.92	7,286.69	229.20	31.20	90.58	2,427.11	50.82	7,892.31	7,764.02	128.29	61.518		
14,000.00	7,212.72	7,301.47	7,286.23	232.49	31.20	90.58	2,427.12	50.82	7,981.76	7,853.16	128.61	62.063		
14,100.00	7,212.19	7,301.01	7,285.78	235.79	31.20	90.57	2,427.13	50.82	8,071.47	7,942.55	128.91	62.611		
14,200.00	7,211.66	7,300.56	7,285.33	239.08	31.20	90.56	2,427.14	50.82	8,161.41	8,032.19	129.21	63.163		
14,300.00	7,211.13	7,300.11	7,284.88	242.38	31.20	90.55	2,427.15	50.82	8,251.58	8,122.08	129.50	63.718		
14,400.00	7,210.61	7,299.65	7,284.42	245.67	31.20	90.55	2,427.16	50.82	8,341.98	8,212.19	129.78	64.276		
14,500.00	7,210.08	7,299.20	7,283.97	248.97	31.19	90.54	2,427.17	50.82	8,432.59	8,302.53	130.06	64.837		
14,600.00	7,209.55	7,298.75	7,283.52	252.27	31.19	90.53	2,427.18	50.82	8,523.41	8,393.09	130.33	65.401		
14,700.00	7,209.02	7,298.30	7,283.07	255.57	31.19	90.53	2,427.18	50.82	8,614.44	8,483.85	130.59	65.967		
14,800.00	7,208.49	7,297.84	7,282.61	258.87	31.19	90.52	2,427.19	50.82	8,705.66	8,574.82	130.84	66.536		
14,900.00	7,207.96	7,297.39	7,282.16	262.17	31.19	90.51	2,427.20	50.82	8,797.08	8,665.99	131.09	67.108		
15,000.00	7,207.43	7,296.94	7,281.71	265.47	31.18	90.50	2,427.21	50.82	8,888.67	8,757.34	131.33	67.681		
15,081.89	7,207.00	7,296.57	7,281.34	268.17	31.18	90.50	2,427.22	50.82	8,963.82	8,832.29	131.52	68.153		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	59.00	3.28	3.28	-165.49	-4,039.75	-1,045.14	4,173.18					
100.00	100.00	41.00	100.00	3.28	3.36	-165.49	-4,039.75	-1,045.14	4,172.76	4,166.12	6.64	628.249		
200.00	200.00	141.00	200.00	3.34	4.57	-165.49	-4,039.75	-1,045.14	4,172.76	4,164.86	7.90	527.979		
300.00	299.98	240.98	299.98	3.44	7.43	6.47	-4,039.75	-1,045.14	4,171.03	4,160.16	10.87	383.707		
400.00	399.84	340.84	399.84	3.59	10.67	6.49	-4,039.75	-1,045.14	4,165.83	4,151.56	14.26	292.091		
500.00	499.45	440.45	499.45	3.80	14.02	6.52	-4,039.75	-1,045.14	4,157.17	4,139.35	17.81	233.386		
600.00	598.70	539.70	598.70	4.06	17.41	6.57	-4,039.75	-1,045.14	4,145.06	4,123.62	21.44	193.313		
700.00	697.49	638.49	697.49	4.38	20.80	6.62	-4,039.75	-1,045.14	4,129.65	4,104.53	25.12	164.399		
800.00	796.13	737.13	796.13	4.74	24.21	6.65	-4,039.75	-1,045.14	4,113.36	4,084.53	28.82	142.705		
900.00	894.78	835.78	894.78	5.15	27.63	6.67	-4,039.75	-1,045.14	4,097.06	4,064.50	32.56	125.823		
1,000.00	993.43	934.43	993.43	5.58	31.05	6.70	-4,039.75	-1,045.14	4,080.77	4,044.44	36.33	112.336		
1,100.00	1,092.07	1,033.07	1,092.07	6.03	34.48	6.73	-4,039.75	-1,045.14	4,064.47	4,024.36	40.11	101.330		
1,200.00	1,190.72	1,131.72	1,190.72	6.50	37.90	6.75	-4,039.75	-1,045.14	4,048.18	4,004.27	43.91	92.187		
1,300.00	1,289.36	1,230.36	1,289.36	6.98	41.34	6.78	-4,039.75	-1,045.14	4,031.89	3,984.16	47.73	84.477		
1,400.00	1,388.01	1,329.01	1,388.01	7.47	44.77	6.81	-4,039.75	-1,045.14	4,015.60	3,964.05	51.55	77.891		
1,500.00	1,486.65	1,427.65	1,486.65	7.97	48.21	6.84	-4,039.75	-1,045.14	3,999.31	3,943.92	55.39	72.204		
1,600.00	1,585.30	1,526.30	1,585.30	8.48	51.64	6.87	-4,039.75	-1,045.14	3,983.02	3,923.79	59.23	67.245		
1,700.00	1,683.94	1,624.94	1,683.94	9.00	55.08	6.89	-4,039.75	-1,045.14	3,966.74	3,903.65	63.08	62.883		
1,800.00	1,782.59	1,723.59	1,782.59	9.52	58.52	6.92	-4,039.75	-1,045.14	3,950.45	3,883.51	66.94	59.019		
1,900.00	1,881.24	1,822.24	1,881.24	10.05	61.96	6.95	-4,039.75	-1,045.14	3,934.16	3,863.37	70.80	55.571		
2,000.00	1,979.88	1,920.88	1,979.88	10.58	65.39	6.98	-4,039.75	-1,045.14	3,917.88	3,843.22	74.66	52.477		
2,100.00	2,078.53	2,019.53	2,078.53	11.11	68.83	7.01	-4,039.75	-1,045.14	3,901.59	3,823.07	78.53	49.686		
2,200.00	2,177.17	2,118.17	2,177.17	11.64	72.27	7.04	-4,039.75	-1,045.14	3,885.31	3,802.92	82.40	47.154		
2,300.00	2,275.82	2,216.82	2,275.82	12.18	75.71	7.07	-4,039.75	-1,045.14	3,869.03	3,782.76	86.27	44.849		
2,400.00	2,374.46	2,315.46	2,374.46	12.72	79.16	7.10	-4,039.75	-1,045.14	3,852.75	3,762.61	90.14	42.740		
2,500.00	2,473.11	2,414.11	2,473.11	13.26	82.60	7.13	-4,039.75	-1,045.14	3,836.47	3,742.45	94.02	40.805		
2,600.00	2,571.76	2,512.76	2,571.76	13.80	86.04	7.16	-4,039.75	-1,045.14	3,820.19	3,722.29	97.90	39.022		
2,700.00	2,670.40	2,611.40	2,670.40	14.35	89.48	7.19	-4,039.75	-1,045.14	3,803.91	3,702.13	101.78	37.374		
2,800.00	2,769.05	2,710.05	2,769.05	14.89	92.92	7.22	-4,039.75	-1,045.14	3,787.64	3,681.98	105.66	35.847		
2,900.00	2,867.69	2,808.69	2,867.69	15.44	96.36	7.25	-4,039.75	-1,045.14	3,771.36	3,661.82	109.55	34.427		
3,000.00	2,966.34	2,907.34	2,966.34	15.99	99.80	7.28	-4,039.75	-1,045.14	3,755.09	3,641.66	113.43	33.105		
3,100.00	3,064.98	3,005.98	3,064.98	16.53	103.25	7.32	-4,039.75	-1,045.14	3,738.82	3,621.50	117.32	31.869		
3,200.00	3,163.63	3,104.63	3,163.63	17.08	106.69	7.35	-4,039.75	-1,045.14	3,722.54	3,601.34	121.20	30.713		
3,300.00	3,262.27	3,203.27	3,262.27	17.63	110.13	7.38	-4,039.75	-1,045.14	3,706.27	3,581.18	125.09	29.629		
3,400.00	3,360.92	3,301.92	3,360.92	18.18	113.57	7.41	-4,039.75	-1,045.14	3,690.00	3,561.02	128.98	28.609		
3,500.00	3,459.57	3,400.57	3,459.57	18.74	117.01	7.45	-4,039.75	-1,045.14	3,673.73	3,540.86	132.87	27.649		
3,600.00	3,558.21	3,500.79	3,558.21	19.29	120.51	7.48	-4,039.75	-1,045.14	3,657.47	3,520.65	136.81	26.733		
3,700.00	3,656.86	3,602.14	3,656.86	19.84	124.05	7.51	-4,039.75	-1,045.14	3,641.20	3,500.40	140.80	25.861		
3,800.00	3,755.50	3,703.50	3,755.50	20.39	127.59	7.55	-4,039.75	-1,045.14	3,624.94	3,480.15	144.79	25.037		
3,900.00	3,854.15	3,804.85	3,854.15	20.95	131.12	7.58	-4,039.75	-1,045.14	3,608.67	3,459.90	148.77	24.256		
4,000.00	3,952.79	3,906.21	3,952.79	21.50	134.66	7.62	-4,039.75	-1,045.14	3,592.41	3,439.65	152.76	23.517		
4,100.00	4,051.44	4,007.56	4,051.44	22.05	138.20	7.65	-4,039.75	-1,045.14	3,576.15	3,419.40	156.75	22.815		
4,200.00	4,150.08	4,108.92	4,150.08	22.61	141.73	7.69	-4,039.75	-1,045.14	3,559.89	3,399.15	160.74	22.148		
4,300.00	4,248.73	4,189.73	4,248.73	23.16	144.56	7.72	-4,039.75	-1,045.14	3,543.63	3,379.62	164.01	21.607		
4,400.00	4,347.38	4,288.38	4,347.38	23.72	148.00	7.76	-4,039.75	-1,045.14	3,527.37	3,359.47	167.90	21.009		
4,500.00	4,446.02	4,387.02	4,446.02	24.27	151.44	7.79	-4,039.75	-1,045.14	3,511.12	3,339.32	171.80	20.438		
4,600.00	4,544.67	4,485.67	4,544.67	24.83	154.88	7.83	-4,039.75	-1,045.14	3,494.86	3,319.17	175.69	19.892		
4,700.00	4,643.31	4,584.31	4,643.31	25.39	158.33	7.87	-4,039.75	-1,045.14	3,478.61	3,299.02	179.59	19.370		
4,800.00	4,741.96	4,682.96	4,741.96	25.94	161.77	7.90	-4,039.75	-1,045.14	3,462.36	3,278.88	183.48	18.870		
4,900.00	4,840.60	4,781.60	4,840.60	26.50	165.21	7.94	-4,039.75	-1,045.14	3,446.11	3,258.73	187.38	18.391		
5,000.00	4,939.25	4,880.25	4,939.25	27.05	168.66	7.98	-4,039.75	-1,045.14	3,429.86	3,238.58	191.28	17.931		
5,100.00	5,037.90	4,978.90	5,037.90	27.61	172.10	8.02	-4,039.75	-1,045.14	3,413.61	3,218.44	195.17	17.490		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,077.54	5,136.54	28.17	175.54	8.06	-4,039.75	-1,045.14	3,397.37	3,198.30	199.07	17.066		
5,300.00	5,235.19	5,176.19	5,235.19	28.72	178.99	8.09	-4,039.75	-1,045.14	3,381.12	3,178.16	202.97	16.658		
5,400.00	5,333.83	5,274.83	5,333.83	29.28	182.43	8.13	-4,039.75	-1,045.14	3,364.88	3,158.02	206.87	16.266		
5,500.00	5,432.48	5,373.48	5,432.48	29.84	185.87	8.17	-4,039.75	-1,045.14	3,348.64	3,137.88	210.76	15.888		
5,600.00	5,531.12	5,472.12	5,531.12	30.40	189.32	8.21	-4,039.75	-1,045.14	3,332.40	3,117.74	214.66	15.524		
5,700.00	5,629.77	5,570.77	5,629.77	30.95	192.76	8.25	-4,039.75	-1,045.14	3,316.16	3,097.60	218.56	15.173		
5,800.00	5,728.41	5,669.41	5,728.41	31.51	196.20	8.30	-4,039.75	-1,045.14	3,299.93	3,077.47	222.46	14.834		
5,900.00	5,827.06	5,768.06	5,827.06	32.07	199.64	8.34	-4,039.75	-1,045.14	3,283.69	3,057.33	226.36	14.507		
6,000.00	5,925.71	5,866.71	5,925.71	32.63	203.09	8.38	-4,039.75	-1,045.14	3,267.46	3,037.20	230.26	14.191		
6,100.00	6,024.35	5,965.35	6,024.35	33.19	206.53	8.42	-4,039.75	-1,045.14	3,251.23	3,017.07	234.16	13.885		
6,200.00	6,123.00	6,064.00	6,123.00	33.74	209.97	8.46	-4,039.75	-1,045.14	3,235.00	2,996.94	238.06	13.589		
6,300.00	6,221.64	6,162.64	6,221.64	34.30	213.42	8.51	-4,039.75	-1,045.14	3,218.77	2,976.82	241.96	13.303		
6,400.00	6,320.29	6,261.29	6,320.29	34.86	216.86	8.55	-4,039.75	-1,045.14	3,202.54	2,956.69	245.86	13.026		
6,500.00	6,418.93	6,359.93	6,418.93	35.42	220.30	8.59	-4,039.75	-1,045.14	3,186.32	2,936.57	249.76	12.758		
6,600.00	6,517.58	6,458.58	6,517.58	35.98	223.75	8.64	-4,039.75	-1,045.14	3,170.10	2,916.44	253.66	12.498		
6,700.00	6,616.23	6,557.23	6,616.23	36.54	227.19	8.68	-4,039.75	-1,045.14	3,153.88	2,896.32	257.56	12.245		
6,800.00	6,714.51	6,655.51	6,714.51	37.10	230.62	-27.47	-4,039.75	-1,045.14	3,136.14	2,874.71	261.43	11.996		
6,900.00	6,810.42	6,751.42	6,810.42	37.66	233.97	-48.42	-4,039.75	-1,045.14	3,114.37	2,849.20	265.17	11.745		
7,000.00	6,901.58	6,842.58	6,901.58	38.21	237.15	-59.49	-4,039.75	-1,045.14	3,089.30	2,820.59	268.72	11.497		
7,100.00	6,985.76	6,926.76	6,985.76	38.76	240.09	-67.12	-4,039.75	-1,045.14	3,061.99	2,789.98	272.01	11.257		
7,200.00	7,060.88	7,001.88	7,060.88	39.32	242.71	-73.23	-4,039.75	-1,045.14	3,033.73	2,758.69	275.04	11.030		
7,300.00	7,125.09	7,066.09	7,125.09	39.90	244.95	-78.38	-4,039.75	-1,045.14	3,005.93	2,728.10	277.83	10.819		
7,400.00	7,176.81	7,117.81	7,176.81	40.55	246.76	-82.70	-4,039.75	-1,045.14	2,980.05	2,699.65	280.40	10.628		
7,500.00	7,214.77	7,155.77	7,214.77	41.30	248.08	-86.12	-4,039.75	-1,045.14	2,957.47	2,674.67	282.80	10.458		
7,600.00	7,238.02	7,179.02	7,238.02	42.22	248.90	-88.57	-4,039.75	-1,045.14	2,939.38	2,654.35	285.03	10.312		
7,700.00	7,246.01	7,187.01	7,246.01	43.32	249.18	-89.99	-4,039.75	-1,045.14	2,926.66	2,639.61	287.05	10.196		
7,800.00	7,245.50	7,186.50	7,245.50	44.65	249.16	-90.02	-4,039.75	-1,045.14	2,918.66	2,629.59	289.07	10.097		
7,900.00	7,244.97	7,185.97	7,244.97	46.21	249.14	-90.01	-4,039.75	-1,045.14	2,914.06	2,622.73	291.34	10.002		
7,983.94	7,244.53	7,185.53	7,244.53	47.69	249.12	-90.00	-4,039.75	-1,045.14	2,912.85	2,619.44	293.41	9.928 CC		
8,000.00	7,244.44	7,185.44	7,244.44	47.99	249.12	-90.00	-4,039.75	-1,045.14	2,912.90	2,619.09	293.81	9.914		
8,100.00	7,243.91	7,184.91	7,243.91	49.96	249.10	-89.99	-4,039.75	-1,045.14	2,915.17	2,618.72	296.44	9.834 ES		
8,200.00	7,243.39	7,184.39	7,243.39	52.10	249.08	-89.98	-4,039.75	-1,045.14	2,920.86	2,621.67	299.19	9.763		
8,300.00	7,242.86	7,183.86	7,242.86	54.38	249.07	-89.97	-4,039.75	-1,045.14	2,929.95	2,627.94	302.01	9.701		
8,400.00	7,242.33	7,183.33	7,242.33	56.78	249.05	-89.96	-4,039.75	-1,045.14	2,942.42	2,637.54	304.88	9.651		
8,500.00	7,241.80	7,182.80	7,241.80	59.28	249.03	-89.95	-4,039.75	-1,045.14	2,958.22	2,650.46	307.76	9.612		
8,600.00	7,241.27	7,182.27	7,241.27	61.88	249.01	-89.94	-4,039.75	-1,045.14	2,977.29	2,666.66	310.62	9.585		
8,700.00	7,240.74	7,181.74	7,240.74	64.54	248.99	-89.93	-4,039.75	-1,045.14	2,999.58	2,686.12	313.46	9.569		
8,800.00	7,240.21	7,181.21	7,240.21	67.27	248.97	-89.92	-4,039.75	-1,045.14	3,025.01	2,708.76	316.24	9.565 SF		
8,900.00	7,239.68	7,180.68	7,239.68	70.06	248.95	-89.90	-4,039.75	-1,045.14	3,053.50	2,734.54	318.96	9.573		
9,000.00	7,239.16	7,180.16	7,239.16	72.89	248.94	-89.89	-4,039.75	-1,045.14	3,084.98	2,763.37	321.61	9.592		
9,100.00	7,238.63	7,179.63	7,238.63	75.77	248.92	-89.88	-4,039.75	-1,045.14	3,119.34	2,795.17	324.17	9.623		
9,200.00	7,238.10	7,179.10	7,238.10	78.69	248.90	-89.87	-4,039.75	-1,045.14	3,156.50	2,829.86	326.64	9.664		
9,300.00	7,237.57	7,178.57	7,237.57	81.64	248.88	-89.86	-4,039.75	-1,045.14	3,196.36	2,867.34	329.01	9.715		
9,400.00	7,237.04	7,178.04	7,237.04	84.62	248.86	-89.85	-4,039.75	-1,045.14	3,238.81	2,907.52	331.29	9.776		
9,500.00	7,236.51	7,177.51	7,236.51	87.63	248.84	-89.84	-4,039.75	-1,045.14	3,283.76	2,950.30	333.46	9.848		
9,600.00	7,235.98	7,176.98	7,235.98	90.66	248.83	-89.83	-4,039.75	-1,045.14	3,331.11	2,995.58	335.53	9.928		
9,700.00	7,235.45	7,176.45	7,235.45	93.72	248.81	-89.82	-4,039.75	-1,045.14	3,380.76	3,043.26	337.50	10.017		
9,800.00	7,234.93	7,175.93	7,234.93	96.79	248.79	-89.81	-4,039.75	-1,045.14	3,432.60	3,093.23	339.37	10.115		
9,900.00	7,234.40	7,175.40	7,234.40	99.88	248.77	-89.80	-4,039.75	-1,045.14	3,486.53	3,145.39	341.14	10.220		
10,000.00	7,233.87	7,174.87	7,233.87	102.98	248.75	-89.79	-4,039.75	-1,045.14	3,542.47	3,199.66	342.81	10.334		
10,100.00	7,233.34	7,174.34	7,233.34	106.10	248.73	-89.78	-4,039.75	-1,045.14	3,600.32	3,255.93	344.40	10.454		
10,200.00	7,232.81	7,173.81	7,232.81	109.23	248.71	-89.77	-4,039.75	-1,045.14	3,659.99	3,314.10	345.89	10.581		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,173.28	7,232.28	112.38	248.70	-89.76	-4,039.75	-1,045.14	3,721.39	3,374.09	347.30	10.715		
10,400.00	7,231.75	7,172.75	7,231.75	115.53	248.68	-89.75	-4,039.75	-1,045.14	3,784.43	3,435.81	348.62	10.855		
10,500.00	7,231.23	7,172.23	7,231.23	118.70	248.66	-89.74	-4,039.75	-1,045.14	3,849.04	3,499.17	349.87	11.001		
10,600.00	7,230.70	7,171.70	7,230.70	121.87	248.64	-89.73	-4,039.75	-1,045.14	3,915.14	3,564.10	351.04	11.153		
10,700.00	7,230.17	7,171.17	7,230.17	125.05	248.62	-89.72	-4,039.75	-1,045.14	3,982.65	3,630.51	352.15	11.310		
10,800.00	7,229.64	7,170.64	7,229.64	128.25	248.60	-89.71	-4,039.75	-1,045.14	4,051.51	3,698.32	353.18	11.471		
10,900.00	7,229.11	7,170.11	7,229.11	131.44	248.59	-89.70	-4,039.75	-1,045.14	4,121.64	3,767.48	354.16	11.638		
11,000.00	7,228.58	7,169.58	7,228.58	134.65	248.57	-89.69	-4,039.75	-1,045.14	4,192.98	3,837.91	355.07	11.809		
11,100.00	7,228.05	7,169.05	7,228.05	137.86	248.55	-89.68	-4,039.75	-1,045.14	4,265.48	3,909.55	355.93	11.984		
11,200.00	7,227.52	7,168.52	7,227.52	141.08	248.53	-89.67	-4,039.75	-1,045.14	4,339.07	3,982.33	356.74	12.163		
11,300.00	7,227.00	7,168.00	7,227.00	144.30	248.51	-89.66	-4,039.75	-1,045.14	4,413.69	4,056.20	357.49	12.346		
11,400.00	7,226.47	7,167.47	7,226.47	147.52	248.49	-89.64	-4,039.75	-1,045.14	4,489.31	4,131.11	358.20	12.533		
11,500.00	7,225.94	7,166.94	7,225.94	150.76	248.47	-89.63	-4,039.75	-1,045.14	4,565.86	4,206.99	358.87	12.723		
11,600.00	7,225.41	7,166.41	7,225.41	153.99	248.46	-89.62	-4,039.75	-1,045.14	4,643.30	4,283.81	359.49	12.916		
11,700.00	7,224.88	7,165.88	7,224.88	157.23	248.44	-89.61	-4,039.75	-1,045.14	4,721.59	4,361.51	360.08	13.113		
11,800.00	7,224.35	7,165.35	7,224.35	160.48	248.42	-89.60	-4,039.75	-1,045.14	4,800.69	4,440.06	360.63	13.312		
11,900.00	7,223.82	7,164.82	7,223.82	163.72	248.40	-89.59	-4,039.75	-1,045.14	4,880.56	4,519.41	361.15	13.514		
12,000.00	7,223.29	7,164.29	7,223.29	166.98	248.38	-89.58	-4,039.75	-1,045.14	4,961.15	4,599.51	361.64	13.719		
12,100.00	7,222.77	7,163.77	7,222.77	170.23	248.36	-89.57	-4,039.75	-1,045.14	5,042.44	4,680.35	362.09	13.926		
12,200.00	7,222.24	7,163.24	7,222.24	173.49	248.35	-89.56	-4,039.75	-1,045.14	5,124.39	4,761.87	362.52	14.135		
12,300.00	7,221.71	7,162.71	7,221.71	176.75	248.33	-89.55	-4,039.75	-1,045.14	5,206.98	4,844.05	362.93	14.347		
12,400.00	7,221.18	7,162.18	7,221.18	180.01	248.31	-89.54	-4,039.75	-1,045.14	5,290.16	4,926.85	363.31	14.561		
12,500.00	7,220.65	7,161.65	7,220.65	183.28	248.29	-89.53	-4,039.75	-1,045.14	5,373.92	5,010.25	363.66	14.777		
12,600.00	7,220.12	7,161.12	7,220.12	186.54	248.27	-89.52	-4,039.75	-1,045.14	5,458.22	5,094.22	364.00	14.995		
12,700.00	7,219.59	7,160.59	7,219.59	189.81	248.25	-89.51	-4,039.75	-1,045.14	5,543.04	5,178.73	364.32	15.215		
12,800.00	7,219.06	7,160.06	7,219.06	193.09	248.23	-89.50	-4,039.75	-1,045.14	5,628.37	5,263.76	364.61	15.437		
12,900.00	7,218.54	7,159.54	7,218.54	196.36	248.22	-89.49	-4,039.75	-1,045.14	5,714.17	5,349.28	364.89	15.660		
13,000.00	7,218.01	7,159.01	7,218.01	199.64	248.20	-89.48	-4,039.75	-1,045.14	5,800.42	5,435.27	365.16	15.885		
13,100.00	7,217.48	7,158.48	7,217.48	202.92	248.18	-89.47	-4,039.75	-1,045.14	5,887.11	5,521.71	365.40	16.111		
13,200.00	7,216.95	7,157.95	7,216.95	206.20	248.16	-89.46	-4,039.75	-1,045.14	5,974.22	5,608.58	365.64	16.339		
13,300.00	7,216.42	7,157.42	7,216.42	209.48	248.14	-89.45	-4,039.75	-1,045.14	6,061.72	5,695.86	365.86	16.569		
13,400.00	7,215.89	7,156.89	7,215.89	212.76	248.12	-89.44	-4,039.75	-1,045.14	6,149.60	5,783.54	366.07	16.799		
13,500.00	7,215.36	7,156.36	7,215.36	216.05	248.11	-89.43	-4,039.75	-1,045.14	6,237.85	5,871.59	366.26	17.031		
13,600.00	7,214.84	7,155.84	7,214.84	219.33	248.09	-89.42	-4,039.75	-1,045.14	6,326.45	5,960.01	366.45	17.264		
13,700.00	7,214.31	7,155.31	7,214.31	222.62	248.07	-89.41	-4,039.75	-1,045.14	6,415.39	6,048.77	366.62	17.499		
13,800.00	7,213.78	7,154.78	7,213.78	225.91	248.05	-89.40	-4,039.75	-1,045.14	6,504.64	6,137.86	366.78	17.734		
13,900.00	7,213.25	7,154.25	7,213.25	229.20	248.03	-89.38	-4,039.75	-1,045.14	6,594.20	6,227.26	366.94	17.971		
14,000.00	7,212.72	7,153.72	7,212.72	232.49	248.01	-89.37	-4,039.75	-1,045.14	6,684.06	6,316.98	367.09	18.208		
14,100.00	7,212.19	7,153.19	7,212.19	235.79	247.99	-89.36	-4,039.75	-1,045.14	6,774.21	6,406.98	367.23	18.447		
14,200.00	7,211.66	7,152.66	7,211.66	239.08	247.98	-89.35	-4,039.75	-1,045.14	6,864.62	6,497.27	367.36	18.687		
14,300.00	7,211.13	7,152.13	7,211.13	242.38	247.96	-89.34	-4,039.75	-1,045.14	6,955.30	6,587.82	367.48	18.927		
14,400.00	7,210.61	7,151.61	7,210.61	245.67	247.94	-89.33	-4,039.75	-1,045.14	7,046.24	6,678.64	367.60	19.168		
14,500.00	7,210.08	7,151.08	7,210.08	248.97	247.92	-89.32	-4,039.75	-1,045.14	7,137.41	6,769.70	367.71	19.411		
14,600.00	7,209.55	7,150.55	7,209.55	252.27	247.90	-89.31	-4,039.75	-1,045.14	7,228.82	6,861.00	367.81	19.654		
14,700.00	7,209.02	7,150.02	7,209.02	255.57	247.88	-89.30	-4,039.75	-1,045.14	7,320.45	6,952.54	367.91	19.897		
14,800.00	7,208.49	7,149.49	7,208.49	258.87	247.87	-89.29	-4,039.75	-1,045.14	7,412.30	7,044.29	368.01	20.142		
14,900.00	7,207.96	7,148.96	7,207.96	262.17	247.85	-89.28	-4,039.75	-1,045.14	7,504.35	7,136.26	368.10	20.387		
15,000.00	7,207.43	7,148.43	7,207.43	265.47	247.83	-89.27	-4,039.75	-1,045.14	7,596.61	7,228.43	368.18	20.633		
15,081.89	7,207.00	7,148.00	7,207.00	268.17	247.81	-89.26	-4,039.75	-1,045.14	7,672.30	7,304.06	368.25	20.835		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4.00	0.00	3.28	3.28	-40.68	1,350.87	-1,161.17	1,781.34					
100.00	100.00	104.00	100.00	3.28	3.78	-40.68	1,350.87	-1,161.17	1,781.34	1,774.27	7.07	252.035		
200.00	200.00	204.00	200.00	3.34	6.30	-40.68	1,350.87	-1,161.17	1,781.34	1,771.70	9.63	184.887	CC	
300.00	299.98	304.02	299.98	3.44	9.46	131.30	1,350.87	-1,161.17	1,782.49	1,769.60	12.89	138.234		
400.00	399.84	404.16	399.84	3.59	12.79	131.38	1,350.87	-1,161.17	1,785.95	1,769.57	16.38	109.014	ES	
500.00	499.45	504.55	499.45	3.80	16.20	131.50	1,350.87	-1,161.17	1,791.73	1,771.73	20.00	89.595		
600.00	598.70	605.30	598.70	4.06	19.66	131.67	1,350.87	-1,161.17	1,799.85	1,776.15	23.71	75.916		
700.00	697.49	706.51	697.49	4.38	23.15	131.92	1,350.87	-1,161.17	1,810.26	1,782.76	27.50	65.824		
800.00	796.13	807.87	796.13	4.74	26.66	132.30	1,350.87	-1,161.17	1,821.34	1,789.99	31.34	58.109		
900.00	894.78	909.22	894.78	5.15	30.17	132.68	1,350.87	-1,161.17	1,832.50	1,797.28	35.22	52.026		
1,000.00	993.43	999.43	993.43	5.58	32.96	133.05	1,350.87	-1,161.17	1,843.74	1,805.34	38.39	48.020		
1,100.00	1,092.07	1,088.07	1,092.07	6.03	36.39	133.42	1,350.87	-1,161.17	1,855.06	1,812.83	42.23	43.929		
1,200.00	1,190.72	1,186.72	1,190.72	6.50	39.82	133.78	1,350.87	-1,161.17	1,866.45	1,820.37	46.08	40.505		
1,300.00	1,289.36	1,285.36	1,289.36	6.98	43.25	134.14	1,350.87	-1,161.17	1,877.91	1,827.97	49.94	37.600		
1,400.00	1,388.01	1,384.01	1,388.01	7.47	46.69	134.49	1,350.87	-1,161.17	1,889.45	1,835.63	53.82	35.107		
1,500.00	1,486.65	1,482.65	1,486.65	7.97	50.12	134.84	1,350.87	-1,161.17	1,901.06	1,843.36	57.70	32.946		
1,600.00	1,585.30	1,581.30	1,585.30	8.48	53.56	135.19	1,350.87	-1,161.17	1,912.74	1,851.15	61.59	31.054		
1,700.00	1,683.94	1,679.94	1,683.94	9.00	57.00	135.53	1,350.87	-1,161.17	1,924.49	1,859.01	65.49	29.386		
1,800.00	1,782.59	1,778.59	1,782.59	9.52	60.43	135.87	1,350.87	-1,161.17	1,936.31	1,866.92	69.39	27.905		
1,900.00	1,881.24	1,877.24	1,881.24	10.05	63.87	136.20	1,350.87	-1,161.17	1,948.20	1,874.90	73.29	26.581		
2,000.00	1,979.88	1,975.88	1,979.88	10.58	67.31	136.53	1,350.87	-1,161.17	1,960.14	1,882.94	77.20	25.390		
2,100.00	2,078.53	2,074.53	2,078.53	11.11	70.75	136.86	1,350.87	-1,161.17	1,972.16	1,891.05	81.11	24.315		
2,200.00	2,177.17	2,173.17	2,177.17	11.64	74.19	137.18	1,350.87	-1,161.17	1,984.23	1,899.21	85.02	23.338		
2,300.00	2,275.82	2,271.82	2,275.82	12.18	77.63	137.50	1,350.87	-1,161.17	1,996.37	1,907.44	88.93	22.448		
2,400.00	2,374.46	2,370.46	2,374.46	12.72	81.07	137.81	1,350.87	-1,161.17	2,008.57	1,915.72	92.85	21.633		
2,500.00	2,473.11	2,469.11	2,473.11	13.26	84.51	138.12	1,350.87	-1,161.17	2,020.83	1,924.06	96.76	20.884		
2,600.00	2,571.76	2,567.76	2,571.76	13.80	87.96	138.43	1,350.87	-1,161.17	2,033.14	1,932.46	100.68	20.194		
2,700.00	2,670.40	2,666.40	2,670.40	14.35	91.40	138.73	1,350.87	-1,161.17	2,045.52	1,940.92	104.60	19.556		
2,800.00	2,769.05	2,765.05	2,769.05	14.89	94.84	139.03	1,350.87	-1,161.17	2,057.95	1,949.43	108.51	18.965		
2,900.00	2,867.69	2,863.69	2,867.69	15.44	98.28	139.33	1,350.87	-1,161.17	2,070.43	1,958.00	112.43	18.415		
3,000.00	2,966.34	2,962.34	2,966.34	15.99	101.72	139.62	1,350.87	-1,161.17	2,082.97	1,966.62	116.35	17.903		
3,100.00	3,064.98	3,060.98	3,064.98	16.53	105.16	139.91	1,350.87	-1,161.17	2,095.56	1,975.30	120.27	17.424		
3,200.00	3,163.63	3,159.63	3,163.63	17.08	108.61	140.20	1,350.87	-1,161.17	2,108.21	1,984.02	124.19	16.976		
3,300.00	3,262.27	3,258.27	3,262.27	17.63	112.05	140.48	1,350.87	-1,161.17	2,120.91	1,992.80	128.10	16.556		
3,400.00	3,360.92	3,356.92	3,360.92	18.18	115.49	140.76	1,350.87	-1,161.17	2,133.65	2,001.63	132.02	16.161		
3,500.00	3,459.57	3,455.57	3,459.57	18.74	118.93	141.03	1,350.87	-1,161.17	2,146.45	2,010.51	135.94	15.790		
3,600.00	3,558.21	3,554.21	3,558.21	19.29	122.38	141.30	1,350.87	-1,161.17	2,159.30	2,019.44	139.86	15.439		
3,700.00	3,656.86	3,652.86	3,656.86	19.84	125.82	141.57	1,350.87	-1,161.17	2,172.19	2,028.41	143.77	15.108		
3,800.00	3,755.50	3,751.50	3,755.50	20.39	129.26	141.84	1,350.87	-1,161.17	2,185.13	2,037.44	147.69	14.795		
3,900.00	3,854.15	3,850.15	3,854.15	20.95	132.70	142.10	1,350.87	-1,161.17	2,198.12	2,046.51	151.61	14.499		
4,000.00	3,952.79	3,948.79	3,952.79	21.50	136.15	142.36	1,350.87	-1,161.17	2,211.15	2,055.62	155.53	14.217		
4,100.00	4,051.44	4,047.44	4,051.44	22.05	139.59	142.62	1,350.87	-1,161.17	2,224.23	2,064.78	159.44	13.950		
4,200.00	4,150.08	4,146.08	4,150.08	22.61	143.03	142.87	1,350.87	-1,161.17	2,237.35	2,073.99	163.36	13.696		
4,300.00	4,248.73	4,244.73	4,248.73	23.16	146.48	143.12	1,350.87	-1,161.17	2,250.51	2,083.24	167.27	13.454		
4,400.00	4,347.38	4,343.38	4,347.38	23.72	149.92	143.37	1,350.87	-1,161.17	2,263.72	2,092.53	171.19	13.223		
4,500.00	4,446.02	4,442.02	4,446.02	24.27	153.36	143.62	1,350.87	-1,161.17	2,276.96	2,101.86	175.10	13.003		
4,600.00	4,544.67	4,540.67	4,544.67	24.83	156.80	143.86	1,350.87	-1,161.17	2,290.25	2,111.23	179.02	12.793		
4,700.00	4,643.31	4,639.31	4,643.31	25.39	160.25	144.10	1,350.87	-1,161.17	2,303.58	2,120.65	182.93	12.592		
4,800.00	4,741.96	4,737.96	4,741.96	25.94	163.69	144.34	1,350.87	-1,161.17	2,316.95	2,130.10	186.85	12.400		
4,900.00	4,840.60	4,836.60	4,840.60	26.50	167.13	144.57	1,350.87	-1,161.17	2,330.35	2,139.59	190.76	12.216		
5,000.00	4,939.25	4,935.25	4,939.25	27.05	170.58	144.80	1,350.87	-1,161.17	2,343.80	2,149.12	194.67	12.040		
5,100.00	5,037.90	5,033.90	5,037.90	27.61	174.02	145.03	1,350.87	-1,161.17	2,357.28	2,158.69	198.59	11.870		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,132.54	5,136.54	28.17	177.46	145.26	1,350.87	-1,161.17	2,370.80	2,168.30	202.50	11.708	
5,300.00	5,235.19	5,231.19	5,235.19	28.72	180.91	145.48	1,350.87	-1,161.17	2,384.36	2,177.94	206.41	11.551	
5,400.00	5,333.83	5,329.83	5,333.83	29.28	184.35	145.70	1,350.87	-1,161.17	2,397.95	2,187.62	210.33	11.401	
5,500.00	5,432.48	5,428.48	5,432.48	29.84	187.79	145.92	1,350.87	-1,161.17	2,411.57	2,197.34	214.24	11.257	
5,600.00	5,531.12	5,527.12	5,531.12	30.40	191.23	146.14	1,350.87	-1,161.17	2,425.23	2,207.08	218.15	11.117	
5,700.00	5,629.77	5,625.77	5,629.77	30.95	194.68	146.35	1,350.87	-1,161.17	2,438.93	2,216.87	222.06	10.983	
5,800.00	5,728.41	5,724.41	5,728.41	31.51	198.12	146.56	1,350.87	-1,161.17	2,452.65	2,226.68	225.97	10.854	
5,900.00	5,827.06	5,823.06	5,827.06	32.07	201.56	146.77	1,350.87	-1,161.17	2,466.41	2,236.53	229.88	10.729	
6,000.00	5,925.71	5,921.71	5,925.71	32.63	205.01	146.98	1,350.87	-1,161.17	2,480.21	2,246.42	233.79	10.609	
6,100.00	6,024.35	6,020.35	6,024.35	33.19	208.45	147.18	1,350.87	-1,161.17	2,494.03	2,256.33	237.70	10.492	
6,200.00	6,123.00	6,119.00	6,123.00	33.74	211.89	147.38	1,350.87	-1,161.17	2,507.88	2,266.27	241.61	10.380	
6,300.00	6,221.64	6,217.64	6,221.64	34.30	215.34	147.58	1,350.87	-1,161.17	2,521.77	2,276.25	245.52	10.271	
6,400.00	6,320.29	6,316.29	6,320.29	34.86	218.78	147.78	1,350.87	-1,161.17	2,535.69	2,286.26	249.43	10.166	
6,500.00	6,418.93	6,414.93	6,418.93	35.42	222.22	147.98	1,350.87	-1,161.17	2,549.63	2,296.29	253.34	10.064	
6,600.00	6,517.58	6,513.58	6,517.58	35.98	225.67	148.17	1,350.87	-1,161.17	2,563.60	2,306.36	257.24	9.966	
6,700.00	6,616.23	6,612.23	6,616.23	36.54	229.11	148.36	1,350.87	-1,161.17	2,577.61	2,316.45	261.15	9.870	
6,800.00	6,714.51	6,710.51	6,714.51	37.10	232.54	113.08	1,350.87	-1,161.17	2,589.50	2,324.44	265.06	9.769	
6,900.00	6,810.42	6,806.42	6,810.42	37.66	235.89	94.49	1,350.87	-1,161.17	2,595.36	2,326.44	268.92	9.651	
7,000.00	6,901.58	6,902.42	6,901.58	38.21	239.24	87.11	1,350.87	-1,161.17	2,595.38	2,322.58	272.80	9.514	
7,100.00	6,985.76	6,981.76	6,985.76	38.76	242.01	84.22	1,350.87	-1,161.17	2,590.18	2,314.04	276.14	9.380	
7,200.00	7,060.88	7,056.88	7,060.88	39.32	244.63	83.56	1,350.87	-1,161.17	2,580.62	2,301.23	279.39	9.237	
7,300.00	7,125.09	7,121.09	7,125.09	39.90	246.87	84.14	1,350.87	-1,161.17	2,567.78	2,285.42	282.36	9.094	
7,400.00	7,176.81	7,172.81	7,176.81	40.55	248.68	85.41	1,350.87	-1,161.17	2,552.79	2,267.76	285.03	8.956	
7,500.00	7,214.77	7,210.77	7,214.77	41.30	250.00	86.97	1,350.87	-1,161.17	2,536.79	2,249.39	287.40	8.827	
7,600.00	7,238.02	7,234.02	7,238.02	42.22	250.82	88.55	1,350.87	-1,161.17	2,520.78	2,231.35	289.43	8.709	
7,700.00	7,246.01	7,242.01	7,246.01	43.32	251.09	89.98	1,350.87	-1,161.17	2,505.59	2,214.51	291.08	8.608	
7,800.00	7,245.50	7,241.50	7,245.50	44.65	251.08	90.03	1,350.87	-1,161.17	2,492.85	2,200.27	292.58	8.520	
7,900.00	7,244.97	7,240.97	7,244.97	46.21	251.06	90.02	1,350.87	-1,161.17	2,484.08	2,189.86	294.22	8.443	
8,000.00	7,244.44	7,240.44	7,244.44	47.99	251.04	90.01	1,350.87	-1,161.17	2,479.30	2,183.34	295.96	8.377	
8,068.46	7,244.08	7,240.08	7,244.08	49.33	251.03	90.00	1,350.87	-1,161.17	2,478.36	2,181.13	297.22	8.338	
8,100.00	7,243.91	7,239.91	7,243.91	49.96	251.02	90.00	1,350.87	-1,161.17	2,478.56	2,180.76	297.79	8.323	
8,200.00	7,243.39	7,239.39	7,243.39	52.10	251.00	89.98	1,350.87	-1,161.17	2,481.84	2,182.16	299.68	8.282	
8,300.00	7,242.86	7,238.86	7,242.86	54.38	250.98	89.97	1,350.87	-1,161.17	2,489.15	2,187.55	301.60	8.253	
8,400.00	7,242.33	7,238.33	7,242.33	56.78	250.97	89.96	1,350.87	-1,161.17	2,500.43	2,196.90	303.53	8.238	
8,500.00	7,241.80	7,237.80	7,241.80	59.28	250.95	89.95	1,350.87	-1,161.17	2,515.64	2,210.19	305.45	8.236 SF	
8,600.00	7,241.27	7,237.27	7,241.27	61.88	250.93	89.94	1,350.87	-1,161.17	2,534.71	2,227.37	307.35	8.247	
8,700.00	7,240.74	7,236.74	7,240.74	64.54	250.91	89.92	1,350.87	-1,161.17	2,557.55	2,248.36	309.20	8.272	
8,800.00	7,240.21	7,236.21	7,240.21	67.27	250.89	89.91	1,350.87	-1,161.17	2,584.06	2,273.08	310.99	8.309	
8,900.00	7,239.68	7,235.68	7,239.68	70.06	250.87	89.90	1,350.87	-1,161.17	2,614.13	2,301.42	312.71	8.360	
9,000.00	7,239.16	7,235.16	7,239.16	72.89	250.86	89.89	1,350.87	-1,161.17	2,647.64	2,333.28	314.36	8.422	
9,100.00	7,238.63	7,234.63	7,238.63	75.77	250.84	89.87	1,350.87	-1,161.17	2,684.45	2,368.52	315.93	8.497	
9,200.00	7,238.10	7,234.10	7,238.10	78.69	250.82	89.86	1,350.87	-1,161.17	2,724.44	2,407.02	317.42	8.583	
9,300.00	7,237.57	7,233.57	7,237.57	81.64	250.80	89.85	1,350.87	-1,161.17	2,767.47	2,448.65	318.82	8.680	
9,400.00	7,237.04	7,233.04	7,237.04	84.62	250.78	89.84	1,350.87	-1,161.17	2,813.39	2,493.26	320.13	8.788	
9,500.00	7,236.51	7,232.51	7,236.51	87.63	250.76	89.83	1,350.87	-1,161.17	2,862.08	2,540.71	321.36	8.906	
9,600.00	7,235.98	7,231.98	7,235.98	90.66	250.74	89.81	1,350.87	-1,161.17	2,913.38	2,590.87	322.51	9.033	
9,700.00	7,235.45	7,231.45	7,235.45	93.72	250.73	89.80	1,350.87	-1,161.17	2,967.17	2,643.59	323.57	9.170	
9,800.00	7,234.93	7,230.93	7,234.93	96.79	250.71	89.79	1,350.87	-1,161.17	3,023.31	2,698.75	324.56	9.315	
9,900.00	7,234.40	7,230.40	7,234.40	99.88	250.69	89.78	1,350.87	-1,161.17	3,081.67	2,756.20	325.47	9.468	
10,000.00	7,233.87	7,229.87	7,233.87	102.98	250.67	89.76	1,350.87	-1,161.17	3,142.13	2,815.81	326.32	9.629	
10,100.00	7,233.34	7,229.34	7,233.34	106.10	250.65	89.75	1,350.87	-1,161.17	3,204.57	2,877.48	327.09	9.797	
10,200.00	7,232.81	7,228.81	7,232.81	109.23	250.63	89.74	1,350.87	-1,161.17	3,268.88	2,941.08	327.80	9.972	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,228.28	7,232.28	112.38	250.62	89.73	1,350.87	-1,161.17	3,334.95	3,006.49	328.46	10.153		
10,400.00	7,231.75	7,227.75	7,231.75	115.53	250.60	89.72	1,350.87	-1,161.17	3,402.67	3,073.61	329.06	10.341		
10,500.00	7,231.23	7,227.23	7,231.23	118.70	250.58	89.70	1,350.87	-1,161.17	3,471.95	3,142.34	329.61	10.534		
10,600.00	7,230.70	7,226.70	7,230.70	121.87	250.56	89.69	1,350.87	-1,161.17	3,542.70	3,212.59	330.11	10.732		
10,700.00	7,230.17	7,226.17	7,230.17	125.05	250.54	89.68	1,350.87	-1,161.17	3,614.84	3,284.27	330.57	10.935		
10,800.00	7,229.64	7,225.64	7,229.64	128.25	250.52	89.67	1,350.87	-1,161.17	3,688.27	3,357.28	330.99	11.143		
10,900.00	7,229.11	7,225.11	7,229.11	131.44	250.51	89.65	1,350.87	-1,161.17	3,762.93	3,431.56	331.37	11.356		
11,000.00	7,228.58	7,224.58	7,228.58	134.65	250.49	89.64	1,350.87	-1,161.17	3,838.74	3,507.02	331.72	11.572		
11,100.00	7,228.05	7,224.05	7,228.05	137.86	250.47	89.63	1,350.87	-1,161.17	3,915.64	3,583.60	332.04	11.793		
11,200.00	7,227.52	7,223.52	7,227.52	141.08	250.45	89.62	1,350.87	-1,161.17	3,993.56	3,661.23	332.33	12.017		
11,300.00	7,227.00	7,223.00	7,227.00	144.30	250.43	89.61	1,350.87	-1,161.17	4,072.44	3,739.85	332.59	12.245		
11,400.00	7,226.47	7,222.47	7,226.47	147.52	250.41	89.59	1,350.87	-1,161.17	4,152.24	3,819.41	332.83	12.476		
11,500.00	7,225.94	7,221.94	7,225.94	150.76	250.39	89.58	1,350.87	-1,161.17	4,232.89	3,899.85	333.04	12.710		
11,600.00	7,225.41	7,221.41	7,225.41	153.99	250.38	89.57	1,350.87	-1,161.17	4,314.35	3,981.11	333.24	12.947		
11,700.00	7,224.88	7,220.88	7,224.88	157.23	250.36	89.56	1,350.87	-1,161.17	4,396.58	4,063.16	333.42	13.186		
11,800.00	7,224.35	7,220.35	7,224.35	160.48	250.34	89.54	1,350.87	-1,161.17	4,479.53	4,145.96	333.58	13.429		
11,900.00	7,223.82	7,219.82	7,223.82	163.72	250.32	89.53	1,350.87	-1,161.17	4,563.17	4,229.44	333.72	13.673		
12,000.00	7,223.29	7,219.29	7,223.29	166.98	250.30	89.52	1,350.87	-1,161.17	4,647.45	4,313.60	333.86	13.921		
12,100.00	7,222.77	7,218.77	7,222.77	170.23	250.28	89.51	1,350.87	-1,161.17	4,732.34	4,398.37	333.97	14.170		
12,200.00	7,222.24	7,218.24	7,222.24	173.49	250.27	89.50	1,350.87	-1,161.17	4,817.82	4,483.74	334.08	14.421		
12,300.00	7,221.71	7,217.71	7,221.71	176.75	250.25	89.48	1,350.87	-1,161.17	4,903.84	4,569.67	334.17	14.674		
12,400.00	7,221.18	7,217.18	7,221.18	180.01	250.23	89.47	1,350.87	-1,161.17	4,990.38	4,656.12	334.26	14.930		
12,500.00	7,220.65	7,216.65	7,220.65	183.28	250.21	89.46	1,350.87	-1,161.17	5,077.42	4,743.09	334.34	15.187		
12,600.00	7,220.12	7,216.12	7,220.12	186.54	250.19	89.45	1,350.87	-1,161.17	5,164.93	4,830.52	334.41	15.445		
12,700.00	7,219.59	7,215.59	7,219.59	189.81	250.17	89.43	1,350.87	-1,161.17	5,252.88	4,918.42	334.47	15.705		
12,800.00	7,219.06	7,215.06	7,219.06	193.09	250.15	89.42	1,350.87	-1,161.17	5,341.26	5,006.74	334.52	15.967		
12,900.00	7,218.54	7,214.54	7,218.54	196.36	250.14	89.41	1,350.87	-1,161.17	5,430.04	5,095.47	334.57	16.230		
13,000.00	7,218.01	7,214.01	7,218.01	199.64	250.12	89.40	1,350.87	-1,161.17	5,519.20	5,184.59	334.61	16.494		
13,100.00	7,217.48	7,213.48	7,217.48	202.92	250.10	89.39	1,350.87	-1,161.17	5,608.73	5,274.09	334.65	16.760		
13,200.00	7,216.95	7,212.95	7,216.95	206.20	250.08	89.37	1,350.87	-1,161.17	5,698.61	5,363.93	334.68	17.027		
13,300.00	7,216.42	7,212.42	7,216.42	209.48	250.06	89.36	1,350.87	-1,161.17	5,788.82	5,454.11	334.71	17.295		
13,400.00	7,215.89	7,211.89	7,215.89	212.76	250.04	89.35	1,350.87	-1,161.17	5,879.35	5,544.62	334.73	17.564		
13,500.00	7,215.36	7,211.36	7,215.36	216.05	250.03	89.34	1,350.87	-1,161.17	5,970.18	5,635.43	334.75	17.835		
13,600.00	7,214.84	7,210.84	7,214.84	219.33	250.01	89.32	1,350.87	-1,161.17	6,061.29	5,726.53	334.77	18.106		
13,700.00	7,214.31	7,210.31	7,214.31	222.62	249.99	89.31	1,350.87	-1,161.17	6,152.69	5,817.90	334.78	18.378		
13,800.00	7,213.78	7,209.78	7,213.78	225.91	249.97	89.30	1,350.87	-1,161.17	6,244.34	5,909.55	334.80	18.651		
13,900.00	7,213.25	7,209.25	7,213.25	229.20	249.95	89.29	1,350.87	-1,161.17	6,336.25	6,001.45	334.81	18.925		
14,000.00	7,212.72	7,208.72	7,212.72	232.49	249.93	89.28	1,350.87	-1,161.17	6,428.41	6,093.59	334.81	19.200		
14,100.00	7,212.19	7,208.19	7,212.19	235.79	249.91	89.26	1,350.87	-1,161.17	6,520.79	6,185.97	334.82	19.476		
14,200.00	7,211.66	7,207.66	7,211.66	239.08	249.90	89.25	1,350.87	-1,161.17	6,613.39	6,278.57	334.82	19.752		
14,300.00	7,211.13	7,207.13	7,211.13	242.38	249.88	89.24	1,350.87	-1,161.17	6,706.21	6,371.38	334.82	20.029		
14,400.00	7,210.61	7,206.61	7,210.61	245.67	249.86	89.23	1,350.87	-1,161.17	6,799.23	6,464.40	334.83	20.307		
14,500.00	7,210.08	7,206.08	7,210.08	248.97	249.84	89.21	1,350.87	-1,161.17	6,892.44	6,557.62	334.83	20.585		
14,600.00	7,209.55	7,205.55	7,209.55	252.27	249.82	89.20	1,350.87	-1,161.17	6,985.84	6,651.02	334.82	20.864		
14,700.00	7,209.02	7,205.02	7,209.02	255.57	249.80	89.19	1,350.87	-1,161.17	7,079.43	6,744.61	334.82	21.144		
14,800.00	7,208.49	7,204.49	7,208.49	258.87	249.79	89.18	1,350.87	-1,161.17	7,173.18	6,838.36	334.82	21.424		
14,900.00	7,207.96	7,203.96	7,207.96	262.17	249.77	89.17	1,350.87	-1,161.17	7,267.11	6,932.29	334.82	21.705		
15,000.00	7,207.43	7,203.43	7,207.43	265.47	249.75	89.15	1,350.87	-1,161.17	7,361.19	7,026.38	334.81	21.986		
15,081.89	7,207.00	7,203.00	7,207.00	268.17	249.73	89.14	1,350.87	-1,161.17	7,438.35	7,103.54	334.81	22.217		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	18.00	3.28	3.28	-87.58	46.66	-1,102.82	1,103.96					
100.00	100.00	82.00	100.00	3.28	3.58	-87.58	46.66	-1,102.82	1,103.81	1,096.94	6.86	160.825		
200.00	200.00	182.00	200.00	3.34	5.66	-87.58	46.66	-1,102.82	1,103.81	1,094.82	8.99	122.737		
300.00	299.98	281.98	299.98	3.44	8.74	84.48	46.66	-1,102.82	1,103.64	1,091.46	12.18	90.634		
400.00	399.84	381.84	399.84	3.59	12.04	84.75	46.66	-1,102.82	1,103.15	1,087.52	15.63	70.578		
500.00	499.45	481.45	499.45	3.80	15.42	85.22	46.66	-1,102.82	1,102.38	1,083.17	19.21	57.384		
600.00	598.70	580.70	598.70	4.06	18.81	85.87	46.66	-1,102.82	1,101.43	1,078.56	22.87	48.156		
700.00	697.49	679.49	697.49	4.38	22.22	86.68	46.66	-1,102.82	1,100.41	1,073.81	26.60	41.376		
800.00	796.13	778.13	796.13	4.74	25.63	87.52	46.66	-1,102.82	1,099.57	1,069.19	30.37	36.201		
900.00	894.78	876.78	894.78	5.15	29.05	88.36	46.66	-1,102.82	1,098.97	1,064.77	34.20	32.138		
1,000.00	993.43	975.43	993.43	5.58	32.47	89.20	46.66	-1,102.82	1,098.61	1,060.57	38.05	28.874		
1,094.33	1,086.48	1,068.48	1,086.48	6.00	35.71	90.00	46.66	-1,102.82	1,098.51	1,056.80	41.71	26.338 CC		
1,100.00	1,092.07	1,074.07	1,092.07	6.03	35.90	90.05	46.66	-1,102.82	1,098.51	1,056.58	41.93	26.199		
1,200.00	1,190.72	1,172.72	1,190.72	6.50	39.33	90.89	46.66	-1,102.82	1,098.64	1,052.81	45.83	23.973		
1,300.00	1,289.36	1,271.36	1,289.36	6.98	42.76	91.74	46.66	-1,102.82	1,099.02	1,049.28	49.74	22.094		
1,400.00	1,388.01	1,370.01	1,388.01	7.47	46.20	92.58	46.66	-1,102.82	1,099.65	1,045.98	53.67	20.489		
1,500.00	1,486.65	1,468.65	1,486.65	7.97	49.63	93.42	46.66	-1,102.82	1,100.52	1,042.91	57.61	19.104		
1,600.00	1,585.30	1,567.30	1,585.30	8.48	53.07	94.26	46.66	-1,102.82	1,101.63	1,040.08	61.55	17.898		
1,700.00	1,683.94	1,665.94	1,683.94	9.00	56.51	95.10	46.66	-1,102.82	1,102.99	1,037.49	65.50	16.839		
1,800.00	1,782.59	1,764.59	1,782.59	9.52	59.95	95.93	46.66	-1,102.82	1,104.59	1,035.13	69.46	15.903		
1,900.00	1,881.24	1,863.24	1,881.24	10.05	63.39	96.77	46.66	-1,102.82	1,106.43	1,033.01	73.42	15.071		
2,000.00	1,979.88	1,961.88	1,979.88	10.58	66.82	97.60	46.66	-1,102.82	1,108.50	1,031.13	77.38	14.326		
2,100.00	2,078.53	2,060.53	2,078.53	11.11	70.26	98.43	46.66	-1,102.82	1,110.82	1,029.48	81.34	13.656		
2,200.00	2,177.17	2,159.17	2,177.17	11.64	73.70	99.25	46.66	-1,102.82	1,113.38	1,028.07	85.31	13.051		
2,300.00	2,275.82	2,257.82	2,275.82	12.18	77.14	100.07	46.66	-1,102.82	1,116.16	1,026.89	89.28	12.502		
2,400.00	2,374.46	2,356.46	2,374.46	12.72	80.59	100.89	46.66	-1,102.82	1,119.19	1,025.94	93.24	12.003		
2,500.00	2,473.11	2,455.11	2,473.11	13.26	84.03	101.70	46.66	-1,102.82	1,122.44	1,025.23	97.21	11.546		
2,600.00	2,571.76	2,553.76	2,571.76	13.80	87.47	102.50	46.66	-1,102.82	1,125.93	1,024.74	101.18	11.128		
2,700.00	2,670.40	2,652.40	2,670.40	14.35	90.91	103.31	46.66	-1,102.82	1,129.64	1,024.49	105.15	10.743		
2,800.00	2,769.05	2,751.05	2,769.05	14.89	94.35	104.10	46.66	-1,102.82	1,133.57	1,024.45	109.12	10.388		
2,900.00	2,867.69	2,849.69	2,867.69	15.44	97.79	104.89	46.66	-1,102.82	1,137.73	1,024.65	113.09	10.061		
3,000.00	2,966.34	2,948.34	2,966.34	15.99	101.23	105.68	46.66	-1,102.82	1,142.11	1,025.06	117.05	9.757		
3,100.00	3,064.98	3,046.98	3,064.98	16.53	104.68	106.46	46.66	-1,102.82	1,146.71	1,025.69	121.02	9.475		
3,200.00	3,163.63	3,145.63	3,163.63	17.08	108.12	107.23	46.66	-1,102.82	1,151.52	1,026.54	124.98	9.213		
3,300.00	3,262.27	3,244.27	3,262.27	17.63	111.56	108.00	46.66	-1,102.82	1,156.55	1,027.60	128.95	8.969		
3,400.00	3,360.92	3,342.92	3,360.92	18.18	115.00	108.76	46.66	-1,102.82	1,161.78	1,028.87	132.91	8.741		
3,500.00	3,459.57	3,441.57	3,459.57	18.74	118.45	109.51	46.66	-1,102.82	1,167.23	1,030.36	136.87	8.528		
3,600.00	3,558.21	3,540.21	3,558.21	19.29	121.89	110.26	46.66	-1,102.82	1,172.87	1,032.04	140.83	8.328		
3,700.00	3,656.86	3,638.86	3,656.86	19.84	125.33	111.00	46.66	-1,102.82	1,178.72	1,033.93	144.79	8.141		
3,800.00	3,755.50	3,737.50	3,755.50	20.39	128.77	111.73	46.66	-1,102.82	1,184.77	1,036.02	148.74	7.965		
3,900.00	3,854.15	3,836.15	3,854.15	20.95	132.22	112.45	46.66	-1,102.82	1,191.01	1,038.31	152.70	7.800		
4,000.00	3,952.79	3,934.79	3,952.79	21.50	135.66	113.17	46.66	-1,102.82	1,197.44	1,040.79	156.65	7.644		
4,100.00	4,051.44	4,033.44	4,051.44	22.05	139.10	113.88	46.66	-1,102.82	1,204.06	1,043.46	160.60	7.497		
4,200.00	4,150.08	4,132.08	4,150.08	22.61	142.54	114.58	46.66	-1,102.82	1,210.87	1,046.32	164.55	7.359		
4,300.00	4,248.73	4,230.73	4,248.73	23.16	145.99	115.28	46.66	-1,102.82	1,217.86	1,049.37	168.49	7.228		
4,400.00	4,347.38	4,329.38	4,347.38	23.72	149.43	115.96	46.66	-1,102.82	1,225.03	1,052.60	172.44	7.104		
4,500.00	4,446.02	4,428.02	4,446.02	24.27	152.87	116.64	46.66	-1,102.82	1,232.38	1,056.00	176.38	6.987		
4,600.00	4,544.67	4,526.67	4,544.67	24.83	156.32	117.31	46.66	-1,102.82	1,239.90	1,059.58	180.32	6.876		
4,700.00	4,643.31	4,625.31	4,643.31	25.39	159.76	117.97	46.66	-1,102.82	1,247.59	1,063.33	184.26	6.771		
4,800.00	4,741.96	4,723.96	4,741.96	25.94	163.20	118.63	46.66	-1,102.82	1,255.45	1,067.25	188.20	6.671		
4,900.00	4,840.60	4,822.60	4,840.60	26.50	166.64	119.27	46.66	-1,102.82	1,263.48	1,071.34	192.13	6.576		
5,000.00	4,939.25	4,921.25	4,939.25	27.05	170.09	119.91	46.66	-1,102.82	1,271.66	1,075.59	196.07	6.486		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	5,037.90	5,019.90	5,037.90	27.61	173.53	120.54	46.66	-1,102.82	1,280.00	1,080.00	200.00	6.400		
5,200.00	5,136.54	5,118.54	5,136.54	28.17	176.97	121.16	46.66	-1,102.82	1,288.50	1,084.57	203.93	6.318		
5,300.00	5,235.19	5,217.19	5,235.19	28.72	180.42	121.78	46.66	-1,102.82	1,297.15	1,089.29	207.86	6.241		
5,400.00	5,333.83	5,315.83	5,333.83	29.28	183.86	122.38	46.66	-1,102.82	1,305.94	1,094.16	211.79	6.166		
5,500.00	5,432.48	5,414.48	5,432.48	29.84	187.30	122.98	46.66	-1,102.82	1,314.89	1,099.17	215.71	6.096		
5,600.00	5,531.12	5,513.12	5,531.12	30.40	190.75	123.57	46.66	-1,102.82	1,323.97	1,104.34	219.63	6.028		
5,700.00	5,629.77	5,611.77	5,629.77	30.95	194.19	124.15	46.66	-1,102.82	1,333.20	1,109.64	223.56	5.964		
5,800.00	5,728.41	5,710.41	5,728.41	31.51	197.63	124.73	46.66	-1,102.82	1,342.56	1,115.08	227.48	5.902		
5,900.00	5,827.06	5,809.06	5,827.06	32.07	201.08	125.29	46.66	-1,102.82	1,352.06	1,120.66	231.40	5.843		
6,000.00	5,925.71	5,907.71	5,925.71	32.63	204.52	125.85	46.66	-1,102.82	1,361.68	1,126.37	235.31	5.787		
6,100.00	6,024.35	6,006.35	6,024.35	33.19	207.96	126.40	46.66	-1,102.82	1,371.44	1,132.21	239.23	5.733		
6,200.00	6,123.00	6,105.00	6,123.00	33.74	211.41	126.94	46.66	-1,102.82	1,381.32	1,138.18	243.14	5.681		
6,300.00	6,221.64	6,203.64	6,221.64	34.30	214.85	127.48	46.66	-1,102.82	1,391.33	1,144.27	247.06	5.632		
6,400.00	6,320.29	6,302.29	6,320.29	34.86	218.29	128.01	46.66	-1,102.82	1,401.45	1,150.48	250.97	5.584		
6,500.00	6,418.93	6,400.93	6,418.93	35.42	221.74	128.53	46.66	-1,102.82	1,411.70	1,156.82	254.88	5.539		
6,600.00	6,517.58	6,500.42	6,517.58	35.98	225.21	129.04	46.66	-1,102.82	1,422.06	1,163.24	258.82	5.494		
6,700.00	6,616.23	6,601.77	6,616.23	36.54	228.75	129.55	46.66	-1,102.82	1,432.53	1,169.71	262.82	5.451		
6,800.00	6,714.51	6,703.49	6,714.51	37.10	232.30	130.06	46.66	-1,102.82	1,443.12	1,176.27	266.85	5.395		
6,900.00	6,812.82	6,801.78	6,812.82	37.66	235.93	130.57	46.66	-1,102.82	1,453.82	1,182.96	270.98	5.301		
7,000.00	6,911.17	6,900.13	6,911.17	38.21	239.64	131.07	46.66	-1,102.82	1,464.62	1,189.76	275.19	5.195		
7,100.00	7,009.56	7,000.00	7,009.56	38.76	243.42	131.57	46.66	-1,102.82	1,475.52	1,196.66	279.50	5.057		
7,200.00	7,108.00	7,100.00	7,108.00	39.32	247.27	132.07	46.66	-1,102.82	1,486.52	1,203.66	283.91	4.903		
7,300.00	7,206.49	7,200.00	7,206.49	39.89	251.19	132.57	46.66	-1,102.82	1,497.62	1,210.86	288.42	4.742		
7,400.00	7,305.03	7,300.00	7,305.03	40.46	255.17	133.07	46.66	-1,102.82	1,508.82	1,218.16	293.03	4.582		
7,500.00	7,403.62	7,400.00	7,403.62	41.03	259.21	133.57	46.66	-1,102.82	1,520.12	1,225.56	297.74	4.425		
7,600.00	7,502.26	7,500.00	7,502.26	41.60	263.31	134.07	46.66	-1,102.82	1,531.52	1,233.14	302.55	4.289		
7,700.00	7,600.95	7,600.00	7,600.95	42.17	267.47	134.57	46.66	-1,102.82	1,543.02	1,240.86	307.46	4.171		
7,800.00	7,699.69	7,700.00	7,699.69	42.74	271.69	135.07	46.66	-1,102.82	1,554.62	1,248.72	312.47	4.078		
7,900.00	7,798.48	7,800.00	7,798.48	43.31	275.97	135.57	46.66	-1,102.82	1,566.32	1,256.72	317.58	4.012		
8,000.00	7,897.32	7,900.00	7,897.32	43.88	280.31	136.07	46.66	-1,102.82	1,578.12	1,264.86	322.79	3.975		
8,017.74	7,896.35	7,900.00	7,896.35	43.88	280.31	136.07	46.66	-1,102.82	1,578.12	1,264.86	322.79	3.971 ES		
8,100.00	7,996.15	8,000.00	7,996.15	44.45	284.71	136.57	46.66	-1,102.82	1,590.02	1,273.06	328.00	3.967 SF		
8,200.00	8,096.00	8,100.00	8,096.00	45.02	289.17	137.07	46.66	-1,102.82	1,602.02	1,281.36	333.31	3.988		
8,300.00	8,195.90	8,200.00	8,195.90	45.59	293.69	137.57	46.66	-1,102.82	1,614.12	1,289.76	338.72	4.039		
8,400.00	8,295.85	8,300.00	8,295.85	46.16	298.27	138.07	46.66	-1,102.82	1,626.32	1,298.36	344.23	4.117		
8,500.00	8,395.85	8,400.00	8,395.85	46.73	302.91	138.57	46.66	-1,102.82	1,638.62	1,307.06	349.84	4.221		
8,600.00	8,495.90	8,500.00	8,495.90	47.30	307.61	139.07	46.66	-1,102.82	1,651.02	1,315.86	355.55	4.349		
8,700.00	8,596.00	8,600.00	8,596.00	47.87	312.37	139.57	46.66	-1,102.82	1,663.52	1,324.76	361.36	4.499		
8,800.00	8,696.15	8,700.00	8,696.15	48.44	317.19	140.07	46.66	-1,102.82	1,676.12	1,333.76	367.27	4.668		
8,900.00	8,796.35	8,800.00	8,796.35	49.01	322.07	140.57	46.66	-1,102.82	1,688.82	1,342.86	373.28	4.856		
9,000.00	8,896.60	8,900.00	8,896.60	49.58	327.01	141.07	46.66	-1,102.82	1,701.62	1,352.06	379.39	5.059		
9,100.00	8,996.90	9,000.00	8,996.90	50.15	332.01	141.57	46.66	-1,102.82	1,714.62	1,361.36	385.60	5.276		
9,200.00	9,097.25	9,100.00	9,097.25	50.72	337.07	142.07	46.66	-1,102.82	1,727.72	1,370.76	391.91	5.505		
9,300.00	9,197.65	9,200.00	9,197.65	51.29	342.19	142.57	46.66	-1,102.82	1,740.92	1,380.26	398.32	5.744		
9,400.00	9,298.10	9,300.00	9,298.10	51.86	347.37	143.07	46.66	-1,102.82	1,754.22	1,390.86	404.83	5.994		
9,500.00	9,398.60	9,400.00	9,398.60	52.43	352.61	143.57	46.66	-1,102.82	1,767.72	1,401.56	411.44	6.251		
9,600.00	9,499.15	9,500.00	9,499.15	53.00	357.91	144.07	46.66	-1,102.82	1,781.32	1,412.36	418.15	6.516		
9,700.00	9,599.75	9,600.00	9,599.75	53.57	363.27	144.57	46.66	-1,102.82	1,795.02	1,423.26	424.96	6.787		
9,800.00	9,699.40	9,700.00	9,699.40	54.14	368.69	145.07	46.66	-1,102.82	1,808.82	1,434.26	431.87	7.064		
9,900.00	9,799.10	9,800.00	9,799.10	54.71	374.17	145.57	46.66	-1,102.82	1,822.82	1,445.36	438.88	7.346		
10,000.00	9,898.85	9,900.00	9,898.85	55.28	379.71	146.07	46.66	-1,102.82	1,836.92	1,456.56	445.99	7.633		
10,100.00	9,998.65	10,000.00	9,998.65	55.85	385.31	146.57	46.66	-1,102.82	1,851.12	1,467.86	453.20	7.923		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,232.81	7,214.81	7,232.81	109.23	250.15	89.44	46.66	-1,102.82	2,477.90	2,176.35	301.55	8.217		
10,300.00	7,232.28	7,214.28	7,232.28	112.38	250.13	89.41	46.66	-1,102.82	2,566.40	2,264.99	301.41	8.515		
10,400.00	7,231.75	7,213.75	7,231.75	115.53	250.11	89.39	46.66	-1,102.82	2,655.72	2,354.44	301.28	8.815		
10,500.00	7,231.23	7,213.23	7,231.23	118.70	250.09	89.36	46.66	-1,102.82	2,745.78	2,444.63	301.15	9.118		
10,600.00	7,230.70	7,212.70	7,230.70	121.87	250.07	89.33	46.66	-1,102.82	2,836.50	2,535.48	301.02	9.423		
10,700.00	7,230.17	7,212.17	7,230.17	125.05	250.05	89.31	46.66	-1,102.82	2,927.83	2,626.93	300.90	9.730		
10,800.00	7,229.64	7,211.64	7,229.64	128.25	250.03	89.28	46.66	-1,102.82	3,019.71	2,718.92	300.79	10.039		
10,900.00	7,229.11	7,211.11	7,229.11	131.44	250.02	89.26	46.66	-1,102.82	3,112.08	2,811.41	300.68	10.350		
11,000.00	7,228.58	7,210.58	7,228.58	134.65	250.00	89.23	46.66	-1,102.82	3,204.92	2,904.35	300.57	10.663		
11,100.00	7,228.05	7,210.05	7,228.05	137.86	249.98	89.20	46.66	-1,102.82	3,298.17	2,997.70	300.47	10.977		
11,200.00	7,227.52	7,209.52	7,227.52	141.08	249.96	89.18	46.66	-1,102.82	3,391.81	3,091.44	300.37	11.292		
11,300.00	7,227.00	7,209.00	7,227.00	144.30	249.94	89.15	46.66	-1,102.82	3,485.80	3,185.52	300.28	11.609		
11,400.00	7,226.47	7,208.47	7,226.47	147.52	249.92	89.13	46.66	-1,102.82	3,580.12	3,279.93	300.19	11.926		
11,500.00	7,225.94	7,207.94	7,225.94	150.76	249.91	89.10	46.66	-1,102.82	3,674.73	3,374.63	300.11	12.245		
11,600.00	7,225.41	7,207.41	7,225.41	153.99	249.89	89.08	46.66	-1,102.82	3,769.63	3,469.60	300.03	12.564		
11,700.00	7,224.88	7,206.88	7,224.88	157.23	249.87	89.05	46.66	-1,102.82	3,864.78	3,564.83	299.95	12.885		
11,800.00	7,224.35	7,206.35	7,224.35	160.48	249.85	89.02	46.66	-1,102.82	3,960.17	3,660.29	299.88	13.206		
11,900.00	7,223.82	7,205.82	7,223.82	163.72	249.83	89.00	46.66	-1,102.82	4,055.79	3,755.97	299.82	13.528		
12,000.00	7,223.29	7,205.29	7,223.29	166.98	249.81	88.97	46.66	-1,102.82	4,151.61	3,851.85	299.75	13.850		
12,100.00	7,222.77	7,204.77	7,222.77	170.23	249.79	88.95	46.66	-1,102.82	4,247.62	3,947.93	299.69	14.173		
12,200.00	7,222.24	7,204.24	7,222.24	173.49	249.78	88.92	46.66	-1,102.82	4,343.81	4,044.17	299.64	14.497		
12,300.00	7,221.71	7,203.71	7,221.71	176.75	249.76	88.90	46.66	-1,102.82	4,440.17	4,140.59	299.58	14.821		
12,400.00	7,221.18	7,203.18	7,221.18	180.01	249.74	88.87	46.66	-1,102.82	4,536.69	4,237.15	299.54	15.146		
12,500.00	7,220.65	7,202.65	7,220.65	183.28	249.72	88.84	46.66	-1,102.82	4,633.35	4,333.86	299.49	15.471		
12,600.00	7,220.12	7,202.12	7,220.12	186.54	249.70	88.82	46.66	-1,102.82	4,730.16	4,430.71	299.45	15.796		
12,700.00	7,219.59	7,201.59	7,219.59	189.81	249.68	88.79	46.66	-1,102.82	4,827.09	4,527.69	299.41	16.122		
12,800.00	7,219.06	7,201.06	7,219.06	193.09	249.67	88.77	46.66	-1,102.82	4,924.15	4,624.78	299.37	16.448		
12,900.00	7,218.54	7,200.54	7,218.54	196.36	249.65	88.74	46.66	-1,102.82	5,021.32	4,721.99	299.34	16.775		
13,000.00	7,218.01	7,200.01	7,218.01	199.64	249.63	88.71	46.66	-1,102.82	5,118.60	4,819.30	299.30	17.102		
13,100.00	7,217.48	7,200.52	7,217.48	202.92	249.65	88.69	46.66	-1,102.82	5,215.99	4,916.68	299.31	17.427		
13,200.00	7,216.95	7,201.05	7,216.95	206.20	249.67	88.66	46.66	-1,102.82	5,313.47	5,014.15	299.32	17.752		
13,300.00	7,216.42	7,201.58	7,216.42	209.48	249.68	88.64	46.66	-1,102.82	5,411.04	5,111.71	299.34	18.077		
13,400.00	7,215.89	7,202.11	7,215.89	212.76	249.70	88.61	46.66	-1,102.82	5,508.70	5,209.35	299.35	18.402		
13,500.00	7,215.36	7,202.64	7,215.36	216.05	249.72	88.59	46.66	-1,102.82	5,606.44	5,307.08	299.37	18.728		
13,600.00	7,214.84	7,203.17	7,214.84	219.33	249.74	88.56	46.66	-1,102.82	5,704.27	5,404.88	299.39	19.053		
13,700.00	7,214.31	7,203.69	7,214.31	222.62	249.76	88.53	46.66	-1,102.82	5,802.16	5,502.75	299.41	19.379		
13,800.00	7,213.78	7,204.22	7,213.78	225.91	249.78	88.51	46.66	-1,102.82	5,900.13	5,600.69	299.44	19.704		
13,900.00	7,213.25	7,204.75	7,213.25	229.20	249.79	88.48	46.66	-1,102.82	5,998.16	5,698.70	299.46	20.030		
14,000.00	7,212.72	7,205.28	7,212.72	232.49	249.81	88.46	46.66	-1,102.82	6,096.25	5,796.76	299.49	20.355		
14,100.00	7,212.19	7,205.81	7,212.19	235.79	249.83	88.43	46.66	-1,102.82	6,194.41	5,894.89	299.52	20.681		
14,200.00	7,211.66	7,206.34	7,211.66	239.08	249.85	88.40	46.66	-1,102.82	6,292.63	5,993.07	299.55	21.007		
14,300.00	7,211.13	7,206.87	7,211.13	242.38	249.87	88.38	46.66	-1,102.82	6,390.90	6,091.31	299.59	21.332		
14,400.00	7,210.61	7,207.39	7,210.61	245.67	249.89	88.35	46.66	-1,102.82	6,489.22	6,189.60	299.62	21.658		
14,500.00	7,210.08	7,207.92	7,210.08	248.97	249.91	88.33	46.66	-1,102.82	6,587.60	6,287.94	299.66	21.984		
14,600.00	7,209.55	7,208.45	7,209.55	252.27	249.92	88.30	46.66	-1,102.82	6,686.02	6,386.32	299.70	22.309		
14,700.00	7,209.02	7,208.98	7,209.02	255.57	249.94	88.28	46.66	-1,102.82	6,784.49	6,484.75	299.74	22.635		
14,800.00	7,208.49	7,209.51	7,208.49	258.87	249.96	88.25	46.66	-1,102.82	6,883.00	6,583.21	299.78	22.960		
14,900.00	7,207.96	7,209.96	7,207.96	262.17	249.28	88.22	46.66	-1,102.82	6,981.55	6,682.43	299.13	23.340		
15,000.00	7,207.43	7,209.43	7,207.43	265.47	249.26	88.20	46.66	-1,102.82	7,080.15	6,781.01	299.14	23.669		
15,081.89	7,207.00	7,209.00	7,207.00	268.17	249.24	88.18	46.66	-1,102.82	7,160.91	6,861.77	299.14	23.938		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	11.00	3.28	3.28	-63.83	727.93	-1,481.05	1,650.31					
100.00	100.00	89.00	100.00	3.28	3.63	-63.83	727.93	-1,481.05	1,650.27	1,643.35	6.91	238.685		
200.00	200.00	189.00	200.00	3.34	5.86	-63.83	727.93	-1,481.05	1,650.27	1,641.07	9.19	179.492 CC		
300.00	299.98	288.98	299.98	3.44	8.96	108.18	727.93	-1,481.05	1,650.81	1,638.41	12.40	133.088		
400.00	399.84	388.84	399.84	3.59	12.28	108.32	727.93	-1,481.05	1,652.45	1,636.59	15.87	104.152		
500.00	499.45	488.45	499.45	3.80	15.65	108.55	727.93	-1,481.05	1,655.22	1,635.77	19.45	85.104		
600.00	598.70	587.70	598.70	4.06	19.06	108.88	727.93	-1,481.05	1,659.16	1,636.05	23.11	71.792		
700.00	697.49	686.49	697.49	4.38	22.46	109.31	727.93	-1,481.05	1,664.28	1,637.45	26.83	62.029		
800.00	796.13	785.13	796.13	4.74	25.87	109.83	727.93	-1,481.05	1,669.84	1,639.24	30.60	54.568		
900.00	894.78	883.78	894.78	5.15	29.29	110.35	727.93	-1,481.05	1,675.55	1,641.13	34.41	48.690		
1,000.00	993.43	982.43	993.43	5.58	32.72	110.87	727.93	-1,481.05	1,681.39	1,643.14	38.25	43.953		
1,100.00	1,092.07	1,081.07	1,092.07	6.03	36.14	111.39	727.93	-1,481.05	1,687.37	1,645.25	42.12	40.061		
1,200.00	1,190.72	1,179.72	1,190.72	6.50	39.57	111.90	727.93	-1,481.05	1,693.49	1,647.49	46.00	36.812		
1,300.00	1,289.36	1,278.36	1,289.36	6.98	43.01	112.40	727.93	-1,481.05	1,699.75	1,649.85	49.90	34.062		
1,400.00	1,388.01	1,377.01	1,388.01	7.47	46.44	112.91	727.93	-1,481.05	1,706.14	1,652.33	53.81	31.706		
1,500.00	1,486.65	1,475.65	1,486.65	7.97	49.88	113.41	727.93	-1,481.05	1,712.67	1,654.94	57.73	29.667		
1,600.00	1,585.30	1,574.30	1,585.30	8.48	53.31	113.90	727.93	-1,481.05	1,719.32	1,657.67	61.65	27.887		
1,700.00	1,683.94	1,672.94	1,683.94	9.00	56.75	114.39	727.93	-1,481.05	1,726.11	1,660.53	65.58	26.319		
1,800.00	1,782.59	1,771.59	1,782.59	9.52	60.19	114.88	727.93	-1,481.05	1,733.03	1,663.51	69.52	24.929		
1,900.00	1,881.24	1,870.24	1,881.24	10.05	63.63	115.37	727.93	-1,481.05	1,740.07	1,666.61	73.46	23.688		
2,000.00	1,979.88	1,968.88	1,979.88	10.58	67.07	115.85	727.93	-1,481.05	1,747.24	1,669.84	77.40	22.574		
2,100.00	2,078.53	2,067.53	2,078.53	11.11	70.51	116.33	727.93	-1,481.05	1,754.53	1,673.19	81.34	21.570		
2,200.00	2,177.17	2,166.17	2,177.17	11.64	73.95	116.80	727.93	-1,481.05	1,761.95	1,676.66	85.29	20.659		
2,300.00	2,275.82	2,264.82	2,275.82	12.18	77.39	117.27	727.93	-1,481.05	1,769.48	1,680.25	89.23	19.830		
2,400.00	2,374.46	2,363.46	2,374.46	12.72	80.83	117.73	727.93	-1,481.05	1,777.14	1,683.95	93.18	19.072		
2,500.00	2,473.11	2,462.11	2,473.11	13.26	84.27	118.19	727.93	-1,481.05	1,784.91	1,687.78	97.13	18.376		
2,600.00	2,571.76	2,560.76	2,571.76	13.80	87.71	118.65	727.93	-1,481.05	1,792.80	1,691.72	101.08	17.737		
2,700.00	2,670.40	2,659.40	2,670.40	14.35	91.15	119.10	727.93	-1,481.05	1,800.80	1,695.78	105.03	17.146		
2,800.00	2,769.05	2,758.05	2,769.05	14.89	94.59	119.55	727.93	-1,481.05	1,808.92	1,699.95	108.98	16.599		
2,900.00	2,867.69	2,856.69	2,867.69	15.44	98.04	120.00	727.93	-1,481.05	1,817.15	1,704.23	112.92	16.092		
3,000.00	2,966.34	2,955.34	2,966.34	15.99	101.48	120.44	727.93	-1,481.05	1,825.49	1,708.62	116.87	15.619		
3,100.00	3,064.98	3,053.98	3,064.98	16.53	104.92	120.88	727.93	-1,481.05	1,833.94	1,713.12	120.82	15.179		
3,200.00	3,163.63	3,152.63	3,163.63	17.08	108.36	121.31	727.93	-1,481.05	1,842.49	1,717.73	124.77	14.767		
3,300.00	3,262.27	3,251.27	3,262.27	17.63	111.80	121.74	727.93	-1,481.05	1,851.16	1,722.44	128.72	14.382		
3,400.00	3,360.92	3,349.92	3,360.92	18.18	115.25	122.17	727.93	-1,481.05	1,859.92	1,727.26	132.66	14.020		
3,500.00	3,459.57	3,448.57	3,459.57	18.74	118.69	122.59	727.93	-1,481.05	1,868.79	1,732.18	136.61	13.680		
3,600.00	3,558.21	3,547.21	3,558.21	19.29	122.13	123.01	727.93	-1,481.05	1,877.76	1,737.21	140.55	13.360		
3,700.00	3,656.86	3,645.86	3,656.86	19.84	125.57	123.42	727.93	-1,481.05	1,886.83	1,742.33	144.50	13.058		
3,800.00	3,755.50	3,744.50	3,755.50	20.39	129.02	123.83	727.93	-1,481.05	1,896.00	1,747.56	148.44	12.773		
3,900.00	3,854.15	3,843.15	3,854.15	20.95	132.46	124.23	727.93	-1,481.05	1,905.27	1,752.88	152.39	12.503		
4,000.00	3,952.79	3,941.79	3,952.79	21.50	135.90	124.64	727.93	-1,481.05	1,914.63	1,758.30	156.33	12.247		
4,100.00	4,051.44	4,040.44	4,051.44	22.05	139.35	125.04	727.93	-1,481.05	1,924.08	1,763.81	160.27	12.005		
4,200.00	4,150.08	4,139.08	4,150.08	22.61	142.79	125.43	727.93	-1,481.05	1,933.63	1,769.42	164.21	11.775		
4,300.00	4,248.73	4,237.73	4,248.73	23.16	146.23	125.82	727.93	-1,481.05	1,943.27	1,775.12	168.15	11.557		
4,400.00	4,347.38	4,336.38	4,347.38	23.72	149.67	126.21	727.93	-1,481.05	1,953.00	1,780.91	172.09	11.349		
4,500.00	4,446.02	4,435.02	4,446.02	24.27	153.12	126.59	727.93	-1,481.05	1,962.82	1,786.79	176.03	11.151		
4,600.00	4,544.67	4,533.67	4,544.67	24.83	156.56	126.97	727.93	-1,481.05	1,972.73	1,792.76	179.96	10.962		
4,700.00	4,643.31	4,632.31	4,643.31	25.39	160.00	127.34	727.93	-1,481.05	1,982.72	1,798.82	183.90	10.781		
4,800.00	4,741.96	4,730.96	4,741.96	25.94	163.45	127.72	727.93	-1,481.05	1,992.80	1,804.96	187.84	10.609		
4,900.00	4,840.60	4,829.60	4,840.60	26.50	166.89	128.08	727.93	-1,481.05	2,002.96	1,811.19	191.77	10.445		
5,000.00	4,939.25	4,928.25	4,939.25	27.05	170.33	128.45	727.93	-1,481.05	2,013.20	1,817.50	195.70	10.287		
5,100.00	5,037.90	5,026.90	5,037.90	27.61	173.77	128.81	727.93	-1,481.05	2,023.53	1,823.89	199.64	10.136		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,125.54	5,136.54	28.17	177.22	129.17	727.93	-1,481.05	2,033.93	1,830.36	203.57	9.991	
5,300.00	5,235.19	5,224.19	5,235.19	28.72	180.66	129.52	727.93	-1,481.05	2,044.42	1,836.92	207.50	9.853	
5,400.00	5,333.83	5,322.83	5,333.83	29.28	184.10	129.87	727.93	-1,481.05	2,054.98	1,843.55	211.43	9.719	
5,500.00	5,432.48	5,421.48	5,432.48	29.84	187.55	130.22	727.93	-1,481.05	2,065.61	1,850.26	215.36	9.592	
5,600.00	5,531.12	5,520.12	5,531.12	30.40	190.99	130.56	727.93	-1,481.05	2,076.33	1,857.04	219.29	9.469	
5,700.00	5,629.77	5,618.77	5,629.77	30.95	194.43	130.90	727.93	-1,481.05	2,087.11	1,863.90	223.21	9.350	
5,800.00	5,728.41	5,717.41	5,728.41	31.51	197.88	131.23	727.93	-1,481.05	2,097.97	1,870.83	227.14	9.236	
5,900.00	5,827.06	5,816.06	5,827.06	32.07	201.32	131.57	727.93	-1,481.05	2,108.90	1,877.83	231.07	9.127	
6,000.00	5,925.71	5,914.71	5,925.71	32.63	204.76	131.90	727.93	-1,481.05	2,119.90	1,884.91	234.99	9.021	
6,100.00	6,024.35	6,013.35	6,024.35	33.19	208.21	132.22	727.93	-1,481.05	2,130.97	1,892.06	238.92	8.919	
6,200.00	6,123.00	6,112.00	6,123.00	33.74	211.65	132.55	727.93	-1,481.05	2,142.11	1,899.27	242.84	8.821	
6,300.00	6,221.64	6,210.64	6,221.64	34.30	215.09	132.86	727.93	-1,481.05	2,153.32	1,906.56	246.76	8.726	
6,400.00	6,320.29	6,309.29	6,320.29	34.86	218.54	133.18	727.93	-1,481.05	2,164.59	1,913.91	250.68	8.635	
6,500.00	6,418.93	6,407.93	6,418.93	35.42	221.98	133.49	727.93	-1,481.05	2,175.93	1,921.32	254.61	8.546	
6,600.00	6,517.58	6,506.58	6,517.58	35.98	225.42	133.80	727.93	-1,481.05	2,187.33	1,928.80	258.53	8.461	
6,700.00	6,616.23	6,605.23	6,616.23	36.54	228.87	134.11	727.93	-1,481.05	2,198.80	1,936.35	262.45	8.378	
6,800.00	6,714.51	6,703.51	6,714.51	37.10	232.30	99.28	727.93	-1,481.05	2,207.05	1,940.67	266.37	8.286	
6,900.00	6,810.42	6,800.58	6,810.42	37.66	235.69	81.36	727.93	-1,481.05	2,206.10	1,935.81	270.29	8.162	
7,000.00	6,901.58	6,909.42	6,901.58	38.21	239.49	74.82	727.93	-1,481.05	2,196.30	1,921.66	274.64	7.997	
7,100.00	6,985.76	6,974.76	6,985.76	38.76	241.77	73.00	727.93	-1,481.05	2,178.50	1,900.99	277.51	7.850	
7,200.00	7,060.88	7,049.88	7,060.88	39.32	244.39	73.70	727.93	-1,481.05	2,153.88	1,873.10	280.78	7.671	
7,300.00	7,125.09	7,114.09	7,125.09	39.90	246.63	75.92	727.93	-1,481.05	2,123.88	1,840.11	283.76	7.485	
7,400.00	7,176.81	7,165.81	7,176.81	40.55	248.44	79.09	727.93	-1,481.05	2,090.08	1,803.64	286.43	7.297	
7,500.00	7,214.77	7,203.77	7,214.77	41.30	249.76	82.73	727.93	-1,481.05	2,054.13	1,765.35	288.79	7.113	
7,600.00	7,238.02	7,227.02	7,238.02	42.22	250.57	86.45	727.93	-1,481.05	2,017.64	1,726.84	290.80	6.938	
7,700.00	7,246.01	7,235.01	7,246.01	43.32	250.85	89.95	727.93	-1,481.05	1,982.01	1,689.57	292.43	6.778	
7,800.00	7,245.50	7,234.50	7,245.50	44.65	250.83	90.10	727.93	-1,481.05	1,949.35	1,655.42	293.93	6.632	
7,900.00	7,244.97	7,233.97	7,244.97	46.21	250.81	90.08	727.93	-1,481.05	1,921.35	1,625.78	295.57	6.501	
8,000.00	7,244.44	7,233.44	7,244.44	47.99	250.80	90.06	727.93	-1,481.05	1,898.20	1,600.86	297.34	6.384	
8,100.00	7,243.91	7,232.91	7,243.91	49.96	250.78	90.05	727.93	-1,481.05	1,880.10	1,580.89	299.21	6.284	
8,200.00	7,243.39	7,232.39	7,243.39	52.10	250.76	90.03	727.93	-1,481.05	1,867.19	1,566.04	301.15	6.200	
8,300.00	7,242.86	7,231.86	7,242.86	54.38	250.74	90.02	727.93	-1,481.05	1,859.57	1,556.45	303.11	6.135	
8,391.98	7,242.37	7,231.37	7,242.37	56.59	250.72	90.00	727.93	-1,481.05	1,857.29	1,552.36	304.93	6.091	
8,400.00	7,242.33	7,231.33	7,242.33	56.78	250.72	90.00	727.93	-1,481.05	1,857.31	1,552.23	305.08	6.088 ES	
8,500.00	7,241.80	7,230.80	7,241.80	59.28	250.70	89.98	727.93	-1,481.05	1,860.43	1,553.41	307.01	6.060	
8,600.00	7,241.27	7,230.27	7,241.27	61.88	250.69	89.97	727.93	-1,481.05	1,868.90	1,560.02	308.89	6.050 SF	
8,700.00	7,240.74	7,229.74	7,240.74	64.54	250.67	89.95	727.93	-1,481.05	1,882.66	1,571.98	310.67	6.060	
8,800.00	7,240.21	7,229.21	7,240.21	67.27	250.65	89.93	727.93	-1,481.05	1,901.58	1,589.22	312.35	6.088	
8,900.00	7,239.68	7,228.68	7,239.68	70.06	250.63	89.92	727.93	-1,481.05	1,925.51	1,611.60	313.91	6.134	
9,000.00	7,239.16	7,228.16	7,239.16	72.89	250.61	89.90	727.93	-1,481.05	1,954.28	1,638.94	315.34	6.197	
9,100.00	7,238.63	7,227.63	7,238.63	75.77	250.59	89.88	727.93	-1,481.05	1,987.66	1,671.03	316.64	6.277	
9,200.00	7,238.10	7,227.10	7,238.10	78.69	250.57	89.87	727.93	-1,481.05	2,025.44	1,707.64	317.79	6.373	
9,300.00	7,237.57	7,226.57	7,237.57	81.64	250.56	89.85	727.93	-1,481.05	2,067.37	1,748.55	318.82	6.484	
9,400.00	7,237.04	7,226.04	7,237.04	84.62	250.54	89.84	727.93	-1,481.05	2,113.20	1,793.48	319.72	6.610	
9,500.00	7,236.51	7,225.51	7,236.51	87.63	250.52	89.82	727.93	-1,481.05	2,162.68	1,842.19	320.49	6.748	
9,600.00	7,235.98	7,224.98	7,235.98	90.66	250.50	89.80	727.93	-1,481.05	2,215.58	1,894.42	321.16	6.899	
9,700.00	7,235.45	7,224.45	7,235.45	93.72	250.48	89.79	727.93	-1,481.05	2,271.65	1,949.93	321.72	7.061	
9,800.00	7,234.93	7,223.93	7,234.93	96.79	250.46	89.77	727.93	-1,481.05	2,330.66	2,008.47	322.19	7.234	
9,900.00	7,234.40	7,223.40	7,234.40	99.88	250.45	89.75	727.93	-1,481.05	2,392.40	2,069.83	322.57	7.417	
10,000.00	7,233.87	7,222.87	7,233.87	102.98	250.43	89.74	727.93	-1,481.05	2,456.66	2,133.77	322.88	7.608	
10,100.00	7,233.34	7,222.34	7,233.34	106.10	250.41	89.72	727.93	-1,481.05	2,523.25	2,200.11	323.13	7.809	
10,200.00	7,232.81	7,221.81	7,232.81	109.23	250.39	89.71	727.93	-1,481.05	2,591.98	2,268.66	323.32	8.017	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.28	7,221.28	7,232.28	112.38	250.37	89.69	727.93	-1,481.05	2,662.70	2,339.24	323.46	8.232		
10,400.00	7,231.75	7,220.75	7,231.75	115.53	250.35	89.67	727.93	-1,481.05	2,735.24	2,411.69	323.55	8.454		
10,500.00	7,231.23	7,220.23	7,231.23	118.70	250.33	89.66	727.93	-1,481.05	2,809.47	2,485.86	323.61	8.682		
10,600.00	7,230.70	7,219.70	7,230.70	121.87	250.32	89.64	727.93	-1,481.05	2,885.26	2,561.63	323.64	8.915		
10,700.00	7,230.17	7,219.17	7,230.17	125.05	250.30	89.62	727.93	-1,481.05	2,962.49	2,638.85	323.63	9.154		
10,800.00	7,229.64	7,218.64	7,229.64	128.25	250.28	89.61	727.93	-1,481.05	3,041.04	2,717.43	323.61	9.397		
10,900.00	7,229.11	7,218.11	7,229.11	131.44	250.26	89.59	727.93	-1,481.05	3,120.82	2,797.26	323.56	9.645		
11,000.00	7,228.58	7,217.58	7,228.58	134.65	250.24	89.57	727.93	-1,481.05	3,201.73	2,878.23	323.50	9.897		
11,100.00	7,228.05	7,217.05	7,228.05	137.86	250.22	89.56	727.93	-1,481.05	3,283.70	2,960.28	323.42	10.153		
11,200.00	7,227.52	7,216.52	7,227.52	141.08	250.21	89.54	727.93	-1,481.05	3,366.64	3,043.30	323.34	10.412		
11,300.00	7,227.00	7,216.00	7,227.00	144.30	250.19	89.53	727.93	-1,481.05	3,450.49	3,127.25	323.24	10.675		
11,400.00	7,226.47	7,215.47	7,226.47	147.52	250.17	89.51	727.93	-1,481.05	3,535.17	3,212.04	323.14	10.940		
11,500.00	7,225.94	7,214.94	7,225.94	150.76	250.15	89.49	727.93	-1,481.05	3,620.64	3,297.61	323.02	11.209		
11,600.00	7,225.41	7,214.41	7,225.41	153.99	250.13	89.48	727.93	-1,481.05	3,706.83	3,383.92	322.91	11.479		
11,700.00	7,224.88	7,213.88	7,224.88	157.23	250.11	89.46	727.93	-1,481.05	3,793.71	3,470.91	322.79	11.753		
11,800.00	7,224.35	7,213.35	7,224.35	160.48	250.09	89.44	727.93	-1,481.05	3,881.21	3,558.54	322.67	12.028		
11,900.00	7,223.82	7,212.82	7,223.82	163.72	250.08	89.43	727.93	-1,481.05	3,969.30	3,646.76	322.55	12.306		
12,000.00	7,223.29	7,212.29	7,223.29	166.98	250.06	89.41	727.93	-1,481.05	4,057.95	3,735.52	322.42	12.586		
12,100.00	7,222.77	7,211.77	7,222.77	170.23	250.04	89.40	727.93	-1,481.05	4,147.11	3,824.81	322.30	12.867		
12,200.00	7,222.24	7,211.24	7,222.24	173.49	250.02	89.38	727.93	-1,481.05	4,236.76	3,914.58	322.18	13.150		
12,300.00	7,221.71	7,210.71	7,221.71	176.75	250.00	89.36	727.93	-1,481.05	4,326.86	4,004.80	322.05	13.435		
12,400.00	7,221.18	7,210.18	7,221.18	180.01	249.98	89.35	727.93	-1,481.05	4,417.38	4,095.45	321.93	13.722		
12,500.00	7,220.65	7,209.65	7,220.65	183.28	249.97	89.33	727.93	-1,481.05	4,508.31	4,186.50	321.81	14.009		
12,600.00	7,220.12	7,209.12	7,220.12	186.54	249.95	89.31	727.93	-1,481.05	4,599.61	4,277.92	321.69	14.298		
12,700.00	7,219.59	7,208.59	7,219.59	189.81	249.93	89.30	727.93	-1,481.05	4,691.27	4,369.70	321.57	14.589		
12,800.00	7,219.06	7,208.06	7,219.06	193.09	249.91	89.28	727.93	-1,481.05	4,783.26	4,461.81	321.46	14.880		
12,900.00	7,218.54	7,207.54	7,218.54	196.36	249.89	89.26	727.93	-1,481.05	4,875.57	4,554.23	321.34	15.172		
13,000.00	7,218.01	7,207.01	7,218.01	199.64	249.87	89.25	727.93	-1,481.05	4,968.17	4,646.94	321.23	15.466		
13,100.00	7,217.48	7,206.48	7,217.48	202.92	249.85	89.23	727.93	-1,481.05	5,061.06	4,739.94	321.12	15.760		
13,200.00	7,216.95	7,205.95	7,216.95	206.20	249.84	89.22	727.93	-1,481.05	5,154.21	4,833.20	321.02	16.056		
13,300.00	7,216.42	7,205.42	7,216.42	209.48	249.82	89.20	727.93	-1,481.05	5,247.62	4,926.70	320.91	16.352		
13,400.00	7,215.89	7,204.89	7,215.89	212.76	249.80	89.18	727.93	-1,481.05	5,341.26	5,020.45	320.81	16.649		
13,500.00	7,215.36	7,204.36	7,215.36	216.05	249.78	89.17	727.93	-1,481.05	5,435.13	5,114.42	320.71	16.947		
13,600.00	7,214.84	7,203.84	7,214.84	219.33	249.76	89.15	727.93	-1,481.05	5,529.21	5,208.60	320.62	17.246		
13,700.00	7,214.31	7,203.31	7,214.31	222.62	249.74	89.13	727.93	-1,481.05	5,623.50	5,302.98	320.52	17.545		
13,800.00	7,213.78	7,202.78	7,213.78	225.91	249.73	89.12	727.93	-1,481.05	5,717.99	5,397.55	320.43	17.845		
13,900.00	7,213.25	7,202.25	7,213.25	229.20	249.71	89.10	727.93	-1,481.05	5,812.65	5,492.31	320.34	18.145		
14,000.00	7,212.72	7,201.72	7,212.72	232.49	249.69	89.09	727.93	-1,481.05	5,907.50	5,587.24	320.26	18.446		
14,100.00	7,212.19	7,201.19	7,212.19	235.79	249.67	89.07	727.93	-1,481.05	6,002.51	5,682.33	320.17	18.748		
14,200.00	7,211.66	7,200.66	7,211.66	239.08	249.65	89.05	727.93	-1,481.05	6,097.68	5,777.58	320.09	19.050		
14,300.00	7,211.13	7,200.13	7,211.13	242.38	249.63	89.04	727.93	-1,481.05	6,193.00	5,872.98	320.01	19.352		
14,400.00	7,210.61	7,200.39	7,210.61	245.67	249.64	89.02	727.93	-1,481.05	6,288.46	5,968.50	319.97	19.654		
14,500.00	7,210.08	7,200.92	7,210.08	248.97	249.66	89.00	727.93	-1,481.05	6,384.07	6,064.14	319.93	19.955		
14,600.00	7,209.55	7,201.45	7,209.55	252.27	249.68	88.99	727.93	-1,481.05	6,479.81	6,159.91	319.90	20.256		
14,700.00	7,209.02	7,201.98	7,209.02	255.57	249.70	88.97	727.93	-1,481.05	6,575.67	6,255.81	319.86	20.558		
14,800.00	7,208.49	7,202.51	7,208.49	258.87	249.72	88.95	727.93	-1,481.05	6,671.66	6,351.83	319.83	20.860		
14,900.00	7,207.96	7,203.04	7,207.96	262.17	249.73	88.94	727.93	-1,481.05	6,767.76	6,447.96	319.81	21.162		
15,000.00	7,207.43	7,203.57	7,207.43	265.47	249.75	88.92	727.93	-1,481.05	6,863.98	6,544.19	319.78	21.464		
15,081.89	7,207.00	7,204.00	7,207.00	268.17	249.77	88.91	727.93	-1,481.05	6,942.85	6,623.08	319.76	21.712		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	48.00	3.28	3.28	-76.09	1,235.86	-4,989.02	5,140.04					
100.00	100.00	52.00	100.00	3.28	3.40	-76.09	1,235.86	-4,989.02	5,139.81	5,133.13	6.69	768.513		
200.00	200.00	152.00	200.00	3.34	4.84	-76.09	1,235.86	-4,989.02	5,139.81	5,131.64	8.18	628.470		
300.00	299.98	251.98	299.98	3.44	7.78	95.89	1,235.86	-4,989.02	5,139.99	5,128.78	11.22	458.268		
400.00	399.84	351.84	399.84	3.59	11.04	95.94	1,235.86	-4,989.02	5,140.53	5,125.91	14.63	351.459		
500.00	499.45	451.45	499.45	3.80	14.39	96.01	1,235.86	-4,989.02	5,141.44	5,123.25	18.19	282.665		
600.00	598.70	550.70	598.70	4.06	17.78	96.12	1,235.86	-4,989.02	5,142.74	5,120.90	21.84	235.454		
700.00	697.49	649.49	697.49	4.38	21.18	96.27	1,235.86	-4,989.02	5,144.43	5,118.87	25.56	201.271		
800.00	796.13	748.13	796.13	4.74	24.59	96.45	1,235.86	-4,989.02	5,146.27	5,116.94	29.33	175.436		
900.00	894.78	846.78	894.78	5.15	28.01	96.63	1,235.86	-4,989.02	5,148.17	5,115.01	33.15	155.289		
1,000.00	993.43	945.43	993.43	5.58	31.43	96.80	1,235.86	-4,989.02	5,150.11	5,113.11	37.00	139.179		
1,100.00	1,092.07	1,044.07	1,092.07	6.03	34.86	96.98	1,235.86	-4,989.02	5,152.11	5,111.23	40.88	126.030		
1,200.00	1,190.72	1,142.72	1,190.72	6.50	38.29	97.16	1,235.86	-4,989.02	5,154.15	5,109.38	44.78	115.108		
1,300.00	1,289.36	1,241.36	1,289.36	6.98	41.72	97.34	1,235.86	-4,989.02	5,156.25	5,107.56	48.69	105.901		
1,400.00	1,388.01	1,340.01	1,388.01	7.47	45.15	97.52	1,235.86	-4,989.02	5,158.40	5,105.79	52.61	98.042		
1,500.00	1,486.65	1,438.65	1,486.65	7.97	48.59	97.70	1,235.86	-4,989.02	5,160.60	5,104.05	56.55	91.258		
1,600.00	1,585.30	1,537.30	1,585.30	8.48	52.03	97.87	1,235.86	-4,989.02	5,162.85	5,102.36	60.49	85.346		
1,700.00	1,683.94	1,635.94	1,683.94	9.00	55.46	98.05	1,235.86	-4,989.02	5,165.16	5,100.71	64.44	80.150		
1,800.00	1,782.59	1,734.59	1,782.59	9.52	58.90	98.23	1,235.86	-4,989.02	5,167.51	5,099.11	68.40	75.549		
1,900.00	1,881.24	1,833.24	1,881.24	10.05	62.34	98.41	1,235.86	-4,989.02	5,169.92	5,097.55	72.36	71.447		
2,000.00	1,979.88	1,931.88	1,979.88	10.58	65.78	98.58	1,235.86	-4,989.02	5,172.37	5,096.05	76.33	67.767		
2,100.00	2,078.53	2,030.53	2,078.53	11.11	69.22	98.76	1,235.86	-4,989.02	5,174.88	5,094.58	80.29	64.449		
2,200.00	2,177.17	2,129.17	2,177.17	11.64	72.66	98.94	1,235.86	-4,989.02	5,177.44	5,093.17	84.26	61.442		
2,300.00	2,275.82	2,227.82	2,275.82	12.18	76.10	99.12	1,235.86	-4,989.02	5,180.04	5,091.80	88.24	58.705		
2,400.00	2,374.46	2,326.46	2,374.46	12.72	79.54	99.29	1,235.86	-4,989.02	5,182.70	5,090.49	92.21	56.203		
2,500.00	2,473.11	2,425.11	2,473.11	13.26	82.98	99.47	1,235.86	-4,989.02	5,185.41	5,089.22	96.19	53.907		
2,600.00	2,571.76	2,523.76	2,571.76	13.80	86.42	99.65	1,235.86	-4,989.02	5,188.17	5,088.00	100.17	51.793		
2,700.00	2,670.40	2,622.40	2,670.40	14.35	89.86	99.82	1,235.86	-4,989.02	5,190.98	5,086.83	104.15	49.840		
2,800.00	2,769.05	2,721.05	2,769.05	14.89	93.30	100.00	1,235.86	-4,989.02	5,193.84	5,085.71	108.13	48.032		
2,900.00	2,867.69	2,819.69	2,867.69	15.44	96.75	100.17	1,235.86	-4,989.02	5,196.75	5,084.64	112.12	46.351		
3,000.00	2,966.34	2,918.34	2,966.34	15.99	100.19	100.35	1,235.86	-4,989.02	5,199.71	5,083.61	116.10	44.786		
3,100.00	3,064.98	3,016.98	3,064.98	16.53	103.63	100.52	1,235.86	-4,989.02	5,202.72	5,082.64	120.08	43.325		
3,200.00	3,163.63	3,115.63	3,163.63	17.08	107.07	100.70	1,235.86	-4,989.02	5,205.78	5,081.71	124.07	41.958		
3,300.00	3,262.27	3,214.27	3,262.27	17.63	110.51	100.87	1,235.86	-4,989.02	5,208.89	5,080.84	128.06	40.677		
3,400.00	3,360.92	3,312.92	3,360.92	18.18	113.96	101.05	1,235.86	-4,989.02	5,212.05	5,080.01	132.04	39.473		
3,500.00	3,459.57	3,411.57	3,459.57	18.74	117.40	101.22	1,235.86	-4,989.02	5,215.26	5,079.24	136.03	38.339		
3,600.00	3,558.21	3,510.21	3,558.21	19.29	120.84	101.40	1,235.86	-4,989.02	5,218.52	5,078.51	140.02	37.271		
3,700.00	3,656.86	3,608.86	3,656.86	19.84	124.28	101.57	1,235.86	-4,989.02	5,221.83	5,077.83	144.00	36.262		
3,800.00	3,755.50	3,707.50	3,755.50	20.39	127.73	101.75	1,235.86	-4,989.02	5,225.19	5,077.20	147.99	35.307		
3,900.00	3,854.15	3,806.15	3,854.15	20.95	131.17	101.92	1,235.86	-4,989.02	5,228.60	5,076.62	151.98	34.403		
4,000.00	3,952.79	3,904.79	3,952.79	21.50	134.61	102.09	1,235.86	-4,989.02	5,232.06	5,076.09	155.97	33.546		
4,100.00	4,051.44	4,003.44	4,051.44	22.05	138.05	102.27	1,235.86	-4,989.02	5,235.56	5,075.61	159.96	32.731		
4,200.00	4,150.08	4,102.08	4,150.08	22.61	141.50	102.44	1,235.86	-4,989.02	5,239.12	5,075.17	163.94	31.957		
4,300.00	4,248.73	4,200.73	4,248.73	23.16	144.94	102.61	1,235.86	-4,989.02	5,242.72	5,074.79	167.93	31.219		
4,400.00	4,347.38	4,300.62	4,347.38	23.72	148.43	102.78	1,235.86	-4,989.02	5,246.37	5,074.41	171.96	30.508		
4,500.00	4,446.02	4,401.98	4,446.02	24.27	151.96	102.96	1,235.86	-4,989.02	5,250.08	5,074.03	176.05	29.822		
4,600.00	4,544.67	4,503.33	4,544.67	24.83	155.50	103.13	1,235.86	-4,989.02	5,253.83	5,073.69	180.13	29.167		
4,700.00	4,643.31	4,604.69	4,643.31	25.39	159.04	103.30	1,235.86	-4,989.02	5,257.62	5,073.41	184.21	28.541		
4,800.00	4,741.96	4,706.04	4,741.96	25.94	162.58	103.47	1,235.86	-4,989.02	5,261.47	5,073.17	188.30	27.942		
4,900.00	4,840.60	4,807.40	4,840.60	26.50	166.11	103.64	1,235.86	-4,989.02	5,265.37	5,072.99	192.38	27.370		
5,000.00	4,939.25	4,908.75	4,939.25	27.05	169.65	103.82	1,235.86	-4,989.02	5,269.31	5,072.85	196.46	26.821		
5,100.00	5,037.90	4,989.90	5,037.90	27.61	172.48	103.99	1,235.86	-4,989.02	5,273.30	5,073.46	199.84	26.388		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,136.54	5,088.54	5,136.54	28.17	175.93	104.16	1,235.86	-4,989.02	5,277.34	5,073.51	203.83	25.891		
5,300.00	5,235.19	5,187.19	5,235.19	28.72	179.37	104.33	1,235.86	-4,989.02	5,281.43	5,073.61	207.81	25.414		
5,400.00	5,333.83	5,285.83	5,333.83	29.28	182.81	104.50	1,235.86	-4,989.02	5,285.56	5,073.76	211.80	24.955		
5,500.00	5,432.48	5,384.48	5,432.48	29.84	186.26	104.67	1,235.86	-4,989.02	5,289.75	5,073.96	215.79	24.513		
5,600.00	5,531.12	5,483.12	5,531.12	30.40	189.70	104.84	1,235.86	-4,989.02	5,293.98	5,074.20	219.78	24.088		
5,700.00	5,629.77	5,581.77	5,629.77	30.95	193.14	105.01	1,235.86	-4,989.02	5,298.25	5,074.49	223.76	23.678		
5,800.00	5,728.41	5,680.41	5,728.41	31.51	196.59	105.17	1,235.86	-4,989.02	5,302.58	5,074.83	227.75	23.282		
5,900.00	5,827.06	5,779.06	5,827.06	32.07	200.03	105.34	1,235.86	-4,989.02	5,306.95	5,075.21	231.74	22.901		
6,000.00	5,925.71	5,877.71	5,925.71	32.63	203.47	105.51	1,235.86	-4,989.02	5,311.37	5,075.64	235.72	22.532		
6,100.00	6,024.35	5,976.35	6,024.35	33.19	206.92	105.68	1,235.86	-4,989.02	5,315.83	5,076.12	239.71	22.176		
6,200.00	6,123.00	6,075.00	6,123.00	33.74	210.36	105.85	1,235.86	-4,989.02	5,320.35	5,076.65	243.70	21.832		
6,300.00	6,221.64	6,173.64	6,221.64	34.30	213.80	106.02	1,235.86	-4,989.02	5,324.91	5,077.23	247.68	21.499		
6,400.00	6,320.29	6,272.29	6,320.29	34.86	217.25	106.18	1,235.86	-4,989.02	5,329.51	5,077.85	251.67	21.177		
6,500.00	6,418.93	6,370.93	6,418.93	35.42	220.69	106.35	1,235.86	-4,989.02	5,334.17	5,078.51	255.65	20.865		
6,600.00	6,517.58	6,469.58	6,517.58	35.98	224.13	106.52	1,235.86	-4,989.02	5,338.86	5,079.23	259.64	20.563		
6,700.00	6,616.23	6,568.23	6,616.23	36.54	227.58	106.68	1,235.86	-4,989.02	5,343.61	5,079.99	263.62	20.270		
6,800.00	6,714.51	6,666.51	6,714.51	37.10	231.01	72.12	1,235.86	-4,989.02	5,343.50	5,075.89	267.61	19.968		
6,900.00	6,810.42	6,762.42	6,810.42	37.66	234.35	54.24	1,235.86	-4,989.02	5,329.53	5,057.98	271.55	19.626		
7,000.00	6,901.58	6,853.58	6,901.58	38.21	237.54	47.52	1,235.86	-4,989.02	5,301.92	5,026.58	275.35	19.256		
7,100.00	6,985.76	6,937.76	6,985.76	38.76	240.47	45.50	1,235.86	-4,989.02	5,261.46	4,982.54	278.92	18.864		
7,200.00	7,060.88	7,012.88	7,060.88	39.32	243.10	46.29	1,235.86	-4,989.02	5,209.23	4,927.02	282.20	18.459		
7,300.00	7,125.09	7,077.09	7,125.09	39.90	245.34	49.39	1,235.86	-4,989.02	5,146.61	4,861.48	285.14	18.050		
7,400.00	7,176.81	7,128.81	7,176.81	40.55	247.14	54.96	1,235.86	-4,989.02	5,075.25	4,787.58	287.67	17.643		
7,500.00	7,214.77	7,166.77	7,214.77	41.30	248.47	63.40	1,235.86	-4,989.02	4,996.97	4,707.20	289.77	17.245		
7,600.00	7,238.02	7,209.98	7,238.02	42.22	249.98	75.13	1,235.86	-4,989.02	4,913.73	4,621.64	292.09	16.822		
7,700.00	7,246.01	7,201.99	7,246.01	43.32	249.70	89.75	1,235.86	-4,989.02	4,827.60	4,534.93	292.67	16.495		
7,800.00	7,245.50	7,202.50	7,245.50	44.65	249.72	90.52	1,235.86	-4,989.02	4,740.93	4,447.33	293.60	16.148		
7,900.00	7,244.97	7,203.03	7,244.97	46.21	249.73	90.51	1,235.86	-4,989.02	4,654.78	4,360.17	294.62	15.799		
8,000.00	7,244.44	7,203.56	7,244.44	47.99	249.75	90.49	1,235.86	-4,989.02	4,569.21	4,273.48	295.72	15.451		
8,100.00	7,243.91	7,204.09	7,243.91	49.96	249.77	90.48	1,235.86	-4,989.02	4,484.22	4,187.30	296.93	15.102		
8,200.00	7,243.39	7,204.61	7,243.39	52.10	249.79	90.47	1,235.86	-4,989.02	4,399.87	4,101.65	298.23	14.754		
8,300.00	7,242.86	7,205.14	7,242.86	54.38	249.81	90.46	1,235.86	-4,989.02	4,316.19	4,016.57	299.63	14.405		
8,400.00	7,242.33	7,205.67	7,242.33	56.78	249.83	90.44	1,235.86	-4,989.02	4,233.22	3,932.09	301.13	14.058		
8,500.00	7,241.80	7,206.20	7,241.80	59.28	249.84	90.43	1,235.86	-4,989.02	4,151.00	3,848.26	302.74	13.711		
8,600.00	7,241.27	7,206.73	7,241.27	61.88	249.86	90.42	1,235.86	-4,989.02	4,069.57	3,765.11	304.46	13.366		
8,700.00	7,240.74	7,207.26	7,240.74	64.54	249.88	90.41	1,235.86	-4,989.02	3,988.99	3,682.69	306.30	13.023		
8,800.00	7,240.21	7,207.79	7,240.21	67.27	249.90	90.39	1,235.86	-4,989.02	3,909.30	3,601.05	308.25	12.682		
8,900.00	7,239.68	7,208.32	7,239.68	70.06	249.92	90.38	1,235.86	-4,989.02	3,830.57	3,520.25	310.32	12.344		
9,000.00	7,239.16	7,208.84	7,239.16	72.89	249.94	90.37	1,235.86	-4,989.02	3,752.85	3,440.34	312.51	12.009		
9,100.00	7,238.63	7,209.37	7,238.63	75.77	249.96	90.36	1,235.86	-4,989.02	3,676.21	3,361.38	314.83	11.677		
9,200.00	7,238.10	7,209.90	7,238.10	78.69	249.97	90.34	1,235.86	-4,989.02	3,600.71	3,283.44	317.27	11.349		
9,300.00	7,237.57	7,189.57	7,237.57	81.64	249.26	90.33	1,235.86	-4,989.02	3,526.44	3,207.33	319.11	11.051		
9,400.00	7,237.04	7,189.04	7,237.04	84.62	249.25	90.32	1,235.86	-4,989.02	3,453.46	3,131.69	321.77	10.733		
9,500.00	7,236.51	7,188.51	7,236.51	87.63	249.23	90.30	1,235.86	-4,989.02	3,381.86	3,057.30	324.56	10.420		
9,600.00	7,235.98	7,187.98	7,235.98	90.66	249.21	90.29	1,235.86	-4,989.02	3,311.74	2,984.25	327.49	10.113		
9,700.00	7,235.45	7,187.45	7,235.45	93.72	249.19	90.28	1,235.86	-4,989.02	3,243.18	2,912.64	330.54	9.812		
9,800.00	7,234.93	7,186.93	7,234.93	96.79	249.17	90.27	1,235.86	-4,989.02	3,176.29	2,842.56	333.73	9.518		
9,900.00	7,234.40	7,186.40	7,234.40	99.88	249.15	90.25	1,235.86	-4,989.02	3,111.18	2,774.14	337.04	9.231		
10,000.00	7,233.87	7,185.87	7,233.87	102.98	249.14	90.24	1,235.86	-4,989.02	3,047.96	2,707.48	340.48	8.952		
10,100.00	7,233.34	7,185.34	7,233.34	106.10	249.12	90.23	1,235.86	-4,989.02	2,986.75	2,642.71	344.04	8.681		
10,200.00	7,232.81	7,184.81	7,232.81	109.23	249.10	90.22	1,235.86	-4,989.02	2,927.68	2,579.97	347.71	8.420		
10,300.00	7,232.28	7,184.28	7,232.28	112.38	249.08	90.20	1,235.86	-4,989.02	2,870.87	2,519.39	351.49	8.168		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,183.75	7,231.75	115.53	249.06	90.19	1,235.86	-4,989.02	2,816.47	2,461.11	355.36	7.926		
10,500.00	7,231.23	7,183.23	7,231.23	118.70	249.04	90.18	1,235.86	-4,989.02	2,764.62	2,405.30	359.32	7.694		
10,600.00	7,230.70	7,182.70	7,230.70	121.87	249.02	90.16	1,235.86	-4,989.02	2,715.47	2,352.11	363.35	7.473		
10,700.00	7,230.17	7,182.17	7,230.17	125.05	249.01	90.15	1,235.86	-4,989.02	2,669.15	2,301.71	367.44	7.264		
10,800.00	7,229.64	7,181.64	7,229.64	128.25	248.99	90.14	1,235.86	-4,989.02	2,625.83	2,254.27	371.56	7.067		
10,900.00	7,229.11	7,181.11	7,229.11	131.44	248.97	90.13	1,235.86	-4,989.02	2,585.65	2,209.96	375.69	6.882		
11,000.00	7,228.58	7,180.58	7,228.58	134.65	248.95	90.11	1,235.86	-4,989.02	2,548.76	2,168.96	379.81	6.711		
11,100.00	7,228.05	7,180.05	7,228.05	137.86	248.93	90.10	1,235.86	-4,989.02	2,515.31	2,131.42	383.89	6.552		
11,200.00	7,227.52	7,179.52	7,227.52	141.08	248.91	90.09	1,235.86	-4,989.02	2,485.44	2,097.53	387.91	6.407		
11,300.00	7,227.00	7,179.00	7,227.00	144.30	248.90	90.08	1,235.86	-4,989.02	2,459.27	2,067.43	391.84	6.276		
11,400.00	7,226.47	7,178.47	7,226.47	147.52	248.88	90.06	1,235.86	-4,989.02	2,436.93	2,041.28	395.65	6.159		
11,500.00	7,225.94	7,177.94	7,225.94	150.76	248.86	90.05	1,235.86	-4,989.02	2,418.52	2,019.22	399.30	6.057		
11,600.00	7,225.41	7,177.41	7,225.41	153.99	248.84	90.04	1,235.86	-4,989.02	2,404.13	2,001.36	402.78	5.969		
11,700.00	7,224.88	7,176.88	7,224.88	157.23	248.82	90.03	1,235.86	-4,989.02	2,393.84	1,987.79	406.04	5.896		
11,800.00	7,224.35	7,176.35	7,224.35	160.48	248.80	90.01	1,235.86	-4,989.02	2,387.69	1,978.61	409.08	5.837		
11,896.97	7,223.84	7,175.84	7,223.84	163.63	248.79	90.00	1,235.86	-4,989.02	2,385.72	1,973.93	411.79	5.794 CC		
11,900.00	7,223.82	7,175.82	7,223.82	163.72	248.78	90.00	1,235.86	-4,989.02	2,385.72	1,973.85	411.87	5.792		
12,000.00	7,223.29	7,175.29	7,223.29	166.98	248.77	89.99	1,235.86	-4,989.02	2,387.94	1,973.56	414.39	5.763 ES		
12,100.00	7,222.77	7,174.77	7,222.77	170.23	248.75	89.97	1,235.86	-4,989.02	2,394.34	1,977.72	416.62	5.747		
12,200.00	7,222.24	7,174.24	7,222.24	173.49	248.73	89.96	1,235.86	-4,989.02	2,404.89	1,986.31	418.57	5.745 SF		
12,300.00	7,221.71	7,173.71	7,221.71	176.75	248.71	89.95	1,235.86	-4,989.02	2,419.52	1,999.29	420.23	5.758		
12,400.00	7,221.18	7,173.18	7,221.18	180.01	248.69	89.94	1,235.86	-4,989.02	2,438.17	2,016.57	421.60	5.783		
12,500.00	7,220.65	7,172.65	7,220.65	183.28	248.67	89.92	1,235.86	-4,989.02	2,460.75	2,038.07	422.68	5.822		
12,600.00	7,220.12	7,172.12	7,220.12	186.54	248.66	89.91	1,235.86	-4,989.02	2,487.14	2,063.65	423.49	5.873		
12,700.00	7,219.59	7,171.59	7,219.59	189.81	248.64	89.90	1,235.86	-4,989.02	2,517.24	2,093.20	424.04	5.936		
12,800.00	7,219.06	7,171.06	7,219.06	193.09	248.62	89.89	1,235.86	-4,989.02	2,550.90	2,126.56	424.34	6.012		
12,900.00	7,218.54	7,170.54	7,218.54	196.36	248.60	89.87	1,235.86	-4,989.02	2,587.99	2,163.58	424.41	6.098		
13,000.00	7,218.01	7,170.01	7,218.01	199.64	248.58	89.86	1,235.86	-4,989.02	2,628.36	2,204.10	424.26	6.195		
13,100.00	7,217.48	7,169.48	7,217.48	202.92	248.56	89.85	1,235.86	-4,989.02	2,671.87	2,247.94	423.93	6.303		
13,200.00	7,216.95	7,168.95	7,216.95	206.20	248.54	89.83	1,235.86	-4,989.02	2,718.36	2,294.93	423.43	6.420		
13,300.00	7,216.42	7,168.42	7,216.42	209.48	248.53	89.82	1,235.86	-4,989.02	2,767.69	2,344.91	422.77	6.547		
13,400.00	7,215.89	7,167.89	7,215.89	212.76	248.51	89.81	1,235.86	-4,989.02	2,819.70	2,397.71	421.98	6.682		
13,500.00	7,215.36	7,167.36	7,215.36	216.05	248.49	89.80	1,235.86	-4,989.02	2,874.24	2,453.17	421.07	6.826		
13,600.00	7,214.84	7,166.84	7,214.84	219.33	248.47	89.78	1,235.86	-4,989.02	2,931.19	2,511.12	420.07	6.978		
13,700.00	7,214.31	7,166.31	7,214.31	222.62	248.45	89.77	1,235.86	-4,989.02	2,990.40	2,571.41	418.98	7.137		
13,800.00	7,213.78	7,165.78	7,213.78	225.91	248.43	89.76	1,235.86	-4,989.02	3,051.73	2,633.91	417.82	7.304		
13,900.00	7,213.25	7,165.25	7,213.25	229.20	248.42	89.75	1,235.86	-4,989.02	3,115.07	2,698.46	416.61	7.477		
14,000.00	7,212.72	7,164.72	7,212.72	232.49	248.40	89.73	1,235.86	-4,989.02	3,180.29	2,764.94	415.35	7.657		
14,100.00	7,212.19	7,164.19	7,212.19	235.79	248.38	89.72	1,235.86	-4,989.02	3,247.28	2,833.22	414.06	7.842		
14,200.00	7,211.66	7,163.66	7,211.66	239.08	248.36	89.71	1,235.86	-4,989.02	3,315.94	2,903.19	412.75	8.034		
14,300.00	7,211.13	7,163.13	7,211.13	242.38	248.34	89.69	1,235.86	-4,989.02	3,386.15	2,974.74	411.41	8.231		
14,400.00	7,210.61	7,162.61	7,210.61	245.67	248.32	89.68	1,235.86	-4,989.02	3,457.83	3,047.76	410.07	8.432		
14,500.00	7,210.08	7,162.08	7,210.08	248.97	248.30	89.67	1,235.86	-4,989.02	3,530.89	3,122.16	408.73	8.639		
14,600.00	7,209.55	7,161.55	7,209.55	252.27	248.29	89.66	1,235.86	-4,989.02	3,605.25	3,197.86	407.39	8.850		
14,700.00	7,209.02	7,161.02	7,209.02	255.57	248.27	89.64	1,235.86	-4,989.02	3,680.81	3,274.76	406.05	9.065		
14,800.00	7,208.49	7,160.49	7,208.49	258.87	248.25	89.63	1,235.86	-4,989.02	3,757.52	3,352.80	404.73	9.284		
14,900.00	7,207.96	7,159.96	7,207.96	262.17	248.23	89.62	1,235.86	-4,989.02	3,835.31	3,431.89	403.41	9.507		
15,000.00	7,207.43	7,159.43	7,207.43	265.47	248.21	89.61	1,235.86	-4,989.02	3,914.10	3,511.98	402.12	9.734		
15,081.89	7,207.00	7,159.00	7,207.00	268.17	248.20	89.60	1,235.86	-4,989.02	3,979.33	3,578.25	401.07	9.922		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	46.00	3.28	3.28	-76.21	1,256.65	-5,118.90	5,271.09				
100.00	100.00	54.00	100.00	3.28	3.41	-76.21	1,256.65	-5,118.90	5,270.89	5,264.20	6.70	786.998	
200.00	200.00	154.00	200.00	3.34	4.89	-76.21	1,256.65	-5,118.90	5,270.89	5,262.66	8.23	640.458	
300.00	299.98	253.98	299.98	3.44	7.84	95.77	1,256.65	-5,118.90	5,271.07	5,259.79	11.28	467.314	
400.00	399.84	353.84	399.84	3.59	11.10	95.81	1,256.65	-5,118.90	5,271.60	5,256.90	14.69	358.784	
500.00	499.45	453.45	499.45	3.80	14.46	95.89	1,256.65	-5,118.90	5,272.49	5,254.23	18.26	288.791	
600.00	598.70	552.70	598.70	4.06	17.85	95.99	1,256.65	-5,118.90	5,273.76	5,251.85	21.91	240.697	
700.00	697.49	651.49	697.49	4.38	21.25	96.14	1,256.65	-5,118.90	5,275.42	5,249.79	25.63	205.840	
800.00	796.13	750.13	796.13	4.74	24.66	96.31	1,256.65	-5,118.90	5,277.22	5,247.82	29.40	179.476	
900.00	894.78	848.78	894.78	5.15	28.08	96.49	1,256.65	-5,118.90	5,279.07	5,245.85	33.22	158.905	
1,000.00	993.43	947.43	993.43	5.58	31.50	96.66	1,256.65	-5,118.90	5,280.98	5,243.90	37.07	142.448	
1,100.00	1,092.07	1,046.07	1,092.07	6.03	34.93	96.84	1,256.65	-5,118.90	5,282.93	5,241.98	40.95	129.010	
1,200.00	1,190.72	1,144.72	1,190.72	6.50	38.36	97.01	1,256.65	-5,118.90	5,284.93	5,240.09	44.85	117.844	
1,300.00	1,289.36	1,243.36	1,289.36	6.98	41.79	97.18	1,256.65	-5,118.90	5,286.99	5,238.23	48.76	108.430	
1,400.00	1,388.01	1,342.01	1,388.01	7.47	45.22	97.36	1,256.65	-5,118.90	5,289.09	5,236.41	52.68	100.392	
1,500.00	1,486.65	1,440.65	1,486.65	7.97	48.66	97.53	1,256.65	-5,118.90	5,291.25	5,234.63	56.62	93.452	
1,600.00	1,585.30	1,539.30	1,585.30	8.48	52.09	97.70	1,256.65	-5,118.90	5,293.45	5,232.89	60.56	87.403	
1,700.00	1,683.94	1,637.94	1,683.94	9.00	55.53	97.88	1,256.65	-5,118.90	5,295.70	5,231.19	64.51	82.086	
1,800.00	1,782.59	1,736.59	1,782.59	9.52	58.97	98.05	1,256.65	-5,118.90	5,298.01	5,229.54	68.47	77.377	
1,900.00	1,881.24	1,835.24	1,881.24	10.05	62.41	98.23	1,256.65	-5,118.90	5,300.36	5,227.93	72.43	73.178	
2,000.00	1,979.88	1,933.88	1,979.88	10.58	65.85	98.40	1,256.65	-5,118.90	5,302.76	5,226.37	76.40	69.411	
2,100.00	2,078.53	2,032.53	2,078.53	11.11	69.29	98.57	1,256.65	-5,118.90	5,305.22	5,224.85	80.36	66.014	
2,200.00	2,177.17	2,131.17	2,177.17	11.64	72.73	98.74	1,256.65	-5,118.90	5,307.72	5,223.38	84.34	62.935	
2,300.00	2,275.82	2,229.82	2,275.82	12.18	76.17	98.92	1,256.65	-5,118.90	5,310.27	5,221.96	88.31	60.132	
2,400.00	2,374.46	2,328.46	2,374.46	12.72	79.61	99.09	1,256.65	-5,118.90	5,312.87	5,220.58	92.29	57.570	
2,500.00	2,473.11	2,427.11	2,473.11	13.26	83.05	99.26	1,256.65	-5,118.90	5,315.52	5,219.26	96.26	55.218	
2,600.00	2,571.76	2,525.76	2,571.76	13.80	86.49	99.43	1,256.65	-5,118.90	5,318.22	5,217.98	100.24	53.053	
2,700.00	2,670.40	2,624.40	2,670.40	14.35	89.93	99.61	1,256.65	-5,118.90	5,320.97	5,216.75	104.22	51.053	
2,800.00	2,769.05	2,723.05	2,769.05	14.89	93.37	99.78	1,256.65	-5,118.90	5,323.77	5,215.56	108.21	49.200	
2,900.00	2,867.69	2,821.69	2,867.69	15.44	96.82	99.95	1,256.65	-5,118.90	5,326.61	5,214.43	112.19	47.479	
3,000.00	2,966.34	2,920.34	2,966.34	15.99	100.26	100.12	1,256.65	-5,118.90	5,329.51	5,213.34	116.17	45.876	
3,100.00	3,064.98	3,018.98	3,064.98	16.53	103.70	100.29	1,256.65	-5,118.90	5,332.46	5,212.30	120.16	44.379	
3,200.00	3,163.63	3,117.63	3,163.63	17.08	107.14	100.46	1,256.65	-5,118.90	5,335.45	5,211.31	124.14	42.978	
3,300.00	3,262.27	3,216.27	3,262.27	17.63	110.58	100.63	1,256.65	-5,118.90	5,338.49	5,210.36	128.13	41.665	
3,400.00	3,360.92	3,314.92	3,360.92	18.18	114.03	100.80	1,256.65	-5,118.90	5,341.58	5,209.47	132.12	40.431	
3,500.00	3,459.57	3,413.57	3,459.57	18.74	117.47	100.97	1,256.65	-5,118.90	5,344.72	5,208.62	136.10	39.270	
3,600.00	3,558.21	3,512.21	3,558.21	19.29	120.91	101.14	1,256.65	-5,118.90	5,347.91	5,207.82	140.09	38.175	
3,700.00	3,656.86	3,610.86	3,656.86	19.84	124.35	101.31	1,256.65	-5,118.90	5,351.15	5,207.07	144.08	37.140	
3,800.00	3,755.50	3,709.50	3,755.50	20.39	127.80	101.48	1,256.65	-5,118.90	5,354.43	5,206.36	148.07	36.162	
3,900.00	3,854.15	3,808.15	3,854.15	20.95	131.24	101.65	1,256.65	-5,118.90	5,357.76	5,205.71	152.06	35.236	
4,000.00	3,952.79	3,906.79	3,952.79	21.50	134.68	101.82	1,256.65	-5,118.90	5,361.14	5,205.10	156.04	34.357	
4,100.00	4,051.44	4,005.44	4,051.44	22.05	138.12	101.99	1,256.65	-5,118.90	5,364.57	5,204.54	160.03	33.522	
4,200.00	4,150.08	4,104.08	4,150.08	22.61	141.57	102.16	1,256.65	-5,118.90	5,368.05	5,204.03	164.02	32.728	
4,300.00	4,248.73	4,202.73	4,248.73	23.16	145.01	102.33	1,256.65	-5,118.90	5,371.58	5,203.57	168.01	31.972	
4,400.00	4,347.38	4,301.38	4,347.38	23.72	148.45	102.50	1,256.65	-5,118.90	5,375.15	5,203.15	172.00	31.251	
4,500.00	4,446.02	4,400.02	4,446.02	24.27	151.89	102.67	1,256.65	-5,118.90	5,378.77	5,202.78	175.99	30.563	
4,600.00	4,544.67	4,501.33	4,544.67	24.83	155.43	102.84	1,256.65	-5,118.90	5,382.44	5,202.37	180.07	29.891	
4,700.00	4,643.31	4,602.69	4,643.31	25.39	158.97	103.00	1,256.65	-5,118.90	5,386.15	5,202.00	184.15	29.248	
4,800.00	4,741.96	4,704.04	4,741.96	25.94	162.51	103.17	1,256.65	-5,118.90	5,389.91	5,201.68	188.24	28.634	
4,900.00	4,840.60	4,805.40	4,840.60	26.50	166.04	103.34	1,256.65	-5,118.90	5,393.72	5,201.40	192.32	28.046	
5,000.00	4,939.25	4,906.75	4,939.25	27.05	169.58	103.51	1,256.65	-5,118.90	5,397.58	5,201.18	196.40	27.482	
5,100.00	5,037.90	5,008.10	5,037.90	27.61	173.12	103.67	1,256.65	-5,118.90	5,401.48	5,201.00	200.49	26.942	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,109.46	5,136.54	28.17	176.66	103.84	1,256.65	-5,118.90	5,405.44	5,200.87	204.57	26.424		
5,300.00	5,235.19	5,189.19	5,235.19	28.72	179.44	104.01	1,256.65	-5,118.90	5,409.43	5,201.54	207.90	26.020		
5,400.00	5,333.83	5,287.83	5,333.83	29.28	182.88	104.17	1,256.65	-5,118.90	5,413.48	5,201.59	211.88	25.549		
5,500.00	5,432.48	5,386.48	5,432.48	29.84	186.33	104.34	1,256.65	-5,118.90	5,417.57	5,201.70	215.87	25.096		
5,600.00	5,531.12	5,485.12	5,531.12	30.40	189.77	104.50	1,256.65	-5,118.90	5,421.71	5,201.85	219.86	24.660		
5,700.00	5,629.77	5,583.77	5,629.77	30.95	193.21	104.67	1,256.65	-5,118.90	5,425.89	5,202.04	223.85	24.239		
5,800.00	5,728.41	5,682.41	5,728.41	31.51	196.66	104.84	1,256.65	-5,118.90	5,430.12	5,202.29	227.84	23.834		
5,900.00	5,827.06	5,781.06	5,827.06	32.07	200.10	105.00	1,256.65	-5,118.90	5,434.40	5,202.58	231.82	23.442		
6,000.00	5,925.71	5,879.71	5,925.71	32.63	203.54	105.17	1,256.65	-5,118.90	5,438.72	5,202.91	235.81	23.064		
6,100.00	6,024.35	5,978.35	6,024.35	33.19	206.99	105.33	1,256.65	-5,118.90	5,443.09	5,203.29	239.80	22.699		
6,200.00	6,123.00	6,077.00	6,123.00	33.74	210.43	105.49	1,256.65	-5,118.90	5,447.50	5,203.72	243.78	22.346		
6,300.00	6,221.64	6,175.64	6,221.64	34.30	213.87	105.66	1,256.65	-5,118.90	5,451.96	5,204.20	247.77	22.004		
6,400.00	6,320.29	6,274.29	6,320.29	34.86	217.32	105.82	1,256.65	-5,118.90	5,456.47	5,204.72	251.76	21.674		
6,500.00	6,418.93	6,372.93	6,418.93	35.42	220.76	105.99	1,256.65	-5,118.90	5,461.02	5,205.28	255.74	21.354		
6,600.00	6,517.58	6,471.58	6,517.58	35.98	224.20	106.15	1,256.65	-5,118.90	5,465.62	5,205.89	259.73	21.044		
6,700.00	6,616.23	6,570.23	6,616.23	36.54	227.65	106.31	1,256.65	-5,118.90	5,470.26	5,206.55	263.71	20.743		
6,800.00	6,714.51	6,668.51	6,714.51	37.10	231.08	71.75	1,256.65	-5,118.90	5,470.03	5,202.33	267.70	20.433		
6,900.00	6,810.42	6,764.42	6,810.42	37.66	234.42	53.86	1,256.65	-5,118.90	5,455.90	5,184.26	271.64	20.085		
7,000.00	6,901.58	6,855.58	6,901.58	38.21	237.61	47.13	1,256.65	-5,118.90	5,428.09	5,152.65	275.44	19.707		
7,100.00	6,985.76	6,939.76	6,985.76	38.76	240.54	45.09	1,256.65	-5,118.90	5,387.37	5,108.36	279.01	19.309		
7,200.00	7,060.88	7,014.88	7,060.88	39.32	243.17	45.84	1,256.65	-5,118.90	5,334.85	5,052.56	282.29	18.899		
7,300.00	7,125.09	7,079.09	7,125.09	39.90	245.41	48.92	1,256.65	-5,118.90	5,271.91	4,986.69	285.22	18.484		
7,400.00	7,176.81	7,130.81	7,176.81	40.55	247.21	54.48	1,256.65	-5,118.90	5,200.18	4,912.44	287.75	18.072		
7,500.00	7,214.77	7,168.77	7,214.77	41.30	248.54	62.97	1,256.65	-5,118.90	5,121.50	4,831.66	289.83	17.670		
7,600.00	7,238.02	7,207.98	7,238.02	42.22	249.91	74.84	1,256.65	-5,118.90	5,037.83	4,745.83	292.01	17.252		
7,700.00	7,246.01	7,200.01	7,246.01	43.32	249.63	89.74	1,256.65	-5,118.90	4,951.26	4,658.69	292.57	16.923		
7,800.00	7,245.50	7,200.50	7,245.50	44.65	249.65	90.53	1,256.65	-5,118.90	4,864.12	4,570.64	293.48	16.574		
7,900.00	7,244.97	7,201.03	7,244.97	46.21	249.66	90.52	1,256.65	-5,118.90	4,777.49	4,483.01	294.48	16.224		
8,000.00	7,244.44	7,201.56	7,244.44	47.99	249.68	90.51	1,256.65	-5,118.90	4,691.38	4,395.82	295.56	15.873		
8,100.00	7,243.91	7,202.09	7,243.91	49.96	249.70	90.49	1,256.65	-5,118.90	4,605.84	4,309.10	296.74	15.522		
8,200.00	7,243.39	7,202.61	7,243.39	52.10	249.72	90.48	1,256.65	-5,118.90	4,520.89	4,222.88	298.01	15.170		
8,300.00	7,242.86	7,203.14	7,242.86	54.38	249.74	90.47	1,256.65	-5,118.90	4,436.56	4,137.19	299.37	14.820		
8,400.00	7,242.33	7,203.67	7,242.33	56.78	249.76	90.46	1,256.65	-5,118.90	4,352.90	4,052.06	300.84	14.469		
8,500.00	7,241.80	7,204.20	7,241.80	59.28	249.78	90.44	1,256.65	-5,118.90	4,269.94	3,967.53	302.41	14.120		
8,600.00	7,241.27	7,204.73	7,241.27	61.88	249.79	90.43	1,256.65	-5,118.90	4,187.73	3,883.64	304.09	13.771		
8,700.00	7,240.74	7,205.26	7,240.74	64.54	249.81	90.42	1,256.65	-5,118.90	4,106.31	3,800.43	305.87	13.425		
8,800.00	7,240.21	7,205.79	7,240.21	67.27	249.83	90.41	1,256.65	-5,118.90	4,025.72	3,717.95	307.77	13.080		
8,900.00	7,239.68	7,206.32	7,239.68	70.06	249.85	90.39	1,256.65	-5,118.90	3,946.03	3,636.24	309.79	12.738		
9,000.00	7,239.16	7,206.84	7,239.16	72.89	249.87	90.38	1,256.65	-5,118.90	3,867.27	3,555.35	311.92	12.398		
9,100.00	7,238.63	7,207.37	7,238.63	75.77	249.89	90.37	1,256.65	-5,118.90	3,789.52	3,475.35	314.17	12.062		
9,200.00	7,238.10	7,207.90	7,238.10	78.69	249.90	90.36	1,256.65	-5,118.90	3,712.83	3,396.28	316.55	11.729		
9,300.00	7,237.57	7,208.43	7,237.57	81.64	249.92	90.34	1,256.65	-5,118.90	3,637.28	3,318.23	319.05	11.400		
9,400.00	7,237.04	7,208.96	7,237.04	84.62	249.94	90.33	1,256.65	-5,118.90	3,562.93	3,241.25	321.68	11.076		
9,500.00	7,236.51	7,209.49	7,236.51	87.63	249.96	90.32	1,256.65	-5,118.90	3,489.86	3,165.43	324.43	10.757		
9,600.00	7,235.98	7,209.98	7,235.98	90.66	249.98	90.31	1,256.65	-5,118.90	3,418.16	3,091.54	326.62	10.465		
9,700.00	7,235.45	7,209.45	7,235.45	93.72	249.99	90.29	1,256.65	-5,118.90	3,347.90	3,018.31	329.60	10.158		
9,800.00	7,234.93	7,208.93	7,234.93	96.79	249.99	90.28	1,256.65	-5,118.90	3,279.20	2,946.49	332.70	9.856		
9,900.00	7,234.40	7,208.40	7,234.40	99.88	249.99	90.27	1,256.65	-5,118.90	3,212.13	2,876.19	335.94	9.562		
10,000.00	7,233.87	7,207.87	7,233.87	102.98	249.99	90.26	1,256.65	-5,118.90	3,146.82	2,807.51	339.31	9.274		
10,100.00	7,233.34	7,207.34	7,233.34	106.10	249.99	90.24	1,256.65	-5,118.90	3,083.36	2,740.57	342.79	8.995		
10,200.00	7,232.81	7,206.81	7,232.81	109.23	249.99	90.23	1,256.65	-5,118.90	3,021.89	2,675.49	346.40	8.724		
10,300.00	7,232.28	7,206.28	7,232.28	112.38	249.99	90.22	1,256.65	-5,118.90	2,962.51	2,612.39	350.12	8.461		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,185.75	7,231.75	115.53	249.13	90.20	1,256.65	-5,118.90	2,905.36	2,551.41	353.95	8.208		
10,500.00	7,231.23	7,185.23	7,231.23	118.70	249.11	90.19	1,256.65	-5,118.90	2,850.58	2,492.71	357.87	7.965		
10,600.00	7,230.70	7,184.70	7,230.70	121.87	249.09	90.18	1,256.65	-5,118.90	2,798.29	2,436.42	361.88	7.733		
10,700.00	7,230.17	7,184.17	7,230.17	125.05	249.08	90.17	1,256.65	-5,118.90	2,748.65	2,382.70	365.96	7.511		
10,800.00	7,229.64	7,183.64	7,229.64	128.25	249.06	90.15	1,256.65	-5,118.90	2,701.81	2,331.72	370.09	7.300		
10,900.00	7,229.11	7,183.11	7,229.11	131.44	249.04	90.14	1,256.65	-5,118.90	2,657.90	2,283.64	374.26	7.102		
11,000.00	7,228.58	7,182.58	7,228.58	134.65	249.02	90.13	1,256.65	-5,118.90	2,617.08	2,238.63	378.44	6.915		
11,100.00	7,228.05	7,182.05	7,228.05	137.86	249.00	90.12	1,256.65	-5,118.90	2,579.48	2,196.86	382.62	6.742		
11,200.00	7,227.52	7,181.52	7,227.52	141.08	248.98	90.10	1,256.65	-5,118.90	2,545.27	2,158.51	386.76	6.581		
11,300.00	7,227.00	7,181.00	7,227.00	144.30	248.97	90.09	1,256.65	-5,118.90	2,514.57	2,123.72	390.85	6.434		
11,400.00	7,226.47	7,180.47	7,226.47	147.52	248.95	90.08	1,256.65	-5,118.90	2,487.51	2,092.67	394.84	6.300		
11,500.00	7,225.94	7,179.94	7,225.94	150.76	248.93	90.07	1,256.65	-5,118.90	2,464.22	2,065.50	398.72	6.180		
11,600.00	7,225.41	7,179.41	7,225.41	153.99	248.91	90.05	1,256.65	-5,118.90	2,444.80	2,042.35	402.45	6.075		
11,700.00	7,224.88	7,178.88	7,224.88	157.23	248.89	90.04	1,256.65	-5,118.90	2,429.34	2,023.34	406.00	5.984		
11,800.00	7,224.35	7,178.35	7,224.35	160.48	248.87	90.03	1,256.65	-5,118.90	2,417.92	2,008.57	409.35	5.907		
11,900.00	7,223.82	7,177.82	7,223.82	163.72	248.85	90.02	1,256.65	-5,118.90	2,410.60	1,998.13	412.47	5.844		
12,000.00	7,223.29	7,177.29	7,223.29	166.98	248.84	90.00	1,256.65	-5,118.90	2,407.41	1,992.07	415.35	5.796		
12,026.73	7,223.15	7,177.15	7,223.15	167.85	248.83	90.00	1,256.65	-5,118.90	2,407.27	1,991.20	416.07	5.786 CC		
12,100.00	7,222.77	7,176.77	7,222.77	170.23	248.82	89.99	1,256.65	-5,118.90	2,408.38	1,990.43	417.95	5.762 ES		
12,200.00	7,222.24	7,176.24	7,222.24	173.49	248.80	89.98	1,256.65	-5,118.90	2,413.49	1,993.21	420.28	5.743		
12,300.00	7,221.71	7,175.71	7,221.71	176.75	248.78	89.97	1,256.65	-5,118.90	2,422.73	2,000.41	422.32	5.737 SF		
12,400.00	7,221.18	7,175.18	7,221.18	180.01	248.76	89.95	1,256.65	-5,118.90	2,436.03	2,011.97	424.06	5.744		
12,500.00	7,220.65	7,174.65	7,220.65	183.28	248.74	89.94	1,256.65	-5,118.90	2,453.35	2,027.83	425.52	5.766		
12,600.00	7,220.12	7,174.12	7,220.12	186.54	248.73	89.93	1,256.65	-5,118.90	2,474.58	2,047.90	426.68	5.800		
12,700.00	7,219.59	7,173.59	7,219.59	189.81	248.71	89.92	1,256.65	-5,118.90	2,499.64	2,072.08	427.56	5.846		
12,800.00	7,219.06	7,173.06	7,219.06	193.09	248.69	89.90	1,256.65	-5,118.90	2,528.41	2,100.24	428.17	5.905		
12,900.00	7,218.54	7,172.54	7,218.54	196.36	248.67	89.89	1,256.65	-5,118.90	2,560.76	2,132.23	428.53	5.976		
13,000.00	7,218.01	7,172.01	7,218.01	199.64	248.65	89.88	1,256.65	-5,118.90	2,596.57	2,167.91	428.65	6.057		
13,100.00	7,217.48	7,171.48	7,217.48	202.92	248.63	89.86	1,256.65	-5,118.90	2,635.68	2,207.12	428.56	6.150		
13,200.00	7,216.95	7,170.95	7,216.95	206.20	248.61	89.85	1,256.65	-5,118.90	2,677.96	2,249.69	428.26	6.253		
13,300.00	7,216.42	7,170.42	7,216.42	209.48	248.60	89.84	1,256.65	-5,118.90	2,723.25	2,295.47	427.79	6.366		
13,400.00	7,215.89	7,169.89	7,215.89	212.76	248.58	89.83	1,256.65	-5,118.90	2,771.41	2,344.27	427.15	6.488		
13,500.00	7,215.36	7,169.36	7,215.36	216.05	248.56	89.81	1,256.65	-5,118.90	2,822.30	2,395.93	426.37	6.619		
13,600.00	7,214.84	7,168.84	7,214.84	219.33	248.54	89.80	1,256.65	-5,118.90	2,875.77	2,450.30	425.47	6.759		
13,700.00	7,214.31	7,168.31	7,214.31	222.62	248.52	89.79	1,256.65	-5,118.90	2,931.67	2,507.20	424.46	6.907		
13,800.00	7,213.78	7,167.78	7,213.78	225.91	248.50	89.78	1,256.65	-5,118.90	2,989.87	2,566.50	423.37	7.062		
13,900.00	7,213.25	7,167.25	7,213.25	229.20	248.49	89.76	1,256.65	-5,118.90	3,050.24	2,628.04	422.20	7.225		
14,000.00	7,212.72	7,166.72	7,212.72	232.49	248.47	89.75	1,256.65	-5,118.90	3,112.65	2,691.69	420.96	7.394		
14,100.00	7,212.19	7,166.19	7,212.19	235.79	248.45	89.74	1,256.65	-5,118.90	3,176.99	2,757.30	419.68	7.570		
14,200.00	7,211.66	7,165.66	7,211.66	239.08	248.43	89.73	1,256.65	-5,118.90	3,243.13	2,824.77	418.36	7.752		
14,300.00	7,211.13	7,165.13	7,211.13	242.38	248.41	89.71	1,256.65	-5,118.90	3,310.97	2,893.95	417.02	7.940		
14,400.00	7,210.61	7,164.61	7,210.61	245.67	248.39	89.70	1,256.65	-5,118.90	3,380.41	2,964.76	415.65	8.133		
14,500.00	7,210.08	7,164.08	7,210.08	248.97	248.37	89.69	1,256.65	-5,118.90	3,451.35	3,037.08	414.27	8.331		
14,600.00	7,209.55	7,163.55	7,209.55	252.27	248.36	89.68	1,256.65	-5,118.90	3,523.70	3,110.81	412.89	8.534		
14,700.00	7,209.02	7,163.02	7,209.02	255.57	248.34	89.66	1,256.65	-5,118.90	3,597.37	3,185.87	411.50	8.742		
14,800.00	7,208.49	7,162.49	7,208.49	258.87	248.32	89.65	1,256.65	-5,118.90	3,672.29	3,262.17	410.13	8.954		
14,900.00	7,207.96	7,161.96	7,207.96	262.17	248.30	89.64	1,256.65	-5,118.90	3,748.38	3,339.63	408.76	9.170		
15,000.00	7,207.43	7,161.43	7,207.43	265.47	248.28	89.63	1,256.65	-5,118.90	3,825.57	3,418.17	407.40	9.390		
15,081.89	7,207.00	7,161.00	7,207.00	268.17	248.27	89.62	1,256.65	-5,118.90	3,889.56	3,483.25	406.30	9.573		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	53.00	3.28	3.28	-92.51	-215.18	-4,916.16	4,921.15					
100.00	100.00	47.00	100.00	3.28	3.38	-92.51	-215.18	-4,916.16	4,920.87	4,914.20	6.67	738.230		
200.00	200.00	147.00	200.00	3.34	4.71	-92.51	-215.18	-4,916.16	4,920.87	4,912.82	8.05	611.182		
300.00	299.98	246.98	299.98	3.44	7.62	79.48	-215.18	-4,916.16	4,920.55	4,909.49	11.06	444.967		
400.00	399.84	346.84	399.84	3.59	10.87	79.56	-215.18	-4,916.16	4,919.60	4,905.14	14.46	340.228		
500.00	499.45	446.45	499.45	3.80	14.22	79.69	-215.18	-4,916.16	4,918.02	4,900.00	18.02	272.934		
600.00	598.70	545.70	598.70	4.06	17.61	79.87	-215.18	-4,916.16	4,915.84	4,894.17	21.67	226.854		
700.00	697.49	644.49	697.49	4.38	21.01	80.08	-215.18	-4,916.16	4,913.11	4,887.73	25.39	193.536		
800.00	796.13	743.13	796.13	4.74	24.42	80.27	-215.18	-4,916.16	4,910.28	4,881.12	29.16	168.398		
900.00	894.78	841.78	894.78	5.15	27.84	80.46	-215.18	-4,916.16	4,907.49	4,874.52	32.98	148.822		
1,000.00	993.43	940.43	993.43	5.58	31.26	80.64	-215.18	-4,916.16	4,904.77	4,867.94	36.83	133.189		
1,100.00	1,092.07	1,039.07	1,092.07	6.03	34.68	80.83	-215.18	-4,916.16	4,902.09	4,861.39	40.70	120.439		
1,200.00	1,190.72	1,137.72	1,190.72	6.50	38.11	81.02	-215.18	-4,916.16	4,899.47	4,854.87	44.60	109.858		
1,300.00	1,289.36	1,236.36	1,289.36	6.98	41.55	81.20	-215.18	-4,916.16	4,896.90	4,848.39	48.51	100.945		
1,400.00	1,388.01	1,335.01	1,388.01	7.47	44.98	81.39	-215.18	-4,916.16	4,894.38	4,841.95	52.44	93.340		
1,500.00	1,486.65	1,433.65	1,486.65	7.97	48.41	81.58	-215.18	-4,916.16	4,891.92	4,835.55	56.37	86.779		
1,600.00	1,585.30	1,532.30	1,585.30	8.48	51.85	81.77	-215.18	-4,916.16	4,889.51	4,829.20	60.32	81.064		
1,700.00	1,683.94	1,630.94	1,683.94	9.00	55.29	81.95	-215.18	-4,916.16	4,887.16	4,822.89	64.27	76.042		
1,800.00	1,782.59	1,729.59	1,782.59	9.52	58.73	82.14	-215.18	-4,916.16	4,884.86	4,816.63	68.23	71.597		
1,900.00	1,881.24	1,828.24	1,881.24	10.05	62.16	82.33	-215.18	-4,916.16	4,882.61	4,810.42	72.19	67.636		
2,000.00	1,979.88	1,926.88	1,979.88	10.58	65.60	82.52	-215.18	-4,916.16	4,880.42	4,804.26	76.16	64.083		
2,100.00	2,078.53	2,025.53	2,078.53	11.11	69.04	82.71	-215.18	-4,916.16	4,878.28	4,798.15	80.13	60.881		
2,200.00	2,177.17	2,124.17	2,177.17	11.64	72.48	82.89	-215.18	-4,916.16	4,876.20	4,792.10	84.10	57.979		
2,300.00	2,275.82	2,222.82	2,275.82	12.18	75.92	83.08	-215.18	-4,916.16	4,874.17	4,786.09	88.08	55.338		
2,400.00	2,374.46	2,321.46	2,374.46	12.72	79.36	83.27	-215.18	-4,916.16	4,872.20	4,780.14	92.06	52.924		
2,500.00	2,473.11	2,420.11	2,473.11	13.26	82.81	83.46	-215.18	-4,916.16	4,870.28	4,774.23	96.04	50.710		
2,600.00	2,571.76	2,518.76	2,571.76	13.80	86.25	83.65	-215.18	-4,916.16	4,868.41	4,768.38	100.03	48.671		
2,700.00	2,670.40	2,617.40	2,670.40	14.35	89.69	83.84	-215.18	-4,916.16	4,866.60	4,762.59	104.01	46.789		
2,800.00	2,769.05	2,716.05	2,769.05	14.89	93.13	84.03	-215.18	-4,916.16	4,864.84	4,756.84	108.00	45.045		
2,900.00	2,867.69	2,814.69	2,867.69	15.44	96.57	84.22	-215.18	-4,916.16	4,863.14	4,751.15	111.99	43.426		
3,000.00	2,966.34	2,913.34	2,966.34	15.99	100.01	84.41	-215.18	-4,916.16	4,861.49	4,745.52	115.98	41.918		
3,100.00	3,064.98	3,011.98	3,064.98	16.53	103.46	84.60	-215.18	-4,916.16	4,859.90	4,739.93	119.97	40.510		
3,200.00	3,163.63	3,110.63	3,163.63	17.08	106.90	84.79	-215.18	-4,916.16	4,858.36	4,734.40	123.96	39.193		
3,300.00	3,262.27	3,209.27	3,262.27	17.63	110.34	84.98	-215.18	-4,916.16	4,856.88	4,728.93	127.95	37.958		
3,400.00	3,360.92	3,307.92	3,360.92	18.18	113.78	85.17	-215.18	-4,916.16	4,855.45	4,723.51	131.95	36.799		
3,500.00	3,459.57	3,406.57	3,459.57	18.74	117.22	85.36	-215.18	-4,916.16	4,854.08	4,718.14	135.94	35.707		
3,600.00	3,558.21	3,505.21	3,558.21	19.29	120.67	85.55	-215.18	-4,916.16	4,852.76	4,712.83	139.94	34.678		
3,700.00	3,656.86	3,603.86	3,656.86	19.84	124.11	85.74	-215.18	-4,916.16	4,851.50	4,707.57	143.93	33.707		
3,800.00	3,755.50	3,702.50	3,755.50	20.39	127.55	85.93	-215.18	-4,916.16	4,850.29	4,702.36	147.93	32.788		
3,900.00	3,854.15	3,801.15	3,854.15	20.95	130.99	86.12	-215.18	-4,916.16	4,849.14	4,697.21	151.93	31.918		
4,000.00	3,952.79	3,900.21	3,952.79	21.50	134.45	86.31	-215.18	-4,916.16	4,848.04	4,692.11	155.94	31.090		
4,100.00	4,051.44	4,001.56	4,051.44	22.05	137.99	86.50	-215.18	-4,916.16	4,847.00	4,686.97	160.03	30.288		
4,200.00	4,150.08	4,102.92	4,150.08	22.61	141.53	86.69	-215.18	-4,916.16	4,846.01	4,681.89	164.12	29.527		
4,300.00	4,248.73	4,204.27	4,248.73	23.16	145.06	86.89	-215.18	-4,916.16	4,845.08	4,676.87	168.22	28.803		
4,400.00	4,347.38	4,305.62	4,347.38	23.72	148.60	87.08	-215.18	-4,916.16	4,844.21	4,671.90	172.31	28.113		
4,500.00	4,446.02	4,406.98	4,446.02	24.27	152.14	87.27	-215.18	-4,916.16	4,843.39	4,666.98	176.40	27.456		
4,600.00	4,544.67	4,508.33	4,544.67	24.83	155.68	87.46	-215.18	-4,916.16	4,842.62	4,662.13	180.50	26.829		
4,700.00	4,643.31	4,609.69	4,643.31	25.39	159.21	87.65	-215.18	-4,916.16	4,841.91	4,657.32	184.59	26.230		
4,800.00	4,741.96	4,688.96	4,741.96	25.94	161.98	87.84	-215.18	-4,916.16	4,841.26	4,653.34	187.91	25.763		
4,900.00	4,840.60	4,787.60	4,840.60	26.50	165.42	88.03	-215.18	-4,916.16	4,840.66	4,648.75	191.92	25.223		
5,000.00	4,939.25	4,886.25	4,939.25	27.05	168.87	88.22	-215.18	-4,916.16	4,840.12	4,644.20	195.92	24.705		
5,100.00	5,037.90	4,984.90	5,037.90	27.61	172.31	88.42	-215.18	-4,916.16	4,839.63	4,639.71	199.92	24.208		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,083.54	5,136.54	28.17	175.75	88.61	-215.18	-4,916.16	4,839.20	4,635.28	203.92	23.731		
5,300.00	5,235.19	5,182.19	5,235.19	28.72	179.20	88.80	-215.18	-4,916.16	4,838.82	4,630.90	207.92	23.273		
5,400.00	5,333.83	5,280.83	5,333.83	29.28	182.64	88.99	-215.18	-4,916.16	4,838.50	4,626.58	211.92	22.832		
5,500.00	5,432.48	5,379.48	5,432.48	29.84	186.08	89.18	-215.18	-4,916.16	4,838.24	4,622.32	215.92	22.408		
5,600.00	5,531.12	5,478.12	5,531.12	30.40	189.52	89.37	-215.18	-4,916.16	4,838.03	4,618.11	219.92	21.999		
5,700.00	5,629.77	5,576.77	5,629.77	30.95	192.97	89.57	-215.18	-4,916.16	4,837.87	4,613.95	223.92	21.605		
5,800.00	5,728.41	5,675.41	5,728.41	31.51	196.41	89.76	-215.18	-4,916.16	4,837.77	4,609.85	227.92	21.225		
5,900.00	5,827.06	5,774.06	5,827.06	32.07	199.85	89.95	-215.18	-4,916.16	4,837.73	4,605.81	231.92	20.859		
5,926.99	5,853.68	5,800.68	5,853.68	32.22	200.78	90.00	-215.18	-4,916.16	4,837.73	4,604.72	233.00	20.762		
6,000.00	5,925.71	5,872.71	5,925.71	32.63	203.30	90.14	-215.18	-4,916.16	4,837.74	4,601.82	235.93	20.505		
6,100.00	6,024.35	5,971.35	6,024.35	33.19	206.74	90.33	-215.18	-4,916.16	4,837.81	4,597.89	239.93	20.164		
6,200.00	6,123.00	6,070.00	6,123.00	33.74	210.18	90.52	-215.18	-4,916.16	4,837.94	4,594.01	243.93	19.833		
6,300.00	6,221.64	6,168.64	6,221.64	34.30	213.63	90.71	-215.18	-4,916.16	4,838.12	4,590.19	247.93	19.514		
6,400.00	6,320.29	6,267.29	6,320.29	34.86	217.07	90.91	-215.18	-4,916.16	4,838.35	4,586.42	251.93	19.205		
6,500.00	6,418.93	6,365.93	6,418.93	35.42	220.51	91.10	-215.18	-4,916.16	4,838.64	4,582.71	255.93	18.906		
6,600.00	6,517.58	6,464.58	6,517.58	35.98	223.96	91.29	-215.18	-4,916.16	4,838.99	4,579.06	259.93	18.616		
6,700.00	6,616.23	6,563.23	6,616.23	36.54	227.40	91.48	-215.18	-4,916.16	4,839.39	4,575.46	263.93	18.336		
6,800.00	6,714.51	6,661.51	6,714.51	37.10	230.83	91.68	-215.18	-4,916.16	4,839.82	4,566.59	267.93	18.044		
6,900.00	6,810.42	6,757.42	6,810.42	37.66	234.18	38.85	-215.18	-4,916.16	4,814.62	4,542.78	271.84	17.711		
7,000.00	6,901.58	6,848.58	6,901.58	38.21	237.36	31.56	-215.18	-4,916.16	4,779.99	4,504.42	275.57	17.346		
7,100.00	6,985.76	6,932.76	6,985.76	38.76	240.30	28.60	-215.18	-4,916.16	4,731.52	4,452.47	279.05	16.956		
7,200.00	7,060.88	7,007.88	7,060.88	39.32	242.92	28.08	-215.18	-4,916.16	4,670.40	4,388.21	282.19	16.551		
7,300.00	7,125.09	7,072.09	7,125.09	39.90	245.16	29.57	-215.18	-4,916.16	4,598.17	4,313.25	284.92	16.138		
7,400.00	7,176.81	7,123.81	7,176.81	40.55	246.97	33.50	-215.18	-4,916.16	4,516.61	4,229.42	287.19	15.727		
7,500.00	7,214.77	7,161.77	7,214.77	41.30	248.29	41.49	-215.18	-4,916.16	4,427.73	4,138.78	288.95	15.324		
7,600.00	7,238.02	7,185.02	7,238.02	42.22	249.11	57.78	-215.18	-4,916.16	4,333.70	4,043.54	290.17	14.935		
7,700.00	7,246.01	7,206.99	7,246.01	43.32	249.87	89.36	-215.18	-4,916.16	4,236.83	3,945.52	291.31	14.544		
7,800.00	7,245.50	7,207.50	7,245.50	44.65	249.89	91.31	-215.18	-4,916.16	4,139.35	3,847.66	291.70	14.191		
7,900.00	7,244.97	7,208.03	7,244.97	46.21	249.91	91.27	-215.18	-4,916.16	4,042.00	3,749.88	292.12	13.837		
8,000.00	7,244.44	7,208.56	7,244.44	47.99	249.93	91.24	-215.18	-4,916.16	3,944.78	3,652.20	292.58	13.483		
8,100.00	7,243.91	7,209.09	7,243.91	49.96	249.95	91.21	-215.18	-4,916.16	3,847.70	3,554.62	293.08	13.129		
8,200.00	7,243.39	7,209.61	7,243.39	52.10	249.96	91.18	-215.18	-4,916.16	3,750.77	3,457.15	293.61	12.774		
8,300.00	7,242.86	7,189.86	7,242.86	54.38	249.27	91.15	-215.18	-4,916.16	3,654.01	3,360.52	293.49	12.450		
8,400.00	7,242.33	7,189.33	7,242.33	56.78	249.26	91.11	-215.18	-4,916.16	3,557.42	3,263.34	294.09	12.097		
8,500.00	7,241.80	7,188.80	7,241.80	59.28	249.24	91.08	-215.18	-4,916.16	3,461.03	3,166.30	294.74	11.743		
8,600.00	7,241.27	7,188.27	7,241.27	61.88	249.22	91.05	-215.18	-4,916.16	3,364.86	3,069.41	295.45	11.389		
8,700.00	7,240.74	7,187.74	7,240.74	64.54	249.20	91.02	-215.18	-4,916.16	3,268.91	2,972.68	296.22	11.035		
8,800.00	7,240.21	7,187.21	7,240.21	67.27	249.18	90.98	-215.18	-4,916.16	3,173.21	2,876.14	297.07	10.682		
8,900.00	7,239.68	7,186.68	7,239.68	70.06	249.16	90.95	-215.18	-4,916.16	3,077.78	2,779.79	298.00	10.328		
9,000.00	7,239.16	7,186.16	7,239.16	72.89	249.15	90.92	-215.18	-4,916.16	2,982.66	2,683.65	299.01	9.975		
9,100.00	7,238.63	7,185.63	7,238.63	75.77	249.13	90.89	-215.18	-4,916.16	2,887.86	2,587.75	300.12	9.622		
9,200.00	7,238.10	7,185.10	7,238.10	78.69	249.11	90.85	-215.18	-4,916.16	2,793.43	2,492.10	301.33	9.270		
9,300.00	7,237.57	7,184.57	7,237.57	81.64	249.09	90.82	-215.18	-4,916.16	2,699.40	2,396.74	302.66	8.919		
9,400.00	7,237.04	7,184.04	7,237.04	84.62	249.07	90.79	-215.18	-4,916.16	2,605.81	2,301.70	304.11	8.569		
9,500.00	7,236.51	7,183.51	7,236.51	87.63	249.05	90.76	-215.18	-4,916.16	2,512.71	2,207.01	305.71	8.219		
9,600.00	7,235.98	7,182.98	7,235.98	90.66	249.03	90.72	-215.18	-4,916.16	2,420.17	2,112.71	307.46	7.872		
9,700.00	7,235.45	7,182.45	7,235.45	93.72	249.02	90.69	-215.18	-4,916.16	2,328.24	2,018.86	309.38	7.526		
9,800.00	7,234.93	7,181.93	7,234.93	96.79	249.00	90.66	-215.18	-4,916.16	2,237.01	1,925.51	311.49	7.182		
9,900.00	7,234.40	7,181.40	7,234.40	99.88	248.98	90.63	-215.18	-4,916.16	2,146.55	1,832.73	313.82	6.840		
10,000.00	7,233.87	7,180.87	7,233.87	102.98	248.96	90.59	-215.18	-4,916.16	2,056.98	1,740.61	316.38	6.502		
10,100.00	7,233.34	7,180.34	7,233.34	106.10	248.94	90.56	-215.18	-4,916.16	1,968.42	1,649.22	319.20	6.167		
10,200.00	7,232.81	7,179.81	7,232.81	109.23	248.92	90.53	-215.18	-4,916.16	1,881.00	1,558.70	322.30	5.836		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,232.28	7,179.28	7,232.28	112.38	248.91	90.50	-215.18	-4,916.16	1,794.90	1,469.18	325.72	5.511		
10,400.00	7,231.75	7,178.75	7,231.75	115.53	248.89	90.46	-215.18	-4,916.16	1,710.31	1,380.83	329.48	5.191		
10,500.00	7,231.23	7,178.23	7,231.23	118.70	248.87	90.43	-215.18	-4,916.16	1,627.46	1,293.84	333.62	4.878		
10,600.00	7,230.70	7,177.70	7,230.70	121.87	248.85	90.40	-215.18	-4,916.16	1,546.65	1,208.48	338.17	4.574		
10,700.00	7,230.17	7,177.17	7,230.17	125.05	248.83	90.37	-215.18	-4,916.16	1,468.20	1,125.05	343.15	4.279		
10,800.00	7,229.64	7,176.64	7,229.64	128.25	248.81	90.33	-215.18	-4,916.16	1,392.51	1,043.93	348.58	3.995		
10,900.00	7,229.11	7,176.11	7,229.11	131.44	248.79	90.30	-215.18	-4,916.16	1,320.07	965.60	354.47	3.724		
11,000.00	7,228.58	7,175.58	7,228.58	134.65	248.78	90.27	-215.18	-4,916.16	1,251.43	890.62	360.80	3.468		
11,100.00	7,228.05	7,175.05	7,228.05	137.86	248.76	90.24	-215.18	-4,916.16	1,187.25	819.73	367.52	3.230		
11,200.00	7,227.52	7,174.52	7,227.52	141.08	248.74	90.21	-215.18	-4,916.16	1,128.29	753.76	374.53	3.013		
11,300.00	7,227.00	7,174.00	7,227.00	144.30	248.72	90.17	-215.18	-4,916.16	1,075.42	693.76	381.66	2.818		
11,400.00	7,226.47	7,173.47	7,226.47	147.52	248.70	90.14	-215.18	-4,916.16	1,029.57	640.89	388.68	2.649		
11,500.00	7,225.94	7,172.94	7,225.94	150.76	248.68	90.11	-215.18	-4,916.16	991.71	596.44	395.27	2.509		
11,600.00	7,225.41	7,172.41	7,225.41	153.99	248.67	90.08	-215.18	-4,916.16	962.79	561.72	401.08	2.401		
11,700.00	7,224.88	7,171.88	7,224.88	157.23	248.65	90.04	-215.18	-4,916.16	943.64	537.92	405.71	2.326		
11,800.00	7,224.35	7,171.35	7,224.35	160.48	248.63	90.01	-215.18	-4,916.16	934.84	525.98	408.86	2.286		
11,832.60	7,224.18	7,171.18	7,224.18	161.54	248.62	90.00	-215.18	-4,916.16	934.28	524.75	409.53	2.281	CC, ES, SF	
11,900.00	7,223.82	7,170.82	7,223.82	163.72	248.61	89.98	-215.18	-4,916.16	936.70	526.39	410.31	2.283		
12,000.00	7,223.29	7,170.29	7,223.29	166.98	248.59	89.95	-215.18	-4,916.16	949.15	539.11	410.05	2.315		
12,100.00	7,222.77	7,169.77	7,222.77	170.23	248.57	89.91	-215.18	-4,916.16	971.79	563.60	408.19	2.381		
12,200.00	7,222.24	7,169.24	7,222.24	173.49	248.55	89.88	-215.18	-4,916.16	1,003.92	598.90	405.02	2.479		
12,300.00	7,221.71	7,168.71	7,221.71	176.75	248.54	89.85	-215.18	-4,916.16	1,044.67	643.80	400.86	2.606		
12,400.00	7,221.18	7,168.18	7,221.18	180.01	248.52	89.82	-215.18	-4,916.16	1,093.07	697.02	396.06	2.760		
12,500.00	7,220.65	7,167.65	7,220.65	183.28	248.50	89.78	-215.18	-4,916.16	1,148.17	757.27	390.90	2.937		
12,600.00	7,220.12	7,167.12	7,220.12	186.54	248.48	89.75	-215.18	-4,916.16	1,209.03	823.42	385.62	3.135		
12,700.00	7,219.59	7,166.59	7,219.59	189.81	248.46	89.72	-215.18	-4,916.16	1,274.85	894.46	380.39	3.351		
12,800.00	7,219.06	7,166.06	7,219.06	193.09	248.44	89.69	-215.18	-4,916.16	1,344.88	969.55	375.33	3.583		
12,900.00	7,218.54	7,165.54	7,218.54	196.36	248.43	89.65	-215.18	-4,916.16	1,418.52	1,048.00	370.52	3.828		
13,000.00	7,218.01	7,165.01	7,218.01	199.64	248.41	89.62	-215.18	-4,916.16	1,495.21	1,129.23	365.98	4.085		
13,100.00	7,217.48	7,164.48	7,217.48	202.92	248.39	89.59	-215.18	-4,916.16	1,574.53	1,212.78	361.74	4.353		
13,200.00	7,216.95	7,163.95	7,216.95	206.20	248.37	89.56	-215.18	-4,916.16	1,656.08	1,298.28	357.80	4.628		
13,300.00	7,216.42	7,163.42	7,216.42	209.48	248.35	89.52	-215.18	-4,916.16	1,739.56	1,385.41	354.15	4.912		
13,400.00	7,215.89	7,162.89	7,215.89	212.76	248.33	89.49	-215.18	-4,916.16	1,824.71	1,473.94	350.77	5.202		
13,500.00	7,215.36	7,162.36	7,215.36	216.05	248.31	89.46	-215.18	-4,916.16	1,911.29	1,563.64	347.65	5.498		
13,600.00	7,214.84	7,161.84	7,214.84	219.33	248.30	89.43	-215.18	-4,916.16	1,999.12	1,654.36	344.77	5.798		
13,700.00	7,214.31	7,161.31	7,214.31	222.62	248.28	89.39	-215.18	-4,916.16	2,088.05	1,745.95	342.10	6.104		
13,800.00	7,213.78	7,160.78	7,213.78	225.91	248.26	89.36	-215.18	-4,916.16	2,177.94	1,838.30	339.64	6.412		
13,900.00	7,213.25	7,160.25	7,213.25	229.20	248.24	89.33	-215.18	-4,916.16	2,268.68	1,931.32	337.36	6.725		
14,000.00	7,212.72	7,159.72	7,212.72	232.49	248.22	89.30	-215.18	-4,916.16	2,360.16	2,024.91	335.25	7.040		
14,100.00	7,212.19	7,159.19	7,212.19	235.79	248.20	89.26	-215.18	-4,916.16	2,452.31	2,119.02	333.30	7.358		
14,200.00	7,211.66	7,158.66	7,211.66	239.08	248.19	89.23	-215.18	-4,916.16	2,545.06	2,213.57	331.48	7.678		
14,300.00	7,211.13	7,158.13	7,211.13	242.38	248.17	89.20	-215.18	-4,916.16	2,638.33	2,308.53	329.80	8.000		
14,400.00	7,210.61	7,157.61	7,210.61	245.67	248.15	89.17	-215.18	-4,916.16	2,732.08	2,403.85	328.23	8.324		
14,500.00	7,210.08	7,157.08	7,210.08	248.97	248.13	89.14	-215.18	-4,916.16	2,826.25	2,499.49	326.77	8.649		
14,600.00	7,209.55	7,156.55	7,209.55	252.27	248.11	89.10	-215.18	-4,916.16	2,920.82	2,595.41	325.40	8.976		
14,700.00	7,209.02	7,156.02	7,209.02	255.57	248.09	89.07	-215.18	-4,916.16	3,015.73	2,691.60	324.13	9.304		
14,800.00	7,208.49	7,155.49	7,208.49	258.87	248.07	89.04	-215.18	-4,916.16	3,110.97	2,788.03	322.94	9.633		
14,900.00	7,207.96	7,154.96	7,207.96	262.17	248.06	89.01	-215.18	-4,916.16	3,206.49	2,884.66	321.83	9.963		
15,000.00	7,207.43	7,154.43	7,207.43	265.47	248.04	88.97	-215.18	-4,916.16	3,302.28	2,981.50	320.78	10.294		
15,081.89	7,207.00	7,154.00	7,207.00	268.17	248.02	88.95	-215.18	-4,916.16	3,380.90	3,060.92	319.97	10.566		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	56.00	3.28	3.28	-110.90	-2,922.72	-7,653.92	8,193.17					
100.00	100.00	44.00	100.00	3.28	3.37	-110.90	-2,922.72	-7,653.92	8,192.97	8,186.32	6.65	1,231.389		
200.00	200.00	144.00	200.00	3.34	4.64	-110.90	-2,922.72	-7,653.92	8,192.97	8,185.00	7.98	1,027.108		
300.00	299.98	243.98	299.98	3.44	7.52	61.08	-2,922.72	-7,653.92	8,192.13	8,181.17	10.96	747.187		
400.00	399.84	343.84	399.84	3.59	10.77	61.16	-2,922.72	-7,653.92	8,189.60	8,175.24	14.36	570.295		
500.00	499.45	443.45	499.45	3.80	14.12	61.29	-2,922.72	-7,653.92	8,185.39	8,167.48	17.92	456.863		
600.00	598.70	542.70	598.70	4.06	17.51	61.47	-2,922.72	-7,653.92	8,179.52	8,157.96	21.56	379.347		
700.00	697.49	641.49	697.49	4.38	20.91	61.65	-2,922.72	-7,653.92	8,172.07	8,146.80	25.27	323.390		
800.00	796.13	740.13	796.13	4.74	24.31	61.75	-2,922.72	-7,653.92	8,164.21	8,135.18	29.03	281.247		
900.00	894.78	838.78	894.78	5.15	27.73	61.85	-2,922.72	-7,653.92	8,156.38	8,123.55	32.83	248.448		
1,000.00	993.43	937.43	993.43	5.58	31.15	61.95	-2,922.72	-7,653.92	8,148.57	8,111.91	36.66	222.260		
1,100.00	1,092.07	1,036.07	1,092.07	6.03	34.58	62.06	-2,922.72	-7,653.92	8,140.79	8,100.27	40.52	200.906		
1,200.00	1,190.72	1,134.72	1,190.72	6.50	38.01	62.16	-2,922.72	-7,653.92	8,133.03	8,088.63	44.40	183.183		
1,300.00	1,289.36	1,233.36	1,289.36	6.98	41.44	62.26	-2,922.72	-7,653.92	8,125.30	8,077.01	48.29	168.253		
1,400.00	1,388.01	1,332.01	1,388.01	7.47	44.88	62.36	-2,922.72	-7,653.92	8,117.60	8,065.40	52.20	155.513		
1,500.00	1,486.65	1,430.65	1,486.65	7.97	48.31	62.46	-2,922.72	-7,653.92	8,109.92	8,053.80	56.12	144.521		
1,600.00	1,585.30	1,529.30	1,585.30	8.48	51.75	62.56	-2,922.72	-7,653.92	8,102.27	8,042.23	60.04	134.944		
1,700.00	1,683.94	1,627.94	1,683.94	9.00	55.18	62.66	-2,922.72	-7,653.92	8,094.64	8,030.67	63.97	126.529		
1,800.00	1,782.59	1,726.59	1,782.59	9.52	58.62	62.77	-2,922.72	-7,653.92	8,087.04	8,019.13	67.91	119.078		
1,900.00	1,881.24	1,825.24	1,881.24	10.05	62.06	62.87	-2,922.72	-7,653.92	8,079.47	8,007.61	71.86	112.436		
2,000.00	1,979.88	1,923.88	1,979.88	10.58	65.50	62.97	-2,922.72	-7,653.92	8,071.92	7,996.11	75.81	106.479		
2,100.00	2,078.53	2,022.53	2,078.53	11.11	68.94	63.07	-2,922.72	-7,653.92	8,064.40	7,984.64	79.76	101.108		
2,200.00	2,177.17	2,121.17	2,177.17	11.64	72.38	63.18	-2,922.72	-7,653.92	8,056.90	7,973.19	83.72	96.240		
2,300.00	2,275.82	2,219.82	2,275.82	12.18	75.82	63.28	-2,922.72	-7,653.92	8,049.43	7,961.76	87.68	91.809		
2,400.00	2,374.46	2,318.46	2,374.46	12.72	79.26	63.38	-2,922.72	-7,653.92	8,041.99	7,950.35	91.64	87.759		
2,500.00	2,473.11	2,417.11	2,473.11	13.26	82.70	63.49	-2,922.72	-7,653.92	8,034.57	7,938.97	95.60	84.042		
2,600.00	2,571.76	2,515.76	2,571.76	13.80	86.14	63.59	-2,922.72	-7,653.92	8,027.19	7,927.62	99.57	80.620		
2,700.00	2,670.40	2,614.40	2,670.40	14.35	89.58	63.69	-2,922.72	-7,653.92	8,019.82	7,916.29	103.54	77.459		
2,800.00	2,769.05	2,713.05	2,769.05	14.89	93.02	63.80	-2,922.72	-7,653.92	8,012.49	7,904.98	107.51	74.530		
2,900.00	2,867.69	2,811.69	2,867.69	15.44	96.47	63.90	-2,922.72	-7,653.92	8,005.18	7,893.70	111.48	71.809		
3,000.00	2,966.34	2,910.34	2,966.34	15.99	99.91	64.01	-2,922.72	-7,653.92	7,997.90	7,882.45	115.45	69.275		
3,100.00	3,064.98	3,008.98	3,064.98	16.53	103.35	64.11	-2,922.72	-7,653.92	7,990.64	7,871.22	119.43	66.909		
3,200.00	3,163.63	3,107.63	3,163.63	17.08	106.79	64.22	-2,922.72	-7,653.92	7,983.42	7,860.01	123.40	64.694		
3,300.00	3,262.27	3,206.27	3,262.27	17.63	110.23	64.32	-2,922.72	-7,653.92	7,976.22	7,848.84	127.38	62.618		
3,400.00	3,360.92	3,304.92	3,360.92	18.18	113.68	64.43	-2,922.72	-7,653.92	7,969.04	7,837.69	131.36	60.667		
3,500.00	3,459.57	3,403.57	3,459.57	18.74	117.12	64.53	-2,922.72	-7,653.92	7,961.90	7,826.56	135.34	58.831		
3,600.00	3,558.21	3,502.21	3,558.21	19.29	120.56	64.64	-2,922.72	-7,653.92	7,954.78	7,815.46	139.32	57.099		
3,700.00	3,656.86	3,600.86	3,656.86	19.84	124.00	64.74	-2,922.72	-7,653.92	7,947.69	7,804.39	143.30	55.463		
3,800.00	3,755.50	3,700.50	3,755.50	20.39	127.48	64.85	-2,922.72	-7,653.92	7,940.62	7,793.31	147.31	53.903		
3,900.00	3,854.15	3,801.85	3,854.15	20.95	131.02	64.95	-2,922.72	-7,653.92	7,933.59	7,782.20	151.39	52.405		
4,000.00	3,952.79	3,903.21	3,952.79	21.50	134.56	65.06	-2,922.72	-7,653.92	7,926.58	7,771.11	155.47	50.985		
4,100.00	4,051.44	4,004.56	4,051.44	22.05	138.09	65.17	-2,922.72	-7,653.92	7,919.60	7,760.05	159.55	49.638		
4,200.00	4,150.08	4,105.92	4,150.08	22.61	141.63	65.27	-2,922.72	-7,653.92	7,912.65	7,749.02	163.62	48.358		
4,300.00	4,248.73	4,207.27	4,248.73	23.16	145.17	65.38	-2,922.72	-7,653.92	7,905.72	7,738.02	167.70	47.141		
4,400.00	4,347.38	4,308.62	4,347.38	23.72	148.71	65.49	-2,922.72	-7,653.92	7,898.83	7,727.04	171.79	45.981		
4,500.00	4,446.02	4,409.98	4,446.02	24.27	152.24	65.59	-2,922.72	-7,653.92	7,891.96	7,716.09	175.87	44.875		
4,600.00	4,544.67	4,488.67	4,544.67	24.83	154.99	65.70	-2,922.72	-7,653.92	7,885.12	7,705.96	179.16	44.012		
4,700.00	4,643.31	4,587.31	4,643.31	25.39	158.43	65.81	-2,922.72	-7,653.92	7,878.31	7,695.16	183.14	43.017		
4,800.00	4,741.96	4,685.96	4,741.96	25.94	161.87	65.92	-2,922.72	-7,653.92	7,871.52	7,684.39	187.13	42.064		
4,900.00	4,840.60	4,784.60	4,840.60	26.50	165.32	66.02	-2,922.72	-7,653.92	7,864.77	7,673.64	191.12	41.151		
5,000.00	4,939.25	4,883.25	4,939.25	27.05	168.76	66.13	-2,922.72	-7,653.92	7,858.04	7,662.93	195.11	40.275		
5,100.00	5,037.90	4,981.90	5,037.90	27.61	172.20	66.24	-2,922.72	-7,653.92	7,851.34	7,652.24	199.10	39.434		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,080.54	5,136.54	28.17	175.65	66.35	-2,922.72	-7,653.92	7,844.67	7,641.58	203.09	38.627		
5,300.00	5,235.19	5,179.19	5,235.19	28.72	179.09	66.46	-2,922.72	-7,653.92	7,838.03	7,630.95	207.08	37.850		
5,400.00	5,333.83	5,277.83	5,333.83	29.28	182.53	66.57	-2,922.72	-7,653.92	7,831.42	7,620.35	211.07	37.103		
5,500.00	5,432.48	5,376.48	5,432.48	29.84	185.98	66.68	-2,922.72	-7,653.92	7,824.83	7,609.77	215.06	36.384		
5,600.00	5,531.12	5,475.12	5,531.12	30.40	189.42	66.78	-2,922.72	-7,653.92	7,818.28	7,599.22	219.05	35.691		
5,700.00	5,629.77	5,573.77	5,629.77	30.95	192.86	66.89	-2,922.72	-7,653.92	7,811.75	7,588.70	223.05	35.023		
5,800.00	5,728.41	5,672.41	5,728.41	31.51	196.31	67.00	-2,922.72	-7,653.92	7,805.25	7,578.22	227.04	34.378		
5,900.00	5,827.06	5,771.06	5,827.06	32.07	199.75	67.11	-2,922.72	-7,653.92	7,798.79	7,567.75	231.03	33.756		
6,000.00	5,925.71	5,869.71	5,925.71	32.63	203.19	67.22	-2,922.72	-7,653.92	7,792.35	7,557.32	235.03	33.155		
6,100.00	6,024.35	5,968.35	6,024.35	33.19	206.64	67.33	-2,922.72	-7,653.92	7,785.94	7,546.92	239.02	32.574		
6,200.00	6,123.00	6,067.00	6,123.00	33.74	210.08	67.44	-2,922.72	-7,653.92	7,779.56	7,536.54	243.01	32.013		
6,300.00	6,221.64	6,165.64	6,221.64	34.30	213.52	67.55	-2,922.72	-7,653.92	7,773.21	7,526.20	247.01	31.469		
6,400.00	6,320.29	6,264.29	6,320.29	34.86	216.97	67.66	-2,922.72	-7,653.92	7,766.89	7,515.88	251.00	30.943		
6,500.00	6,418.93	6,362.93	6,418.93	35.42	220.41	67.77	-2,922.72	-7,653.92	7,760.59	7,505.59	255.00	30.434		
6,600.00	6,517.58	6,461.58	6,517.58	35.98	223.85	67.89	-2,922.72	-7,653.92	7,754.33	7,495.34	259.00	29.940		
6,700.00	6,616.23	6,560.23	6,616.23	36.54	227.30	68.00	-2,922.72	-7,653.92	7,748.10	7,485.11	262.99	29.461		
6,800.00	6,714.51	6,658.51	6,714.51	37.10	230.73	33.09	-2,922.72	-7,653.92	7,736.66	7,469.70	266.96	28.981		
6,900.00	6,810.42	6,754.42	6,810.42	37.66	234.07	13.88	-2,922.72	-7,653.92	7,710.51	7,439.72	270.78	28.475		
7,000.00	6,901.58	6,845.58	6,901.58	38.21	237.26	4.70	-2,922.72	-7,653.92	7,670.05	7,395.68	274.37	27.955		
7,100.00	6,985.76	6,929.76	6,985.76	38.76	240.20	-1.21	-2,922.72	-7,653.92	7,616.27	7,338.63	277.64	27.432		
7,200.00	7,060.88	7,004.88	7,060.88	39.32	242.82	-6.25	-2,922.72	-7,653.92	7,550.50	7,270.00	280.50	26.918		
7,300.00	7,125.09	7,069.09	7,125.09	39.90	245.06	-11.82	-2,922.72	-7,653.92	7,474.36	7,191.47	282.89	26.421		
7,400.00	7,176.81	7,120.81	7,176.81	40.55	246.86	-19.47	-2,922.72	-7,653.92	7,389.73	7,104.98	284.75	25.952		
7,500.00	7,214.77	7,158.77	7,214.77	41.30	248.19	-32.02	-2,922.72	-7,653.92	7,298.72	7,012.69	286.03	25.517		
7,600.00	7,238.02	7,182.02	7,238.02	42.22	249.00	-54.91	-2,922.72	-7,653.92	7,203.61	6,916.88	286.72	25.124		
7,700.00	7,246.01	7,190.01	7,246.01	43.32	249.28	-89.43	-2,922.72	-7,653.92	7,106.75	6,819.93	286.82	24.778		
7,800.00	7,245.50	7,189.50	7,245.50	44.65	249.26	-91.17	-2,922.72	-7,653.92	7,009.90	6,723.29	286.60	24.459		
7,900.00	7,244.97	7,188.97	7,244.97	46.21	249.24	-91.15	-2,922.72	-7,653.92	6,913.14	6,626.74	286.40	24.138		
8,000.00	7,244.44	7,188.44	7,244.44	47.99	249.23	-91.14	-2,922.72	-7,653.92	6,816.47	6,530.25	286.22	23.816		
8,100.00	7,243.91	7,187.91	7,243.91	49.96	249.21	-91.12	-2,922.72	-7,653.92	6,719.90	6,433.84	286.06	23.491		
8,200.00	7,243.39	7,187.39	7,243.39	52.10	249.19	-91.10	-2,922.72	-7,653.92	6,623.43	6,337.51	285.92	23.165		
8,300.00	7,242.86	7,186.86	7,242.86	54.38	249.17	-91.08	-2,922.72	-7,653.92	6,527.07	6,241.26	285.81	22.837		
8,400.00	7,242.33	7,186.33	7,242.33	56.78	249.15	-91.07	-2,922.72	-7,653.92	6,430.82	6,145.09	285.73	22.507		
8,500.00	7,241.80	7,185.80	7,241.80	59.28	249.13	-91.05	-2,922.72	-7,653.92	6,334.69	6,049.00	285.68	22.174		
8,600.00	7,241.27	7,185.27	7,241.27	61.88	249.11	-91.03	-2,922.72	-7,653.92	6,238.67	5,953.01	285.67	21.839		
8,700.00	7,240.74	7,184.74	7,240.74	64.54	249.10	-91.01	-2,922.72	-7,653.92	6,142.79	5,857.09	285.69	21.501		
8,800.00	7,240.21	7,184.21	7,240.21	67.27	249.08	-91.00	-2,922.72	-7,653.92	6,047.04	5,761.27	285.76	21.161		
8,900.00	7,239.68	7,183.68	7,239.68	70.06	249.06	-90.98	-2,922.72	-7,653.92	5,951.42	5,665.55	285.88	20.818		
9,000.00	7,239.16	7,183.16	7,239.16	72.89	249.04	-90.96	-2,922.72	-7,653.92	5,855.96	5,569.92	286.04	20.473		
9,100.00	7,238.63	7,182.63	7,238.63	75.77	249.02	-90.95	-2,922.72	-7,653.92	5,760.65	5,474.39	286.25	20.124		
9,200.00	7,238.10	7,182.10	7,238.10	78.69	249.00	-90.93	-2,922.72	-7,653.92	5,665.50	5,378.97	286.53	19.773		
9,300.00	7,237.57	7,181.57	7,237.57	81.64	248.99	-90.91	-2,922.72	-7,653.92	5,570.52	5,283.65	286.86	19.419		
9,400.00	7,237.04	7,181.04	7,237.04	84.62	248.97	-90.89	-2,922.72	-7,653.92	5,475.71	5,188.45	287.26	19.062		
9,500.00	7,236.51	7,180.51	7,236.51	87.63	248.95	-90.88	-2,922.72	-7,653.92	5,381.10	5,093.36	287.74	18.702		
9,600.00	7,235.98	7,179.98	7,235.98	90.66	248.93	-90.86	-2,922.72	-7,653.92	5,286.68	4,998.40	288.28	18.339		
9,700.00	7,235.45	7,179.45	7,235.45	93.72	248.91	-90.84	-2,922.72	-7,653.92	5,192.48	4,903.57	288.91	17.973		
9,800.00	7,234.93	7,178.93	7,234.93	96.79	248.89	-90.83	-2,922.72	-7,653.92	5,098.49	4,808.88	289.62	17.604		
9,900.00	7,234.40	7,178.40	7,234.40	99.88	248.87	-90.81	-2,922.72	-7,653.92	5,004.74	4,714.32	290.41	17.233		
10,000.00	7,233.87	7,177.87	7,233.87	102.98	248.86	-90.79	-2,922.72	-7,653.92	4,911.23	4,619.93	291.30	16.859		
10,100.00	7,233.34	7,177.34	7,233.34	106.10	248.84	-90.77	-2,922.72	-7,653.92	4,817.99	4,525.70	292.29	16.484		
10,200.00	7,232.81	7,176.81	7,232.81	109.23	248.82	-90.76	-2,922.72	-7,653.92	4,725.02	4,431.64	293.38	16.105		
10,300.00	7,232.28	7,176.28	7,232.28	112.38	248.80	-90.74	-2,922.72	-7,653.92	4,632.34	4,337.76	294.58	15.725		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,175.75	7,231.75	115.53	248.78	-90.72	-2,922.72	-7,653.92	4,539.97	4,244.09	295.88	15.344		
10,500.00	7,231.23	7,175.23	7,231.23	118.70	248.76	-90.70	-2,922.72	-7,653.92	4,447.94	4,150.63	297.31	14.961		
10,600.00	7,230.70	7,174.70	7,230.70	121.87	248.75	-90.69	-2,922.72	-7,653.92	4,356.25	4,057.40	298.85	14.577		
10,700.00	7,230.17	7,174.17	7,230.17	125.05	248.73	-90.67	-2,922.72	-7,653.92	4,264.94	3,964.42	300.52	14.192		
10,800.00	7,229.64	7,173.64	7,229.64	128.25	248.71	-90.65	-2,922.72	-7,653.92	4,174.03	3,871.71	302.32	13.807		
10,900.00	7,229.11	7,173.11	7,229.11	131.44	248.69	-90.64	-2,922.72	-7,653.92	4,083.54	3,779.28	304.26	13.421		
11,000.00	7,228.58	7,172.58	7,228.58	134.65	248.67	-90.62	-2,922.72	-7,653.92	3,993.51	3,687.17	306.34	13.036		
11,100.00	7,228.05	7,172.05	7,228.05	137.86	248.65	-90.60	-2,922.72	-7,653.92	3,903.96	3,595.39	308.56	12.652		
11,200.00	7,227.52	7,171.52	7,227.52	141.08	248.63	-90.58	-2,922.72	-7,653.92	3,814.93	3,503.98	310.95	12.269		
11,300.00	7,227.00	7,171.00	7,227.00	144.30	248.62	-90.57	-2,922.72	-7,653.92	3,726.45	3,412.96	313.49	11.887		
11,400.00	7,226.47	7,170.47	7,226.47	147.52	248.60	-90.55	-2,922.72	-7,653.92	3,638.58	3,322.37	316.20	11.507		
11,500.00	7,225.94	7,169.94	7,225.94	150.76	248.58	-90.53	-2,922.72	-7,653.92	3,551.34	3,232.25	319.09	11.130		
11,600.00	7,225.41	7,169.41	7,225.41	153.99	248.56	-90.51	-2,922.72	-7,653.92	3,464.79	3,142.63	322.16	10.755		
11,700.00	7,224.88	7,168.88	7,224.88	157.23	248.54	-90.50	-2,922.72	-7,653.92	3,378.99	3,053.57	325.42	10.383		
11,800.00	7,224.35	7,168.35	7,224.35	160.48	248.52	-90.48	-2,922.72	-7,653.92	3,293.99	2,965.10	328.88	10.016		
11,900.00	7,223.82	7,167.82	7,223.82	163.72	248.51	-90.46	-2,922.72	-7,653.92	3,209.85	2,877.30	332.56	9.652		
12,000.00	7,223.29	7,167.29	7,223.29	166.98	248.49	-90.45	-2,922.72	-7,653.92	3,126.65	2,790.20	336.44	9.293		
12,100.00	7,222.77	7,166.77	7,222.77	170.23	248.47	-90.43	-2,922.72	-7,653.92	3,044.45	2,703.89	340.56	8.939		
12,200.00	7,222.24	7,166.24	7,222.24	173.49	248.45	-90.41	-2,922.72	-7,653.92	2,963.36	2,618.44	344.92	8.592		
12,300.00	7,221.71	7,165.71	7,221.71	176.75	248.43	-90.39	-2,922.72	-7,653.92	2,883.45	2,533.93	349.52	8.250		
12,400.00	7,221.18	7,165.18	7,221.18	180.01	248.41	-90.38	-2,922.72	-7,653.92	2,804.82	2,450.45	354.38	7.915		
12,500.00	7,220.65	7,164.65	7,220.65	183.28	248.39	-90.36	-2,922.72	-7,653.92	2,727.60	2,368.11	359.50	7.587		
12,600.00	7,220.12	7,164.12	7,220.12	186.54	248.38	-90.34	-2,922.72	-7,653.92	2,651.90	2,287.02	364.89	7.268		
12,700.00	7,219.59	7,163.59	7,219.59	189.81	248.36	-90.33	-2,922.72	-7,653.92	2,577.86	2,207.30	370.56	6.957		
12,800.00	7,219.06	7,163.06	7,219.06	193.09	248.34	-90.31	-2,922.72	-7,653.92	2,505.62	2,129.12	376.51	6.655		
12,900.00	7,218.54	7,162.54	7,218.54	196.36	248.32	-90.29	-2,922.72	-7,653.92	2,435.35	2,052.61	382.74	6.363		
13,000.00	7,218.01	7,162.01	7,218.01	199.64	248.30	-90.27	-2,922.72	-7,653.92	2,367.21	1,977.96	389.25	6.081		
13,100.00	7,217.48	7,161.48	7,217.48	202.92	248.28	-90.26	-2,922.72	-7,653.92	2,301.41	1,905.38	396.03	5.811		
13,200.00	7,216.95	7,160.95	7,216.95	206.20	248.27	-90.24	-2,922.72	-7,653.92	2,238.14	1,835.07	403.07	5.553		
13,300.00	7,216.42	7,160.42	7,216.42	209.48	248.25	-90.22	-2,922.72	-7,653.92	2,177.62	1,767.27	410.35	5.307		
13,400.00	7,215.89	7,159.89	7,215.89	212.76	248.23	-90.20	-2,922.72	-7,653.92	2,120.09	1,702.26	417.83	5.074		
13,500.00	7,215.36	7,159.36	7,215.36	216.05	248.21	-90.19	-2,922.72	-7,653.92	2,065.81	1,640.32	425.49	4.855		
13,600.00	7,214.84	7,158.84	7,214.84	219.33	248.19	-90.17	-2,922.72	-7,653.92	2,015.03	1,581.76	433.27	4.651		
13,700.00	7,214.31	7,158.31	7,214.31	222.62	248.17	-90.15	-2,922.72	-7,653.92	1,968.02	1,526.91	441.11	4.462		
13,800.00	7,213.78	7,157.78	7,213.78	225.91	248.15	-90.14	-2,922.72	-7,653.92	1,925.07	1,476.13	448.94	4.288		
13,900.00	7,213.25	7,157.25	7,213.25	229.20	248.14	-90.12	-2,922.72	-7,653.92	1,886.44	1,429.76	456.68	4.131		
14,000.00	7,212.72	7,156.72	7,212.72	232.49	248.12	-90.10	-2,922.72	-7,653.92	1,852.41	1,388.19	464.23	3.990		
14,100.00	7,212.19	7,156.19	7,212.19	235.79	248.10	-90.08	-2,922.72	-7,653.92	1,823.24	1,351.75	471.49	3.867		
14,200.00	7,211.66	7,155.66	7,211.66	239.08	248.08	-90.07	-2,922.72	-7,653.92	1,799.16	1,320.80	478.36	3.761		
14,300.00	7,211.13	7,155.13	7,211.13	242.38	248.06	-90.05	-2,922.72	-7,653.92	1,780.37	1,295.64	484.74	3.673		
14,400.00	7,210.61	7,154.61	7,210.61	245.67	248.04	-90.03	-2,922.72	-7,653.92	1,767.06	1,276.54	490.52	3.602		
14,500.00	7,210.08	7,154.08	7,210.08	248.97	248.03	-90.01	-2,922.72	-7,653.92	1,759.34	1,263.71	495.63	3.550		
14,586.17	7,209.62	7,153.62	7,209.62	251.81	248.01	-90.00	-2,922.72	-7,653.92	1,757.22	1,257.80	499.43	3.518 CC		
14,600.00	7,209.55	7,153.55	7,209.55	252.27	248.01	-90.00	-2,922.72	-7,653.92	1,757.28	1,257.29	499.98	3.515 ES		
14,700.00	7,209.02	7,153.02	7,209.02	255.57	247.99	-89.98	-2,922.72	-7,653.92	1,760.91	1,257.36	503.55	3.497		
14,800.00	7,208.49	7,152.49	7,208.49	258.87	247.97	-89.96	-2,922.72	-7,653.92	1,770.19	1,263.90	506.29	3.496 SF		
14,900.00	7,207.96	7,151.96	7,207.96	262.17	247.95	-89.95	-2,922.72	-7,653.92	1,785.03	1,276.82	508.20	3.512		
15,000.00	7,207.43	7,151.43	7,207.43	265.47	247.93	-89.93	-2,922.72	-7,653.92	1,805.29	1,295.98	509.32	3.545		
15,081.89	7,207.00	7,151.00	7,207.00	268.17	247.92	-89.91	-2,922.72	-7,653.92	1,825.81	1,316.14	509.66	3.582		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	43.00	3.28	3.28	-102.38	-1,430.86	-6,518.30	6,673.64					
100.00	100.00	57.00	100.00	3.28	3.43	-102.38	-1,430.86	-6,518.30	6,673.50	6,666.79	6.71	994.220		
200.00	200.00	157.00	200.00	3.34	4.97	-102.38	-1,430.86	-6,518.30	6,673.50	6,665.20	8.31	803.254		
300.00	299.98	256.98	299.98	3.44	7.94	69.60	-1,430.86	-6,518.30	6,672.89	6,661.52	11.37	586.639		
400.00	399.84	356.84	399.84	3.59	11.20	69.68	-1,430.86	-6,518.30	6,671.07	6,656.28	14.79	450.955		
500.00	499.45	456.45	499.45	3.80	14.56	69.81	-1,430.86	-6,518.30	6,668.04	6,649.69	18.36	363.209		
600.00	598.70	555.70	598.70	4.06	17.96	69.98	-1,430.86	-6,518.30	6,663.83	6,641.82	22.01	302.754		
700.00	697.49	654.49	697.49	4.38	21.36	70.18	-1,430.86	-6,518.30	6,658.49	6,632.76	25.73	258.829		
800.00	796.13	753.13	796.13	4.74	24.76	70.31	-1,430.86	-6,518.30	6,652.88	6,623.38	29.49	225.573		
900.00	894.78	851.78	894.78	5.15	28.18	70.44	-1,430.86	-6,518.30	6,647.30	6,614.00	33.30	199.596		
1,000.00	993.43	950.43	993.43	5.58	31.60	70.57	-1,430.86	-6,518.30	6,641.76	6,604.61	37.15	178.796		
1,100.00	1,092.07	1,049.07	1,092.07	6.03	35.03	70.71	-1,430.86	-6,518.30	6,636.26	6,595.24	41.02	161.797		
1,200.00	1,190.72	1,147.72	1,190.72	6.50	38.46	70.84	-1,430.86	-6,518.30	6,630.79	6,585.88	44.90	147.663		
1,300.00	1,289.36	1,246.36	1,289.36	6.98	41.89	70.97	-1,430.86	-6,518.30	6,625.36	6,576.55	48.81	135.738		
1,400.00	1,388.01	1,345.01	1,388.01	7.47	45.33	71.10	-1,430.86	-6,518.30	6,619.96	6,567.23	52.73	125.550		
1,500.00	1,486.65	1,443.65	1,486.65	7.97	48.76	71.23	-1,430.86	-6,518.30	6,614.60	6,557.95	56.66	116.750		
1,600.00	1,585.30	1,542.30	1,585.30	8.48	52.20	71.37	-1,430.86	-6,518.30	6,609.28	6,548.69	60.59	109.077		
1,700.00	1,683.94	1,640.94	1,683.94	9.00	55.64	71.50	-1,430.86	-6,518.30	6,603.99	6,539.46	64.54	102.328		
1,800.00	1,782.59	1,739.59	1,782.59	9.52	59.07	71.63	-1,430.86	-6,518.30	6,598.74	6,530.25	68.49	96.349		
1,900.00	1,881.24	1,838.24	1,881.24	10.05	62.51	71.77	-1,430.86	-6,518.30	6,593.53	6,521.09	72.44	91.016		
2,000.00	1,979.88	1,936.88	1,979.88	10.58	65.95	71.90	-1,430.86	-6,518.30	6,588.35	6,511.95	76.40	86.231		
2,100.00	2,078.53	2,035.53	2,078.53	11.11	69.39	72.04	-1,430.86	-6,518.30	6,583.21	6,502.84	80.37	81.914		
2,200.00	2,177.17	2,134.17	2,177.17	11.64	72.83	72.17	-1,430.86	-6,518.30	6,578.11	6,493.77	84.33	78.000		
2,300.00	2,275.82	2,232.82	2,275.82	12.18	76.27	72.30	-1,430.86	-6,518.30	6,573.04	6,484.74	88.31	74.436		
2,400.00	2,374.46	2,331.46	2,374.46	12.72	79.71	72.44	-1,430.86	-6,518.30	6,568.01	6,475.74	92.28	71.176		
2,500.00	2,473.11	2,430.11	2,473.11	13.26	83.15	72.57	-1,430.86	-6,518.30	6,563.02	6,466.77	96.25	68.185		
2,600.00	2,571.76	2,528.76	2,571.76	13.80	86.60	72.71	-1,430.86	-6,518.30	6,558.07	6,457.84	100.23	65.430		
2,700.00	2,670.40	2,627.40	2,670.40	14.35	90.04	72.84	-1,430.86	-6,518.30	6,553.15	6,448.94	104.21	62.884		
2,800.00	2,769.05	2,726.05	2,769.05	14.89	93.48	72.98	-1,430.86	-6,518.30	6,548.27	6,440.08	108.19	60.525		
2,900.00	2,867.69	2,824.69	2,867.69	15.44	96.92	73.12	-1,430.86	-6,518.30	6,543.43	6,431.25	112.17	58.333		
3,000.00	2,966.34	2,923.34	2,966.34	15.99	100.36	73.25	-1,430.86	-6,518.30	6,538.62	6,422.46	116.16	56.291		
3,100.00	3,064.98	3,021.98	3,064.98	16.53	103.80	73.39	-1,430.86	-6,518.30	6,533.85	6,413.71	120.14	54.384		
3,200.00	3,163.63	3,120.63	3,163.63	17.08	107.25	73.52	-1,430.86	-6,518.30	6,529.13	6,405.00	124.13	52.600		
3,300.00	3,262.27	3,219.27	3,262.27	17.63	110.69	73.66	-1,430.86	-6,518.30	6,524.43	6,396.32	128.12	50.926		
3,400.00	3,360.92	3,317.92	3,360.92	18.18	114.13	73.80	-1,430.86	-6,518.30	6,519.78	6,387.67	132.10	49.353		
3,500.00	3,459.57	3,416.57	3,459.57	18.74	117.57	73.93	-1,430.86	-6,518.30	6,515.16	6,379.07	136.09	47.872		
3,600.00	3,558.21	3,515.21	3,558.21	19.29	121.02	74.07	-1,430.86	-6,518.30	6,510.59	6,370.50	140.08	46.476		
3,700.00	3,656.86	3,613.86	3,656.86	19.84	124.46	74.21	-1,430.86	-6,518.30	6,506.05	6,361.97	144.08	45.157		
3,800.00	3,755.50	3,712.50	3,755.50	20.39	127.90	74.34	-1,430.86	-6,518.30	6,501.54	6,353.48	148.07	43.909		
3,900.00	3,854.15	3,811.15	3,854.15	20.95	131.34	74.48	-1,430.86	-6,518.30	6,497.08	6,345.02	152.06	42.727		
4,000.00	3,952.79	3,909.79	3,952.79	21.50	134.79	74.62	-1,430.86	-6,518.30	6,492.66	6,336.60	156.05	41.605		
4,100.00	4,051.44	4,008.44	4,051.44	22.05	138.23	74.76	-1,430.86	-6,518.30	6,488.27	6,328.22	160.05	40.540		
4,200.00	4,150.08	4,107.08	4,150.08	22.61	141.67	74.90	-1,430.86	-6,518.30	6,483.92	6,319.88	164.04	39.526		
4,300.00	4,248.73	4,205.73	4,248.73	23.16	145.11	75.03	-1,430.86	-6,518.30	6,479.61	6,311.57	168.04	38.560		
4,400.00	4,347.38	4,304.38	4,347.38	23.72	148.56	75.17	-1,430.86	-6,518.30	6,475.34	6,303.31	172.03	37.640		
4,500.00	4,446.02	4,403.02	4,446.02	24.27	152.00	75.31	-1,430.86	-6,518.30	6,471.11	6,295.08	176.03	36.761		
4,600.00	4,544.67	4,501.67	4,544.67	24.83	155.44	75.45	-1,430.86	-6,518.30	6,466.92	6,286.89	180.03	35.922		
4,700.00	4,643.31	4,600.31	4,643.31	25.39	158.89	75.59	-1,430.86	-6,518.30	6,462.76	6,278.74	184.02	35.119		
4,800.00	4,741.96	4,701.04	4,741.96	25.94	162.40	75.73	-1,430.86	-6,518.30	6,458.65	6,270.55	188.09	34.337		
4,900.00	4,840.60	4,802.40	4,840.60	26.50	165.94	75.87	-1,430.86	-6,518.30	6,454.57	6,262.38	192.19	33.585		
5,000.00	4,939.25	4,903.75	4,939.25	27.05	169.48	76.01	-1,430.86	-6,518.30	6,450.53	6,254.25	196.28	32.864		
5,100.00	5,037.90	5,005.10	5,037.90	27.61	173.01	76.15	-1,430.86	-6,518.30	6,446.54	6,246.16	200.37	32.173		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,106.46	5,136.54	28.17	176.55	76.29	-1,430.86	-6,518.30	6,442.58	6,238.11	204.47	31.509		
5,300.00	5,235.19	5,207.81	5,235.19	28.72	180.09	76.43	-1,430.86	-6,518.30	6,438.66	6,230.10	208.56	30.872		
5,400.00	5,333.83	5,309.17	5,333.83	29.28	183.63	76.57	-1,430.86	-6,518.30	6,434.78	6,222.12	212.66	30.259		
5,500.00	5,432.48	5,389.48	5,432.48	29.84	186.43	76.71	-1,430.86	-6,518.30	6,430.94	6,214.92	216.02	29.771		
5,600.00	5,531.12	5,488.12	5,531.12	30.40	189.87	76.85	-1,430.86	-6,518.30	6,427.14	6,207.12	220.02	29.212		
5,700.00	5,629.77	5,586.77	5,629.77	30.95	193.32	76.99	-1,430.86	-6,518.30	6,423.38	6,199.36	224.02	28.673		
5,800.00	5,728.41	5,685.41	5,728.41	31.51	196.76	77.13	-1,430.86	-6,518.30	6,419.66	6,191.64	228.02	28.154		
5,900.00	5,827.06	5,784.06	5,827.06	32.07	200.20	77.27	-1,430.86	-6,518.30	6,415.98	6,183.95	232.02	27.652		
6,000.00	5,925.71	5,882.71	5,925.71	32.63	203.65	77.41	-1,430.86	-6,518.30	6,412.33	6,176.31	236.02	27.168		
6,100.00	6,024.35	5,981.35	6,024.35	33.19	207.09	77.55	-1,430.86	-6,518.30	6,408.73	6,168.71	240.03	26.700		
6,200.00	6,123.00	6,080.00	6,123.00	33.74	210.53	77.69	-1,430.86	-6,518.30	6,405.17	6,161.14	244.03	26.248		
6,300.00	6,221.64	6,178.64	6,221.64	34.30	213.98	77.84	-1,430.86	-6,518.30	6,401.65	6,153.62	248.03	25.810		
6,400.00	6,320.29	6,277.29	6,320.29	34.86	217.42	77.98	-1,430.86	-6,518.30	6,398.17	6,146.13	252.03	25.386		
6,500.00	6,418.93	6,375.93	6,418.93	35.42	220.86	78.12	-1,430.86	-6,518.30	6,394.73	6,138.69	256.04	24.976		
6,600.00	6,517.58	6,474.58	6,517.58	35.98	224.31	78.26	-1,430.86	-6,518.30	6,391.32	6,131.28	260.04	24.578		
6,700.00	6,616.23	6,573.23	6,616.23	36.54	227.75	78.40	-1,430.86	-6,518.30	6,387.96	6,123.92	264.05	24.193		
6,800.00	6,714.51	6,671.51	6,714.51	37.10	231.18	43.72	-1,430.86	-6,518.30	6,379.25	6,111.22	268.03	23.801		
6,900.00	6,810.42	6,767.42	6,810.42	37.66	234.53	25.04	-1,430.86	-6,518.30	6,355.35	6,083.46	271.90	23.374		
7,000.00	6,901.58	6,858.58	6,901.58	38.21	237.71	16.75	-1,430.86	-6,518.30	6,316.63	6,041.07	275.56	22.923		
7,100.00	6,985.76	6,942.76	6,985.76	38.76	240.65	12.22	-1,430.86	-6,518.30	6,264.02	5,985.10	278.92	22.458		
7,200.00	7,060.88	7,017.88	7,060.88	39.32	243.27	9.27	-1,430.86	-6,518.30	6,198.81	5,916.91	281.90	21.990		
7,300.00	7,125.09	7,082.09	7,125.09	39.90	245.51	6.98	-1,430.86	-6,518.30	6,122.60	5,838.17	284.43	21.526		
7,400.00	7,176.81	7,133.81	7,176.81	40.55	247.32	4.69	-1,430.86	-6,518.30	6,037.26	5,750.81	286.44	21.077		
7,500.00	7,214.77	7,171.77	7,214.77	41.30	248.64	1.37	-1,430.86	-6,518.30	5,944.87	5,656.98	287.90	20.649		
7,600.00	7,238.02	7,204.98	7,238.02	42.22	249.80	-7.19	-1,430.86	-6,518.30	5,847.72	5,558.61	289.11	20.227		
7,700.00	7,246.01	7,203.01	7,246.01	43.32	249.73	-86.86	-1,430.86	-6,518.30	5,748.20	5,459.18	289.02	19.889		
7,800.00	7,245.50	7,202.50	7,245.50	44.65	249.72	-96.26	-1,430.86	-6,518.30	5,648.31	5,359.36	288.95	19.548		
7,900.00	7,244.97	7,201.97	7,244.97	46.21	249.70	-96.15	-1,430.86	-6,518.30	5,548.43	5,259.55	288.88	19.207		
8,000.00	7,244.44	7,201.44	7,244.44	47.99	249.68	-96.04	-1,430.86	-6,518.30	5,448.56	5,159.75	288.81	18.866		
8,100.00	7,243.91	7,200.91	7,243.91	49.96	249.66	-95.93	-1,430.86	-6,518.30	5,348.68	5,059.95	288.74	18.524		
8,200.00	7,243.39	7,200.39	7,243.39	52.10	249.64	-95.82	-1,430.86	-6,518.30	5,248.82	4,960.15	288.66	18.183		
8,300.00	7,242.86	7,200.14	7,242.86	54.38	249.63	-95.71	-1,430.86	-6,518.30	5,148.96	4,860.35	288.60	17.841		
8,400.00	7,242.33	7,200.67	7,242.33	56.78	249.65	-95.60	-1,430.86	-6,518.30	5,049.10	4,760.53	288.57	17.497		
8,500.00	7,241.80	7,201.20	7,241.80	59.28	249.67	-95.49	-1,430.86	-6,518.30	4,949.25	4,660.72	288.53	17.153		
8,600.00	7,241.27	7,201.73	7,241.27	61.88	249.69	-95.38	-1,430.86	-6,518.30	4,849.41	4,560.91	288.49	16.810		
8,700.00	7,240.74	7,202.26	7,240.74	64.54	249.71	-95.27	-1,430.86	-6,518.30	4,749.57	4,461.11	288.45	16.466		
8,800.00	7,240.21	7,202.79	7,240.21	67.27	249.73	-95.16	-1,430.86	-6,518.30	4,649.74	4,361.32	288.41	16.122		
8,900.00	7,239.68	7,203.32	7,239.68	70.06	249.74	-95.04	-1,430.86	-6,518.30	4,549.91	4,261.54	288.37	15.778		
9,000.00	7,239.16	7,203.84	7,239.16	72.89	249.76	-94.93	-1,430.86	-6,518.30	4,450.10	4,161.76	288.34	15.434		
9,100.00	7,238.63	7,204.37	7,238.63	75.77	249.78	-94.82	-1,430.86	-6,518.30	4,350.29	4,061.99	288.30	15.090		
9,200.00	7,238.10	7,204.90	7,238.10	78.69	249.80	-94.71	-1,430.86	-6,518.30	4,250.49	3,962.24	288.25	14.746		
9,300.00	7,237.57	7,205.43	7,237.57	81.64	249.82	-94.60	-1,430.86	-6,518.30	4,150.70	3,862.49	288.21	14.401		
9,400.00	7,237.04	7,205.96	7,237.04	84.62	249.84	-94.49	-1,430.86	-6,518.30	4,050.92	3,762.75	288.17	14.057		
9,500.00	7,236.51	7,206.49	7,236.51	87.63	249.86	-94.38	-1,430.86	-6,518.30	3,951.16	3,663.03	288.13	13.713		
9,600.00	7,235.98	7,207.02	7,235.98	90.66	249.87	-94.27	-1,430.86	-6,518.30	3,851.40	3,563.31	288.09	13.369		
9,700.00	7,235.45	7,207.55	7,235.45	93.72	249.89	-94.16	-1,430.86	-6,518.30	3,751.66	3,463.61	288.05	13.024		
9,800.00	7,234.93	7,208.07	7,234.93	96.79	249.91	-94.05	-1,430.86	-6,518.30	3,651.93	3,363.92	288.01	12.680		
9,900.00	7,234.40	7,208.60	7,234.40	99.88	249.93	-93.94	-1,430.86	-6,518.30	3,552.22	3,264.25	287.97	12.335		
10,000.00	7,233.87	7,209.13	7,233.87	102.98	249.95	-93.83	-1,430.86	-6,518.30	3,452.52	3,164.59	287.94	11.991		
10,100.00	7,233.34	7,209.66	7,233.34	106.10	249.97	-93.72	-1,430.86	-6,518.30	3,352.84	3,064.94	287.90	11.646		
10,200.00	7,232.81	7,189.81	7,232.81	109.23	249.27	-93.61	-1,430.86	-6,518.30	3,253.19	2,966.03	287.16	11.329		
10,300.00	7,232.28	7,189.28	7,232.28	112.38	249.25	-93.49	-1,430.86	-6,518.30	3,153.55	2,866.45	287.09	10.984		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,231.75	7,188.75	7,231.75	115.53	249.24	-93.38	-1,430.86	-6,518.30	3,053.93	2,766.90	287.03	10.640		
10,500.00	7,231.23	7,188.23	7,231.23	118.70	249.22	-93.27	-1,430.86	-6,518.30	2,954.35	2,667.37	286.98	10.295		
10,600.00	7,230.70	7,187.70	7,230.70	121.87	249.20	-93.16	-1,430.86	-6,518.30	2,854.79	2,567.85	286.93	9.949		
10,700.00	7,230.17	7,187.17	7,230.17	125.05	249.18	-93.05	-1,430.86	-6,518.30	2,755.26	2,468.36	286.90	9.604		
10,800.00	7,229.64	7,186.64	7,229.64	128.25	249.16	-92.94	-1,430.86	-6,518.30	2,655.77	2,368.89	286.88	9.258		
10,900.00	7,229.11	7,186.11	7,229.11	131.44	249.14	-92.83	-1,430.86	-6,518.30	2,556.32	2,269.45	286.87	8.911		
11,000.00	7,228.58	7,185.58	7,228.58	134.65	249.13	-92.72	-1,430.86	-6,518.30	2,456.91	2,170.02	286.88	8.564		
11,100.00	7,228.05	7,185.05	7,228.05	137.86	249.11	-92.61	-1,430.86	-6,518.30	2,357.55	2,070.63	286.92	8.217		
11,200.00	7,227.52	7,184.52	7,227.52	141.08	249.09	-92.49	-1,430.86	-6,518.30	2,258.25	1,971.25	286.99	7.869		
11,300.00	7,227.00	7,184.00	7,227.00	144.30	249.07	-92.38	-1,430.86	-6,518.30	2,159.01	1,871.91	287.11	7.520		
11,400.00	7,226.47	7,183.47	7,226.47	147.52	249.05	-92.27	-1,430.86	-6,518.30	2,059.85	1,772.58	287.27	7.170		
11,500.00	7,225.94	7,182.94	7,225.94	150.76	249.03	-92.16	-1,430.86	-6,518.30	1,960.77	1,673.28	287.49	6.820		
11,600.00	7,225.41	7,182.41	7,225.41	153.99	249.01	-92.05	-1,430.86	-6,518.30	1,861.79	1,573.99	287.80	6.469		
11,700.00	7,224.88	7,181.88	7,224.88	157.23	249.00	-91.94	-1,430.86	-6,518.30	1,762.93	1,474.71	288.22	6.117		
11,800.00	7,224.35	7,181.35	7,224.35	160.48	248.98	-91.83	-1,430.86	-6,518.30	1,664.20	1,375.44	288.76	5.763		
11,900.00	7,223.82	7,180.82	7,223.82	163.72	248.96	-91.72	-1,430.86	-6,518.30	1,565.63	1,276.15	289.47	5.409		
12,000.00	7,223.29	7,180.29	7,223.29	166.98	248.94	-91.61	-1,430.86	-6,518.30	1,467.25	1,176.85	290.41	5.052		
12,100.00	7,222.77	7,179.77	7,222.77	170.23	248.92	-91.49	-1,430.86	-6,518.30	1,369.11	1,077.49	291.62	4.695		
12,200.00	7,222.24	7,179.24	7,222.24	173.49	248.90	-91.38	-1,430.86	-6,518.30	1,271.26	978.06	293.21	4.336		
12,300.00	7,221.71	7,178.71	7,221.71	176.75	248.89	-91.27	-1,430.86	-6,518.30	1,173.78	878.50	295.27	3.975		
12,400.00	7,221.18	7,178.18	7,221.18	180.01	248.87	-91.16	-1,430.86	-6,518.30	1,076.75	778.77	297.98	3.614		
12,500.00	7,220.65	7,177.65	7,220.65	183.28	248.85	-91.05	-1,430.86	-6,518.30	980.32	678.80	301.52	3.251		
12,600.00	7,220.12	7,177.12	7,220.12	186.54	248.83	-90.94	-1,430.86	-6,518.30	884.68	578.50	306.18	2.889		
12,700.00	7,219.59	7,176.59	7,219.59	189.81	248.81	-90.83	-1,430.86	-6,518.30	790.13	477.75	312.38	2.529		
12,800.00	7,219.06	7,176.06	7,219.06	193.09	248.79	-90.71	-1,430.86	-6,518.30	697.09	376.44	320.66	2.174		
12,900.00	7,218.54	7,175.54	7,218.54	196.36	248.77	-90.60	-1,430.86	-6,518.30	606.28	274.44	331.84	1.827		
13,000.00	7,218.01	7,175.01	7,218.01	199.64	248.76	-90.49	-1,430.86	-6,518.30	518.85	171.78	347.08	1.495 Level 3		
13,100.00	7,217.48	7,174.48	7,217.48	202.92	248.74	-90.38	-1,430.86	-6,518.30	436.86	68.98	367.88	1.188 Level 2		
13,200.00	7,216.95	7,173.95	7,216.95	206.20	248.72	-90.27	-1,430.86	-6,518.30	363.98	-31.56	395.54	0.920 Level 1		
13,300.00	7,216.42	7,173.42	7,216.42	209.48	248.70	-90.16	-1,430.86	-6,518.30	306.78	-121.73	428.51	0.716 Level 1		
13,400.00	7,215.89	7,172.89	7,215.89	212.76	248.68	-90.05	-1,430.86	-6,518.30	275.22	-181.26	456.48	0.603 Level 1		
13,441.84	7,215.67	7,172.67	7,215.67	214.14	248.67	-90.00	-1,430.86	-6,518.30	272.02	-190.32	462.34	0.588 Level 1, CC, ES, SF		
13,500.00	7,215.36	7,172.36	7,215.36	216.05	248.66	-89.94	-1,430.86	-6,518.30	278.17	-184.38	462.55	0.601 Level 1		
13,600.00	7,214.84	7,171.84	7,214.84	219.33	248.65	-89.82	-1,430.86	-6,518.30	314.66	-131.18	445.84	0.706 Level 1		
13,700.00	7,214.31	7,171.31	7,214.31	222.62	248.63	-89.71	-1,430.86	-6,518.30	375.02	-46.46	421.48	0.890 Level 1		
13,800.00	7,213.78	7,170.78	7,213.78	225.91	248.61	-89.60	-1,430.86	-6,518.30	449.75	50.40	399.34	1.126 Level 2		
13,900.00	7,213.25	7,170.25	7,213.25	229.20	248.59	-89.49	-1,430.86	-6,518.30	532.82	151.10	381.72	1.396 Level 3		
14,000.00	7,212.72	7,169.72	7,212.72	232.49	248.57	-89.38	-1,430.86	-6,518.30	620.91	252.78	368.13	1.687		
14,100.00	7,212.19	7,169.19	7,212.19	235.79	248.55	-89.27	-1,430.86	-6,518.30	712.15	354.54	357.61	1.991		
14,200.00	7,211.66	7,168.66	7,211.66	239.08	248.53	-89.16	-1,430.86	-6,518.30	805.47	456.10	349.37	2.305		
14,300.00	7,211.13	7,168.13	7,211.13	242.38	248.52	-89.04	-1,430.86	-6,518.30	900.23	557.42	342.81	2.626		
14,400.00	7,210.61	7,167.61	7,210.61	245.67	248.50	-88.93	-1,430.86	-6,518.30	996.01	658.52	337.50	2.951		
14,500.00	7,210.08	7,167.08	7,210.08	248.97	248.48	-88.82	-1,430.86	-6,518.30	1,092.55	759.42	333.13	3.280		
14,600.00	7,209.55	7,166.55	7,209.55	252.27	248.46	-88.71	-1,430.86	-6,518.30	1,189.66	860.16	329.50	3.610		
14,700.00	7,209.02	7,166.02	7,209.02	255.57	248.44	-88.60	-1,430.86	-6,518.30	1,287.22	960.77	326.45	3.943		
14,800.00	7,208.49	7,165.49	7,208.49	258.87	248.42	-88.49	-1,430.86	-6,518.30	1,385.12	1,061.27	323.85	4.277		
14,900.00	7,207.96	7,164.96	7,207.96	262.17	248.41	-88.38	-1,430.86	-6,518.30	1,483.30	1,161.68	321.61	4.612		
15,000.00	7,207.43	7,164.43	7,207.43	265.47	248.39	-88.27	-1,430.86	-6,518.30	1,581.71	1,262.03	319.68	4.948		
15,081.89	7,207.00	7,164.00	7,207.00	268.17	248.37	-88.17	-1,430.86	-6,518.30	1,662.43	1,344.15	318.28	5.223		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	38.00	3.28	3.28	-92.20	-294.27	-7,657.00	7,662.75					
100.00	100.00	100.00	125.92	3.28	3.29	-92.20	-293.98	-7,656.71	7,662.40	7,655.83	6.57	1,165.942		
200.00	200.00	181.72	219.72	3.34	3.33	-92.19	-293.38	-7,656.31	7,661.96	7,655.29	6.67	1,149.459		
300.00	299.98	255.23	293.23	3.44	3.40	79.79	-292.92	-7,656.27	7,661.57	7,654.73	6.84	1,120.806		
400.00	399.84	330.69	368.68	3.59	3.49	79.83	-292.72	-7,656.47	7,660.89	7,653.81	7.08	1,081.421		
500.00	499.45	412.02	450.01	3.80	3.63	79.90	-292.79	-7,656.92	7,659.90	7,652.48	7.42	1,031.853		
600.00	598.70	520.28	558.27	4.06	3.85	80.03	-293.06	-7,657.52	7,658.33	7,650.42	7.90	968.815		
700.00	697.49	610.34	648.32	4.38	4.06	80.15	-293.72	-7,658.02	7,656.22	7,647.78	8.44	907.336		
800.00	796.13	697.86	735.84	4.74	4.30	80.25	-294.59	-7,658.62	7,654.12	7,645.08	9.04	847.073		
900.00	894.78	798.65	836.62	5.15	4.59	80.37	-295.62	-7,659.37	7,652.11	7,642.38	9.73	786.673		
1,000.00	993.43	902.11	940.07	5.58	4.91	80.49	-296.64	-7,660.10	7,650.08	7,639.60	10.47	730.320		
1,100.00	1,092.07	1,005.61	1,043.57	6.03	5.24	80.61	-297.51	-7,660.77	7,648.02	7,636.76	11.26	679.085		
1,200.00	1,190.72	1,105.08	1,143.04	6.50	5.58	80.72	-298.07	-7,661.38	7,645.97	7,633.90	12.07	633.609		
1,300.00	1,289.36	1,200.44	1,238.39	6.98	5.92	80.84	-298.42	-7,661.99	7,643.96	7,631.07	12.88	593.342		
1,400.00	1,388.01	1,313.22	1,351.17	7.47	6.33	80.97	-298.70	-7,662.63	7,641.91	7,628.13	13.78	554.493		
1,500.00	1,486.65	1,401.46	1,439.41	7.97	6.65	81.08	-298.96	-7,663.13	7,639.89	7,625.29	14.61	522.978		
1,600.00	1,585.30	1,501.04	1,538.98	8.48	7.03	81.19	-299.36	-7,663.74	7,637.95	7,622.46	15.49	493.071		
1,700.00	1,683.94	1,592.22	1,630.16	9.00	7.37	81.30	-299.68	-7,664.33	7,636.09	7,619.74	16.35	466.967		
1,800.00	1,782.59	1,697.19	1,735.13	9.52	7.78	81.43	-299.88	-7,665.03	7,634.27	7,617.00	17.28	441.866		
1,900.00	1,881.24	1,793.72	1,831.66	10.05	8.16	81.55	-299.99	-7,665.64	7,632.45	7,614.28	18.18	419.865		
2,000.00	1,979.88	1,896.25	1,934.19	10.58	8.56	81.67	-300.19	-7,666.28	7,630.66	7,611.55	19.11	399.299		
2,100.00	2,078.53	1,986.30	2,024.24	11.11	8.92	81.78	-300.40	-7,666.87	7,628.93	7,608.93	20.00	381.466		
2,200.00	2,177.17	2,122.11	2,160.05	11.64	9.46	81.94	-300.48	-7,667.50	7,627.05	7,605.97	21.08	361.888		
2,300.00	2,275.82	2,230.73	2,268.66	12.18	9.90	82.07	-300.88	-7,667.70	7,624.92	7,602.87	22.05	345.825		
2,400.00	2,374.46	2,340.28	2,378.21	12.72	10.34	82.20	-301.55	-7,667.68	7,622.62	7,599.59	23.03	331.009		
2,500.00	2,473.11	2,435.65	2,473.58	13.26	10.73	82.31	-302.04	-7,667.66	7,620.37	7,596.41	23.96	318.110		
2,600.00	2,571.76	2,549.41	2,587.33	13.80	11.20	82.45	-302.47	-7,667.60	7,618.11	7,593.15	24.96	305.227		
2,700.00	2,670.40	2,674.68	2,712.60	14.35	11.71	82.60	-302.69	-7,667.10	7,615.54	7,589.53	26.01	292.780		
2,800.00	2,769.05	2,772.50	2,810.42	14.89	12.10	82.72	-302.54	-7,666.53	7,612.83	7,585.87	26.96	282.423		
2,900.00	2,867.69	2,837.13	2,875.05	15.44	12.37	82.80	-302.24	-7,666.27	7,610.36	7,582.59	27.77	274.068		
3,000.00	2,966.34	2,900.01	2,937.93	15.99	12.63	82.88	-301.72	-7,666.43	7,608.50	7,579.93	28.58	266.263		
3,100.00	3,064.98	2,947.82	2,985.74	16.53	12.83	82.95	-301.22	-7,666.81	7,607.23	7,577.91	29.32	259.441		
3,200.00	3,163.63	3,010.06	3,047.96	17.08	13.08	83.03	-300.49	-7,667.62	7,606.52	7,576.39	30.13	252.473		
3,300.00	3,262.27	3,097.69	3,135.58	17.63	13.45	83.14	-299.31	-7,668.99	7,606.13	7,575.09	31.04	245.030		
3,350.86	3,312.45	3,126.49	3,164.37	17.91	13.57	83.18	-298.87	-7,669.50	7,606.05	7,574.61	31.44	241.917		
3,400.00	3,360.92	3,153.47	3,191.34	18.18	13.68	83.22	-298.45	-7,670.05	7,606.13	7,574.30	31.82	239.016		
3,500.00	3,459.57	3,211.06	3,248.90	18.74	13.92	83.30	-297.48	-7,671.48	7,606.72	7,574.11	32.61	233.255		
3,600.00	3,558.21	3,283.74	3,321.54	19.29	14.22	83.40	-296.14	-7,673.58	7,607.78	7,574.31	33.46	227.341		
3,700.00	3,656.86	3,376.32	3,414.06	19.84	14.61	83.52	-294.15	-7,676.47	7,609.10	7,574.70	34.40	221.174		
3,800.00	3,755.50	3,498.53	3,536.17	20.39	15.12	83.70	-290.91	-7,680.11	7,610.37	7,574.90	35.47	214.552		
3,900.00	3,854.15	3,620.58	3,658.13	20.95	15.64	83.87	-287.67	-7,683.30	7,611.31	7,574.77	36.54	208.306		
4,000.00	3,952.79	3,722.35	3,759.84	21.50	16.07	84.01	-285.35	-7,685.82	7,612.15	7,574.63	37.52	202.878		
4,100.00	4,051.44	3,826.09	3,863.53	22.05	16.50	84.15	-283.28	-7,688.33	7,612.96	7,574.45	38.51	197.679		
4,200.00	4,150.08	3,929.22	3,966.61	22.61	16.94	84.29	-281.45	-7,690.78	7,613.77	7,574.27	39.50	192.750		
4,300.00	4,248.73	4,040.56	4,077.92	23.16	17.40	84.44	-279.91	-7,693.32	7,614.51	7,573.99	40.53	187.895		
4,400.00	4,347.38	4,146.78	4,184.11	23.72	17.85	84.58	-278.31	-7,695.54	7,615.11	7,573.58	41.53	183.368		
4,500.00	4,446.02	4,246.93	4,284.23	24.27	18.27	84.71	-277.07	-7,697.64	7,615.74	7,573.23	42.51	179.163		
4,600.00	4,544.67	4,354.79	4,392.05	24.83	18.73	84.85	-276.03	-7,699.81	7,616.32	7,572.80	43.52	175.011		
4,700.00	4,643.31	4,467.20	4,504.45	25.39	19.20	84.99	-275.38	-7,701.95	7,616.80	7,572.25	44.55	170.968		
4,800.00	4,741.96	4,613.98	4,651.21	25.94	19.82	85.18	-274.81	-7,704.14	7,616.92	7,571.19	45.73	166.564		
4,900.00	4,840.60	4,710.02	4,747.24	26.50	20.23	85.30	-274.53	-7,705.29	7,616.76	7,570.07	46.69	163.125		
5,000.00	4,939.25	4,804.27	4,841.48	27.05	20.62	85.42	-274.24	-7,706.46	7,616.70	7,569.05	47.65	159.851		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,037.90	4,916.53	4,953.74	27.61	21.10	85.56	-273.87	-7,707.78	7,616.60	7,567.92	48.68	156.458		
5,200.00	5,136.54	5,013.48	5,050.68	28.17	21.51	85.68	-273.47	-7,708.86	7,616.48	7,566.83	49.65	153.404		
5,300.00	5,235.19	5,121.45	5,158.64	28.72	21.97	85.81	-272.98	-7,709.97	7,616.31	7,565.65	50.67	150.326		
5,400.00	5,333.83	5,218.80	5,255.99	29.28	22.38	85.94	-272.64	-7,710.94	7,616.15	7,564.52	51.64	147.497		
5,500.00	5,432.48	5,315.88	5,389.06	29.84	22.94	86.10	-272.20	-7,712.11	7,615.94	7,563.19	52.76	144.356		
5,600.00	5,531.12	5,491.65	5,528.82	30.40	23.53	86.28	-271.27	-7,712.34	7,615.03	7,561.12	53.91	141.265		
5,700.00	5,629.77	5,567.95	5,605.12	30.95	23.85	86.38	-270.80	-7,712.43	7,614.12	7,559.33	54.79	138.973		
5,800.00	5,728.41	5,657.57	5,694.74	31.51	24.23	86.49	-270.53	-7,712.80	7,613.52	7,557.80	55.73	136.621		
5,900.00	5,827.06	5,751.19	5,788.36	32.07	24.63	86.61	-270.22	-7,713.19	7,612.98	7,556.30	56.68	134.306		
6,000.00	5,925.71	5,842.69	5,879.86	32.63	25.02	86.72	-269.85	-7,713.69	7,612.59	7,554.96	57.63	132.091		
6,100.00	6,024.35	5,931.11	5,968.28	33.19	25.40	86.83	-269.47	-7,714.22	7,612.30	7,553.74	58.57	129.978		
6,153.06	6,076.70	5,971.69	6,008.86	33.48	25.57	86.89	-269.34	-7,714.54	7,612.26	7,553.22	59.04	128.945		
6,200.00	6,123.00	6,011.83	6,048.99	33.74	25.74	86.94	-269.24	-7,714.91	7,612.29	7,552.82	59.47	128.006		
6,300.00	6,221.64	6,117.97	6,155.12	34.30	26.19	87.07	-269.08	-7,715.82	7,612.29	7,551.82	60.48	125.867		
6,400.00	6,320.29	6,187.09	6,224.25	34.86	26.48	87.15	-269.01	-7,716.56	7,612.54	7,551.21	61.33	124.121		
6,500.00	6,418.93	6,281.84	6,318.99	35.42	26.89	87.27	-269.05	-7,717.82	7,613.07	7,550.77	62.29	122.212		
6,600.00	6,517.58	6,379.80	6,416.93	35.98	27.30	87.39	-269.28	-7,719.13	7,613.62	7,550.35	63.27	120.335		
6,700.00	6,616.23	6,510.63	6,547.76	36.54	27.86	87.54	-269.74	-7,720.68	7,614.06	7,549.67	64.39	118.254		
6,800.00	6,714.51	6,614.03	6,651.15	37.10	28.30	87.64	-270.26	-7,721.64	7,608.86	7,543.47	65.39	116.364		
6,900.00	6,810.42	6,705.04	6,742.15	37.66	28.69	87.74	-271.11	-7,722.52	7,588.46	7,522.14	66.33	114.408		
7,000.00	6,901.58	6,776.39	6,813.49	38.21	28.99	87.84	-272.06	-7,723.36	7,553.31	7,486.15	67.16	112.462		
7,100.00	6,985.76	6,848.34	6,885.43	38.76	29.30	87.94	-273.05	-7,724.38	7,504.29	7,436.32	67.97	110.402		
7,200.00	7,060.88	6,911.38	6,948.46	39.32	29.57	88.04	-273.77	-7,725.35	7,442.53	7,373.82	68.71	108.321		
7,300.00	7,125.09	6,954.43	6,991.49	39.90	29.75	88.14	-274.19	-7,726.12	7,369.58	7,300.27	69.32	106.319		
7,400.00	7,176.81	7,000.01	7,037.07	40.55	29.94	88.24	-274.57	-7,727.07	7,287.21	7,217.32	69.89	104.273		
7,500.00	7,214.77	7,022.43	7,059.49	41.30	30.04	88.34	-274.73	-7,727.57	7,197.30	7,126.99	70.31	102.372		
7,600.00	7,238.02	7,045.93	7,082.98	42.22	30.14	88.44	-274.88	-7,728.10	7,101.99	7,031.31	70.68	100.487		
7,700.00	7,246.01	7,055.40	7,092.44	43.32	30.18	88.54	-274.93	-7,728.31	7,003.59	6,932.66	70.94	98.732		
7,800.00	7,245.50	7,057.03	7,094.07	44.65	30.19	88.64	-274.94	-7,728.35	6,904.43	6,833.29	71.14	97.058		
7,900.00	7,244.97	7,058.65	7,095.69	46.21	30.19	88.74	-274.94	-7,728.39	6,805.29	6,733.94	71.35	95.380		
8,000.00	7,244.44	7,060.26	7,097.30	47.99	30.20	88.84	-274.95	-7,728.42	6,706.18	6,634.61	71.57	93.697		
8,100.00	7,243.91	7,061.88	7,098.92	49.96	30.21	88.94	-274.96	-7,728.46	6,607.09	6,535.29	71.81	92.010		
8,200.00	7,243.39	7,063.50	7,100.54	52.10	30.22	89.04	-274.97	-7,728.50	6,508.04	6,435.98	72.06	90.319		
8,300.00	7,242.86	7,065.13	7,102.17	54.38	30.22	89.14	-274.98	-7,728.54	6,409.01	6,336.69	72.32	88.624		
8,400.00	7,242.33	7,066.75	7,103.79	56.78	30.23	89.24	-274.98	-7,728.57	6,310.01	6,237.41	72.59	86.925		
8,500.00	7,241.80	7,068.38	7,105.42	59.28	30.24	89.34	-274.99	-7,728.61	6,211.04	6,138.16	72.88	85.222		
8,600.00	7,241.27	7,070.01	7,107.05	61.88	30.24	89.44	-275.00	-7,728.65	6,112.10	6,038.92	73.19	83.515		
8,700.00	7,240.74	7,071.64	7,108.68	64.54	30.25	89.54	-275.01	-7,728.68	6,013.20	5,939.70	73.51	81.805		
8,800.00	7,240.21	7,073.27	7,110.31	67.27	30.26	89.64	-275.01	-7,728.72	5,914.34	5,840.49	73.85	80.091		
8,900.00	7,239.68	7,074.91	7,111.94	70.06	30.26	89.74	-275.02	-7,728.76	5,815.51	5,741.31	74.20	78.375		
9,000.00	7,239.16	7,076.55	7,113.58	72.89	30.27	89.84	-275.03	-7,728.80	5,716.73	5,642.15	74.58	76.655		
9,100.00	7,238.63	7,078.18	7,115.22	75.77	30.28	89.94	-275.03	-7,728.83	5,617.99	5,543.01	74.97	74.933		
9,200.00	7,238.10	7,079.82	7,116.86	78.69	30.28	90.04	-275.04	-7,728.87	5,519.29	5,443.90	75.39	73.209		
9,300.00	7,237.57	7,081.47	7,118.50	81.64	30.29	90.14	-275.05	-7,728.91	5,420.64	5,344.81	75.83	71.482		
9,400.00	7,237.04	7,083.11	7,120.15	84.62	30.30	90.24	-275.05	-7,728.95	5,322.04	5,245.74	76.30	69.754		
9,500.00	7,236.51	7,084.76	7,121.79	87.63	30.31	90.34	-275.06	-7,728.98	5,223.49	5,146.70	76.79	68.025		
9,600.00	7,235.98	7,086.41	7,123.44	90.66	30.31	90.44	-275.07	-7,729.02	5,125.00	5,047.69	77.31	66.294		
9,700.00	7,235.45	7,088.06	7,125.09	93.72	30.32	90.54	-275.07	-7,729.06	5,026.56	4,948.71	77.85	64.564		
9,800.00	7,234.93	7,089.71	7,126.74	96.79	30.33	90.64	-275.08	-7,729.10	4,928.19	4,849.76	78.43	62.833		
9,900.00	7,234.40	7,091.36	7,128.39	99.88	30.33	90.74	-275.09	-7,729.14	4,829.89	4,750.84	79.05	61.103		
10,000.00	7,233.87	7,093.02	7,130.05	102.98	30.34	90.84	-275.09	-7,729.17	4,731.65	4,651.96	79.69	59.374		
10,100.00	7,233.34	7,094.68	7,131.71	106.10	30.35	90.94	-275.10	-7,729.21	4,633.49	4,553.12	80.38	57.646		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.81	7,096.34	7,133.37	109.23	30.36	85.13	-275.10	-7,729.25	4,535.41	4,454.31	81.10	55.921		
10,300.00	7,232.28	7,098.00	7,135.03	112.38	30.36	85.23	-275.11	-7,729.29	4,437.42	4,355.55	81.87	54.199		
10,400.00	7,231.75	7,099.66	7,136.69	115.53	30.37	85.34	-275.11	-7,729.33	4,339.52	4,256.83	82.69	52.480		
10,500.00	7,231.23	7,101.73	7,138.76	118.70	30.38	85.47	-275.12	-7,729.37	4,241.71	4,158.15	83.55	50.766		
10,600.00	7,230.70	7,103.88	7,140.91	121.87	30.39	85.61	-275.13	-7,729.42	4,144.01	4,059.53	84.48	49.056		
10,700.00	7,230.17	7,106.02	7,143.05	125.05	30.40	85.75	-275.14	-7,729.47	4,046.42	3,960.96	85.45	47.353		
10,800.00	7,229.64	7,108.14	7,145.17	128.25	30.41	85.88	-275.14	-7,729.52	3,948.94	3,862.45	86.49	45.657		
10,900.00	7,229.11	7,110.25	7,147.27	131.44	30.41	86.02	-275.15	-7,729.57	3,851.60	3,764.00	87.60	43.970		
11,000.00	7,228.58	7,112.33	7,149.36	134.65	30.42	86.15	-275.16	-7,729.62	3,754.40	3,665.62	88.77	42.292		
11,100.00	7,228.05	7,114.40	7,151.43	137.86	30.43	86.28	-275.17	-7,729.66	3,657.34	3,567.31	90.03	40.626		
11,200.00	7,227.52	7,116.45	7,153.48	141.08	30.44	86.41	-275.18	-7,729.71	3,560.45	3,469.09	91.36	38.971		
11,300.00	7,227.00	7,118.49	7,155.51	144.30	30.45	86.54	-275.18	-7,729.75	3,463.73	3,370.94	92.79	37.329		
11,400.00	7,226.47	7,120.51	7,157.53	147.52	30.46	86.67	-275.19	-7,729.80	3,367.20	3,272.89	94.31	35.702		
11,500.00	7,225.94	7,122.51	7,159.53	150.76	30.47	86.80	-275.20	-7,729.84	3,270.88	3,174.94	95.94	34.092		
11,600.00	7,225.41	7,124.50	7,161.52	153.99	30.48	86.93	-275.21	-7,729.89	3,174.79	3,077.10	97.69	32.499		
11,700.00	7,224.88	7,126.47	7,163.49	157.23	30.48	87.06	-275.22	-7,729.93	3,078.95	2,979.39	99.56	30.926		
11,800.00	7,224.35	7,128.43	7,165.45	160.48	30.49	87.18	-275.23	-7,729.97	2,983.38	2,881.81	101.57	29.373		
11,900.00	7,223.82	7,130.37	7,167.39	163.72	30.50	87.31	-275.24	-7,730.02	2,888.10	2,784.38	103.72	27.844		
12,000.00	7,223.29	7,132.29	7,169.31	166.98	30.51	87.43	-275.24	-7,730.06	2,793.16	2,687.11	106.05	26.339		
12,100.00	7,222.77	7,134.20	7,171.22	170.23	30.52	87.55	-275.25	-7,730.10	2,698.58	2,590.03	108.55	24.861		
12,200.00	7,222.24	7,136.10	7,173.12	173.49	30.52	87.67	-275.26	-7,730.14	2,604.40	2,493.15	111.24	23.412		
12,300.00	7,221.71	7,137.98	7,175.00	176.75	30.53	87.79	-275.27	-7,730.18	2,510.67	2,396.51	114.16	21.993		
12,400.00	7,221.18	7,139.84	7,176.86	180.01	30.54	87.91	-275.28	-7,730.22	2,417.44	2,300.13	117.31	20.608		
12,500.00	7,220.65	7,141.70	7,178.71	183.28	30.55	88.03	-275.29	-7,730.26	2,324.78	2,204.06	120.72	19.257		
12,600.00	7,220.12	7,143.53	7,180.55	186.54	30.56	88.15	-275.30	-7,730.30	2,232.75	2,108.32	124.43	17.944		
12,700.00	7,219.59	7,145.36	7,182.38	189.81	30.56	88.27	-275.31	-7,730.34	2,141.43	2,012.97	128.45	16.671		
12,800.00	7,219.06	7,147.17	7,184.18	193.09	30.57	88.38	-275.32	-7,730.38	2,050.91	1,918.08	132.84	15.439		
12,900.00	7,218.54	7,148.96	7,185.98	196.36	30.58	88.50	-275.33	-7,730.42	1,961.32	1,823.71	137.61	14.253		
13,000.00	7,218.01	7,150.75	7,187.76	199.64	30.59	88.61	-275.34	-7,730.46	1,872.78	1,729.96	142.82	13.113		
13,100.00	7,217.48	7,152.52	7,189.53	202.92	30.59	88.73	-275.35	-7,730.50	1,785.45	1,636.95	148.51	12.023		
13,200.00	7,216.95	7,154.27	7,191.29	206.20	30.60	88.84	-275.36	-7,730.53	1,699.52	1,544.80	154.72	10.984		
13,300.00	7,216.42	7,156.01	7,193.03	209.48	30.61	88.95	-275.37	-7,730.57	1,615.20	1,453.68	161.52	10.000		
13,400.00	7,215.89	7,157.74	7,194.76	212.76	30.62	89.06	-275.38	-7,730.61	1,532.77	1,363.83	168.94	9.073		
13,500.00	7,215.36	7,159.46	7,196.48	216.05	30.62	89.18	-275.39	-7,730.64	1,452.55	1,275.51	177.04	8.205		
13,600.00	7,214.84	7,161.17	7,198.18	219.33	30.63	89.28	-275.40	-7,730.68	1,374.92	1,189.07	185.84	7.398		
13,700.00	7,214.31	7,162.86	7,199.87	222.62	30.64	89.39	-275.41	-7,730.71	1,300.34	1,104.97	195.37	6.656		
13,800.00	7,213.78	7,164.54	7,201.55	225.91	30.65	89.50	-275.42	-7,730.75	1,229.38	1,023.77	205.61	5.979		
13,900.00	7,213.25	7,166.21	7,203.22	229.20	30.65	89.61	-275.43	-7,730.78	1,162.70	946.22	216.48	5.371		
14,000.00	7,212.72	7,167.86	7,204.87	232.49	30.66	89.72	-275.44	-7,730.82	1,101.07	873.24	227.83	4.833		
14,100.00	7,212.19	7,169.50	7,206.52	235.79	30.67	89.82	-275.45	-7,730.85	1,045.38	805.98	239.41	4.367		
14,200.00	7,211.66	7,171.14	7,208.15	239.08	30.67	89.93	-275.46	-7,730.88	996.64	745.83	250.81	3.974		
14,300.00	7,211.13	7,172.76	7,209.77	242.38	30.68	90.03	-275.47	-7,730.92	955.91	694.38	261.53	3.655		
14,400.00	7,210.61	7,174.36	7,211.37	245.67	30.69	90.13	-275.48	-7,730.95	924.24	653.35	270.89	3.412		
14,500.00	7,210.08	7,175.96	7,212.97	248.97	30.69	90.24	-275.50	-7,730.98	902.59	624.37	278.22	3.244		
14,600.00	7,209.55	7,177.55	7,214.56	252.27	30.70	90.34	-275.51	-7,731.02	891.69	608.77	282.92	3.152		
14,647.78	7,209.30	7,178.30	7,215.31	253.84	30.70	90.39	-275.51	-7,731.03	890.41	606.30	284.12	3.134 CC, ES		
14,700.00	7,209.02	7,179.12	7,216.13	255.57	30.71	90.44	-275.52	-7,731.05	891.94	607.33	284.61	3.134 SF		
14,800.00	7,208.49	7,180.68	7,217.69	258.87	30.71	90.54	-275.53	-7,731.08	903.33	620.11	283.22	3.189		
14,900.00	7,207.96	7,182.23	7,219.24	262.17	30.72	90.64	-275.54	-7,731.11	925.44	646.40	279.04	3.317		
15,000.00	7,207.43	7,183.78	7,220.78	265.47	30.73	90.74	-275.55	-7,731.14	957.53	684.96	272.57	3.513		
15,081.89	7,207.00	7,185.03	7,222.04	268.17	30.73	90.82	-275.56	-7,731.17	990.58	724.55	266.03	3.724		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	61.00	3.28	3.28	-111.22	-1,385.19	-3,566.79	3,826.81				
100.00	100.00	39.00	100.00	3.28	3.35	-111.22	-1,385.19	-3,566.79	3,826.32	3,819.69	6.63	576.720	
200.00	200.00	139.00	200.00	3.34	4.52	-111.22	-1,385.19	-3,566.79	3,826.32	3,818.47	7.85	487.121	
300.00	299.98	238.98	299.98	3.44	7.37	60.77	-1,385.19	-3,566.79	3,825.47	3,814.66	10.81	353.972	
400.00	399.84	338.84	399.84	3.59	10.60	60.89	-1,385.19	-3,566.79	3,822.91	3,808.72	14.19	269.330	
500.00	499.45	438.45	499.45	3.80	13.95	61.07	-1,385.19	-3,566.79	3,818.67	3,800.93	17.75	215.175	
600.00	598.70	537.70	598.70	4.06	17.34	61.34	-1,385.19	-3,566.79	3,812.77	3,791.38	21.39	178.245	
700.00	697.49	636.49	697.49	4.38	20.74	61.63	-1,385.19	-3,566.79	3,805.30	3,780.20	25.10	151.620	
800.00	796.13	735.13	796.13	4.74	24.14	61.85	-1,385.19	-3,566.79	3,797.45	3,768.59	28.86	131.601	
900.00	894.78	833.78	894.78	5.15	27.56	62.06	-1,385.19	-3,566.79	3,789.66	3,757.00	32.66	116.046	
1,000.00	993.43	932.43	993.43	5.58	30.98	62.28	-1,385.19	-3,566.79	3,781.92	3,745.43	36.49	103.642	
1,100.00	1,092.07	1,031.07	1,092.07	6.03	34.41	62.50	-1,385.19	-3,566.79	3,774.23	3,733.89	40.35	93.539	
1,200.00	1,190.72	1,129.72	1,190.72	6.50	37.84	62.72	-1,385.19	-3,566.79	3,766.61	3,722.38	44.23	85.163	
1,300.00	1,289.36	1,228.36	1,289.36	6.98	41.27	62.94	-1,385.19	-3,566.79	3,759.04	3,710.91	48.12	78.112	
1,400.00	1,388.01	1,327.01	1,388.01	7.47	44.70	63.16	-1,385.19	-3,566.79	3,751.52	3,699.49	52.03	72.099	
1,500.00	1,486.65	1,425.65	1,486.65	7.97	48.14	63.38	-1,385.19	-3,566.79	3,744.06	3,688.11	55.95	66.916	
1,600.00	1,585.30	1,524.30	1,585.30	8.48	51.57	63.60	-1,385.19	-3,566.79	3,736.66	3,676.78	59.88	62.402	
1,700.00	1,683.94	1,622.94	1,683.94	9.00	55.01	63.83	-1,385.19	-3,566.79	3,729.32	3,665.50	63.82	58.438	
1,800.00	1,782.59	1,721.59	1,782.59	9.52	58.45	64.05	-1,385.19	-3,566.79	3,722.03	3,654.27	67.76	54.930	
1,900.00	1,881.24	1,820.24	1,881.24	10.05	61.89	64.28	-1,385.19	-3,566.79	3,714.80	3,643.10	71.71	51.805	
2,000.00	1,979.88	1,918.88	1,979.88	10.58	65.33	64.50	-1,385.19	-3,566.79	3,707.64	3,631.97	75.66	49.003	
2,100.00	2,078.53	2,017.53	2,078.53	11.11	68.76	64.73	-1,385.19	-3,566.79	3,700.53	3,620.91	79.62	46.479	
2,200.00	2,177.17	2,116.17	2,177.17	11.64	72.20	64.96	-1,385.19	-3,566.79	3,693.47	3,609.90	83.58	44.191	
2,300.00	2,275.82	2,214.82	2,275.82	12.18	75.65	65.18	-1,385.19	-3,566.79	3,686.48	3,598.94	87.54	42.110	
2,400.00	2,374.46	2,313.46	2,374.46	12.72	79.09	65.41	-1,385.19	-3,566.79	3,679.55	3,588.04	91.51	40.209	
2,500.00	2,473.11	2,412.11	2,473.11	13.26	82.53	65.64	-1,385.19	-3,566.79	3,672.68	3,577.20	95.48	38.465	
2,600.00	2,571.76	2,510.76	2,571.76	13.80	85.97	65.87	-1,385.19	-3,566.79	3,665.87	3,566.41	99.45	36.860	
2,700.00	2,670.40	2,609.40	2,670.40	14.35	89.41	66.11	-1,385.19	-3,566.79	3,659.12	3,555.69	103.43	35.379	
2,800.00	2,769.05	2,708.05	2,769.05	14.89	92.85	66.34	-1,385.19	-3,566.79	3,652.43	3,545.02	107.40	34.006	
2,900.00	2,867.69	2,806.69	2,867.69	15.44	96.29	66.57	-1,385.19	-3,566.79	3,645.80	3,534.42	111.38	32.732	
3,000.00	2,966.34	2,905.34	2,966.34	15.99	99.73	66.81	-1,385.19	-3,566.79	3,639.23	3,523.87	115.36	31.546	
3,100.00	3,064.98	3,003.98	3,064.98	16.53	103.18	67.04	-1,385.19	-3,566.79	3,632.73	3,513.39	119.34	30.439	
3,200.00	3,163.63	3,102.63	3,163.63	17.08	106.62	67.28	-1,385.19	-3,566.79	3,626.29	3,502.96	123.33	29.404	
3,300.00	3,262.27	3,201.27	3,262.27	17.63	110.06	67.51	-1,385.19	-3,566.79	3,619.91	3,492.60	127.31	28.433	
3,400.00	3,360.92	3,300.08	3,360.92	18.18	113.51	67.75	-1,385.19	-3,566.79	3,613.60	3,482.29	131.30	27.521	
3,500.00	3,459.57	3,401.43	3,459.57	18.74	117.04	67.99	-1,385.19	-3,566.79	3,607.35	3,471.96	135.39	26.645	
3,600.00	3,558.21	3,502.79	3,558.21	19.29	120.58	68.23	-1,385.19	-3,566.79	3,601.16	3,461.69	139.47	25.820	
3,700.00	3,656.86	3,604.14	3,656.86	19.84	124.12	68.47	-1,385.19	-3,566.79	3,595.03	3,451.48	143.55	25.043	
3,800.00	3,755.50	3,705.50	3,755.50	20.39	127.66	68.71	-1,385.19	-3,566.79	3,588.98	3,441.34	147.64	24.309	
3,900.00	3,854.15	3,806.85	3,854.15	20.95	131.19	68.95	-1,385.19	-3,566.79	3,582.98	3,431.26	151.73	23.615	
4,000.00	3,952.79	3,908.21	3,952.79	21.50	134.73	69.19	-1,385.19	-3,566.79	3,577.05	3,421.24	155.81	22.957	
4,100.00	4,051.44	4,009.56	4,051.44	22.05	138.27	69.44	-1,385.19	-3,566.79	3,571.19	3,411.29	159.90	22.334	
4,200.00	4,150.08	4,089.08	4,150.08	22.61	141.04	69.68	-1,385.19	-3,566.79	3,565.39	3,402.16	163.23	21.843	
4,300.00	4,248.73	4,187.73	4,248.73	23.16	144.49	69.92	-1,385.19	-3,566.79	3,559.66	3,392.44	167.22	21.287	
4,400.00	4,347.38	4,286.38	4,347.38	23.72	147.93	70.17	-1,385.19	-3,566.79	3,554.00	3,382.77	171.22	20.757	
4,500.00	4,446.02	4,385.02	4,446.02	24.27	151.37	70.42	-1,385.19	-3,566.79	3,548.40	3,373.18	175.22	20.251	
4,600.00	4,544.67	4,483.67	4,544.67	24.83	154.81	70.66	-1,385.19	-3,566.79	3,542.87	3,363.65	179.22	19.769	
4,700.00	4,643.31	4,582.31	4,643.31	25.39	158.26	70.91	-1,385.19	-3,566.79	3,537.40	3,354.19	183.22	19.307	
4,800.00	4,741.96	4,680.96	4,741.96	25.94	161.70	71.16	-1,385.19	-3,566.79	3,532.01	3,344.79	187.21	18.866	
4,900.00	4,840.60	4,779.60	4,840.60	26.50	165.14	71.41	-1,385.19	-3,566.79	3,526.68	3,335.46	191.21	18.444	
5,000.00	4,939.25	4,878.25	4,939.25	27.05	168.59	71.66	-1,385.19	-3,566.79	3,521.42	3,326.20	195.22	18.039	
5,100.00	5,037.90	4,976.90	5,037.90	27.61	172.03	71.91	-1,385.19	-3,566.79	3,516.23	3,317.01	199.22	17.650	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,075.54	5,136.54	28.17	175.47	72.16	-1,385.19	-3,566.79	3,511.11	3,307.89	203.22	17.277		
5,300.00	5,235.19	5,174.19	5,235.19	28.72	178.92	72.41	-1,385.19	-3,566.79	3,506.05	3,298.83	207.22	16.919		
5,400.00	5,333.83	5,272.83	5,333.83	29.28	182.36	72.67	-1,385.19	-3,566.79	3,501.07	3,289.85	211.22	16.575		
5,500.00	5,432.48	5,371.48	5,432.48	29.84	185.80	72.92	-1,385.19	-3,566.79	3,496.16	3,280.93	215.23	16.244		
5,600.00	5,531.12	5,470.12	5,531.12	30.40	189.25	73.17	-1,385.19	-3,566.79	3,491.31	3,272.08	219.23	15.925		
5,700.00	5,629.77	5,568.77	5,629.77	30.95	192.69	73.43	-1,385.19	-3,566.79	3,486.54	3,263.30	223.24	15.618		
5,800.00	5,728.41	5,667.41	5,728.41	31.51	196.13	73.68	-1,385.19	-3,566.79	3,481.84	3,254.60	227.24	15.322		
5,900.00	5,827.06	5,766.06	5,827.06	32.07	199.58	73.94	-1,385.19	-3,566.79	3,477.21	3,245.96	231.25	15.037		
6,000.00	5,925.71	5,864.71	5,925.71	32.63	203.02	74.20	-1,385.19	-3,566.79	3,472.65	3,237.39	235.25	14.761		
6,100.00	6,024.35	5,963.35	6,024.35	33.19	206.46	74.45	-1,385.19	-3,566.79	3,468.16	3,228.90	239.26	14.495		
6,200.00	6,123.00	6,062.00	6,123.00	33.74	209.90	74.71	-1,385.19	-3,566.79	3,463.74	3,220.48	243.27	14.238		
6,300.00	6,221.64	6,160.64	6,221.64	34.30	213.35	74.97	-1,385.19	-3,566.79	3,459.40	3,212.13	247.28	13.990		
6,400.00	6,320.29	6,259.29	6,320.29	34.86	216.79	75.23	-1,385.19	-3,566.79	3,455.13	3,203.85	251.28	13.750		
6,500.00	6,418.93	6,357.93	6,418.93	35.42	220.23	75.49	-1,385.19	-3,566.79	3,450.93	3,195.64	255.29	13.518		
6,600.00	6,517.58	6,456.58	6,517.58	35.98	223.68	75.75	-1,385.19	-3,566.79	3,446.80	3,187.50	259.30	13.293		
6,700.00	6,616.23	6,555.23	6,616.23	36.54	227.12	76.01	-1,385.19	-3,566.79	3,442.75	3,179.44	263.31	13.075		
6,800.00	6,714.51	6,653.51	6,714.51	37.10	230.55	41.41	-1,385.19	-3,566.79	3,433.40	3,166.10	267.30	12.845		
6,900.00	6,810.42	6,749.42	6,810.42	37.66	233.90	22.73	-1,385.19	-3,566.79	3,408.95	3,137.79	271.16	12.572		
7,000.00	6,901.58	6,840.58	6,901.58	38.21	237.08	14.36	-1,385.19	-3,566.79	3,369.76	3,094.95	274.81	12.262		
7,100.00	6,985.76	6,924.76	6,985.76	38.76	240.02	9.65	-1,385.19	-3,566.79	3,316.78	3,038.62	278.16	11.924		
7,200.00	7,060.88	7,000.12	7,060.88	39.32	242.65	6.38	-1,385.19	-3,566.79	3,251.28	2,970.15	281.13	11.565		
7,300.00	7,125.09	7,064.09	7,125.09	39.90	244.88	3.51	-1,385.19	-3,566.79	3,174.87	2,891.25	283.62	11.194		
7,400.00	7,176.81	7,115.81	7,176.81	40.55	246.69	0.15	-1,385.19	-3,566.79	3,089.41	2,803.81	285.61	10.817		
7,500.00	7,214.77	7,153.77	7,214.77	41.30	248.01	-5.42	-1,385.19	-3,566.79	2,997.02	2,710.00	287.02	10.442		
7,600.00	7,238.02	7,177.02	7,238.02	42.22	248.83	-20.18	-1,385.19	-3,566.79	2,899.96	2,612.12	287.84	10.075		
7,700.00	7,246.01	7,185.01	7,246.01	43.32	249.11	-88.32	-1,385.19	-3,566.79	2,800.64	2,512.59	288.05	9.723		
7,800.00	7,245.50	7,184.50	7,245.50	44.65	249.09	-93.34	-1,385.19	-3,566.79	2,701.03	2,413.11	287.92	9.381		
7,900.00	7,244.97	7,183.97	7,244.97	46.21	249.07	-93.22	-1,385.19	-3,566.79	2,601.46	2,313.67	287.78	9.040		
8,000.00	7,244.44	7,183.44	7,244.44	47.99	249.05	-93.09	-1,385.19	-3,566.79	2,501.91	2,214.27	287.64	8.698		
8,100.00	7,243.91	7,182.91	7,243.91	49.96	249.03	-92.97	-1,385.19	-3,566.79	2,402.41	2,114.91	287.50	8.356		
8,200.00	7,243.39	7,182.39	7,243.39	52.10	249.01	-92.85	-1,385.19	-3,566.79	2,302.95	2,015.60	287.35	8.015		
8,300.00	7,242.86	7,181.86	7,242.86	54.38	249.00	-92.72	-1,385.19	-3,566.79	2,203.54	1,916.35	287.19	7.673		
8,400.00	7,242.33	7,181.33	7,242.33	56.78	248.98	-92.60	-1,385.19	-3,566.79	2,104.18	1,817.15	287.03	7.331		
8,500.00	7,241.80	7,180.80	7,241.80	59.28	248.96	-92.47	-1,385.19	-3,566.79	2,004.89	1,718.02	286.87	6.989		
8,600.00	7,241.27	7,180.27	7,241.27	61.88	248.94	-92.35	-1,385.19	-3,566.79	1,905.67	1,618.97	286.70	6.647		
8,700.00	7,240.74	7,179.74	7,240.74	64.54	248.92	-92.22	-1,385.19	-3,566.79	1,806.54	1,520.01	286.53	6.305		
8,800.00	7,240.21	7,179.21	7,240.21	67.27	248.90	-92.10	-1,385.19	-3,566.79	1,707.50	1,421.14	286.36	5.963		
8,900.00	7,239.68	7,178.68	7,239.68	70.06	248.88	-91.98	-1,385.19	-3,566.79	1,608.59	1,322.39	286.20	5.621		
9,000.00	7,239.16	7,178.16	7,239.16	72.89	248.87	-91.85	-1,385.19	-3,566.79	1,509.82	1,223.78	286.05	5.278		
9,100.00	7,238.63	7,177.63	7,238.63	75.77	248.85	-91.73	-1,385.19	-3,566.79	1,411.23	1,125.31	285.92	4.936		
9,200.00	7,238.10	7,177.10	7,238.10	78.69	248.83	-91.60	-1,385.19	-3,566.79	1,312.84	1,027.02	285.82	4.593		
9,300.00	7,237.57	7,176.57	7,237.57	81.64	248.81	-91.48	-1,385.19	-3,566.79	1,214.72	928.93	285.79	4.250		
9,400.00	7,237.04	7,176.04	7,237.04	84.62	248.79	-91.36	-1,385.19	-3,566.79	1,116.94	831.07	285.86	3.907		
9,500.00	7,236.51	7,175.51	7,236.51	87.63	248.77	-91.23	-1,385.19	-3,566.79	1,019.58	733.49	286.09	3.564		
9,600.00	7,235.98	7,174.98	7,235.98	90.66	248.76	-91.11	-1,385.19	-3,566.79	922.78	636.22	286.57	3.220		
9,700.00	7,235.45	7,174.45	7,235.45	93.72	248.74	-90.98	-1,385.19	-3,566.79	826.75	539.30	287.46	2.876		
9,800.00	7,234.93	7,173.93	7,234.93	96.79	248.72	-90.86	-1,385.19	-3,566.79	731.79	442.78	289.01	2.532		
9,900.00	7,234.40	7,173.40	7,234.40	99.88	248.70	-90.73	-1,385.19	-3,566.79	638.36	346.73	291.63	2.189		
10,000.00	7,233.87	7,172.87	7,233.87	102.98	248.68	-90.61	-1,385.19	-3,566.79	547.26	251.27	295.99	1.849		
10,100.00	7,233.34	7,172.34	7,233.34	106.10	248.66	-90.49	-1,385.19	-3,566.79	459.88	156.76	303.12	1.517		
10,200.00	7,232.81	7,171.81	7,232.81	109.23	248.64	-90.36	-1,385.19	-3,566.79	378.78	64.33	314.46	1.205 Level 2		
10,300.00	7,232.28	7,171.28	7,232.28	112.38	248.63	-90.24	-1,385.19	-3,566.79	308.98	-22.39	331.37	0.932 Level 1		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,170.75	7,231.75	115.53	248.61	-90.11	-1,385.19	-3,566.79	259.72	-92.46	352.18	0.737	Level 1	
10,490.06	7,231.28	7,170.28	7,231.28	118.38	248.59	-90.00	-1,385.19	-3,566.79	243.61	-122.48	366.08	0.665	Level 1, CC	
10,500.00	7,231.23	7,170.23	7,231.23	118.70	248.59	-89.99	-1,385.19	-3,566.79	243.81	-123.06	366.87	0.665	Level 1, ES, SF	
10,600.00	7,230.70	7,169.70	7,230.70	121.87	248.57	-89.86	-1,385.19	-3,566.79	267.26	-98.31	365.57	0.731	Level 1	
10,700.00	7,230.17	7,169.17	7,230.17	125.05	248.55	-89.74	-1,385.19	-3,566.79	321.58	-32.99	354.57	0.907	Level 1	
10,800.00	7,229.64	7,168.64	7,229.64	128.25	248.53	-89.61	-1,385.19	-3,566.79	394.21	51.26	342.95	1.149	Level 2	
10,900.00	7,229.11	7,168.11	7,229.11	131.44	248.52	-89.49	-1,385.19	-3,566.79	476.85	143.23	333.63	1.429	Level 3	
11,000.00	7,228.58	7,167.58	7,228.58	134.65	248.50	-89.37	-1,385.19	-3,566.79	565.13	238.54	326.59	1.730		
11,100.00	7,228.05	7,167.05	7,228.05	137.86	248.48	-89.24	-1,385.19	-3,566.79	656.78	335.48	321.30	2.044		
11,200.00	7,227.52	7,166.52	7,227.52	141.08	248.46	-89.12	-1,385.19	-3,566.79	750.56	433.30	317.26	2.366		
11,300.00	7,227.00	7,166.00	7,227.00	144.30	248.44	-88.99	-1,385.19	-3,566.79	845.77	531.66	314.11	2.693		
11,400.00	7,226.47	7,165.47	7,226.47	147.52	248.42	-88.87	-1,385.19	-3,566.79	941.97	630.36	311.61	3.023		
11,500.00	7,225.94	7,164.94	7,225.94	150.76	248.40	-88.74	-1,385.19	-3,566.79	1,038.89	729.29	309.59	3.356		
11,600.00	7,225.41	7,164.41	7,225.41	153.99	248.39	-88.62	-1,385.19	-3,566.79	1,136.34	828.40	307.94	3.690		
11,700.00	7,224.88	7,163.88	7,224.88	157.23	248.37	-88.50	-1,385.19	-3,566.79	1,234.20	927.64	306.56	4.026		
11,800.00	7,224.35	7,163.35	7,224.35	160.48	248.35	-88.37	-1,385.19	-3,566.79	1,332.38	1,026.98	305.40	4.363		
11,900.00	7,223.82	7,162.82	7,223.82	163.72	248.33	-88.25	-1,385.19	-3,566.79	1,430.81	1,126.40	304.41	4.700		
12,000.00	7,223.29	7,162.29	7,223.29	166.98	248.31	-88.12	-1,385.19	-3,566.79	1,529.44	1,225.89	303.56	5.038		
12,100.00	7,222.77	7,161.77	7,222.77	170.23	248.29	-88.00	-1,385.19	-3,566.79	1,628.24	1,325.42	302.82	5.377		
12,200.00	7,222.24	7,161.24	7,222.24	173.49	248.28	-87.87	-1,385.19	-3,566.79	1,727.18	1,425.00	302.18	5.716		
12,300.00	7,221.71	7,160.71	7,221.71	176.75	248.26	-87.75	-1,385.19	-3,566.79	1,826.23	1,524.62	301.61	6.055		
12,400.00	7,221.18	7,160.18	7,221.18	180.01	248.24	-87.63	-1,385.19	-3,566.79	1,925.39	1,624.27	301.11	6.394		
12,500.00	7,220.65	7,159.65	7,220.65	183.28	248.22	-87.50	-1,385.19	-3,566.79	2,024.62	1,723.95	300.67	6.734		
12,600.00	7,220.12	7,159.12	7,220.12	186.54	248.20	-87.38	-1,385.19	-3,566.79	2,123.93	1,823.65	300.27	7.073		
12,700.00	7,219.59	7,158.59	7,219.59	189.81	248.18	-87.25	-1,385.19	-3,566.79	2,223.29	1,923.38	299.92	7.413		
12,800.00	7,219.06	7,158.06	7,219.06	193.09	248.16	-87.13	-1,385.19	-3,566.79	2,322.72	2,023.12	299.60	7.753		
12,900.00	7,218.54	7,157.54	7,218.54	196.36	248.15	-87.01	-1,385.19	-3,566.79	2,422.19	2,122.88	299.31	8.093		
13,000.00	7,218.01	7,157.01	7,218.01	199.64	248.13	-86.88	-1,385.19	-3,566.79	2,521.70	2,222.65	299.05	8.432		
13,100.00	7,217.48	7,156.48	7,217.48	202.92	248.11	-86.76	-1,385.19	-3,566.79	2,621.25	2,322.43	298.81	8.772		
13,200.00	7,216.95	7,155.95	7,216.95	206.20	248.09	-86.63	-1,385.19	-3,566.79	2,720.83	2,422.23	298.60	9.112		
13,300.00	7,216.42	7,155.42	7,216.42	209.48	248.07	-86.51	-1,385.19	-3,566.79	2,820.44	2,522.04	298.40	9.452		
13,400.00	7,215.89	7,154.89	7,215.89	212.76	248.05	-86.39	-1,385.19	-3,566.79	2,920.08	2,621.85	298.22	9.792		
13,500.00	7,215.36	7,154.36	7,215.36	216.05	248.04	-86.26	-1,385.19	-3,566.79	3,019.74	2,721.68	298.06	10.131		
13,600.00	7,214.84	7,153.84	7,214.84	219.33	248.02	-86.14	-1,385.19	-3,566.79	3,119.42	2,821.51	297.91	10.471		
13,700.00	7,214.31	7,153.31	7,214.31	222.62	248.00	-86.01	-1,385.19	-3,566.79	3,219.12	2,921.35	297.78	10.810		
13,800.00	7,213.78	7,152.78	7,213.78	225.91	247.98	-85.89	-1,385.19	-3,566.79	3,318.84	3,021.19	297.66	11.150		
13,900.00	7,213.25	7,152.25	7,213.25	229.20	247.96	-85.77	-1,385.19	-3,566.79	3,418.58	3,121.04	297.54	11.489		
14,000.00	7,212.72	7,151.72	7,212.72	232.49	247.94	-85.64	-1,385.19	-3,566.79	3,518.33	3,220.89	297.44	11.829		
14,100.00	7,212.19	7,151.19	7,212.19	235.79	247.92	-85.52	-1,385.19	-3,566.79	3,618.10	3,320.75	297.34	12.168		
14,200.00	7,211.66	7,150.66	7,211.66	239.08	247.91	-85.40	-1,385.19	-3,566.79	3,717.88	3,420.62	297.26	12.507		
14,300.00	7,211.13	7,150.13	7,211.13	242.38	247.89	-85.27	-1,385.19	-3,566.79	3,817.67	3,520.49	297.18	12.846		
14,400.00	7,210.61	7,149.61	7,210.61	245.67	247.87	-85.15	-1,385.19	-3,566.79	3,917.47	3,620.36	297.11	13.185		
14,500.00	7,210.08	7,149.08	7,210.08	248.97	247.85	-85.03	-1,385.19	-3,566.79	4,017.28	3,720.23	297.04	13.524		
14,600.00	7,209.55	7,148.55	7,209.55	252.27	247.83	-84.90	-1,385.19	-3,566.79	4,117.09	3,820.11	296.99	13.863		
14,700.00	7,209.02	7,148.02	7,209.02	255.57	247.81	-84.78	-1,385.19	-3,566.79	4,216.92	3,919.99	296.93	14.202		
14,800.00	7,208.49	7,147.49	7,208.49	258.87	247.80	-84.66	-1,385.19	-3,566.79	4,316.76	4,019.87	296.89	14.540		
14,900.00	7,207.96	7,146.96	7,207.96	262.17	247.78	-84.53	-1,385.19	-3,566.79	4,416.60	4,119.76	296.84	14.879		
15,000.00	7,207.43	7,146.43	7,207.43	265.47	247.76	-84.41	-1,385.19	-3,566.79	4,516.45	4,219.64	296.81	15.217		
15,081.89	7,207.00	7,146.00	7,207.00	268.17	247.74	-84.31	-1,385.19	-3,566.79	4,598.22	4,301.44	296.78	15.494		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 78-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	58.75	3.28	3.28	-91.09	-173.66	-9,143.70	9,145.53					
100.00	100.00	185.34	210.32	3.28	3.34	-91.08	-172.21	-9,142.13	9,144.42	9,137.79	6.62	1,380.860		
200.00	200.00	289.65	314.63	3.34	3.45	-91.08	-171.70	-9,140.80	9,143.13	9,136.34	6.79	1,346.994		
300.00	299.98	369.82	394.79	3.44	3.58	80.92	-171.53	-9,139.89	9,141.72	9,134.70	7.01	1,303.286		
400.00	399.84	465.24	490.20	3.59	3.76	80.99	-171.29	-9,138.93	9,139.88	9,132.53	7.35	1,243.339		
500.00	499.45	547.98	572.94	3.80	3.95	81.08	-171.07	-9,138.17	9,137.60	9,129.85	7.75	1,179.797		
600.00	598.70	624.22	649.18	4.06	4.15	81.19	-171.19	-9,137.64	9,135.01	9,126.81	8.20	1,114.051		
700.00	697.49	737.20	762.15	4.38	4.46	81.34	-171.34	-9,137.08	9,132.14	9,123.31	8.84	1,033.606		
800.00	796.13	846.02	870.97	4.74	4.80	81.45	-171.20	-9,136.25	9,128.88	9,119.35	9.54	957.221		
900.00	894.78	927.74	952.68	5.15	5.07	81.53	-171.07	-9,135.65	9,125.67	9,115.47	10.20	894.328		
1,000.00	993.43	984.00	1,008.95	5.58	5.26	81.59	-171.12	-9,135.33	9,122.74	9,111.92	10.82	842.985		
1,100.00	1,092.07	984.00	1,008.95	6.03	5.26	81.59	-171.12	-9,135.33	9,120.68	9,109.41	11.27	809.092		
1,200.00	1,190.72	1,047.70	1,072.65	6.50	5.47	81.65	-171.13	-9,135.59	9,118.93	9,106.98	11.95	763.068		
1,300.00	1,289.36	1,112.00	1,136.93	6.98	5.68	81.72	-170.90	-9,137.00	9,118.49	9,105.84	12.65	720.928		
1,363.77	1,352.27	1,112.00	1,136.93	7.29	5.68	81.72	-170.90	-9,137.00	9,118.27	9,105.31	12.96	703.511		
1,400.00	1,388.01	1,112.00	1,136.93	7.47	5.68	81.72	-170.90	-9,137.00	9,118.34	9,105.20	13.14	693.920		
1,500.00	1,486.65	1,112.00	1,136.93	7.97	5.68	81.72	-170.90	-9,137.00	9,119.29	9,105.64	13.64	668.532		
1,600.00	1,585.30	1,112.00	1,136.93	8.48	5.68	81.72	-170.90	-9,137.00	9,121.33	9,107.18	14.15	644.722		
1,700.00	1,683.94	1,178.36	1,203.23	9.00	5.91	81.79	-170.58	-9,139.77	9,123.50	9,108.62	14.88	613.072		
1,800.00	1,782.59	1,241.00	1,265.74	9.52	6.12	81.86	-170.38	-9,143.72	9,127.20	9,111.59	15.61	584.630		
1,900.00	1,881.24	1,241.00	1,265.74	10.05	6.12	81.86	-170.38	-9,143.72	9,131.13	9,115.00	16.13	566.065		
2,000.00	1,979.88	1,241.00	1,265.74	10.58	6.12	81.86	-170.38	-9,143.72	9,136.16	9,119.51	16.65	548.661		
2,100.00	2,078.53	1,241.00	1,265.74	11.11	6.12	81.86	-170.38	-9,143.72	9,142.28	9,125.10	17.17	532.340		
2,200.00	2,177.17	1,298.11	1,322.65	11.64	6.32	81.92	-170.24	-9,148.47	9,148.73	9,130.83	17.90	511.095		
2,300.00	2,275.82	1,321.28	1,345.71	12.18	6.40	81.94	-170.18	-9,150.73	9,156.28	9,137.77	18.51	494.745		
2,400.00	2,374.46	1,369.00	1,393.14	12.72	6.58	81.99	-170.06	-9,155.98	9,164.81	9,145.61	19.20	477.228		
2,500.00	2,473.11	1,369.00	1,393.14	13.26	6.58	81.99	-170.06	-9,155.98	9,173.90	9,154.17	19.73	465.047		
2,600.00	2,571.76	1,369.00	1,393.14	13.80	6.58	81.99	-170.06	-9,155.98	9,184.07	9,163.82	20.25	453.579		
2,700.00	2,670.40	1,418.85	1,442.59	14.35	6.77	82.04	-170.07	-9,162.26	9,194.79	9,173.84	20.96	438.771		
2,800.00	2,769.05	1,444.57	1,468.07	14.89	6.86	82.06	-170.17	-9,165.80	9,206.44	9,184.87	21.57	426.760		
2,900.00	2,867.69	1,498.00	1,520.90	15.44	7.07	82.12	-170.62	-9,173.79	9,219.04	9,196.75	22.30	413.432		
3,000.00	2,966.34	1,498.00	1,520.90	15.99	7.07	82.12	-170.62	-9,173.79	9,232.12	9,209.31	22.81	404.672		
3,100.00	3,064.98	1,498.00	1,520.90	16.53	7.07	82.12	-170.62	-9,173.79	9,246.27	9,222.94	23.33	396.393		
3,200.00	3,163.63	1,543.45	1,565.71	17.08	7.26	82.16	-171.16	-9,181.31	9,261.01	9,236.99	24.02	385.570		
3,300.00	3,262.27	1,567.06	1,588.95	17.63	7.36	82.18	-171.47	-9,185.49	9,276.66	9,252.03	24.62	376.752		
3,400.00	3,360.92	1,626.00	1,646.80	18.18	7.60	82.23	-172.30	-9,196.73	9,293.39	9,268.02	25.37	366.288		
3,500.00	3,459.57	1,626.00	1,646.80	18.74	7.60	82.23	-172.30	-9,196.73	9,310.39	9,284.52	25.87	359.840		
3,600.00	3,558.21	1,626.00	1,646.80	19.29	7.60	82.23	-172.30	-9,196.73	9,328.44	9,302.07	26.37	353.728		
3,700.00	3,656.86	1,626.00	1,646.80	19.84	7.60	82.23	-172.30	-9,196.73	9,347.52	9,320.65	26.87	347.933		
3,800.00	3,755.50	1,681.29	1,700.85	20.39	7.86	82.28	-173.22	-9,208.36	9,366.91	9,339.31	27.60	339.418		
3,900.00	3,854.15	1,703.36	1,722.35	20.95	7.96	82.30	-173.64	-9,213.30	9,387.36	9,359.17	28.18	333.100		
4,000.00	3,952.79	1,754.00	1,771.54	21.50	8.19	82.34	-174.72	-9,225.31	9,408.79	9,379.89	28.89	325.655		
4,100.00	4,051.44	1,754.00	1,771.54	22.05	8.19	82.34	-174.72	-9,225.31	9,430.63	9,401.26	29.37	321.073		
4,200.00	4,150.08	1,754.00	1,771.54	22.61	8.19	82.34	-174.72	-9,225.31	9,453.48	9,423.63	29.85	316.721		
4,300.00	4,248.73	1,800.60	1,816.63	23.16	8.43	82.38	-175.71	-9,237.04	9,476.93	9,446.39	30.54	310.349		
4,400.00	4,347.38	1,827.96	1,843.03	23.72	8.57	82.41	-176.22	-9,244.19	9,501.16	9,470.03	31.13	305.176		
4,500.00	4,446.02	1,883.00	1,895.99	24.27	8.86	82.45	-177.12	-9,259.14	9,526.25	9,494.39	31.86	298.994		
4,600.00	4,544.67	1,883.00	1,895.99	24.83	8.86	82.45	-177.12	-9,259.14	9,551.76	9,519.44	32.32	295.524		
4,700.00	4,643.31	1,883.00	1,895.99	25.39	8.86	82.45	-177.12	-9,259.14	9,578.25	9,545.47	32.78	292.227		
4,800.00	4,741.96	1,944.41	1,954.84	25.94	9.21	82.51	-178.04	-9,276.65	9,605.10	9,571.57	33.53	286.431		
4,900.00	4,840.60	2,011.00	2,018.39	26.50	9.60	82.56	-179.13	-9,296.51	9,632.96	9,598.65	34.32	280.689		
5,000.00	4,939.25	2,011.00	2,018.39	27.05	9.60	82.56	-179.13	-9,296.51	9,661.07	9,626.31	34.76	277.910		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 78-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.00	5,037.90	2,047.62	2,053.24	27.61	9.83	82.59	-179.75	-9,307.77	9,689.98	9,654.59	35.39	273.774		
5,200.00	5,136.54	2,090.99	2,094.43	28.17	10.10	82.63	-180.48	-9,321.30	9,719.42	9,683.36	36.06	269.542		
5,300.00	5,235.19	5,300.00	2,336.59	28.72	32.19	82.84	-184.12	-9,399.98	9,748.99	9,697.06	51.94	187.710		
5,400.00	5,333.83	2,443.35	2,429.86	29.28	12.44	82.93	-185.59	-9,429.04	9,777.02	9,738.17	38.85	251.657		
5,500.00	5,432.48	2,488.54	2,472.96	29.84	12.76	82.96	-186.25	-9,442.64	9,805.41	9,765.87	39.54	247.989		
5,600.00	5,531.12	2,525.00	2,507.67	30.40	13.01	82.99	-186.72	-9,453.77	9,834.31	9,794.14	40.18	244.768		
5,700.00	5,629.77	2,589.59	2,569.09	30.95	13.48	83.05	-187.33	-9,473.74	9,863.63	9,822.66	40.98	240.714		
5,800.00	5,728.41	2,653.00	2,629.30	31.51	13.94	83.11	-187.57	-9,493.62	9,893.38	9,851.61	41.77	236.862		
5,900.00	5,827.06	2,653.00	2,629.30	32.07	13.94	83.11	-187.57	-9,493.62	9,923.69	9,881.50	42.19	235.206		
6,000.00	5,925.71	2,709.95	2,683.24	32.63	14.37	83.16	-187.60	-9,511.91	9,954.42	9,911.47	42.95	231.792		
6,100.00	6,024.35	2,983.29	2,942.12	33.19	16.45	83.39	-190.00	-9,599.48	9,985.23	9,940.24	44.99	221.942		
7,300.00	7,125.09	6,999.01	6,849.95	39.90	39.60	19.79	-212.77	-10,303.76	9,943.01	9,872.37	70.65	140.742		
7,400.00	7,176.81	7,051.52	6,902.43	40.55	39.79	21.05	-214.08	-10,305.35	9,860.68	9,789.45	71.22	138.448		
7,500.00	7,214.77	7,095.08	6,945.96	41.30	39.95	24.73	-214.97	-10,306.65	9,770.63	9,698.93	71.70	136.269		
7,600.00	7,238.02	7,122.93	6,973.79	42.22	40.05	34.72	-215.45	-10,307.46	9,675.09	9,603.04	72.05	134.275		
7,700.00	7,246.01	7,134.50	6,985.35	43.32	40.09	73.76	-215.62	-10,307.79	9,576.42	9,504.14	72.28	132.485		
7,800.00	7,245.50	7,137.01	6,987.87	44.65	40.10	77.85	-215.65	-10,307.86	9,476.96	9,404.51	72.45	130.813		
7,900.00	7,244.97	7,139.49	6,990.35	46.21	40.11	77.99	-215.69	-10,307.93	9,377.51	9,304.90	72.62	129.138		
8,000.00	7,244.44	7,141.97	6,992.82	47.99	40.12	78.13	-215.72	-10,308.00	9,278.07	9,205.28	72.79	127.460		
8,100.00	7,243.91	7,144.44	6,995.29	49.96	40.13	78.27	-215.76	-10,308.07	9,178.64	9,105.67	72.98	125.778		
8,200.00	7,243.39	7,146.90	6,997.75	52.10	40.13	78.41	-215.79	-10,308.14	9,079.23	9,006.06	73.17	124.091		
8,300.00	7,242.86	7,151.34	7,002.19	54.38	40.15	78.66	-215.85	-10,308.27	8,979.83	8,906.46	73.37	122.390		
8,400.00	7,242.33	7,155.77	7,006.61	56.78	40.17	78.92	-215.91	-10,308.40	8,880.43	8,806.85	73.58	120.685		
8,500.00	7,241.80	7,160.10	7,010.94	59.28	40.18	79.16	-215.96	-10,308.52	8,781.06	8,707.25	73.80	118.978		
8,600.00	7,241.27	7,164.33	7,015.18	61.88	40.20	79.41	-216.01	-10,308.63	8,681.69	8,607.66	74.03	117.268		
8,700.00	7,240.74	7,168.48	7,019.32	64.54	40.21	79.64	-216.07	-10,308.75	8,582.34	8,508.07	74.27	115.557		
8,800.00	7,240.21	7,172.54	7,023.37	67.27	40.23	79.88	-216.12	-10,308.86	8,483.00	8,408.49	74.52	113.842		
8,900.00	7,239.68	7,176.51	7,027.34	70.06	40.24	80.10	-216.16	-10,308.96	8,383.68	8,308.91	74.77	112.126		
9,000.00	7,239.16	7,180.39	7,031.23	72.89	40.25	80.33	-216.21	-10,309.07	8,284.37	8,209.34	75.03	110.407		
9,100.00	7,238.63	7,184.20	7,035.03	75.77	40.27	80.55	-216.26	-10,309.17	8,185.08	8,109.77	75.31	108.687		
9,200.00	7,238.10	7,187.93	7,038.76	78.69	40.28	80.76	-216.30	-10,309.27	8,085.80	8,010.21	75.59	106.964		
9,300.00	7,237.57	7,191.58	7,042.41	81.64	40.29	80.97	-216.34	-10,309.36	7,986.55	7,910.66	75.89	105.240		
9,400.00	7,237.04	7,195.16	7,045.99	84.62	40.31	81.18	-216.38	-10,309.45	7,887.31	7,811.11	76.20	103.514		
9,500.00	7,236.51	7,198.67	7,049.49	87.63	40.32	81.38	-216.42	-10,309.54	7,788.08	7,711.57	76.51	101.787		
9,600.00	7,235.98	7,202.10	7,052.93	90.66	40.33	81.58	-216.46	-10,309.63	7,688.88	7,612.04	76.84	100.058		
9,700.00	7,235.45	7,205.48	7,056.30	93.72	40.34	81.78	-216.50	-10,309.72	7,589.70	7,512.51	77.19	98.329		
9,800.00	7,234.93	7,208.78	7,059.61	96.79	40.36	81.97	-216.54	-10,309.80	7,490.54	7,412.99	77.54	96.598		
9,900.00	7,234.40	7,212.02	7,062.85	99.88	40.37	82.16	-216.57	-10,309.88	7,391.40	7,313.48	77.91	94.866		
10,000.00	7,233.87	7,215.21	7,066.03	102.98	40.38	82.34	-216.60	-10,309.96	7,292.28	7,213.98	78.30	93.134		
10,100.00	7,233.34	7,218.33	7,069.15	106.10	40.39	82.53	-216.64	-10,310.03	7,193.19	7,114.49	78.70	91.401		
10,200.00	7,232.81	7,221.39	7,072.21	109.23	40.40	82.70	-216.67	-10,310.11	7,094.12	7,015.00	79.11	89.669		
10,300.00	7,232.28	7,224.40	7,075.22	112.38	40.41	82.88	-216.70	-10,310.18	6,995.07	6,915.53	79.55	87.936		
10,400.00	7,231.75	7,227.35	7,078.17	115.53	40.42	83.05	-216.73	-10,310.25	6,896.06	6,816.06	80.00	86.204		
10,500.00	7,231.23	7,230.25	7,081.07	118.70	40.43	83.22	-216.76	-10,310.32	6,797.07	6,716.60	80.47	84.472		
10,600.00	7,230.70	7,233.10	7,083.91	121.87	40.44	83.39	-216.79	-10,310.39	6,698.11	6,617.15	80.95	82.741		
10,700.00	7,230.17	7,235.89	7,086.71	125.05	40.45	83.55	-216.82	-10,310.45	6,599.18	6,517.72	81.46	81.011		
10,800.00	7,229.64	7,238.64	7,089.45	128.25	40.46	83.71	-216.85	-10,310.52	6,500.28	6,418.29	81.99	79.283		
10,900.00	7,229.11	7,241.34	7,092.15	131.44	40.47	83.87	-216.87	-10,310.58	6,401.42	6,318.88	82.54	77.557		
11,000.00	7,228.58	7,243.99	7,094.80	134.65	40.48	84.03	-216.90	-10,310.64	6,302.59	6,219.48	83.11	75.833		
11,100.00	7,228.05	7,246.59	7,097.41	137.86	40.49	84.18	-216.92	-10,310.70	6,203.80	6,120.09	83.71	74.111		
11,200.00	7,227.52	7,249.16	7,099.97	141.08	40.50	84.33	-216.95	-10,310.76	6,105.05	6,020.71	84.33	72.392		
11,300.00	7,227.00	7,251.68	7,102.49	144.30	40.51	84.48	-216.97	-10,310.82	6,006.33	5,921.35	84.98	70.677		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH												Offset Site Error: 0.00 ft	
Survey Program: 78-MWD												Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
11,400.00	7,226.47	7,254.15	7,104.96	147.52	40.52	84.63	-216.99	-10,310.87	5,907.66	5,822.00	85.66	68.965	
11,500.00	7,225.94	7,256.59	7,107.40	150.76	40.53	84.77	-217.02	-10,310.92	5,809.04	5,722.67	86.37	67.258	
11,600.00	7,225.41	7,258.98	7,109.79	153.99	40.54	84.91	-217.04	-10,310.98	5,710.46	5,623.35	87.11	65.555	
11,700.00	7,224.88	7,261.34	7,112.15	157.23	40.55	85.05	-217.06	-10,311.03	5,611.93	5,524.05	87.88	63.858	
11,800.00	7,224.35	7,263.66	7,114.46	160.48	40.55	85.19	-217.08	-10,311.08	5,513.46	5,424.77	88.69	62.166	
11,900.00	7,223.82	7,265.94	7,116.74	163.72	40.56	85.32	-217.10	-10,311.13	5,415.04	5,325.50	89.53	60.481	
12,000.00	7,223.29	7,268.18	7,118.99	166.98	40.57	85.45	-217.12	-10,311.18	5,316.67	5,226.26	90.42	58.802	
12,100.00	7,222.77	7,270.39	7,121.19	170.23	40.58	85.58	-217.14	-10,311.23	5,218.37	5,127.03	91.34	57.130	
12,200.00	7,222.24	7,272.56	7,123.37	173.49	40.59	85.71	-217.16	-10,311.27	5,120.14	5,027.83	92.31	55.467	
12,300.00	7,221.71	7,274.71	7,125.51	176.75	40.59	85.84	-217.18	-10,311.32	5,021.97	4,928.65	93.32	53.812	
12,400.00	7,221.18	7,276.85	7,127.65	180.01	40.60	85.96	-217.20	-10,311.36	4,923.88	4,829.49	94.39	52.167	
12,500.00	7,220.65	7,279.02	7,129.82	183.28	40.61	86.09	-217.21	-10,311.41	4,825.86	4,730.36	95.50	50.531	
12,600.00	7,220.12	7,281.15	7,131.95	186.54	40.62	86.22	-217.23	-10,311.45	4,727.92	4,631.25	96.67	48.906	
12,700.00	7,219.59	7,283.25	7,134.05	189.81	40.62	86.34	-217.25	-10,311.50	4,630.08	4,532.18	97.90	47.293	
12,800.00	7,219.06	7,285.32	7,136.12	193.09	40.63	86.47	-217.27	-10,311.54	4,532.33	4,433.13	99.19	45.691	
12,900.00	7,218.54	7,287.35	7,138.15	196.36	40.64	86.59	-217.28	-10,311.58	4,434.67	4,334.12	100.55	44.103	
13,000.00	7,218.01	7,289.36	7,140.16	199.64	40.64	86.70	-217.30	-10,311.62	4,337.12	4,235.14	101.98	42.528	
13,100.00	7,217.48	7,291.33	7,142.13	202.92	40.65	86.82	-217.32	-10,311.66	4,239.69	4,136.20	103.49	40.968	
13,200.00	7,216.95	7,293.27	7,144.07	206.20	40.66	86.94	-217.33	-10,311.70	4,142.38	4,037.30	105.07	39.423	
13,300.00	7,216.42	7,295.18	7,145.98	209.48	40.67	87.05	-217.35	-10,311.74	4,045.20	3,938.45	106.75	37.895	
13,400.00	7,215.89	7,297.07	7,147.87	212.76	40.67	87.16	-217.37	-10,311.77	3,948.15	3,839.64	108.51	36.384	
13,500.00	7,215.36	7,298.92	7,149.72	216.05	40.68	87.27	-217.38	-10,311.81	3,851.26	3,740.89	110.38	34.892	
13,600.00	7,214.84	7,300.75	7,151.55	219.33	40.68	87.38	-217.40	-10,311.85	3,754.53	3,642.18	112.35	33.418	
13,700.00	7,214.31	7,302.55	7,153.35	222.62	40.69	87.49	-217.41	-10,311.88	3,657.98	3,543.54	114.44	31.965	
13,800.00	7,213.78	7,304.33	7,155.12	225.91	40.70	87.59	-217.43	-10,311.92	3,561.62	3,444.97	116.65	30.533	
13,900.00	7,213.25	7,306.08	7,156.87	229.20	40.70	87.70	-217.44	-10,311.95	3,465.46	3,346.46	118.99	29.123	
14,000.00	7,212.72	7,307.80	7,158.60	232.49	40.71	87.80	-217.46	-10,311.98	3,369.52	3,248.04	121.48	27.736	
14,100.00	7,212.19	7,309.50	7,160.30	235.79	40.72	87.90	-217.47	-10,312.02	3,273.83	3,149.70	124.13	26.374	
14,200.00	7,211.66	7,311.18	7,161.97	239.08	40.72	88.00	-217.48	-10,312.05	3,178.40	3,051.45	126.95	25.037	
14,300.00	7,211.13	7,312.83	7,163.62	242.38	40.73	88.10	-217.50	-10,312.08	3,083.26	2,953.32	129.95	23.727	
14,400.00	7,210.61	7,314.46	7,165.25	245.67	40.73	88.19	-217.51	-10,312.11	2,988.44	2,855.29	133.14	22.445	
14,500.00	7,210.08	7,316.06	7,166.85	248.97	40.74	88.29	-217.52	-10,312.14	2,893.96	2,757.40	136.56	21.192	
14,600.00	7,209.55	7,317.65	7,168.44	252.27	40.74	88.38	-217.54	-10,312.17	2,799.87	2,659.66	140.21	19.969	
14,700.00	7,209.02	7,319.21	7,170.00	255.57	40.75	88.47	-217.55	-10,312.20	2,706.20	2,562.08	144.12	18.777	
14,800.00	7,208.49	7,320.75	7,171.54	258.87	40.75	88.57	-217.56	-10,312.23	2,613.00	2,464.68	148.32	17.617	
14,900.00	7,207.96	7,322.27	7,173.06	262.17	40.76	88.66	-217.58	-10,312.25	2,520.32	2,367.49	152.82	16.492	
15,000.00	7,207.43	7,323.77	7,174.56	265.47	40.77	88.75	-217.59	-10,312.28	2,428.22	2,270.55	157.67	15.401	
15,081.89	7,207.00	7,324.98	7,175.77	268.17	40.77	88.82	-217.60	-10,312.30	2,353.28	2,191.37	161.91	14.535 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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	38.00	3.28	3.28	-90.75	-119.25	-9,146.67	9,147.53					
100.00	100.00	62.00	100.00	3.28	3.45	-90.75	-119.25	-9,146.67	9,147.45	9,140.71	6.74	1,357.461		
200.00	200.00	162.00	200.00	3.34	5.10	-90.75	-119.25	-9,146.67	9,147.45	9,139.01	8.44	1,083.750		
300.00	299.98	261.98	299.98	3.44	8.09	81.23	-119.25	-9,146.67	9,147.18	9,135.65	11.53	793.062		
400.00	399.84	361.84	399.84	3.59	11.37	81.28	-119.25	-9,146.67	9,146.38	9,131.42	14.96	611.387		
500.00	499.45	461.45	499.45	3.80	14.73	81.36	-119.25	-9,146.67	9,145.06	9,126.53	18.53	493.549		
600.00	598.70	560.70	598.70	4.06	18.13	81.47	-119.25	-9,146.67	9,143.23	9,121.04	22.18	412.142		
700.00	697.49	659.49	697.49	4.38	21.53	81.59	-119.25	-9,146.67	9,140.92	9,115.01	25.90	352.878		
800.00	796.13	758.13	796.13	4.74	24.94	81.69	-119.25	-9,146.67	9,138.50	9,108.82	29.68	307.913		
900.00	894.78	856.78	894.78	5.15	28.36	81.80	-119.25	-9,146.67	9,136.12	9,102.62	33.50	272.743		
1,000.00	993.43	955.43	993.43	5.58	31.78	81.90	-119.25	-9,146.67	9,133.76	9,096.41	37.35	244.555		
1,100.00	1,092.07	1,054.07	1,092.07	6.03	35.21	82.00	-119.25	-9,146.67	9,131.43	9,090.20	41.23	221.499		
1,200.00	1,190.72	1,152.72	1,190.72	6.50	38.64	82.10	-119.25	-9,146.67	9,129.13	9,084.01	45.12	202.318		
1,300.00	1,289.36	1,251.36	1,289.36	6.98	42.07	82.20	-119.25	-9,146.67	9,126.86	9,077.82	49.04	186.127		
1,400.00	1,388.01	1,350.01	1,388.01	7.47	45.50	82.30	-119.25	-9,146.67	9,124.62	9,071.65	52.96	172.287		
1,500.00	1,486.65	1,448.65	1,486.65	7.97	48.94	82.40	-119.25	-9,146.67	9,122.40	9,065.50	56.90	160.329		
1,600.00	1,585.30	1,547.30	1,585.30	8.48	52.37	82.50	-119.25	-9,146.67	9,120.22	9,059.38	60.84	149.898		
1,700.00	1,683.94	1,645.94	1,683.94	9.00	55.81	82.60	-119.25	-9,146.67	9,118.06	9,053.27	64.79	140.722		
1,800.00	1,782.59	1,744.59	1,782.59	9.52	59.25	82.70	-119.25	-9,146.67	9,115.94	9,047.18	68.75	132.591		
1,900.00	1,881.24	1,843.24	1,881.24	10.05	62.69	82.80	-119.25	-9,146.67	9,113.84	9,041.12	72.72	125.336		
2,000.00	1,979.88	1,941.88	1,979.88	10.58	66.13	82.90	-119.25	-9,146.67	9,111.77	9,035.09	76.68	118.824		
2,100.00	2,078.53	2,040.53	2,078.53	11.11	69.57	83.00	-119.25	-9,146.67	9,109.73	9,029.08	80.65	112.949		
2,200.00	2,177.17	2,139.17	2,177.17	11.64	73.01	83.11	-119.25	-9,146.67	9,107.72	9,023.09	84.63	107.621		
2,300.00	2,275.82	2,237.82	2,275.82	12.18	76.45	83.21	-119.25	-9,146.67	9,105.74	9,017.14	88.60	102.768		
2,400.00	2,374.46	2,336.46	2,374.46	12.72	79.89	83.31	-119.25	-9,146.67	9,103.79	9,011.20	92.58	98.330		
2,500.00	2,473.11	2,435.11	2,473.11	13.26	83.33	83.41	-119.25	-9,146.67	9,101.87	9,005.30	96.57	94.256		
2,600.00	2,571.76	2,533.76	2,571.76	13.80	86.77	83.51	-119.25	-9,146.67	9,099.97	8,999.42	100.55	90.503		
2,700.00	2,670.40	2,632.40	2,670.40	14.35	90.21	83.61	-119.25	-9,146.67	9,098.11	8,993.57	104.53	87.035		
2,800.00	2,769.05	2,731.05	2,769.05	14.89	93.65	83.71	-119.25	-9,146.67	9,096.27	8,987.75	108.52	83.821		
2,900.00	2,867.69	2,829.69	2,867.69	15.44	97.09	83.81	-119.25	-9,146.67	9,094.47	8,981.96	112.51	80.834		
3,000.00	2,966.34	2,928.34	2,966.34	15.99	100.54	83.92	-119.25	-9,146.67	9,092.69	8,976.19	116.50	78.051		
3,100.00	3,064.98	3,026.98	3,064.98	16.53	103.98	84.02	-119.25	-9,146.67	9,090.94	8,970.45	120.49	75.452		
3,200.00	3,163.63	3,125.63	3,163.63	17.08	107.42	84.12	-119.25	-9,146.67	9,089.22	8,964.75	124.48	73.019		
3,300.00	3,262.27	3,224.27	3,262.27	17.63	110.86	84.22	-119.25	-9,146.67	9,087.53	8,959.06	128.47	70.737		
3,400.00	3,360.92	3,322.92	3,360.92	18.18	114.30	84.32	-119.25	-9,146.67	9,085.87	8,953.41	132.46	68.592		
3,500.00	3,459.57	3,421.57	3,459.57	18.74	117.75	84.42	-119.25	-9,146.67	9,084.24	8,947.79	136.46	66.572		
3,600.00	3,558.21	3,520.21	3,558.21	19.29	121.19	84.52	-119.25	-9,146.67	9,082.64	8,942.19	140.45	64.668		
3,700.00	3,656.86	3,618.86	3,656.86	19.84	124.63	84.63	-119.25	-9,146.67	9,081.07	8,936.63	144.45	62.868		
3,800.00	3,755.50	3,717.50	3,755.50	20.39	128.07	84.73	-119.25	-9,146.67	9,079.53	8,931.09	148.44	61.166		
3,900.00	3,854.15	3,816.15	3,854.15	20.95	131.52	84.83	-119.25	-9,146.67	9,078.02	8,925.58	152.44	59.552		
4,000.00	3,952.79	3,914.79	3,952.79	21.50	134.96	84.93	-119.25	-9,146.67	9,076.53	8,920.10	156.43	58.021		
4,100.00	4,051.44	4,013.44	4,051.44	22.05	138.40	85.03	-119.25	-9,146.67	9,075.08	8,914.65	160.43	56.567		
4,200.00	4,150.08	4,112.08	4,150.08	22.61	141.85	85.13	-119.25	-9,146.67	9,073.65	8,909.22	164.43	55.183		
4,300.00	4,248.73	4,210.73	4,248.73	23.16	145.29	85.24	-119.25	-9,146.67	9,072.26	8,903.83	168.43	53.865		
4,400.00	4,347.38	4,309.38	4,347.38	23.72	148.73	85.34	-119.25	-9,146.67	9,070.89	8,898.47	172.43	52.608		
4,500.00	4,446.02	4,408.02	4,446.02	24.27	152.17	85.44	-119.25	-9,146.67	9,069.56	8,893.13	176.42	51.408		
4,600.00	4,544.67	4,506.67	4,544.67	24.83	155.62	85.54	-119.25	-9,146.67	9,068.25	8,887.83	180.42	50.261		
4,700.00	4,643.31	4,605.31	4,643.31	25.39	159.06	85.64	-119.25	-9,146.67	9,066.97	8,882.55	184.42	49.164		
4,800.00	4,741.96	4,703.96	4,741.96	25.94	162.50	85.75	-119.25	-9,146.67	9,065.72	8,877.30	188.42	48.114		
4,900.00	4,840.60	4,802.60	4,840.60	26.50	165.95	85.85	-119.25	-9,146.67	9,064.50	8,872.08	192.42	47.107		
5,000.00	4,939.25	4,901.25	4,939.25	27.05	169.39	85.95	-119.25	-9,146.67	9,063.31	8,866.89	196.42	46.142		
5,100.00	5,037.90	5,000.10	5,037.90	27.61	172.84	86.05	-119.25	-9,146.67	9,062.16	8,861.73	200.43	45.214		

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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,136.54	5,101.46	5,136.54	28.17	176.38	86.15	-119.25	-9,146.67	9,061.03	8,856.50	204.52	44.303		
5,300.00	5,235.19	5,202.81	5,235.19	28.72	179.91	86.26	-119.25	-9,146.67	9,059.93	8,851.31	208.62	43.428		
5,400.00	5,333.83	5,304.17	5,333.83	29.28	183.45	86.36	-119.25	-9,146.67	9,058.85	8,846.14	212.72	42.587		
5,500.00	5,432.48	5,405.52	5,432.48	29.84	186.99	86.46	-119.25	-9,146.67	9,057.81	8,841.00	216.81	41.777		
5,600.00	5,531.12	5,506.88	5,531.12	30.40	190.53	86.56	-119.25	-9,146.67	9,056.80	8,835.89	220.91	40.998		
5,700.00	5,629.77	5,608.23	5,629.77	30.95	194.07	86.67	-119.25	-9,146.67	9,055.82	8,830.82	225.00	40.248		
5,800.00	5,728.41	5,709.59	5,728.41	31.51	197.60	86.77	-119.25	-9,146.67	9,054.87	8,825.77	229.10	39.524		
5,900.00	5,827.06	5,789.06	5,827.06	32.07	200.38	86.87	-119.25	-9,146.67	9,053.94	8,821.51	232.43	38.953		
6,000.00	5,925.71	5,887.71	5,925.71	32.63	203.82	86.97	-119.25	-9,146.67	9,053.05	8,816.62	236.43	38.290		
6,100.00	6,024.35	5,986.35	6,024.35	33.19	207.26	87.07	-119.25	-9,146.67	9,052.19	8,811.75	240.44	37.649		
6,200.00	6,123.00	6,085.00	6,123.00	33.74	210.71	87.18	-119.25	-9,146.67	9,051.35	8,806.92	244.44	37.029		
6,300.00	6,221.64	6,183.64	6,221.64	34.30	214.15	87.28	-119.25	-9,146.67	9,050.55	8,802.11	248.44	36.429		
6,400.00	6,320.29	6,282.29	6,320.29	34.86	217.59	87.38	-119.25	-9,146.67	9,049.77	8,797.33	252.44	35.849		
6,500.00	6,418.93	6,380.93	6,418.93	35.42	221.04	87.48	-119.25	-9,146.67	9,049.03	8,792.58	256.45	35.286		
6,600.00	6,517.58	6,479.58	6,517.58	35.98	224.48	87.59	-119.25	-9,146.67	9,048.31	8,787.87	260.45	34.741		
6,700.00	6,616.23	6,578.23	6,616.23	36.54	227.92	87.69	-119.25	-9,146.67	9,047.63	8,783.18	264.45	34.213		
6,800.00	6,714.51	6,676.51	6,714.51	37.10	231.36	53.07	-119.25	-9,146.67	9,041.59	8,773.15	268.44	33.682		
6,900.00	6,810.42	6,772.42	6,810.42	37.66	234.70	34.71	-119.25	-9,146.67	9,020.38	8,748.03	272.34	33.121		
7,000.00	6,901.58	6,863.58	6,901.58	38.21	237.89	27.04	-119.25	-9,146.67	8,984.28	8,708.22	276.06	32.545		
7,100.00	6,985.76	6,947.76	6,985.76	38.76	240.82	23.54	-119.25	-9,146.67	8,934.20	8,654.70	279.50	31.965		
7,200.00	7,060.88	7,022.88	7,060.88	39.32	243.45	22.22	-119.25	-9,146.67	8,871.37	8,588.79	282.58	31.394		
7,300.00	7,125.09	7,087.09	7,125.09	39.90	245.69	22.52	-119.25	-9,146.67	8,797.34	8,512.09	285.24	30.841		
7,400.00	7,176.81	7,138.81	7,176.81	40.55	247.49	24.67	-119.25	-9,146.67	8,713.92	8,426.50	287.42	30.318		
7,500.00	7,214.77	7,176.77	7,214.77	41.30	248.82	30.06	-119.25	-9,146.67	8,623.17	8,334.11	289.06	29.831		
7,600.00	7,238.02	7,200.02	7,238.02	42.22	249.63	44.10	-119.25	-9,146.67	8,527.31	8,237.17	290.14	29.391		
7,700.00	7,246.01	7,208.01	7,246.01	43.32	249.91	88.86	-119.25	-9,146.67	8,428.69	8,138.06	290.63	29.002		
7,800.00	7,245.50	7,207.50	7,245.50	44.65	249.89	92.37	-119.25	-9,146.67	8,329.49	8,038.69	290.80	28.644		
7,900.00	7,244.97	7,206.97	7,244.97	46.21	249.87	92.34	-119.25	-9,146.67	8,230.30	7,939.33	290.98	28.285		
8,000.00	7,244.44	7,206.44	7,244.44	47.99	249.85	92.31	-119.25	-9,146.67	8,131.14	7,839.97	291.16	27.926		
8,100.00	7,243.91	7,205.91	7,243.91	49.96	249.83	92.29	-119.25	-9,146.67	8,032.00	7,740.63	291.36	27.567		
8,200.00	7,243.39	7,205.39	7,243.39	52.10	249.82	92.26	-119.25	-9,146.67	7,932.87	7,641.30	291.57	27.207		
8,300.00	7,242.86	7,204.86	7,242.86	54.38	249.80	92.23	-119.25	-9,146.67	7,833.78	7,541.98	291.79	26.847		
8,400.00	7,242.33	7,204.33	7,242.33	56.78	249.78	92.20	-119.25	-9,146.67	7,734.70	7,442.68	292.02	26.487		
8,500.00	7,241.80	7,203.80	7,241.80	59.28	249.76	92.17	-119.25	-9,146.67	7,635.65	7,343.38	292.27	26.126		
8,600.00	7,241.27	7,203.27	7,241.27	61.88	249.74	92.14	-119.25	-9,146.67	7,536.62	7,244.10	292.52	25.764		
8,700.00	7,240.74	7,202.74	7,240.74	64.54	249.72	92.11	-119.25	-9,146.67	7,437.62	7,144.83	292.79	25.402		
8,800.00	7,240.21	7,202.21	7,240.21	67.27	249.71	92.08	-119.25	-9,146.67	7,338.65	7,045.57	293.08	25.040		
8,900.00	7,239.68	7,201.68	7,239.68	70.06	249.69	92.06	-119.25	-9,146.67	7,239.70	6,946.33	293.37	24.677		
9,000.00	7,239.16	7,201.16	7,239.16	72.89	249.67	92.03	-119.25	-9,146.67	7,140.78	6,847.10	293.69	24.314		
9,100.00	7,238.63	7,200.63	7,238.63	75.77	249.65	92.00	-119.25	-9,146.67	7,041.90	6,747.88	294.01	23.951		
9,200.00	7,238.10	7,200.10	7,238.10	78.69	249.63	91.97	-119.25	-9,146.67	6,943.04	6,648.68	294.36	23.587		
9,300.00	7,237.57	7,200.43	7,237.57	81.64	249.64	91.94	-119.25	-9,146.67	6,844.22	6,549.47	294.75	23.220		
9,400.00	7,237.04	7,200.96	7,237.04	84.62	249.66	91.91	-119.25	-9,146.67	6,745.44	6,450.27	295.17	22.853		
9,500.00	7,236.51	7,201.49	7,236.51	87.63	249.68	91.88	-119.25	-9,146.67	6,646.69	6,351.08	295.60	22.485		
9,600.00	7,235.98	7,202.02	7,235.98	90.66	249.70	91.86	-119.25	-9,146.67	6,547.98	6,251.92	296.06	22.117		
9,700.00	7,235.45	7,202.55	7,235.45	93.72	249.72	91.83	-119.25	-9,146.67	6,449.30	6,152.77	296.53	21.749		
9,800.00	7,234.93	7,203.07	7,234.93	96.79	249.74	91.80	-119.25	-9,146.67	6,350.67	6,053.64	297.03	21.380		
9,900.00	7,234.40	7,203.60	7,234.40	99.88	249.75	91.77	-119.25	-9,146.67	6,252.09	5,954.53	297.55	21.012		
10,000.00	7,233.87	7,204.13	7,233.87	102.98	249.77	91.74	-119.25	-9,146.67	6,153.54	5,855.45	298.10	20.643		
10,100.00	7,233.34	7,204.66	7,233.34	106.10	249.79	91.71	-119.25	-9,146.67	6,055.05	5,756.38	298.67	20.274		
10,200.00	7,232.81	7,205.19	7,232.81	109.23	249.81	91.68	-119.25	-9,146.67	5,956.61	5,657.34	299.26	19.904		
10,300.00	7,232.28	7,205.72	7,232.28	112.38	249.83	91.65	-119.25	-9,146.67	5,858.21	5,558.33	299.89	19.535		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.75	7,206.25	7,231.75	115.53	249.85	91.63	-119.25	-9,146.67	5,759.88	5,459.34	300.54	19.165		
10,500.00	7,231.23	7,206.78	7,231.23	118.70	249.87	91.60	-119.25	-9,146.67	5,661.60	5,360.37	301.23	18.795		
10,600.00	7,230.70	7,207.30	7,230.70	121.87	249.88	91.57	-119.25	-9,146.67	5,563.39	5,261.44	301.95	18.425		
10,700.00	7,230.17	7,207.83	7,230.17	125.05	249.90	91.54	-119.25	-9,146.67	5,465.23	5,162.54	302.70	18.055		
10,800.00	7,229.64	7,208.36	7,229.64	128.25	249.92	91.51	-119.25	-9,146.67	5,367.15	5,063.66	303.49	17.685		
10,900.00	7,229.11	7,208.89	7,229.11	131.44	249.94	91.48	-119.25	-9,146.67	5,269.14	4,964.82	304.31	17.315		
11,000.00	7,228.58	7,209.42	7,228.58	134.65	249.96	91.45	-119.25	-9,146.67	5,171.20	4,866.02	305.18	16.945		
11,100.00	7,228.05	7,209.95	7,228.05	137.86	249.98	91.42	-119.25	-9,146.67	5,073.35	4,767.26	306.09	16.575		
11,200.00	7,227.52	7,189.52	7,227.52	141.08	249.26	91.40	-119.25	-9,146.67	4,975.58	4,669.26	306.32	16.243		
11,300.00	7,227.00	7,189.00	7,227.00	144.30	249.24	91.37	-119.25	-9,146.67	4,877.90	4,570.61	307.29	15.874		
11,400.00	7,226.47	7,188.47	7,226.47	147.52	249.23	91.34	-119.25	-9,146.67	4,780.32	4,472.01	308.31	15.505		
11,500.00	7,225.94	7,187.94	7,225.94	150.76	249.21	91.31	-119.25	-9,146.67	4,682.84	4,373.46	309.38	15.136		
11,600.00	7,225.41	7,187.41	7,225.41	153.99	249.19	91.28	-119.25	-9,146.67	4,585.46	4,274.95	310.51	14.768		
11,700.00	7,224.88	7,186.88	7,224.88	157.23	249.17	91.25	-119.25	-9,146.67	4,488.21	4,176.50	311.70	14.399		
11,800.00	7,224.35	7,186.35	7,224.35	160.48	249.15	91.22	-119.25	-9,146.67	4,391.07	4,078.11	312.96	14.031		
11,900.00	7,223.82	7,185.82	7,223.82	163.72	249.13	91.20	-119.25	-9,146.67	4,294.07	3,979.78	314.29	13.663		
12,000.00	7,223.29	7,185.29	7,223.29	166.98	249.12	91.17	-119.25	-9,146.67	4,197.21	3,881.52	315.69	13.295		
12,100.00	7,222.77	7,184.77	7,222.77	170.23	249.10	91.14	-119.25	-9,146.67	4,100.50	3,783.32	317.17	12.928		
12,200.00	7,222.24	7,184.24	7,222.24	173.49	249.08	91.11	-119.25	-9,146.67	4,003.95	3,685.21	318.74	12.562		
12,300.00	7,221.71	7,183.71	7,221.71	176.75	249.06	91.08	-119.25	-9,146.67	3,907.57	3,587.17	320.40	12.196		
12,400.00	7,221.18	7,183.18	7,221.18	180.01	249.04	91.05	-119.25	-9,146.67	3,811.38	3,489.23	322.15	11.831		
12,500.00	7,220.65	7,182.65	7,220.65	183.28	249.02	91.02	-119.25	-9,146.67	3,715.39	3,391.38	324.01	11.467		
12,600.00	7,220.12	7,182.12	7,220.12	186.54	249.00	90.99	-119.25	-9,146.67	3,619.62	3,293.64	325.98	11.104		
12,700.00	7,219.59	7,181.59	7,219.59	189.81	248.99	90.97	-119.25	-9,146.67	3,524.08	3,196.01	328.07	10.742		
12,800.00	7,219.06	7,181.06	7,219.06	193.09	248.97	90.94	-119.25	-9,146.67	3,428.80	3,098.51	330.29	10.381		
12,900.00	7,218.54	7,180.54	7,218.54	196.36	248.95	90.91	-119.25	-9,146.67	3,333.79	3,001.14	332.65	10.022		
13,000.00	7,218.01	7,180.01	7,218.01	199.64	248.93	90.88	-119.25	-9,146.67	3,239.09	2,903.93	335.16	9.664		
13,100.00	7,217.48	7,179.48	7,217.48	202.92	248.91	90.85	-119.25	-9,146.67	3,144.71	2,806.88	337.83	9.308		
13,200.00	7,216.95	7,178.95	7,216.95	206.20	248.89	90.82	-119.25	-9,146.67	3,050.69	2,710.01	340.68	8.955		
13,300.00	7,216.42	7,178.42	7,216.42	209.48	248.88	90.79	-119.25	-9,146.67	2,957.06	2,613.34	343.72	8.603		
13,400.00	7,215.89	7,177.89	7,215.89	212.76	248.86	90.76	-119.25	-9,146.67	2,863.87	2,516.90	346.97	8.254		
13,500.00	7,215.36	7,177.36	7,215.36	216.05	248.84	90.74	-119.25	-9,146.67	2,771.14	2,420.70	350.44	7.908		
13,600.00	7,214.84	7,176.84	7,214.84	219.33	248.82	90.71	-119.25	-9,146.67	2,678.94	2,324.79	354.16	7.564		
13,700.00	7,214.31	7,176.31	7,214.31	222.62	248.80	90.68	-119.25	-9,146.67	2,587.32	2,229.19	358.14	7.224		
13,800.00	7,213.78	7,175.78	7,213.78	225.91	248.78	90.65	-119.25	-9,146.67	2,496.35	2,133.94	362.41	6.888		
13,900.00	7,213.25	7,175.25	7,213.25	229.20	248.76	90.62	-119.25	-9,146.67	2,406.09	2,039.09	366.99	6.556		
14,000.00	7,212.72	7,174.72	7,212.72	232.49	248.75	90.59	-119.25	-9,146.67	2,316.63	1,944.71	371.92	6.229		
14,100.00	7,212.19	7,174.19	7,212.19	235.79	248.73	90.56	-119.25	-9,146.67	2,228.06	1,850.84	377.22	5.906		
14,200.00	7,211.66	7,173.66	7,211.66	239.08	248.71	90.53	-119.25	-9,146.67	2,140.51	1,757.58	382.93	5.590		
14,300.00	7,211.13	7,173.13	7,211.13	242.38	248.69	90.51	-119.25	-9,146.67	2,054.09	1,665.01	389.08	5.279		
14,400.00	7,210.61	7,172.61	7,210.61	245.67	248.67	90.48	-119.25	-9,146.67	1,968.96	1,573.25	395.70	4.976		
14,500.00	7,210.08	7,172.08	7,210.08	248.97	248.65	90.45	-119.25	-9,146.67	1,885.28	1,482.44	402.84	4.680		
14,600.00	7,209.55	7,171.55	7,209.55	252.27	248.64	90.42	-119.25	-9,146.67	1,803.27	1,392.75	410.52	4.393		
14,700.00	7,209.02	7,171.02	7,209.02	255.57	248.62	90.39	-119.25	-9,146.67	1,723.16	1,304.38	418.79	4.115		
14,800.00	7,208.49	7,170.49	7,208.49	258.87	248.60	90.36	-119.25	-9,146.67	1,645.23	1,217.58	427.66	3.847		
14,900.00	7,207.96	7,169.96	7,207.96	262.17	248.58	90.33	-119.25	-9,146.67	1,569.81	1,132.66	437.15	3.591		
15,000.00	7,207.43	7,169.43	7,207.43	265.47	248.56	90.31	-119.25	-9,146.67	1,497.26	1,050.01	447.26	3.348		
15,081.89	7,207.00	7,169.00	7,207.00	268.17	248.55	90.28	-119.25	-9,146.67	1,440.31	984.34	455.97	3.159 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	25.00	3.28	3.28	-90.93	-148.40	-9,143.90	9,145.14					
100.00	100.00	111.39	136.39	3.28	3.29	-90.93	-148.68	-9,143.54	9,144.82	9,138.24	6.58	1,390.348		
200.00	200.00	185.80	210.80	3.34	3.34	-90.93	-148.60	-9,143.35	9,144.56	9,137.89	6.67	1,370.478		
300.00	299.98	260.38	285.37	3.44	3.41	81.04	-148.55	-9,143.36	9,144.31	9,137.46	6.85	1,335.627		
400.00	399.84	347.29	372.29	3.59	3.53	81.08	-148.64	-9,143.56	9,143.73	9,136.61	7.12	1,285.040		
500.00	499.45	435.43	460.42	3.80	3.68	81.15	-148.76	-9,143.88	9,142.74	9,135.26	7.48	1,222.769		
600.00	598.70	610.99	635.98	4.06	4.08	81.31	-149.25	-9,144.18	9,141.17	9,133.03	8.14	1,123.437		
700.00	697.49	678.45	703.44	4.38	4.26	81.41	-149.59	-9,143.99	9,138.55	9,129.91	8.63	1,058.379		
800.00	796.13	727.00	751.99	4.74	4.40	81.46	-149.83	-9,144.03	9,136.23	9,127.09	9.14	999.913		
900.00	894.78	727.00	751.99	5.15	4.40	81.46	-149.83	-9,144.03	9,134.79	9,125.25	9.54	957.602		
1,000.00	993.43	797.97	822.96	5.58	4.61	81.53	-149.72	-9,144.78	9,133.60	9,123.43	10.18	897.483		
1,054.72	1,047.41	815.39	840.38	5.82	4.66	81.55	-149.56	-9,145.14	9,133.41	9,122.94	10.47	871.964		
1,100.00	1,092.07	856.00	880.96	6.03	4.78	81.60	-148.99	-9,146.25	9,133.54	9,122.73	10.81	845.237		
1,107.92	1,099.89	856.00	880.96	6.06	4.78	81.60	-148.99	-9,146.25	9,133.54	9,122.69	10.84	842.383		
1,200.00	1,190.72	856.00	880.96	6.50	4.78	81.60	-148.99	-9,146.25	9,134.00	9,122.73	11.27	810.171		
1,300.00	1,289.36	856.00	880.96	6.98	4.78	81.60	-148.99	-9,146.25	9,135.56	9,123.80	11.76	777.107		
1,400.00	1,388.01	908.53	933.44	7.47	4.95	81.66	-147.85	-9,148.40	9,137.59	9,125.18	12.41	736.115		
1,500.00	1,486.65	932.62	957.48	7.97	5.03	81.69	-147.18	-9,149.70	9,140.64	9,127.65	12.99	703.610		
1,600.00	1,585.30	984.00	1,008.72	8.48	5.20	81.75	-145.48	-9,153.11	9,144.69	9,131.02	13.67	669.123		
1,700.00	1,683.94	984.00	1,008.72	9.00	5.20	81.75	-145.48	-9,153.11	9,149.24	9,135.06	14.18	645.312		
1,800.00	1,782.59	984.00	1,008.72	9.52	5.20	81.75	-145.48	-9,153.11	9,154.88	9,140.19	14.69	623.077		
1,900.00	1,881.24	1,033.86	1,058.36	10.05	5.37	81.81	-143.26	-9,157.20	9,161.12	9,145.74	15.38	595.582		
2,000.00	1,979.88	1,060.49	1,084.84	10.58	5.47	81.85	-141.78	-9,159.68	9,168.27	9,152.27	15.99	573.215		
2,100.00	2,078.53	1,112.00	1,135.95	11.11	5.65	81.92	-138.33	-9,165.04	9,176.34	9,159.64	16.70	549.537		
2,200.00	2,177.17	1,112.00	1,135.95	11.64	5.65	81.92	-138.33	-9,165.04	9,184.96	9,167.74	17.22	533.389		
2,300.00	2,275.82	1,152.25	1,175.81	12.18	5.80	81.98	-135.12	-9,169.64	9,194.44	9,176.55	17.89	513.923		
2,400.00	2,374.46	1,190.25	1,213.37	12.72	5.95	82.04	-131.70	-9,174.23	9,204.60	9,186.05	18.56	496.052		
2,500.00	2,473.11	1,241.00	1,263.44	13.26	6.15	82.13	-126.56	-9,180.71	9,215.46	9,196.19	19.27	478.166		
2,600.00	2,571.76	1,282.17	1,303.97	13.80	6.32	82.20	-121.78	-9,186.16	9,226.90	9,206.94	19.96	462.286		
2,700.00	2,670.40	1,344.30	1,364.94	14.35	6.59	82.31	-113.28	-9,194.52	9,238.80	9,218.07	20.73	445.575		
2,800.00	2,769.05	1,369.00	1,389.11	14.89	6.70	82.36	-109.48	-9,197.89	9,251.25	9,229.89	21.36	433.190		
2,900.00	2,867.69	1,431.80	1,450.40	15.44	6.99	82.48	-99.00	-9,206.73	9,264.20	9,242.05	22.15	418.202		
3,000.00	2,966.34	1,498.00	1,514.73	15.99	7.31	82.62	-86.90	-9,216.63	9,277.98	9,255.01	22.97	403.962		
3,100.00	3,064.98	1,498.00	1,514.73	16.53	7.31	82.62	-86.90	-9,216.63	9,292.26	9,268.78	23.48	395.737		
3,200.00	3,163.63	1,545.05	1,560.27	17.08	7.55	82.73	-77.74	-9,224.05	9,307.28	9,283.06	24.22	384.267		
3,300.00	3,262.27	1,581.19	1,595.18	17.63	7.74	82.81	-70.45	-9,229.97	9,323.01	9,298.10	24.91	374.311		
3,400.00	3,360.92	1,626.00	1,638.33	18.18	7.98	82.91	-61.11	-9,237.59	9,339.43	9,313.80	25.64	364.317		
3,500.00	3,459.57	1,626.00	1,638.33	18.74	7.98	82.91	-61.11	-9,237.59	9,356.63	9,330.49	26.14	357.967		
3,600.00	3,558.21	1,694.66	1,704.15	19.29	8.37	83.07	-45.86	-9,249.76	9,374.27	9,347.26	27.01	347.114		
3,700.00	3,656.86	1,754.00	1,760.70	19.84	8.72	83.21	-31.56	-9,260.72	9,392.72	9,364.90	27.83	337.561		
3,800.00	3,755.50	1,754.00	1,760.70	20.39	8.72	83.21	-31.56	-9,260.72	9,411.77	9,383.45	28.32	332.349		
3,900.00	3,854.15	1,754.00	1,760.70	20.95	8.72	83.21	-31.56	-9,260.72	9,431.84	9,403.03	28.81	327.400		
4,000.00	3,952.79	1,816.11	1,819.51	21.50	9.12	83.36	-15.71	-9,272.86	9,452.19	9,422.53	29.66	318.673		
4,100.00	4,051.44	1,883.00	1,882.40	22.05	9.56	83.53	2.14	-9,286.98	9,473.91	9,443.37	30.54	310.187		
4,200.00	4,150.08	1,883.00	1,882.40	22.61	9.56	83.53	2.14	-9,286.98	9,495.79	9,464.77	31.02	306.105		
4,300.00	4,248.73	1,989.01	1,981.73	23.16	10.31	83.81	31.36	-9,309.77	9,518.52	9,486.35	32.17	295.879		
4,400.00	4,347.38	2,115.34	2,100.31	23.72	11.22	84.13	66.03	-9,336.12	9,540.77	9,507.30	33.47	285.073		
4,500.00	4,446.02	2,194.70	2,175.05	24.27	11.80	84.33	86.97	-9,352.69	9,563.08	9,528.62	34.46	277.484		
4,600.00	4,544.67	2,268.00	2,244.18	24.83	12.35	84.51	105.75	-9,368.20	9,585.72	9,550.30	35.42	270.635		
4,700.00	4,643.31	2,422.06	2,389.95	25.39	13.49	84.88	143.57	-9,400.68	9,608.31	9,571.39	36.91	260.301		
4,800.00	4,741.96	2,456.13	2,422.14	25.94	13.75	84.96	152.09	-9,407.91	9,631.06	9,593.45	37.61	256.070		
4,900.00	4,840.60	2,525.00	2,487.06	26.50	14.28	85.12	169.70	-9,422.65	9,654.34	9,615.80	38.54	250.493		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,000.00	4,939.25	2,599.29	2,556.96	27.05	14.86	85.30	189.15	-9,438.62	9,677.94	9,638.42	39.52	244.888		
5,100.00	5,037.90	2,653.00	2,607.50	27.61	15.28	85.44	203.29	-9,450.07	9,701.68	9,661.33	40.35	240.427		
5,200.00	5,136.54	2,708.71	2,659.81	28.17	15.73	85.57	218.21	-9,462.10	9,725.89	9,684.68	41.21	236.035		
5,300.00	5,235.19	2,744.87	2,693.64	28.72	16.02	85.66	228.14	-9,470.11	9,750.78	9,708.86	41.91	232.638		
5,400.00	5,333.83	2,782.00	2,728.29	29.28	16.32	85.76	238.54	-9,478.49	9,776.30	9,733.67	42.63	229.352		
5,500.00	5,432.48	3,038.00	2,968.22	29.84	18.42	86.38	307.66	-9,534.92	9,801.13	9,756.19	44.94	218.084		
5,600.00	5,531.12	3,097.48	3,024.19	30.40	18.91	86.52	323.26	-9,547.63	9,825.67	9,779.85	45.82	214.445		
5,700.00	5,629.77	3,135.84	3,060.18	30.95	19.22	86.61	333.52	-9,556.04	9,850.86	9,804.32	46.54	211.674		
5,800.00	5,728.41	5,800.00	3,272.91	31.51	40.79	87.14	392.11	-9,605.50	9,876.33	9,812.06	64.27	153.657		
5,900.00	5,827.06	6,044.71	5,889.76	32.07	35.14	91.22	695.09	-9,877.35	9,879.75	9,817.27	62.48	158.129		
6,000.00	5,925.71	6,185.02	6,030.04	32.63	35.54	91.34	692.22	-9,876.51	9,879.16	9,815.70	63.47	155.661		
6,100.00	6,024.35	6,284.99	6,130.00	33.19	35.82	91.42	690.43	-9,875.71	9,878.46	9,814.12	64.34	153.534		
6,200.00	6,123.00	6,374.55	6,219.54	33.74	36.08	91.50	688.96	-9,875.02	9,877.85	9,812.66	65.19	151.528		
6,300.00	6,221.64	6,530.82	6,375.79	34.30	36.54	91.64	686.85	-9,873.37	9,877.03	9,810.79	66.24	149.120		
6,400.00	6,320.29	6,598.83	6,443.79	34.86	36.74	91.70	686.26	-9,872.58	9,876.16	9,809.13	67.03	147.343		
6,500.00	6,418.93	6,677.70	6,522.65	35.42	36.98	91.78	685.78	-9,871.74	9,875.50	9,807.64	67.85	145.540		
6,600.00	6,517.58	6,755.29	6,600.24	35.98	37.22	91.85	685.24	-9,871.09	9,875.07	9,806.39	68.68	143.789		
6,700.00	6,616.23	6,842.44	6,687.38	36.54	37.49	91.93	684.67	-9,870.50	9,874.83	9,805.29	69.53	142.015		
6,800.00	6,714.51	6,922.58	6,767.53	37.10	37.74	92.01	684.11	-9,870.02	9,869.42	9,799.04	70.37	140.242		
6,900.00	6,810.42	6,992.07	6,837.01	37.66	37.97	92.09	683.56	-9,869.55	9,869.03	9,798.03	71.18	138.468		
7,000.00	6,901.58	7,073.62	6,918.54	38.21	38.19	92.17	683.01	-9,869.07	9,868.51	9,797.03	72.00	136.695		
7,100.00	6,985.76	7,158.22	7,003.12	38.76	38.47	92.25	682.47	-9,868.60	9,868.05	9,796.05	72.83	134.922		
7,200.00	7,068.88	7,241.14	7,086.03	39.32	38.73	92.33	681.93	-9,868.15	9,867.59	9,795.06	73.66	133.149		
7,300.00	7,152.09	7,324.05	7,169.94	39.87	39.00	92.41	681.40	-9,867.70	9,867.14	9,794.07	74.49	131.376		
7,400.00	7,235.30	7,406.96	7,255.84	40.43	39.26	92.49	680.87	-9,867.25	9,866.68	9,793.08	75.32	129.603		
7,500.00	7,318.51	7,489.87	7,338.73	40.98	39.52	92.57	680.34	-9,866.80	9,866.23	9,792.09	76.15	127.830		
7,600.00	7,401.72	7,572.78	7,421.62	41.54	39.78	92.65	679.81	-9,866.35	9,865.78	9,791.10	76.98	126.057		
7,700.00	7,484.93	7,655.69	7,504.52	42.10	40.04	92.73	679.28	-9,865.90	9,865.33	9,790.11	77.81	124.284		
7,800.00	7,568.14	7,738.60	7,587.43	42.66	40.30	92.81	678.75	-9,865.45	9,864.88	9,789.12	78.64	122.511		
7,900.00	7,651.35	7,821.51	7,670.34	43.22	40.56	92.89	678.22	-9,865.00	9,864.43	9,788.13	79.47	120.738		
8,000.00	7,734.56	7,904.42	7,753.25	43.78	40.82	92.97	677.69	-9,864.55	9,863.98	9,787.14	80.30	118.965		
8,100.00	7,817.77	7,987.33	7,836.16	44.34	41.08	93.05	677.16	-9,864.10	9,863.53	9,786.15	81.13	117.192		
8,200.00	7,900.98	8,070.24	7,919.07	44.90	41.34	93.13	676.63	-9,863.65	9,863.08	9,785.16	81.96	115.419		
8,300.00	7,984.19	8,153.15	7,997.98	45.46	41.60	93.21	676.10	-9,863.20	9,862.63	9,784.17	82.79	113.646		
8,400.00	8,067.40	8,236.06	8,081.81	46.02	41.86	93.29	675.57	-9,862.75	9,862.18	9,783.18	83.62	111.873		
8,500.00	8,150.61	8,318.97	8,165.64	46.58	42.12	93.37	675.04	-9,862.30	9,861.73	9,782.19	84.45	110.100		
8,600.00	8,233.82	8,401.88	8,248.45	47.14	42.38	93.45	674.51	-9,861.85	9,861.28	9,781.20	85.28	108.327		
8,700.00	8,317.03	8,484.79	8,331.26	47.70	42.64	93.53	673.98	-9,861.40	9,860.83	9,780.21	86.11	106.554		
8,800.00	8,400.24	8,567.70	8,414.07	48.26	42.90	93.61	673.45	-9,860.95	9,860.38	9,779.22	86.94	104.781		
8,900.00	8,483.45	8,650.61	8,496.88	48.82	43.16	93.69	672.92	-9,860.50	9,859.93	9,778.23	87.77	103.008		
9,000.00	8,566.66	8,733.52	8,579.69	49.38	43.42	93.77	672.39	-9,860.05	9,859.48	9,777.24	88.60	101.235		
9,100.00	8,649.87	8,816.43	8,662.50	49.94	43.68	93.85	671.86	-9,859.60	9,859.03	9,776.25	89.43	99.462		
9,200.00	8,733.08	8,899.34	8,745.31	50.50	43.94	93.93	671.33	-9,859.15	9,858.58	9,775.26	90.26	97.689		
9,300.00	8,816.29	8,982.25	8,828.12	51.06	44.20	94.01	670.80	-9,858.70	9,858.13	9,774.27	91.09	95.916		
9,400.00	8,899.50	9,065.16	8,910.93	51.62	44.46	94.09	670.27	-9,858.25	9,857.68	9,773.28	91.92	94.143		
9,500.00	8,982.71	9,148.07	8,993.74	52.18	44.72	94.17	669.74	-9,857.80	9,857.23	9,772.29	92.75	92.370		
9,600.00	9,065.92	9,230.98	9,076.55	52.74	44.98	94.25	669.21	-9,857.35	9,856.78	9,771.30	93.58	90.597		
9,700.00	9,149.13	9,313.89	9,159.36	53.30	45.24	94.33	668.68	-9,856.90	9,856.33	9,770.31	94.41	88.824		
9,800.00	9,232.34	9,396.80	9,242.17	53.86	45.50	94.41	668.15	-9,856.45	9,855.88	9,769.32	95.24	87.051		
9,900.00	9,315.55	9,479.71	9,324.98	54.42	45.76	94.49	667.62	-9,856.00	9,855.43	9,768.33	96.07	85.278		
10,000.00	9,398.76	9,562.62	9,407.79	54.98	46.02	94.57	667.09	-9,855.55	9,854.98	9,767.34	96.90	83.505		
10,100.00	9,481.97	9,645.53	9,490.60	55.54	46.28	94.65	666.56	-9,855.10	9,854.53	9,766.35	97.73	81.732		
10,200.00	9,565.18	9,728.44	9,573.41	56.10	46.54	94.73	666.03	-9,854.65	9,854.08	9,765.36	98.56	79.959		
10,300.00	9,648.39	9,811.35	9,656.22	56.66	46.80	94.81	665.50	-9,854.20	9,853.63	9,764.37	99.39	78.186		
10,400.00	9,731.60	9,894.26	9,739.03	57.22	47.06	94.89	664.97	-9,853.75	9,853.18	9,763.38	100.22	76.413		
10,500.00	9,814.81	9,977.17	9,821.84	57.78	47.32	94.97	664.44	-9,853.30	9,852.73	9,762.39	101.05	74.640		
10,600.00	9,898.02	10,060.08	9,905.05	58.34	47.58	95.05	663.91	-9,852.85	9,852.28	9,761.40	101.88	72.867		
10,700.00	9,981.23	10,142.99	9,987.86	58.90	47.84	95.13	663.38	-9,852.40	9,851.83	9,760.41	102.71	71.094		
10,800.00	10,064.44	10,225.90	10,070.67	59.46	48.10	95.21	662.85	-9,851.95	9,851.38	9,759.42	103.54	69.321		
10,900.00	10,147.65	10,308.81	10,153.48	60.02	48.36	95.29	662.32	-9,851.50	9,850.93	9,758.43	104.37	67.548		
11,000.00	10,230.86	10,391.72	10,236.29	60.58	48.62	95.37	661.79	-9,851.05	9,850.48	9,757.44	105.20	65.775		
11,100.00	10,314.07	10,474.63	10,319.10	61.14	48.88	95.45	661.26	-9,850.60	9,850.03	9,756.45	106.03	63.999		
11,200.00	10,397.28	10,557.54	10,401.91	61.70	49.14	95.53	660.73	-9,850.15	9,849.58	9,755.46	106.86	62.226		
11,300.00	10,480.49	10,640.45	10,484.72	62.26	49.40	95.61	660.20	-9,849.70	9,849.13	9,754.47	107.69	60.453		
11,400.00	10,563.70	10,723.36	10,567.53	62.82	49.66	95.69	659.67	-9,849.25	9,848.68	9,753.48	108.52	58.680		
11,500.00	10,646.91	10,806.27	10,650.34	63.38	49.92	95.77	659.14	-9,848.80	9,848.23	9,752.49	109.35	56.907		
11,600.00	10,730.12	10,889.18	10,733.15	63.94	50.18	95.85	658.61	-9,848.35	9,847.78	9,751.50	110.18	55.134		
11,700.00	10,813.33	10,972.09	10,815.96	64.50	50.44	95.93	658.08	-9,847.90	9,847.33	9,750.51	111.01	53.361		
11,800.00	10,896.54	11,055.00	10,898.77	65.06	50.70	96.01	657.55	-9,847.45	9,846.88	9,749.52	111.84	51.588		
11,900.00	10,979.75	11,137.91	10,981.58	65.62	50.96	96.09	657.02	-9,847.00	9,846.43	9,748.53	112.67	49.815		
12,000.00	11,062.96	11,220.82	11,064.39	66.18	51.22	96.17	656.49	-9,846.55	9,845.98	9,747.54	113.50	48.042		
12,100.00	11,146.17	11,303.73	11,146.60	66.74	51.48	96.25	655.96	-9,846.10	9,845.53	9,746.55</				



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.81	7,509.75	7,354.62	109.23	39.60	94.82	679.19	-9,863.36	6,832.92	6,742.30	90.62	75.405		
10,300.00	7,232.28	7,507.22	7,352.09	112.38	39.59	94.74	679.23	-9,863.39	6,736.77	6,645.20	91.56	73.574		
10,400.00	7,231.75	7,504.72	7,349.58	115.53	39.59	94.66	679.27	-9,863.43	6,640.73	6,548.17	92.55	71.750		
10,500.00	7,231.23	7,502.24	7,347.10	118.70	39.58	94.59	679.30	-9,863.46	6,544.81	6,451.22	93.58	69.935		
10,600.00	7,230.70	7,499.78	7,344.64	121.87	39.57	94.51	679.34	-9,863.50	6,449.01	6,354.35	94.66	68.130		
10,700.00	7,230.17	7,497.35	7,342.21	125.05	39.56	94.44	679.37	-9,863.53	6,353.34	6,257.56	95.78	66.335		
10,800.00	7,229.64	7,494.94	7,339.80	128.25	39.56	94.36	679.41	-9,863.57	6,257.81	6,160.86	96.94	64.552		
10,900.00	7,229.11	7,492.55	7,337.42	131.44	39.55	94.29	679.45	-9,863.60	6,162.41	6,064.26	98.16	62.781		
11,000.00	7,228.58	7,490.19	7,335.06	134.65	39.54	94.22	679.48	-9,863.63	6,067.17	5,967.74	99.42	61.024		
11,100.00	7,228.05	7,487.85	7,332.72	137.86	39.53	94.15	679.52	-9,863.66	5,972.08	5,871.34	100.74	59.282		
11,200.00	7,227.52	7,485.53	7,330.40	141.08	39.53	94.07	679.55	-9,863.70	5,877.15	5,775.03	102.11	57.555		
11,300.00	7,227.00	7,483.23	7,328.10	144.30	39.52	94.00	679.58	-9,863.73	5,782.39	5,678.85	103.54	55.846		
11,400.00	7,226.47	7,480.96	7,325.83	147.52	39.51	93.93	679.62	-9,863.76	5,687.81	5,582.78	105.03	54.153		
11,500.00	7,225.94	7,478.71	7,323.57	150.76	39.50	93.86	679.65	-9,863.79	5,593.42	5,486.83	106.58	52.480		
11,600.00	7,225.41	7,476.47	7,321.34	153.99	39.50	93.80	679.69	-9,863.82	5,499.22	5,391.02	108.20	50.825		
11,700.00	7,224.88	7,474.26	7,319.13	157.23	39.49	93.73	679.72	-9,863.85	5,405.23	5,295.35	109.88	49.191		
11,800.00	7,224.35	7,472.07	7,316.94	160.48	39.48	93.66	679.75	-9,863.87	5,311.47	5,199.83	111.64	47.579		
11,900.00	7,223.82	7,469.90	7,314.77	163.72	39.48	93.59	679.79	-9,863.90	5,217.93	5,104.47	113.46	45.988		
12,000.00	7,223.29	7,467.75	7,312.62	166.98	39.47	93.53	679.82	-9,863.93	5,124.64	5,009.27	115.37	44.420		
12,100.00	7,222.77	7,465.62	7,310.49	170.23	39.46	93.46	679.85	-9,863.96	5,031.60	4,914.25	117.35	42.876		
12,200.00	7,222.24	7,463.51	7,308.38	173.49	39.46	93.40	679.88	-9,863.98	4,938.83	4,819.41	119.42	41.356		
12,300.00	7,221.71	7,461.41	7,306.28	176.75	39.45	93.33	679.91	-9,864.01	4,846.35	4,724.77	121.58	39.861		
12,400.00	7,221.18	7,459.34	7,304.21	180.01	39.44	93.27	679.95	-9,864.04	4,754.18	4,630.35	123.83	38.392		
12,500.00	7,220.65	7,457.28	7,302.15	183.28	39.44	93.21	679.98	-9,864.06	4,662.33	4,536.15	126.18	36.950		
12,600.00	7,220.12	7,455.25	7,300.12	186.54	39.43	93.14	680.01	-9,864.09	4,570.81	4,442.19	128.63	35.535		
12,700.00	7,219.59	7,453.23	7,298.10	189.81	39.42	93.08	680.04	-9,864.11	4,479.66	4,348.48	131.18	34.148		
12,800.00	7,219.06	7,451.22	7,296.10	193.09	39.42	93.02	680.07	-9,864.14	4,388.90	4,255.05	133.85	32.789		
12,900.00	7,218.54	7,449.24	7,294.11	196.36	39.41	92.96	680.10	-9,864.16	4,298.54	4,161.90	136.64	31.459		
13,000.00	7,218.01	7,447.27	7,292.15	199.64	39.40	92.90	680.13	-9,864.18	4,208.62	4,069.07	139.55	30.159		
13,100.00	7,217.48	7,445.32	7,290.20	202.92	39.40	92.84	680.16	-9,864.21	4,119.16	3,976.58	142.59	28.889		
13,200.00	7,216.95	7,443.39	7,288.27	206.20	39.39	92.78	680.19	-9,864.23	4,030.20	3,884.44	145.76	27.649		
13,300.00	7,216.42	7,441.48	7,286.35	209.48	39.39	92.72	680.22	-9,864.25	3,941.77	3,792.69	149.08	26.441		
13,400.00	7,215.89	7,439.58	7,284.45	212.76	39.38	92.66	680.25	-9,864.28	3,853.90	3,701.35	152.55	25.263		
13,500.00	7,215.36	7,437.69	7,282.57	216.05	39.37	92.60	680.28	-9,864.30	3,766.64	3,610.46	156.18	24.118		
13,600.00	7,214.84	7,435.83	7,280.70	219.33	39.37	92.55	680.31	-9,864.32	3,680.02	3,520.05	159.97	23.005		
13,700.00	7,214.31	7,433.98	7,278.85	222.62	39.36	92.49	680.34	-9,864.34	3,594.09	3,430.16	163.94	21.924		
13,800.00	7,213.78	7,432.14	7,277.02	225.91	39.36	92.43	680.37	-9,864.36	3,508.92	3,340.83	168.09	20.876		
13,900.00	7,213.25	7,430.32	7,275.20	229.20	39.35	92.38	680.40	-9,864.38	3,424.54	3,252.11	172.43	19.861		
14,000.00	7,212.72	7,428.52	7,273.39	232.49	39.34	92.32	680.43	-9,864.40	3,341.02	3,164.06	176.97	18.879		
14,100.00	7,212.19	7,426.73	7,271.61	235.79	39.34	92.27	680.45	-9,864.42	3,258.43	3,076.72	181.71	17.932		
14,200.00	7,211.66	7,424.95	7,269.83	239.08	39.33	92.21	680.48	-9,864.44	3,176.84	2,990.16	186.68	17.018		
14,300.00	7,211.13	7,423.19	7,268.07	242.38	39.33	92.16	680.51	-9,864.46	3,096.33	2,904.46	191.87	16.137		
14,400.00	7,210.61	7,421.45	7,266.33	245.67	39.32	92.10	680.54	-9,864.48	3,016.99	2,819.69	197.30	15.292		
14,500.00	7,210.08	7,419.72	7,264.60	248.97	39.32	92.05	680.57	-9,864.50	2,938.90	2,735.94	202.97	14.480		
14,600.00	7,209.55	7,418.00	7,262.88	252.27	39.31	92.00	680.59	-9,864.52	2,862.18	2,653.30	208.88	13.703		
14,700.00	7,209.02	7,416.30	7,261.18	255.57	39.31	91.95	680.62	-9,864.54	2,786.94	2,571.89	215.05	12.960		
14,800.00	7,208.49	7,414.61	7,259.49	258.87	39.30	91.89	680.65	-9,864.56	2,713.29	2,491.82	221.47	12.251		
14,900.00	7,207.96	7,412.93	7,257.81	262.17	39.30	91.84	680.67	-9,864.58	2,641.37	2,413.23	228.15	11.578		
15,000.00	7,207.43	7,411.27	7,256.15	265.47	39.29	91.79	680.70	-9,864.59	2,571.33	2,336.26	235.08	10.938		
15,081.89	7,207.00	7,409.92	7,254.80	268.17	39.29	91.75	680.72	-9,864.61	2,515.49	2,274.55	240.93	10.441	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 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 @ 4820.00ft

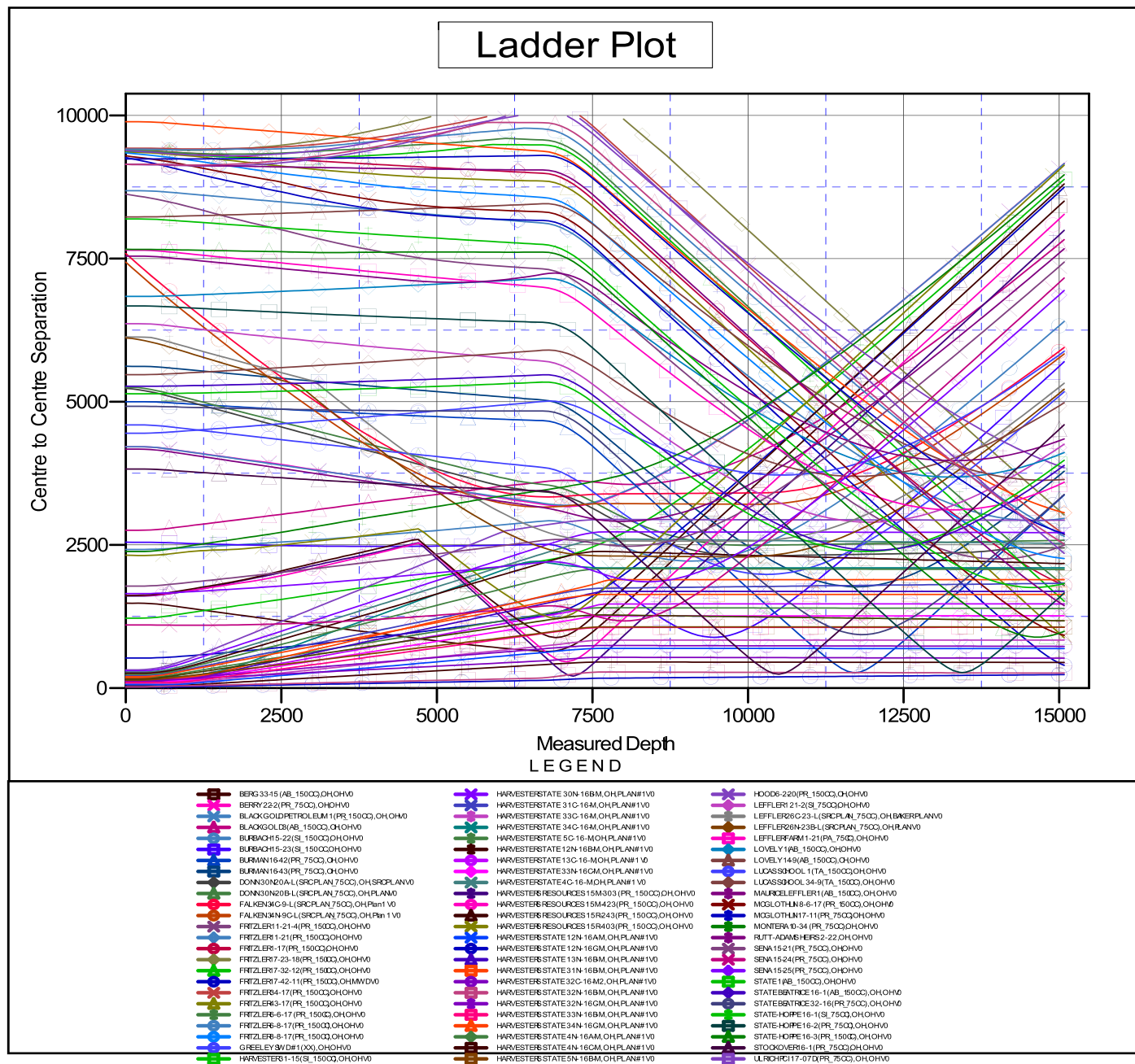
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 32C-16-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°

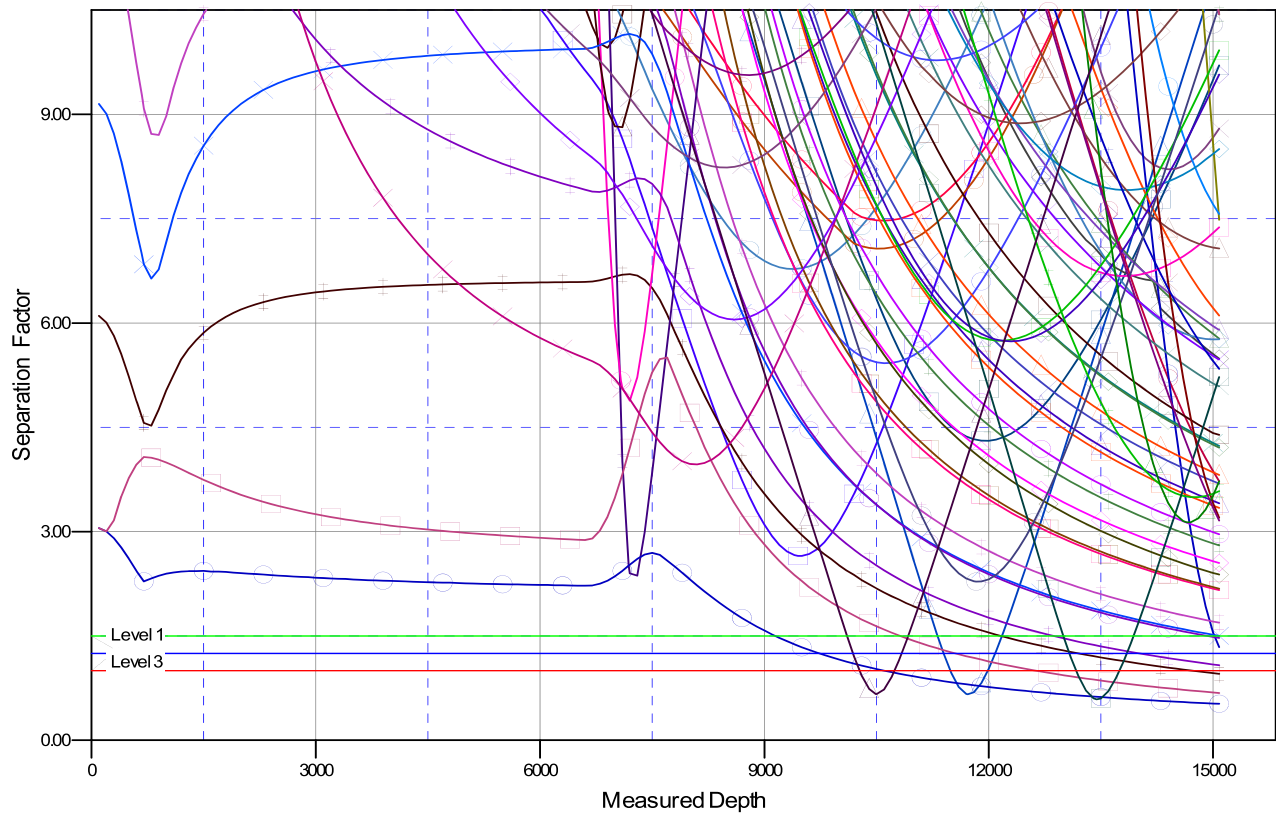


Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4820.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4820.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 @ 4820.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 32C-16-M
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

BERG 33-15 (AB, 1500Q, OH, OHV0)	HARVESTER STATE 30N-16BM, OH, PLAN#1V0	H006-220 (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 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 33C-16M, OH, PLAN#1V0	LEFFLER 26-23 (L, SRCP, PLAN, 750Q, OH, BAKER, PLANV0)
BLACK GOLD (AB, 1500Q, OH, OHV0)	HARVESTER STATE 34C-16M, OH, PLAN#1V0	LEFFLER 26N-23B (L, SRCP, PLAN, 750Q, OH, PLANV0)
BURBACH 15-22 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 5C-16-M, OH, PLAN#1V0	LEFFLER FARM 1-21 (PA, 750Q, OH, OHV0)
BURBACH 15-22 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 12N-16BM, OH, PLAN#1V0	LOVELY 149 (AB, 1500Q, OH, OHV0)
BURMAN 16-42 (PR, 750Q, OH, OHV0)	HARVESTER STATE 13C-16-M, 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 02N-04-L (SRCP, PLAN, 750Q, OH, SRCP, PLANV0)	HARVESTER STATE 4C-16-M, OH, PLAN#1V0	LUCAS SCHOOL 34-9 (TA, 1500Q, OH, OHV0)
DOHN 02N-04-L (SRCP, PLAN, 750Q, OH, PLANV0)	HARVESTER RESOURCES 15M303 (PR, 1500Q, OH, OHV0)	MAIRCE LEFFLER 1 (AB, 1500Q, OH, OHV0)
FALKEN 31N-9C-L (SRCP, PLAN, 750Q, OH, Plan 1V0)	HARVESTER RESOURCES 15M423 (PR, 1500Q, OH, OHV0)	MOGLOTHUN 6-17 (PR, 600Q, OH, OHV0)
FALKEN 31N-9C-L (SRCP, PLAN, 750Q, OH, Plan 1V0)	HARVESTER RESOURCES 15R243 (PR, 1500Q, OH, OHV0)	MOGLOTHUN 17-11 (PR, 750Q, OH, OHV0)
FRTZLER 11-21 (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-16BM, OH, PLAN#1V0	SENA 15-21 (PR, 750Q, OH, OHV0)
FRTZLER 17-23 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 13N-16BM, OH, PLAN#1V0	SENA 15-24 (PR, 750Q, OH, OHV0)
FRTZLER 17-32 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 31N-16BM, OH, PLAN#1V0	SENA 15-25 (PR, 750Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32C-16M2, OH, PLAN#1V0	STATE 1 (AB, 1500Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32N-16BM, OH, PLAN#1V0	STATEBATRICE 16-1 (AB, 1500Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32N-16BM, OH, PLAN#1V0	STATEBATRICE 32-16 (PR, 750Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 33N-16BM, OH, PLAN#1V0	STATE HOPE 16-1 (SL, 750Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 34N-16BM, OH, PLAN#1V0	STATE HOPE 16-2 (PR, 750Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 4N-16AM, OH, PLAN#1V0	STATE HOPE 16-3 (PR, 1500Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 4N-16CM, OH, PLAN#1V0	STOCKOVER 6-1 (PR, 750Q, OH, OHV0)
GRIFFIN 11-21 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 5N-16BM, OH, PLAN#1V0	ULRICH 11-7 (PR, 750Q, OH, OHV0)
HARVESTER 11-15 (SL, 1500Q, OH, OHV0)		