



SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 32C-16-M2**

**OH
PLAN #1**

Anticollision Report

03 October, 2017





Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	15,002.37	PLAN #1 (OH)	MWD+IFR1	OWSG MWD + IFR1

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
HARVESTERS STATE 7-15 PAD						
BERG 33-15 (AB_150CC) - OH - OH	6,723.28	6,657.69	1,214.87	1,156.78	20.916	CC, ES
BERG 33-15 (AB_150CC) - OH - OH	6,900.00	6,821.00	1,225.83	1,166.26	20.579	SF
BERRY 22-2(PR_75CC) - OH - OH	6,916.81	6,868.22	3,876.94	3,817.26	64.961	CC, ES
BERRY 22-2(PR_75CC) - OH - OH	9,700.00	7,130.34	5,041.46	4,945.20	52.375	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	6,919.22	6,968.44	3,894.58	3,834.49	64.809	CC, ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	9,600.00	7,428.62	4,982.40	4,886.09	51.731	SF
BLACKGOLD 3(AB_150CC) - OH - OH	507.90	536.16	2,648.34	2,640.63	343.692	CC, ES
BLACKGOLD 3(AB_150CC) - OH - OH	9,500.00	7,251.41	3,176.68	3,077.92	32.166	SF
BURBACH 15-22(SI_150CC) - OH - OH	8,997.62	7,216.62	1,476.79	1,163.60	4.715	CC
BURBACH 15-22(SI_150CC) - OH - OH	9,000.00	7,216.61	1,476.80	1,163.55	4.715	ES
BURBACH 15-22(SI_150CC) - OH - OH	9,100.00	7,216.21	1,480.34	1,164.89	4.693	SF
BURBACH 15-23(SI_150CC) - OH - OH	9,378.08	7,200.12	146.41	-175.79	0.454	Level 1, CC, ES, SF
BURMAN 16-42(PR_75CC) - OH - OH	11,648.70	7,180.19	1,004.95	622.10	2.625	CC
BURMAN 16-42(PR_75CC) - OH - OH	11,700.00	7,179.99	1,006.26	622.04	2.619	ES, SF
BURMAN 16-43(PR_75CC) - OH - OH	11,666.30	7,177.12	2,505.79	2,122.56	6.539	CC
BURMAN 16-43(PR_75CC) - OH - OH	11,700.00	7,176.99	2,506.02	2,121.84	6.523	ES
BURMAN 16-43(PR_75CC) - OH - OH	12,000.00	7,175.81	2,527.91	2,136.34	6.456	SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	9,990.44	7,300.00	3,041.80	2,918.47	24.663	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,002.44	12,343.36	3,174.38	2,766.79	7.788	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	9,956.59	7,379.88	3,230.45	3,107.71	26.321	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,002.44	12,374.16	3,309.30	2,902.78	8.141	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	7,082.88	16,109.89	2,634.22	2,346.74	9.163	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,200.00	19,118.26	2,671.30	2,234.93	6.122	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,400.00	19,118.26	2,684.07	2,244.05	6.100	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	6,995.85	15,988.67	2,462.60	2,176.46	8.606	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,200.00	19,018.34	2,472.83	2,037.66	5.682	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,300.00	19,018.34	2,477.70	2,040.66	5.669	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	13,942.28	7,338.57	2,986.23	2,753.86	12.851	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,000.00	7,341.33	2,986.79	2,752.70	12.759	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,600.00	7,330.73	3,058.03	2,810.71	12.365	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,534.55	7,147.84	3,655.73	3,193.01	7.900	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,600.00	7,147.58	3,656.32	3,191.75	7.870	ES
FRITZLER 11-21(PR_150CC) - OH - OH	15,002.44	7,146.00	3,685.55	3,211.17	7.769	SF
FRITZLER 1-17(PR_150CC) - OH - OH	15,002.44	7,161.00	2,469.08	2,006.10	5.333	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,002.44	7,421.49	3,340.98	3,173.43	19.939	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	15,002.44	7,588.25	1,524.18	1,408.29	13.153	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,002.44	7,561.41	386.01	140.66	1.573	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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	15,002.44	7,195.00	3,188.87	2,980.69	15.318	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	15,002.44	7,352.94	1,306.06	1,095.77	6.211	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,002.44	7,217.06	2,272.31	2,066.43	11.037	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,002.44	7,296.58	3,285.80	3,050.02	13.936	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,002.44	7,207.27	2,991.64	2,730.56	11.459	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,235.40	7,167.75	2,724.89	2,381.21	7.929	CC
GREELEY SWD #1(XX) - OH - OH	10,300.00	7,167.49	2,725.66	2,380.22	7.890	ES
GREELEY SWD #1(XX) - OH - OH	10,700.00	7,165.92	2,764.21	2,409.02	7.782	SF
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,111.73			
HARVESTER 31-15(SI_150CC) - OH - OH	400.00	382.81	1,112.32	1,105.14	154.936	ES
HARVESTER 31-15(SI_150CC) - OH - OH	6,900.00	6,883.31	1,611.39	1,551.80	27.040	SF
HARVESTER 32-15(SI_150CC) - OH - OH	436.18	415.22	522.27	514.96	71.433	CC
HARVESTER 32-15(SI_150CC) - OH - OH	500.00	477.80	522.35	514.78	69.013	ES
HARVESTER 32-15(SI_150CC) - OH - OH	6,700.00	6,661.91	765.91	707.89	13.201	SF
HARVESTER STATE 30C-16-M - OH - PLAN #1	200.00	201.00	200.01	193.33	29.964	CC, ES
HARVESTER STATE 30C-16-M - OH - PLAN #1	15,002.44	15,216.01	2,201.22	1,744.27	4.817	SF
HARVESTER STATE 30N-16B-M - OH - PLAN #1	300.00	301.00	180.34	173.45	26.170	CC, ES
HARVESTER STATE 30N-16B-M - OH - PLAN #1	15,002.44	14,942.37	1,988.96	1,533.06	4.363	SF
HARVESTER STATE 31C-16-M - OH - PLAN #1	500.00	500.00	100.18	92.57	13.161	CC, ES
HARVESTER STATE 31C-16-M - OH - PLAN #1	15,002.44	14,996.08	1,101.33	644.84	2.413	SF
HARVESTER STATE 33C-16-M - OH - PLAN #1	200.00	199.00	199.65	192.98	29.919	CC, ES
HARVESTER STATE 33C-16-M - OH - PLAN #1	15,002.44	15,240.51	1,568.64	1,112.31	3.438	SF
HARVESTER STATE 34C-16-M - OH - PLAN #1	200.00	198.00	319.87	313.20	47.939	CC, ES
HARVESTER STATE 34C-16-M - OH - PLAN #1	15,002.44	15,759.87	2,830.85	2,374.19	6.199	SF
HARVESTER STATE 5C-16-M - OH - PLAN #1	500.00	500.00	60.11	52.50	7.897	CC, ES
HARVESTER STATE 5C-16-M - OH - PLAN #1	15,002.44	14,990.01	661.27	204.79	1.449	Level 3, SF
HARVESTER STATE 12N-16B-M - OH - PLAN #1	200.00	199.00	159.94	153.27	23.968	CC, ES
HARVESTER STATE 12N-16B-M - OH - PLAN #1	15,002.44	14,967.09	1,161.47	708.62	2.565	SF
HARVESTER STATE 13C-16-M - OH - PLAN #1	200.00	198.00	259.77	253.09	38.931	CC, ES
HARVESTER STATE 13C-16-M - OH - PLAN #1	15,002.44	15,411.27	2,199.93	1,743.55	4.820	SF
HARVESTER STATE 33N-16C-M - OH - PLAN #1	200.00	198.00	239.73	233.06	35.928	CC, ES
HARVESTER STATE 33N-16C-M - OH - PLAN #1	15,002.44	15,250.80	1,991.67	1,535.55	4.367	SF
HARVESTER STATE 4C-16-M - OH - PLAN #1	500.00	501.00	160.30	154.56	27.922	CC, ES
HARVESTER STATE 4C-16-M - OH - PLAN #1	15,002.44	15,116.21	1,796.95	1,340.25	3.935	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,120.45	9,096.56	213.89	147.01	3.198	CC, ES
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,200.00	9,099.73	232.77	151.78	2.874	SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,014.91	9,196.85	460.59	387.03	6.261	CC, ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,100.00	9,204.16	473.85	393.34	5.885	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,848.85	9,071.37	900.13	820.33	11.280	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,000.00	9,077.47	930.09	846.12	11.077	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,846.87	9,155.00	1,225.85	1,144.32	15.035	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,900.00	9,155.00	1,229.21	1,146.66	14.889	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	200.00	199.00	179.98	173.30	26.970	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,002.44	14,900.02	1,389.59	941.07	3.098	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	200.00	199.00	139.90	133.22	20.964	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,002.44	14,981.12	947.22	493.75	2.089	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	200.00	198.00	279.80	273.12	41.933	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,002.44	15,314.63	2,415.38	1,959.40	5.297	SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	500.00	500.00	80.16	72.54	10.530	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,002.44	14,817.25	927.01	489.47	2.119	SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	200.00	199.00	119.86	113.19	17.961	CC, ES
HARVESTERS STATE 32C-16-M - OH - PLAN #1	15,002.44	15,075.96	729.70	233.93	1.472	Level 3, SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	300.00	299.00	99.82	92.93	14.491	CC, ES

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

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Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
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Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,002.44	14,866.70	559.16	122.58	1.281	Level 3, SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	800.00	798.77	14.11	4.96	1.542	CC
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,002.44	14,908.26	246.34	-164.78	0.599	Level 1, ES, SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	200.00	199.00	219.68	213.01	32.919	CC, ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	15,002.44	15,123.22	1,789.05	1,333.88	3.930	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	200.00	198.00	299.83	293.16	44.936	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	15,002.44	15,459.96	2,622.16	2,165.68	5.744	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	500.00	500.00	120.22	112.61	15.794	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,002.44	14,732.12	1,353.51	905.67	3.022	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	500.00	500.00	140.27	132.65	18.427	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,002.44	14,969.16	1,446.99	991.72	3.178	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	588.28	588.84	17.39	9.38	2.172	CC
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,002.44	14,805.30	371.56	-30.70	0.924	Level 1, ES, SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	500.00	500.00	40.07	32.46	5.265	CC
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,002.32	14,879.57	455.69	11.50	1.026	Level 2, ES, SF
HOOD 41-20(PR_150CC) - OH - OH	15,002.44	7,153.00	3,770.74	3,301.04	8.028	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,002.44	7,563.95	4,536.48	4,285.82	18.098	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,888.11	7,108.19	3,634.40	3,463.46	21.261	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,000.00	7,114.88	3,636.12	3,462.02	20.886	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	13,000.00	7,174.61	3,800.10	3,604.27	19.405	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	9,824.37	7,725.22	3,303.93	3,182.24	27.152	CC
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	10,000.00	7,652.02	3,306.45	3,180.93	26.342	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	11,600.00	7,152.01	3,601.29	3,443.32	22.796	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,830.22	7,584.88	3,028.72	2,907.55	24.995	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,900.00	7,550.00	3,029.23	2,906.61	24.705	ES
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	11,400.00	7,100.00	3,292.13	3,138.89	21.482	SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,217.99	7,155.02	3,846.01	3,420.16	9.031	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,300.00	7,154.70	3,846.88	3,418.73	8.985	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,900.00	7,152.34	3,906.01	3,463.58	8.829	SF
LOVELY 1(AB_150CC) - OH - OH	13,177.24	7,202.18	2,952.91	2,526.55	6.926	CC
LOVELY 1(AB_150CC) - OH - OH	13,300.00	7,201.70	2,955.46	2,525.91	6.880	ES
LOVELY 1(AB_150CC) - OH - OH	13,600.00	7,200.52	2,983.02	2,546.98	6.841	SF
LOVELY 14-9(AB_150CC) - OH - OH	14,673.97	7,200.71	2,899.47	2,430.96	6.189	CC
LOVELY 14-9(AB_150CC) - OH - OH	14,700.00	7,200.81	2,899.59	2,430.36	6.180	ES
LOVELY 14-9(AB_150CC) - OH - OH	15,002.44	7,202.00	2,918.02	2,441.83	6.128	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,448.63	7,232.91	2,982.02	2,630.30	8.478	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,500.00	7,232.71	2,982.46	2,629.41	8.448	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	11,000.00	7,230.74	3,032.56	2,668.04	8.319	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,664.18	7,188.13	2,962.59	2,579.03	7.724	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,700.00	7,187.99	2,962.80	2,578.29	7.705	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	12,100.00	7,186.42	2,994.47	2,600.65	7.604	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,233.69	4,452.00	4,539.50	4,267.70	16.701	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,300.00	4,452.00	4,539.99	4,266.63	16.608	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	14,500.00	4,452.00	4,712.82	4,414.96	15.823	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,002.44	7,425.79	1,635.69	1,377.02	6.324	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,002.44	7,184.00	2,031.51	1,580.25	4.502	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	478.80	491.81	2,264.98	2,257.43	300.109	CC
MONTERA 10-34 (PR_75CC) - OH - OH	500.00	511.09	2,264.99	2,257.35	296.641	ES
MONTERA 10-34 (PR_75CC) - OH - OH	8,600.00	7,308.64	3,345.99	3,267.59	42.680	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	7,917.65	7,181.86	3,656.56	3,367.95	12.669	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,000.00	7,181.54	3,657.49	3,367.43	12.609	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,900.00	7,178.00	3,786.22	3,477.72	12.273	SF
SENA 15-21(PR_75CC) - OH - OH	500.00	505.00	1,692.82	1,672.80	84.535	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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	8,000.00	7,236.54	1,734.83	1,442.89	5.942	ES
SENA 15-21(PR_75CC) - OH - OH	8,200.00	7,235.75	1,747.29	1,451.93	5.916	SF
SENA 15-24(PR_75CC) - OH - OH	7,943.36	7,222.76	430.17	139.69	1.481	Level 3, CC, ES, SF
SENA 15-25(PR_75CC) - OH - OH	8,316.25	7,228.30	1,114.38	816.52	3.741	CC, ES
SENA 15-25(PR_75CC) - OH - OH	8,400.00	7,227.97	1,117.53	818.10	3.732	SF
STATE 1(AB_150CC) - OH - OH	11,820.17	7,177.52	1,649.75	1,262.22	4.257	CC
STATE 1(AB_150CC) - OH - OH	11,900.00	7,177.20	1,651.68	1,262.21	4.241	ES
STATE 1(AB_150CC) - OH - OH	12,000.00	7,176.81	1,659.52	1,268.05	4.239	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	11,949.88	7,179.01	1,671.55	1,280.36	4.273	CC
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,000.00	7,178.81	1,672.30	1,279.85	4.261	ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,100.00	7,178.42	1,678.28	1,283.68	4.253	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,758.66	7,172.76	198.18	-187.47	0.514	Level 1, CC, ES, SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,517.54	7,158.91	2,487.87	2,025.24	5.378	CC
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,600.00	7,158.58	2,489.24	2,024.32	5.354	ES
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,800.00	7,157.80	2,503.85	2,034.40	5.334	SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,370.28	7,176.42	1,004.93	574.05	2.332	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,400.00	7,176.30	1,005.37	573.67	2.329	ES, SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,573.94	7,178.75	159.87	-86.82	0.648	Level 1, CC, ES, SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,418.47	7,170.03	982.36	633.65	2.817	CC, ES
STOCKOVER 16-1(PR_75CC) - OH - OH	10,500.00	7,169.71	985.74	634.96	2.810	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,002.44	7,324.89	2,165.68	2,088.39	28.018	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,002.44	7,175.00	1,038.75	708.66	3.147	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	15,002.44	7,403.94	2,041.20	1,876.92	12.426	CC, ES, SF

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	38.00	3.28	3.28	167.35	-1,559.96	350.20	1,599.24				
100.00	100.00	58.80	96.80	3.28	3.28	167.35	-1,560.02	350.20	1,598.85	1,592.28	6.57	243.462	
200.00	200.00	157.01	195.01	3.34	3.31	167.35	-1,560.33	350.18	1,599.15	1,592.50	6.65	240.508	
300.00	300.00	259.52	297.51	3.44	3.40	167.36	-1,560.64	349.98	1,599.41	1,592.56	6.85	233.638	
400.00	400.00	360.47	398.47	3.60	3.54	167.36	-1,560.76	349.90	1,599.50	1,592.35	7.14	223.930	
500.00	500.00	460.15	498.15	3.81	3.72	167.36	-1,560.87	349.92	1,599.61	1,592.08	7.53	212.512	
600.00	599.98	556.23	594.23	4.03	3.93	-30.85	-1,561.02	350.05	1,598.30	1,590.33	7.97	200.610	
700.00	699.84	652.80	690.80	4.29	4.18	-30.98	-1,561.50	350.16	1,594.32	1,585.85	8.46	188.402	
800.00	799.54	754.79	792.79	4.57	4.46	-31.13	-1,562.10	350.00	1,588.22	1,579.19	9.03	175.926	
900.00	899.23	857.79	895.78	4.87	4.77	-31.26	-1,562.55	349.45	1,581.80	1,572.16	9.64	164.066	
1,000.00	998.92	959.40	997.39	5.20	5.09	-31.39	-1,562.83	348.92	1,575.25	1,564.96	10.29	153.095	
1,100.00	1,098.61	1,057.16	1,095.15	5.54	5.42	-31.51	-1,563.10	348.25	1,568.66	1,557.71	10.96	143.169	
1,200.00	1,198.30	1,155.22	1,193.21	5.90	5.76	-31.63	-1,563.55	347.67	1,562.29	1,550.63	11.65	134.088	
1,300.00	1,298.00	1,255.04	1,293.03	6.27	6.12	-31.76	-1,564.04	347.00	1,555.92	1,543.55	12.37	125.746	
1,400.00	1,397.69	1,356.48	1,394.46	6.66	6.49	-31.88	-1,564.54	346.18	1,549.54	1,536.42	13.12	118.107	
1,500.00	1,497.38	1,459.96	1,497.93	7.05	6.88	-32.01	-1,564.83	345.37	1,542.97	1,529.08	13.89	111.097	
1,600.00	1,597.07	1,562.18	1,600.15	7.44	7.26	-32.14	-1,564.88	344.60	1,536.18	1,521.51	14.67	104.750	
1,700.00	1,696.76	1,660.40	1,698.36	7.85	7.64	-32.25	-1,564.95	343.53	1,529.34	1,513.90	15.44	99.059	
1,800.00	1,796.45	1,757.35	1,795.31	8.25	8.02	-32.37	-1,565.17	342.62	1,522.70	1,506.48	16.22	93.895	
1,900.00	1,896.15	1,856.56	1,894.51	8.67	8.41	-32.49	-1,565.54	341.67	1,516.19	1,499.17	17.01	89.126	
2,000.00	1,995.84	1,955.00	1,992.95	9.08	8.80	-32.61	-1,565.91	340.67	1,509.68	1,491.87	17.81	84.762	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,100.00	2,095.53	2,053.69	2,091.63	9.50	9.19	-32.72	-1,566.47	339.49	1,503.33	1,484.71	18.62	80.749		
2,200.00	2,195.22	2,152.84	2,190.77	9.92	9.59	-32.84	-1,567.00	338.49	1,496.98	1,477.55	19.43	77.043		
2,300.00	2,294.91	2,251.07	2,289.00	10.35	9.99	-32.97	-1,567.53	337.83	1,490.74	1,470.49	20.25	73.634		
2,400.00	2,394.60	2,353.71	2,391.63	10.77	10.41	-33.10	-1,568.15	336.96	1,484.52	1,463.44	21.08	70.422		
2,500.00	2,494.30	2,457.03	2,494.95	11.20	10.83	-33.23	-1,568.45	335.96	1,477.98	1,456.05	21.92	67.421		
2,600.00	2,593.99	2,557.97	2,595.88	11.63	11.24	-33.37	-1,568.54	335.27	1,471.33	1,448.57	22.76	64.655		
2,700.00	2,693.68	2,655.88	2,693.80	12.07	11.64	-33.52	-1,568.57	334.75	1,464.66	1,441.08	23.58	62.106		
2,800.00	2,793.37	2,753.49	2,791.40	12.50	12.04	-33.66	-1,568.80	334.24	1,458.21	1,433.80	24.41	59.733		
2,900.00	2,893.06	2,853.84	2,891.75	12.93	12.46	-33.81	-1,569.08	333.71	1,451.81	1,426.56	25.25	57.490		
3,000.00	2,992.76	2,952.72	2,990.63	13.37	12.87	-33.97	-1,569.29	333.29	1,445.37	1,419.28	26.09	55.396		
3,100.00	3,092.45	3,049.83	3,087.74	13.81	13.27	-34.11	-1,569.66	332.82	1,439.11	1,412.18	26.93	53.448		
3,200.00	3,192.14	3,150.02	3,187.93	14.25	13.69	-34.27	-1,570.17	332.35	1,432.97	1,405.20	27.77	51.597		
3,300.00	3,291.83	3,255.45	3,293.36	14.68	14.13	-34.44	-1,570.38	332.14	1,426.62	1,397.98	28.64	49.812		
3,400.00	3,391.52	3,361.90	3,399.80	15.12	14.57	-34.61	-1,570.16	331.51	1,419.79	1,390.28	29.51	48.110		
3,500.00	3,491.21	3,460.90	3,498.80	15.56	14.98	-34.77	-1,569.69	330.86	1,412.69	1,382.33	30.36	46.535		
3,600.00	3,590.91	3,556.21	3,594.10	16.00	15.38	-34.92	-1,569.53	330.12	1,405.86	1,374.67	31.19	45.071		
3,700.00	3,690.60	3,649.17	3,687.07	16.45	15.77	-35.06	-1,569.70	329.43	1,399.40	1,367.38	32.02	43.704		
3,800.00	3,790.29	3,743.54	3,781.43	16.89	16.17	-35.20	-1,570.45	328.65	1,393.48	1,360.63	32.85	42.414		
3,900.00	3,889.98	3,844.92	3,882.80	17.33	16.59	-35.34	-1,571.36	327.86	1,387.70	1,353.99	33.71	41.160		
4,000.00	3,989.67	3,947.79	3,985.67	17.77	17.03	-35.50	-1,571.97	327.15	1,381.67	1,347.09	34.58	39.954		
4,100.00	4,089.36	4,048.03	4,085.90	18.22	17.45	-35.66	-1,572.49	326.40	1,375.54	1,340.10	35.44	38.814		
4,200.00	4,189.06	4,149.08	4,186.95	18.66	17.88	-35.81	-1,572.98	325.59	1,369.39	1,333.09	36.30	37.723		
4,300.00	4,288.75	4,258.95	4,296.81	19.10	18.34	-35.99	-1,573.10	324.87	1,362.95	1,325.76	37.19	36.645		
4,400.00	4,388.44	4,362.20	4,400.06	19.55	18.77	-36.17	-1,572.42	323.97	1,355.70	1,317.64	38.06	35.618		
4,500.00	4,488.13	4,461.44	4,499.30	19.99	19.19	-36.34	-1,571.86	323.14	1,348.57	1,309.66	38.92	34.651		
4,600.00	4,587.82	4,570.54	4,608.39	20.44	19.65	-36.52	-1,571.00	321.98	1,341.18	1,301.38	39.81	33.693		
4,700.00	4,687.51	4,667.09	4,704.92	20.89	20.06	-36.70	-1,569.64	321.21	1,333.29	1,292.64	40.66	32.795		
4,800.00	4,787.21	4,767.13	4,804.95	21.33	20.48	-36.92	-1,568.37	321.23	1,325.81	1,284.30	41.52	31.934		
4,900.00	4,886.90	4,857.23	4,895.04	21.78	20.86	-37.08	-1,567.60	320.20	1,318.38	1,276.03	42.35	31.132		
5,000.00	4,986.59	4,944.96	4,982.77	22.22	21.23	-37.21	-1,567.90	319.16	1,312.04	1,268.87	43.17	30.392		
5,100.00	5,086.28	5,049.29	5,087.09	22.67	21.67	-37.42	-1,568.30	319.17	1,306.18	1,262.13	44.05	29.653		
5,200.00	5,185.97	5,161.68	5,199.47	23.12	22.14	-37.69	-1,567.37	319.52	1,299.26	1,254.30	44.95	28.904		
5,300.00	5,285.66	5,262.76	5,300.54	23.56	22.56	-37.96	-1,565.86	320.27	1,291.89	1,246.07	45.82	28.196		
5,400.00	5,385.36	5,354.76	5,392.53	24.01	22.95	-38.22	-1,564.57	321.25	1,284.76	1,238.10	46.66	27.534		
5,500.00	5,485.05	5,444.99	5,482.75	24.46	23.33	-38.47	-1,563.97	322.51	1,278.45	1,230.96	47.49	26.918		
5,600.00	5,584.74	5,544.70	5,582.46	24.90	23.75	-38.73	-1,564.04	323.31	1,272.66	1,224.30	48.36	26.316		
5,700.00	5,684.43	5,647.80	5,685.55	25.35	24.18	-39.00	-1,563.59	324.24	1,266.45	1,217.21	49.24	25.722		
5,800.00	5,784.12	5,748.61	5,786.35	25.80	24.60	-39.29	-1,563.08	325.50	1,260.33	1,210.22	50.11	25.153		
5,900.00	5,883.81	5,849.19	5,886.93	26.25	25.03	-39.53	-1,562.67	325.65	1,253.93	1,202.95	50.97	24.599		
6,000.00	5,983.51	5,943.36	5,981.09	26.70	25.42	-39.78	-1,562.38	326.27	1,247.84	1,196.01	51.82	24.079		
6,100.00	6,083.20	6,035.68	6,073.40	27.14	25.81	-40.07	-1,562.17	327.98	1,242.28	1,189.61	52.67	23.588		
6,200.00	6,182.89	6,132.91	6,170.61	27.59	26.22	-40.38	-1,562.50	329.94	1,237.35	1,183.83	53.53	23.117		
6,300.00	6,282.58	6,239.63	6,277.32	28.04	26.67	-40.69	-1,562.57	331.41	1,231.95	1,177.53	54.42	22.639		
6,400.00	6,382.27	6,335.80	6,373.47	28.49	27.08	-41.01	-1,562.33	333.27	1,226.53	1,171.26	55.27	22.190		
6,500.00	6,481.96	6,425.96	6,463.61	28.94	27.46	-41.29	-1,562.63	334.93	1,221.64	1,165.53	56.11	21.772		
6,600.00	6,581.66	6,512.95	6,550.58	29.39	27.83	-41.55	-1,563.95	336.64	1,217.90	1,160.98	56.93	21.394		
6,700.00	6,681.21	6,629.33	6,666.94	29.83	28.32	-80.58	-1,565.87	337.82	1,214.99	1,157.13	57.86	20.998		
6,723.28	6,704.21	6,657.69	6,695.29	29.94	28.44	-87.50	-1,566.16	337.84	1,214.87	1,156.78	58.08	20.916 CC, ES		
6,800.00	6,778.96	6,772.52	6,765.09	30.28	28.93	-98.78	-1,566.51	337.59	1,216.56	1,157.64	58.92	20.649		
6,900.00	6,872.51	6,821.00	6,858.59	30.70	29.14	-104.86	-1,567.54	337.89	1,225.83	1,166.26	59.57	20.579 SF		
7,000.00	6,959.55	6,907.95	6,945.54	31.10	29.51	-107.83	-1,568.51	338.17	1,243.01	1,182.62	60.39	20.585		
7,100.00	7,037.93	6,986.20	7,023.78	31.48	29.84	-109.20	-1,569.37	338.43	1,268.91	1,207.73	61.18	20.739		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,200.00	7,105.74	7,053.82	7,091.40	31.88	30.13	-109.20	-1,570.12	338.64	1,304.14	1,242.17	61.97	21.044	
7,300.00	7,161.29	7,109.16	7,146.73	32.41	30.37	-107.71	-1,570.73	338.82	1,348.84	1,286.09	62.75	21.495	
7,400.00	7,203.22	7,150.83	7,188.41	33.13	30.54	-104.47	-1,571.19	338.96	1,402.58	1,339.08	63.51	22.085	
7,500.00	7,230.50	7,177.83	7,215.40	34.04	30.66	-99.16	-1,571.49	339.05	1,464.34	1,400.11	64.22	22.800	
7,600.00	7,242.45	7,189.48	7,227.05	35.13	30.71	-91.57	-1,571.62	339.08	1,532.50	1,467.64	64.86	23.627	
7,700.00	7,242.72	7,189.44	7,227.01	36.39	30.71	-88.92	-1,571.62	339.08	1,604.98	1,539.56	65.42	24.532	
7,800.00	7,242.33	7,188.73	7,226.30	37.81	30.70	-88.88	-1,571.61	339.08	1,680.32	1,614.35	65.97	25.470	
7,900.00	7,241.93	7,188.02	7,225.59	39.40	30.70	-88.84	-1,571.60	339.08	1,758.12	1,691.61	66.50	26.436	
8,000.00	7,241.54	7,187.31	7,224.88	41.13	30.70	-88.81	-1,571.60	339.08	1,838.07	1,771.05	67.01	27.428	
8,100.00	7,241.15	7,186.60	7,224.17	42.97	30.69	-88.77	-1,571.59	339.07	1,919.89	1,852.40	67.50	28.445	
8,200.00	7,240.75	7,185.89	7,223.46	44.92	30.69	-88.73	-1,571.58	339.07	2,003.37	1,935.42	67.95	29.483	
8,300.00	7,240.36	7,185.18	7,222.76	46.97	30.69	-88.69	-1,571.57	339.07	2,088.30	2,019.92	68.38	30.541	
8,400.00	7,239.97	7,184.48	7,222.05	49.10	30.69	-88.65	-1,571.57	339.07	2,174.51	2,105.74	68.78	31.617	
8,500.00	7,239.57	7,183.77	7,221.34	51.29	30.68	-88.62	-1,571.56	339.07	2,261.86	2,192.71	69.15	32.710	
8,600.00	7,239.18	7,183.06	7,220.63	53.56	30.68	-88.58	-1,571.55	339.06	2,350.21	2,280.71	69.50	33.816	
8,700.00	7,238.79	7,182.35	7,219.92	55.87	30.68	-88.54	-1,571.54	339.06	2,439.47	2,369.64	69.83	34.936	
8,800.00	7,238.39	7,181.64	7,219.21	58.24	30.67	-88.50	-1,571.53	339.06	2,529.53	2,459.39	70.13	36.068	
8,900.00	7,238.00	7,180.93	7,218.50	60.64	30.67	-88.47	-1,571.53	339.06	2,620.31	2,549.89	70.42	37.210	
9,000.00	7,237.61	7,180.22	7,217.80	63.09	30.67	-88.43	-1,571.52	339.05	2,711.73	2,641.04	70.69	38.361	
9,100.00	7,237.21	7,179.52	7,217.09	65.66	30.66	-88.39	-1,571.51	339.05	2,803.75	2,732.80	70.94	39.521	
9,200.00	7,236.82	7,178.81	7,216.38	68.07	30.66	-88.35	-1,571.50	339.05	2,896.29	2,825.11	71.18	40.689	
9,300.00	7,236.43	7,178.10	7,215.67	70.61	30.66	-88.32	-1,571.50	339.05	2,989.31	2,917.90	71.41	41.863	
9,400.00	7,236.03	7,177.39	7,214.96	73.16	30.66	-88.28	-1,571.49	339.04	3,082.77	3,011.15	71.62	43.044	
9,500.00	7,235.64	7,176.68	7,214.25	75.74	30.65	-88.24	-1,571.48	339.04	3,176.63	3,104.81	71.82	44.230	
9,600.00	7,235.25	7,175.97	7,213.54	78.34	30.65	-88.20	-1,571.47	339.04	3,270.85	3,198.84	72.01	45.421	
9,700.00	7,234.85	7,175.26	7,212.84	80.96	30.65	-88.17	-1,571.46	339.04	3,365.40	3,293.21	72.19	46.616	
9,800.00	7,234.46	7,174.56	7,212.13	83.59	30.64	-88.13	-1,571.46	339.04	3,460.26	3,387.90	72.37	47.816	
9,900.00	7,234.07	7,173.85	7,211.42	86.24	30.64	-88.09	-1,571.45	339.03	3,555.41	3,482.87	72.53	49.018	
10,000.00	7,233.67	7,173.14	7,210.71	88.90	30.64	-88.05	-1,571.44	339.03	3,650.81	3,578.12	72.69	50.224	
10,100.00	7,233.28	7,172.43	7,210.00	91.57	30.63	-88.02	-1,571.43	339.03	3,746.45	3,673.61	72.84	51.433	
10,200.00	7,232.89	7,171.72	7,209.29	94.25	30.63	-87.98	-1,571.42	339.03	3,842.31	3,769.33	72.99	52.644	
10,300.00	7,232.49	7,171.01	7,208.59	96.95	30.63	-87.94	-1,571.42	339.02	3,938.38	3,865.26	73.13	53.857	
10,400.00	7,232.10	7,170.30	7,207.88	99.65	30.63	-87.90	-1,571.41	339.02	4,034.64	3,961.38	73.26	55.072	
10,500.00	7,231.71	7,169.60	7,207.17	102.36	30.62	-87.87	-1,571.40	339.02	4,131.08	4,057.69	73.39	56.289	
10,600.00	7,231.32	7,168.89	7,206.46	105.08	30.62	-87.83	-1,571.39	339.02	4,227.68	4,154.17	73.52	57.507	
10,700.00	7,230.92	7,168.18	7,205.75	107.80	30.62	-87.79	-1,571.39	339.01	4,324.44	4,250.80	73.64	58.726	
10,800.00	7,230.53	7,167.47	7,205.04	110.53	30.61	-87.75	-1,571.38	339.01	4,421.34	4,347.59	73.75	59.946	
10,900.00	7,230.14	7,166.76	7,204.33	113.27	30.61	-87.72	-1,571.37	339.01	4,518.38	4,444.51	73.87	61.167	
11,000.00	7,229.74	7,166.05	7,203.63	116.02	30.61	-87.68	-1,571.36	339.01	4,615.54	4,541.56	73.98	62.389	
11,100.00	7,229.35	7,165.34	7,202.92	118.77	30.60	-87.64	-1,571.35	339.01	4,712.82	4,638.73	74.09	63.611	
11,200.00	7,228.96	7,164.64	7,202.21	121.52	30.60	-87.60	-1,571.35	339.00	4,810.21	4,736.02	74.19	64.833	
11,300.00	7,228.56	7,163.93	7,201.50	124.28	30.60	-87.57	-1,571.34	339.00	4,907.71	4,833.41	74.30	66.055	
11,400.00	7,228.17	7,163.22	7,200.79	127.04	30.60	-87.53	-1,571.33	339.00	5,005.31	4,930.91	74.40	67.277	
11,500.00	7,227.78	7,162.51	7,200.08	129.81	30.59	-87.49	-1,571.32	339.00	5,103.00	5,028.50	74.50	68.499	
11,600.00	7,227.38	7,161.80	7,199.37	132.58	30.59	-87.45	-1,571.31	338.99	5,200.77	5,126.18	74.59	69.721	
11,700.00	7,226.99	7,161.09	7,198.67	135.36	30.59	-87.41	-1,571.31	338.99	5,298.63	5,223.94	74.69	70.942	
11,800.00	7,226.60	7,160.38	7,197.96	138.14	30.58	-87.38	-1,571.30	338.99	5,396.57	5,321.79	74.78	72.163	
11,900.00	7,226.20	7,159.68	7,197.25	140.92	30.58	-87.34	-1,571.29	338.99	5,494.58	5,419.71	74.88	73.383	
12,000.00	7,225.81	7,158.97	7,196.54	143.70	30.58	-87.30	-1,571.28	338.99	5,592.67	5,517.70	74.97	74.603	
12,100.00	7,225.42	7,158.26	7,195.83	146.49	30.57	-87.26	-1,571.28	338.98	5,690.82	5,615.76	75.06	75.821	
12,200.00	7,225.02	7,157.55	7,195.12	149.28	30.57	-87.23	-1,571.27	338.98	5,789.03	5,713.88	75.14	77.039	
12,300.00	7,224.63	7,156.84	7,194.42	152.08	30.57	-87.19	-1,571.26	338.98	5,887.30	5,812.07	75.23	78.256	

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
12,400.00	7,224.24	7,156.13	7,193.71	154.87	30.57	-87.15	-1,571.25	338.98	5,985.63	5,910.31	75.32	79.472	
12,500.00	7,223.84	7,155.43	7,193.00	157.67	30.56	-87.11	-1,571.24	338.97	6,084.01	6,008.61	75.40	80.687	
12,600.00	7,223.45	7,154.72	7,192.29	160.47	30.56	-87.08	-1,571.24	338.97	6,182.45	6,106.96	75.49	81.900	
12,700.00	7,223.06	7,154.01	7,191.58	163.27	30.56	-87.04	-1,571.23	338.97	6,280.94	6,205.36	75.57	83.113	
12,800.00	7,222.66	7,153.30	7,190.87	166.07	30.55	-87.00	-1,571.22	338.97	6,379.47	6,303.81	75.65	84.324	
12,900.00	7,222.27	7,152.59	7,190.16	168.88	30.55	-86.96	-1,571.21	338.96	6,478.05	6,402.31	75.74	85.533	
13,000.00	7,221.88	7,151.88	7,189.46	171.69	30.55	-86.93	-1,571.21	338.96	6,576.67	6,500.85	75.82	86.741	
13,100.00	7,221.48	7,151.17	7,188.75	174.49	30.54	-86.89	-1,571.20	338.96	6,675.33	6,599.43	75.90	87.948	
13,200.00	7,221.09	7,150.47	7,188.04	177.30	30.54	-86.85	-1,571.19	338.96	6,774.03	6,698.04	75.98	89.153	
13,300.00	7,220.70	7,149.76	7,187.33	180.12	30.54	-86.81	-1,571.18	338.96	6,872.76	6,796.70	76.06	90.356	
13,400.00	7,220.30	7,149.05	7,186.62	182.93	30.54	-86.78	-1,571.17	338.95	6,971.54	6,895.39	76.14	91.558	
13,500.00	7,219.91	7,148.34	7,185.91	185.74	30.53	-86.74	-1,571.17	338.95	7,070.35	6,994.12	76.22	92.758	
13,600.00	7,219.52	7,147.63	7,185.20	188.56	30.53	-86.70	-1,571.16	338.95	7,169.19	7,092.88	76.30	93.956	
13,700.00	7,219.12	7,146.92	7,184.50	191.38	30.53	-86.66	-1,571.15	338.95	7,268.06	7,191.68	76.38	95.152	
13,800.00	7,218.73	7,146.21	7,183.79	194.20	30.52	-86.63	-1,571.14	338.94	7,366.96	7,290.50	76.46	96.347	
13,900.00	7,218.34	7,145.51	7,183.08	197.02	30.52	-86.59	-1,571.13	338.94	7,465.89	7,389.35	76.54	97.539	
14,000.00	7,217.94	7,144.80	7,182.37	199.84	30.52	-86.55	-1,571.13	338.94	7,564.86	7,488.23	76.62	98.730	
14,100.00	7,217.55	7,144.09	7,181.66	202.66	30.51	-86.51	-1,571.12	338.94	7,663.84	7,587.14	76.70	99.918	
14,200.00	7,217.16	7,143.38	7,180.95	205.48	30.51	-86.48	-1,571.11	338.93	7,762.86	7,686.07	76.78	101.105	
14,300.00	7,216.76	7,142.67	7,180.25	208.30	30.51	-86.44	-1,571.10	338.93	7,861.89	7,785.03	76.86	102.289	
14,400.00	7,216.37	7,141.96	7,179.54	211.13	30.50	-86.40	-1,571.10	338.93	7,960.96	7,884.02	76.94	103.471	
14,500.00	7,215.98	7,141.25	7,178.83	213.96	30.50	-86.36	-1,571.09	338.93	8,060.04	7,983.02	77.02	104.651	
14,600.00	7,215.58	7,140.55	7,178.12	216.78	30.50	-86.33	-1,571.08	338.93	8,159.15	8,082.05	77.10	105.829	
14,700.00	7,215.19	7,139.84	7,177.41	219.61	30.50	-86.29	-1,571.07	338.92	8,258.28	8,181.10	77.18	107.005	
14,800.00	7,214.80	7,139.13	7,176.70	222.44	30.49	-86.25	-1,571.06	338.92	8,357.43	8,280.17	77.26	108.178	
14,900.00	7,214.40	7,138.42	7,175.99	225.27	30.49	-86.21	-1,571.06	338.92	8,456.60	8,379.26	77.34	109.349	
15,000.00	7,214.01	7,137.71	7,175.29	228.10	30.49	-86.18	-1,571.05	338.92	8,555.78	8,478.37	77.42	110.518	
15,002.44	7,214.00	7,137.69	7,175.27	228.16	30.49	-86.18	-1,571.05	338.92	8,558.20	8,480.78	77.42	110.546	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	70.00	3.28	3.28	172.76	-4,299.16	545.80	4,334.24				
100.00	100.00	29.34	99.34	3.28	3.28	172.76	-4,299.17	545.79	4,333.67	4,327.11	6.57	660.088	
200.00	200.00	124.85	194.85	3.34	3.30	172.77	-4,299.24	545.58	4,333.72	4,327.09	6.63	653.392	
300.00	300.00	215.08	285.08	3.44	3.36	172.77	-4,299.49	545.31	4,333.96	4,327.16	6.80	637.323	
400.00	400.00	309.87	379.87	3.60	3.46	172.77	-4,299.90	545.22	4,334.37	4,327.31	7.07	613.323	
500.00	500.00	412.51	482.50	3.81	3.63	172.77	-4,300.33	545.26	4,334.80	4,327.37	7.43	583.026	
600.00	599.98	511.07	581.07	4.03	3.83	-25.41	-4,300.76	545.27	4,333.65	4,325.79	7.86	551.091	
700.00	699.84	614.38	684.37	4.29	4.08	-25.47	-4,301.21	545.02	4,329.32	4,320.96	8.36	517.707	
800.00	799.54	717.97	787.96	4.57	4.35	-25.53	-4,301.57	544.52	4,322.62	4,313.70	8.92	484.489	
900.00	899.23	810.75	880.74	4.87	4.63	-25.56	-4,302.00	543.81	4,315.90	4,306.40	9.50	454.477	
1,000.00	998.92	910.90	980.88	5.20	4.94	-25.59	-4,302.53	542.75	4,309.21	4,299.08	10.13	425.297	
1,100.00	1,098.61	992.23	1,062.20	5.54	5.20	-25.61	-4,303.20	541.61	4,302.76	4,292.02	10.74	400.654	
1,200.00	1,198.30	1,081.23	1,151.18	5.90	5.51	-25.63	-4,304.27	540.12	4,296.66	4,285.26	11.40	377.007	
1,300.00	1,298.00	1,176.98	1,246.91	6.27	5.84	-25.65	-4,305.61	538.41	4,290.74	4,278.64	12.10	354.631	
1,400.00	1,397.69	1,285.82	1,355.71	6.66	6.23	-25.66	-4,307.11	536.33	4,284.78	4,271.91	12.87	332.986	
1,500.00	1,497.38	1,392.39	1,462.26	7.05	6.63	-25.68	-4,308.36	534.08	4,278.59	4,264.95	13.65	313.554	
1,600.00	1,597.07	1,491.52	1,561.36	7.44	7.00	-25.70	-4,309.45	532.04	4,272.34	4,257.93	14.41	296.499	
1,700.00	1,696.76	1,583.62	1,653.43	7.85	7.35	-25.71	-4,310.54	530.25	4,266.18	4,251.02	15.16	281.455	
1,800.00	1,796.45	1,704.41	1,774.20	8.25	7.82	-25.74	-4,311.84	527.98	4,259.94	4,243.91	16.02	265.840	
1,900.00	1,896.15	1,789.03	1,858.80	8.67	8.15	-25.75	-4,312.65	526.48	4,253.58	4,236.82	16.76	253.773	
2,000.00	1,995.84	1,883.21	1,952.96	9.08	8.52	-25.78	-4,313.76	524.96	4,247.47	4,229.93	17.54	242.135	
2,100.00	2,095.53	1,976.02	2,045.75	9.50	8.89	-25.79	-4,314.99	523.35	4,241.48	4,223.16	18.32	231.482	
2,200.00	2,195.22	2,066.24	2,135.94	9.92	9.25	-25.81	-4,316.38	521.67	4,235.69	4,216.59	19.10	221.766	
2,300.00	2,294.91	2,163.58	2,233.24	10.35	9.65	-25.83	-4,318.07	519.80	4,230.09	4,210.18	19.91	212.468	
2,400.00	2,394.60	2,302.33	2,371.96	10.77	10.21	-25.85	-4,319.97	517.21	4,224.17	4,203.29	20.89	202.245	
2,500.00	2,494.30	2,472.98	2,542.59	11.20	10.90	-25.90	-4,319.90	514.60	4,216.91	4,194.92	21.99	191.784	
2,600.00	2,593.99	2,586.96	2,656.55	11.63	11.37	-25.93	-4,318.48	512.91	4,208.40	4,185.53	22.87	184.011	
2,700.00	2,693.68	2,687.63	2,757.20	12.07	11.78	-25.96	-4,317.17	511.31	4,199.84	4,176.14	23.71	177.171	
2,800.00	2,793.37	2,782.24	2,851.79	12.50	12.17	-25.98	-4,316.00	509.67	4,191.33	4,166.81	24.52	170.940	
2,900.00	2,893.06	2,880.22	2,949.75	12.93	12.57	-26.01	-4,314.89	507.89	4,182.91	4,157.56	25.35	165.012	
3,000.00	2,992.76	2,973.78	3,043.28	13.37	12.96	-26.03	-4,313.90	506.14	4,174.56	4,148.40	26.16	159.552	
3,100.00	3,092.45	3,076.81	3,146.29	13.81	13.39	-26.05	-4,312.92	504.11	4,166.30	4,139.28	27.02	154.203	
3,200.00	3,192.14	3,184.71	3,254.16	14.25	13.84	-26.08	-4,311.70	501.94	4,157.86	4,129.96	27.89	149.066	
3,300.00	3,291.83	3,273.38	3,342.80	14.68	14.21	-26.10	-4,310.69	500.23	4,149.42	4,120.72	28.69	144.606	
3,400.00	3,391.52	3,360.44	3,429.84	15.12	14.57	-26.12	-4,309.99	498.44	4,141.30	4,111.81	29.49	140.422	
3,500.00	3,491.21	3,451.14	3,520.52	15.56	14.95	-26.13	-4,309.56	496.27	4,133.45	4,103.14	30.30	136.395	
3,600.00	3,590.91	3,543.79	3,613.14	16.00	15.34	-26.14	-4,309.32	493.80	4,125.78	4,094.65	31.13	132.546	
3,700.00	3,690.60	3,639.07	3,708.38	16.45	15.74	-26.16	-4,309.20	491.43	4,118.27	4,086.31	31.96	128.855	
3,800.00	3,790.29	3,735.68	3,804.97	16.89	16.14	-26.18	-4,309.06	489.49	4,110.80	4,078.00	32.80	125.329	
3,900.00	3,889.98	3,830.51	3,899.78	17.33	16.54	-26.19	-4,309.09	487.50	4,103.49	4,069.86	33.63	122.007	
4,000.00	3,989.67	3,933.69	4,002.94	17.77	16.98	-26.22	-4,309.05	485.61	4,096.16	4,061.66	34.50	118.729	
4,100.00	4,089.36	4,035.04	4,104.29	18.22	17.40	-26.24	-4,308.93	483.93	4,088.77	4,053.41	35.36	115.632	
4,200.00	4,189.06	4,138.82	4,208.05	18.66	17.84	-26.28	-4,308.68	482.79	4,081.34	4,045.11	36.23	112.650	
4,300.00	4,288.75	4,254.01	4,323.24	19.10	18.32	-26.34	-4,307.91	483.12	4,073.68	4,036.54	37.14	109.670	
4,400.00	4,388.44	4,396.25	4,465.46	19.55	18.91	-26.43	-4,305.89	484.18	4,065.38	4,027.22	38.16	106.531	
4,500.00	4,488.13	4,493.17	4,562.36	19.99	19.32	-26.49	-4,303.94	484.93	4,056.48	4,017.47	39.01	103.993	
4,600.00	4,587.82	4,569.10	4,638.28	20.44	19.64	-26.54	-4,302.65	485.53	4,047.90	4,008.13	39.77	101.772	
4,700.00	4,687.51	4,640.14	4,709.31	20.89	19.93	-26.58	-4,301.94	485.89	4,039.97	3,999.45	40.52	99.698	
4,800.00	4,787.21	4,712.88	4,782.05	21.33	20.24	-26.63	-4,301.78	486.24	4,032.79	3,991.51	41.28	97.705	
4,900.00	4,886.90	4,813.35	4,882.52	21.78	20.66	-26.68	-4,301.82	486.78	4,025.89	3,983.75	42.14	95.543	
5,000.00	4,986.59	4,912.33	4,981.50	22.22	21.07	-26.74	-4,301.89	487.08	4,018.99	3,976.00	42.99	93.480	
5,100.00	5,086.28	5,011.79	5,080.96	22.67	21.49	-26.79	-4,301.98	487.40	4,012.12	3,968.27	43.85	91.492	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,117.71	5,186.88	23.12	21.93	-26.85	-4,301.96	488.01	4,005.18	3,960.44	44.74	89.529		
5,300.00	5,285.66	5,241.27	5,310.44	23.56	22.45	-26.93	-4,301.53	488.87	3,997.95	3,952.26	45.69	87.504		
5,400.00	5,385.36	5,376.93	5,446.08	24.01	23.02	-27.02	-4,299.76	490.32	3,989.81	3,943.13	46.68	85.463		
5,500.00	5,485.05	5,540.48	5,609.48	24.46	23.72	-27.18	-4,294.64	494.82	3,979.93	3,932.15	47.78	83.301		
5,600.00	5,584.74	5,600.01	5,668.95	24.90	23.97	-27.24	-4,292.71	496.53	3,970.26	3,921.76	48.50	81.866		
5,700.00	5,684.43	5,674.47	5,743.37	25.35	24.29	-27.31	-4,291.00	498.17	3,961.38	3,912.12	49.27	80.406		
5,800.00	5,784.12	5,748.28	5,817.17	25.80	24.60	-27.37	-4,289.99	499.20	3,953.28	3,903.25	50.03	79.013		
5,900.00	5,883.81	5,831.00	5,899.88	26.25	24.95	-27.42	-4,289.44	499.70	3,945.73	3,894.90	50.83	77.624		
6,000.00	5,983.51	5,931.17	6,000.05	26.70	25.37	-27.48	-4,289.04	499.98	3,938.42	3,886.72	51.70	76.184		
6,100.00	6,083.20	6,039.75	6,108.62	27.14	25.83	-27.53	-4,288.37	499.97	3,930.84	3,878.24	52.59	74.741		
6,200.00	6,182.89	6,140.56	6,209.43	27.59	26.26	-27.59	-4,287.79	499.80	3,923.28	3,869.82	53.46	73.387		
6,300.00	6,282.58	6,254.01	6,322.88	28.04	26.74	-27.65	-4,286.83	499.55	3,915.46	3,861.08	54.38	72.008		
6,400.00	6,382.27	6,352.19	6,421.06	28.49	27.16	-27.70	-4,285.80	499.28	3,907.43	3,852.19	55.23	70.743		
6,500.00	6,481.96	6,444.79	6,513.65	28.94	27.55	-27.75	-4,285.01	499.06	3,899.60	3,843.53	56.07	69.546		
6,600.00	6,581.66	6,543.26	6,612.12	29.39	27.97	-27.79	-4,284.33	498.48	3,891.87	3,834.94	56.93	68.360		
6,700.00	6,681.21	6,651.32	6,720.17	29.83	28.43	-27.83	-4,283.45	498.19	3,884.51	3,826.68	57.83	67.174		
6,800.00	6,778.96	6,759.39	6,828.24	30.28	28.89	-27.88	-4,282.12	498.45	3,879.28	3,820.57	58.72	66.068		
6,900.00	6,872.51	6,853.51	6,922.34	30.70	29.29	-27.91	-4,280.92	498.20	3,876.99	3,817.45	59.55	65.109		
6,916.81	6,887.65	6,868.22	6,937.05	30.76	29.35	-27.91	-4,280.74	498.16	3,876.94	3,817.26	59.68	64.961 CC, ES		
7,000.00	6,959.55	6,939.82	7,008.65	31.10	29.65	-27.94	-4,279.83	498.11	3,878.23	3,817.89	60.35	64.267		
7,100.00	7,037.93	7,012.81	7,081.63	31.48	29.96	-27.95	-4,278.75	498.80	3,883.46	3,822.34	61.12	63.539		
7,200.00	7,105.74	7,059.60	7,128.41	31.88	30.16	-27.96	-4,278.19	499.48	3,893.37	3,831.52	61.86	62.943		
7,300.00	7,161.29	7,103.48	7,165.35	32.41	30.35	-27.97	-4,277.90	500.07	3,908.25	3,845.57	62.68	62.350		
7,400.00	7,203.22	7,136.94	7,205.74	33.13	30.49	-27.98	-4,277.69	500.74	3,927.99	3,864.40	63.60	61.763		
7,500.00	7,230.50	7,162.61	7,231.40	34.04	30.60	-27.99	-4,277.55	501.17	3,952.36	3,887.73	64.63	61.153		
7,600.00	7,242.45	7,172.90	7,241.70	35.13	30.64	-28.00	-4,277.50	501.34	3,980.96	3,915.23	65.73	60.565		
7,700.00	7,242.72	7,171.51	7,240.30	36.39	30.64	-28.01	-4,277.50	501.32	4,012.90	3,946.01	66.89	59.994		
7,800.00	7,242.33	7,169.45	7,238.24	37.81	30.63	-28.02	-4,277.52	501.28	4,047.11	3,978.95	68.17	59.371		
7,900.00	7,241.93	7,167.39	7,236.18	39.40	30.62	-28.03	-4,277.53	501.25	4,083.48	4,013.94	69.54	58.720		
8,000.00	7,241.54	7,165.33	7,234.13	41.13	30.61	-28.04	-4,277.54	501.21	4,121.96	4,050.96	70.99	58.061		
8,100.00	7,241.15	7,163.28	7,232.07	42.97	30.60	-28.05	-4,277.55	501.18	4,162.48	4,089.98	72.50	57.410		
8,200.00	7,240.75	7,161.22	7,230.01	44.92	30.59	-28.06	-4,277.56	501.15	4,204.99	4,130.94	74.05	56.783		
8,300.00	7,240.36	7,159.16	7,227.95	46.97	30.59	-28.07	-4,277.57	501.11	4,249.43	4,173.80	75.63	56.186		
8,400.00	7,239.97	7,157.10	7,225.89	49.10	30.58	-28.08	-4,277.58	501.08	4,295.73	4,218.51	77.22	55.629		
8,500.00	7,239.57	7,155.04	7,223.84	51.29	30.57	-28.09	-4,277.59	501.04	4,343.84	4,265.03	78.82	55.114		
8,600.00	7,239.18	7,152.98	7,221.78	53.56	30.56	-28.10	-4,277.60	501.01	4,393.70	4,313.30	80.41	54.644		
8,700.00	7,238.79	7,150.93	7,219.72	55.87	30.55	-28.11	-4,277.61	500.97	4,445.25	4,363.27	81.98	54.222		
8,800.00	7,238.39	7,148.87	7,217.66	58.24	30.54	-28.12	-4,277.63	500.94	4,498.44	4,414.89	83.54	53.846		
8,900.00	7,238.00	7,146.81	7,215.60	60.64	30.53	-28.13	-4,277.64	500.91	4,553.19	4,468.11	85.08	53.516		
9,000.00	7,237.61	7,144.75	7,213.55	63.09	30.52	-28.14	-4,277.65	500.87	4,609.47	4,522.87	86.59	53.232		
9,100.00	7,237.21	7,142.69	7,211.49	65.56	30.52	-28.15	-4,277.66	500.84	4,667.20	4,579.13	88.07	52.992		
9,200.00	7,236.82	7,140.64	7,209.43	68.07	30.51	-28.16	-4,277.67	500.80	4,726.35	4,636.83	89.52	52.794		
9,300.00	7,236.43	7,138.58	7,207.37	70.61	30.50	-28.17	-4,277.68	500.77	4,786.86	4,695.92	90.94	52.637		
9,400.00	7,236.03	7,136.52	7,205.32	73.16	30.49	-28.18	-4,277.69	500.74	4,848.67	4,756.35	92.32	52.518		
9,500.00	7,235.64	7,134.46	7,203.26	75.74	30.48	-28.19	-4,277.70	500.70	4,911.74	4,818.07	93.67	52.436		
9,600.00	7,235.25	7,132.40	7,201.20	78.34	30.47	-28.20	-4,277.71	500.67	4,976.02	4,881.04	94.98	52.389		
9,700.00	7,234.85	7,130.34	7,199.14	80.96	30.46	-28.21	-4,277.72	500.63	5,041.46	4,945.20	96.26	52.375 SF		
9,800.00	7,234.46	7,128.29	7,197.08	83.59	30.45	-28.22	-4,277.73	500.60	5,108.02	5,010.53	97.50	52.392		
9,900.00	7,234.07	7,126.23	7,195.03	86.24	30.45	-28.23	-4,277.75	500.56	5,175.66	5,076.96	98.70	52.439		
10,000.00	7,233.67	7,124.17	7,192.97	88.90	30.44	-28.24	-4,277.76	500.53	5,244.33	5,144.46	99.87	52.514		
10,100.00	7,233.28	7,122.11	7,190.91	91.57	30.43	-28.25	-4,277.77	500.50	5,313.99	5,212.99	101.00	52.615		
10,200.00	7,232.89	7,120.05	7,188.85	94.25	30.42	-28.26	-4,277.78	500.46	5,384.61	5,282.52	102.09	52.741		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,118.00	7,186.79	96.95	30.41	-89.07	-4,277.79	500.43	5,456.15	5,352.99	103.16	52.891		
10,400.00	7,232.10	7,115.94	7,184.74	99.65	30.40	-89.04	-4,277.80	500.39	5,528.57	5,424.38	104.19	53.063		
10,500.00	7,231.71	7,113.88	7,182.68	102.36	30.39	-89.01	-4,277.81	500.36	5,601.83	5,496.65	105.19	53.256		
10,600.00	7,231.32	7,111.82	7,180.62	105.08	30.38	-88.98	-4,277.82	500.33	5,675.92	5,569.76	106.15	53.469		
10,700.00	7,230.92	7,109.76	7,178.56	107.80	30.38	-88.95	-4,277.83	500.29	5,750.78	5,643.69	107.09	53.700		
10,800.00	7,230.53	7,107.70	7,176.50	110.53	30.37	-88.92	-4,277.84	500.26	5,826.40	5,718.41	108.00	53.949		
10,900.00	7,230.14	7,105.65	7,174.45	113.27	30.36	-88.89	-4,277.86	500.22	5,902.75	5,793.87	108.88	54.216		
11,000.00	7,229.74	7,103.59	7,172.39	116.02	30.35	-88.86	-4,277.87	500.19	5,979.79	5,870.07	109.73	54.498		
11,100.00	7,229.35	7,101.53	7,170.33	118.77	30.34	-88.83	-4,277.88	500.15	6,057.50	5,946.96	110.55	54.795		
11,200.00	7,228.96	7,100.56	7,168.27	121.52	30.34	-88.79	-4,277.89	500.12	6,135.86	6,024.51	111.35	55.104		
11,300.00	7,228.56	7,102.62	7,166.22	124.28	30.35	-88.76	-4,277.90	500.09	6,214.84	6,102.70	112.14	55.420		
11,400.00	7,228.17	7,104.67	7,164.16	127.04	30.35	-88.73	-4,277.91	500.05	6,294.41	6,181.51	112.91	55.749		
11,500.00	7,227.78	7,106.73	7,162.10	129.81	30.36	-88.70	-4,277.92	500.02	6,374.56	6,260.92	113.65	56.090		
11,600.00	7,227.38	7,108.79	7,160.04	132.58	30.37	-88.67	-4,277.93	499.98	6,455.27	6,340.90	114.37	56.443		
11,700.00	7,226.99	7,110.85	7,157.98	135.36	30.38	-88.64	-4,277.94	499.95	6,536.50	6,421.44	115.07	56.807		
11,800.00	7,226.60	7,112.91	7,155.93	138.14	30.39	-88.61	-4,277.95	499.92	6,618.25	6,502.51	115.74	57.181		
11,900.00	7,226.20	7,114.96	7,153.87	140.92	30.40	-88.58	-4,277.97	499.88	6,700.50	6,584.10	116.40	57.565		
12,000.00	7,225.81	7,117.02	7,151.81	143.70	30.41	-88.55	-4,277.98	499.85	6,783.22	6,666.18	117.04	57.959		
12,100.00	7,225.42	7,119.08	7,149.75	146.49	30.42	-88.51	-4,277.99	499.81	6,866.39	6,748.74	117.65	58.361		
12,200.00	7,225.02	7,121.14	7,147.69	149.28	30.42	-88.48	-4,278.00	499.78	6,950.02	6,831.76	118.25	58.772		
12,300.00	7,224.63	7,085.39	7,154.20	152.08	30.27	-88.58	-4,277.97	499.89	7,034.08	6,915.40	118.68	59.271		
12,400.00	7,224.24	7,084.12	7,152.93	154.87	30.27	-88.56	-4,277.98	499.87	7,118.54	6,999.31	119.23	59.705		
12,500.00	7,223.84	7,082.86	7,151.67	157.67	30.26	-88.54	-4,277.99	499.85	7,203.40	7,083.64	119.76	60.146		
12,600.00	7,223.45	7,081.60	7,150.41	160.47	30.26	-88.52	-4,278.00	499.83	7,288.65	7,168.36	120.29	60.595		
12,700.00	7,223.06	7,080.35	7,149.15	163.27	30.25	-88.51	-4,278.01	499.81	7,374.26	7,253.47	120.79	61.050		
12,800.00	7,222.66	7,079.10	7,147.90	166.07	30.25	-88.49	-4,278.02	499.79	7,460.23	7,338.95	121.28	61.512		
12,900.00	7,222.27	7,077.86	7,146.66	168.88	30.24	-88.47	-4,278.03	499.77	7,546.55	7,424.79	121.76	61.979		
13,000.00	7,221.88	7,076.62	7,145.42	171.69	30.23	-88.45	-4,278.04	499.75	7,633.20	7,510.98	122.22	62.453		
13,100.00	7,221.48	7,075.38	7,144.19	174.49	30.23	-88.43	-4,278.05	499.73	7,720.18	7,597.50	122.67	62.932		
13,200.00	7,221.09	7,074.15	7,142.96	177.30	30.22	-88.41	-4,278.06	499.71	7,807.46	7,684.35	123.11	63.417		
13,300.00	7,220.70	7,072.93	7,141.73	180.12	30.22	-88.39	-4,278.07	499.69	7,895.05	7,771.51	123.54	63.907		
13,400.00	7,220.30	7,071.71	7,140.52	182.93	30.21	-88.38	-4,278.08	499.67	7,982.93	7,858.97	123.96	64.401		
13,500.00	7,219.91	7,070.49	7,139.30	185.74	30.21	-88.36	-4,278.09	499.65	8,071.09	7,946.73	124.36	64.901		
13,600.00	7,219.52	7,069.28	7,138.09	188.56	30.20	-88.34	-4,278.10	499.63	8,159.52	8,034.77	124.75	65.405		
13,700.00	7,219.12	7,068.08	7,136.88	191.38	30.20	-88.32	-4,278.11	499.62	8,248.22	8,123.08	125.14	65.913		
13,800.00	7,218.73	7,066.88	7,135.68	194.20	30.19	-88.30	-4,278.12	499.60	8,337.17	8,211.66	125.51	66.425		
13,900.00	7,218.34	7,065.68	7,134.49	197.02	30.19	-88.28	-4,278.13	499.58	8,426.37	8,300.49	125.88	66.942		
14,000.00	7,217.94	7,064.49	7,133.29	199.84	30.18	-88.27	-4,278.14	499.56	8,515.81	8,389.58	126.23	67.462		
14,100.00	7,217.55	7,063.30	7,132.11	202.66	30.18	-88.25	-4,278.15	499.54	8,605.48	8,478.90	126.58	67.986		
14,200.00	7,217.16	7,062.12	7,130.92	205.48	30.17	-88.23	-4,278.16	499.52	8,695.38	8,568.46	126.92	68.513		
14,300.00	7,216.76	7,060.94	7,129.75	208.30	30.17	-88.21	-4,278.17	499.51	8,785.49	8,658.25	127.25	69.044		
14,400.00	7,216.37	7,059.76	7,128.57	211.13	30.16	-88.19	-4,278.19	499.49	8,875.82	8,748.25	127.57	69.578		
14,500.00	7,215.98	7,058.59	7,127.40	213.96	30.16	-88.18	-4,278.20	499.47	8,966.35	8,838.47	127.88	70.115		
14,600.00	7,215.58	7,057.43	7,126.24	216.78	30.15	-88.16	-4,278.21	499.45	9,057.08	8,928.89	128.19	70.654		
14,700.00	7,215.19	7,056.27	7,125.08	219.61	30.15	-88.14	-4,278.22	499.43	9,148.00	9,019.51	128.49	71.197		
14,800.00	7,214.80	7,055.11	7,123.92	222.44	30.14	-88.12	-4,278.23	499.42	9,239.11	9,110.33	128.78	71.743		
14,900.00	7,214.40	7,053.96	7,122.77	225.27	30.14	-88.11	-4,278.24	499.40	9,330.40	9,201.34	129.07	72.291		
15,000.00	7,214.01	7,052.81	7,121.62	228.10	30.13	-88.09	-4,278.25	499.38	9,421.87	9,292.53	129.35	72.842		
15,002.44	7,214.00	7,052.78	7,121.59	228.16	30.13	-88.09	-4,278.25	499.38	9,424.10	9,294.75	129.35	72.855		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	20.24	-1.76	3.28	3.28	172.76	-4,299.17	545.80	4,333.68					
100.00	100.00	113.01	91.01	3.28	3.29	172.77	-4,299.30	545.70	4,333.81	4,327.23	6.58	659.052		
200.00	200.00	211.87	189.87	3.34	3.35	172.77	-4,299.55	545.58	4,334.04	4,327.35	6.69	647.877		
300.00	300.00	318.25	296.25	3.44	3.48	172.77	-4,299.73	545.38	4,334.18	4,327.26	6.92	626.302		
400.00	400.00	418.47	396.47	3.60	3.64	172.78	-4,299.87	545.03	4,334.28	4,327.03	7.24	598.427		
500.00	500.00	520.85	498.85	3.81	3.85	172.78	-4,299.95	544.72	4,334.32	4,326.66	7.66	566.193		
600.00	599.98	619.08	597.08	4.03	4.09	-25.40	-4,300.06	544.35	4,332.80	4,324.68	8.12	533.640		
700.00	699.84	720.72	698.72	4.29	4.36	-25.47	-4,300.12	544.06	4,328.10	4,319.46	8.64	500.655		
800.00	799.54	816.96	794.96	4.57	4.65	-25.52	-4,300.23	543.85	4,321.19	4,311.98	9.21	469.303		
900.00	899.23	917.93	895.92	4.87	4.96	-25.56	-4,300.35	543.53	4,314.19	4,304.36	9.83	439.071		
1,000.00	998.92	1,016.29	994.28	5.20	5.29	-25.60	-4,300.49	543.25	4,307.21	4,296.74	10.47	411.312		
1,100.00	1,098.61	1,118.53	1,096.52	5.54	5.64	-25.65	-4,300.59	542.96	4,300.19	4,289.03	11.16	385.282		
1,200.00	1,198.30	1,218.11	1,196.10	5.90	5.97	-25.68	-4,300.74	542.61	4,293.22	4,281.37	11.85	362.338		
1,300.00	1,298.00	1,304.72	1,282.72	6.27	6.30	-25.72	-4,301.03	542.21	4,286.41	4,273.87	12.55	341.667		
1,400.00	1,397.69	1,407.11	1,385.10	6.66	6.68	-25.76	-4,301.44	541.72	4,279.67	4,266.37	13.30	321.811		
1,500.00	1,497.38	1,513.63	1,491.62	7.05	7.08	-25.80	-4,301.74	541.06	4,272.80	4,258.72	14.08	303.422		
1,600.00	1,597.07	1,611.66	1,589.64	7.44	7.46	-25.83	-4,301.99	540.40	4,265.89	4,251.04	14.85	287.339		
1,700.00	1,696.76	1,710.39	1,688.38	7.85	7.84	-25.87	-4,302.25	539.78	4,259.01	4,243.38	15.62	272.603		
1,800.00	1,796.45	1,805.49	1,783.47	8.25	8.22	-25.91	-4,302.58	539.12	4,252.19	4,235.80	16.40	259.346		
1,900.00	1,896.15	1,899.38	1,877.36	8.67	8.59	-25.94	-4,303.04	538.34	4,245.51	4,228.34	17.17	247.245		
2,000.00	1,995.84	1,998.07	1,976.04	9.08	8.98	-25.97	-4,303.63	537.30	4,238.90	4,220.93	17.97	235.860		
2,100.00	2,095.53	2,108.63	2,086.59	9.50	9.42	-26.00	-4,304.20	535.96	4,232.19	4,213.36	18.83	224.814		
2,200.00	2,195.22	2,214.15	2,192.10	9.92	9.85	-26.03	-4,304.56	534.57	4,225.29	4,205.63	19.66	214.875		
2,300.00	2,294.91	2,327.47	2,305.41	10.35	10.31	-26.06	-4,304.65	533.07	4,218.14	4,197.60	20.54	205.386		
2,400.00	2,394.60	2,433.10	2,411.03	10.77	10.74	-26.10	-4,304.46	531.77	4,210.74	4,189.35	21.38	196.903		
2,500.00	2,494.30	2,533.08	2,511.01	11.20	11.15	-26.13	-4,304.22	530.75	4,203.31	4,181.10	22.21	189.225		
2,600.00	2,593.99	2,635.17	2,613.10	11.63	11.57	-26.17	-4,303.89	529.88	4,195.83	4,172.77	23.05	182.008		
2,700.00	2,693.68	2,732.01	2,709.92	12.07	11.96	-26.20	-4,303.57	529.04	4,188.34	4,164.46	23.87	175.428		
2,800.00	2,793.37	2,827.39	2,805.31	12.50	12.36	-26.24	-4,303.39	528.26	4,180.99	4,156.30	24.69	169.314		
2,900.00	2,893.06	2,926.13	2,904.04	12.93	12.77	-26.28	-4,303.16	527.55	4,173.62	4,148.09	25.53	163.492		
3,000.00	2,992.76	3,010.85	2,988.76	13.37	13.12	-26.31	-4,303.16	527.10	4,166.51	4,140.20	26.31	158.368		
3,100.00	3,092.45	3,103.37	3,081.28	13.81	13.50	-26.35	-4,303.40	526.66	4,159.66	4,132.54	27.12	153.363		
3,200.00	3,192.14	3,208.04	3,185.95	14.25	13.94	-26.39	-4,303.70	526.10	4,152.83	4,124.85	27.99	148.385		
3,300.00	3,291.83	3,294.46	3,272.36	14.68	14.30	-26.42	-4,304.06	525.60	4,146.13	4,117.35	28.78	144.064		
3,400.00	3,391.52	3,385.30	3,363.20	15.12	14.68	-26.46	-4,304.67	525.03	4,139.68	4,110.08	29.59	139.893		
3,500.00	3,491.21	3,534.51	3,512.40	15.56	15.30	-26.52	-4,304.94	524.28	4,132.77	4,102.13	30.64	134.898		
3,600.00	3,590.91	3,655.43	3,633.32	16.00	15.80	-26.58	-4,303.97	524.14	4,124.92	4,093.35	31.57	130.669		
3,700.00	3,690.60	3,767.26	3,745.15	16.45	16.27	-26.63	-4,302.68	523.88	4,116.73	4,084.26	32.46	126.806		
3,800.00	3,790.29	3,861.51	3,839.39	16.89	16.66	-26.68	-4,301.44	523.69	4,108.39	4,075.10	33.29	123.394		
3,900.00	3,889.98	3,950.90	3,928.77	17.33	17.04	-26.72	-4,300.54	523.36	4,100.32	4,066.21	34.11	120.218		
4,000.00	3,989.67	4,043.34	4,021.21	17.77	17.43	-26.76	-4,299.80	522.96	4,092.46	4,057.53	34.93	117.154		
4,100.00	4,089.36	4,132.15	4,110.02	18.22	17.80	-26.80	-4,299.27	522.43	4,084.78	4,049.03	35.74	114.278		
4,200.00	4,189.06	4,217.03	4,194.90	18.66	18.16	-26.84	-4,299.11	521.91	4,077.49	4,040.94	36.54	111.585		
4,300.00	4,288.75	4,318.40	4,296.26	19.10	18.58	-26.88	-4,299.01	521.34	4,070.30	4,032.90	37.40	108.820		
4,400.00	4,388.44	4,413.24	4,391.10	19.55	18.99	-26.92	-4,298.97	520.85	4,063.18	4,024.94	38.24	106.251		
4,500.00	4,488.13	4,514.89	4,492.75	19.99	19.42	-26.97	-4,298.95	520.40	4,056.10	4,016.99	39.11	103.720		
4,600.00	4,587.82	4,615.72	4,593.58	20.44	19.84	-27.01	-4,298.87	519.93	4,048.95	4,008.98	39.97	101.304		
4,700.00	4,687.51	4,706.66	4,684.52	20.89	20.23	-27.05	-4,298.91	519.44	4,041.92	4,001.13	40.79	99.085		
4,800.00	4,787.21	4,795.77	4,773.63	21.33	20.60	-27.09	-4,299.13	519.23	4,035.14	3,993.53	41.61	96.976		
4,900.00	4,886.90	4,895.72	4,873.57	21.78	21.02	-27.14	-4,299.47	519.27	4,028.49	3,986.02	42.47	94.855		
5,000.00	4,986.59	4,995.43	4,973.28	22.22	21.44	-27.19	-4,299.80	519.29	4,021.83	3,978.50	43.33	92.819		
5,100.00	5,086.28	5,091.32	5,069.17	22.67	21.85	-27.24	-4,300.16	519.32	4,015.23	3,971.05	44.18	90.893		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,188.90	5,166.76	23.12	22.26	-27.29	-4,300.60	519.40	4,008.70	3,963.67	45.03	89.027		
5,300.00	5,285.66	5,293.57	5,271.42	23.56	22.70	-27.34	-4,301.05	519.42	4,002.15	3,956.24	45.91	87.176		
5,400.00	5,385.36	5,394.66	5,372.51	24.01	23.13	-27.39	-4,301.41	519.32	3,995.51	3,948.74	46.78	85.418		
5,500.00	5,485.05	5,489.35	5,467.20	24.46	23.53	-27.44	-4,301.78	519.27	3,988.93	3,941.31	47.62	83.769		
5,600.00	5,584.74	5,634.99	5,612.84	24.90	24.14	-27.52	-4,301.43	519.50	3,981.72	3,933.06	48.66	81.832		
5,700.00	5,684.43	5,729.05	5,706.89	25.35	24.54	-27.58	-4,300.73	519.71	3,974.05	3,924.55	49.50	80.287		
5,800.00	5,784.12	5,809.70	5,787.54	25.80	24.88	-27.62	-4,300.47	519.72	3,966.78	3,916.50	50.29	78.882		
5,900.00	5,883.81	5,901.65	5,879.50	26.25	25.27	-27.67	-4,300.50	519.63	3,959.84	3,908.72	51.12	77.460		
6,000.00	5,983.51	6,006.39	5,984.24	26.70	25.71	-27.72	-4,300.60	519.33	3,952.94	3,900.93	52.00	76.013		
6,100.00	6,083.20	6,100.58	6,078.42	27.14	26.12	-27.76	-4,300.73	518.90	3,946.05	3,893.20	52.85	74.671		
6,200.00	6,182.89	6,201.66	6,179.50	27.59	26.55	-27.81	-4,300.93	518.35	3,939.21	3,885.49	53.72	73.335		
6,300.00	6,282.58	6,323.72	6,301.56	28.04	27.07	-27.86	-4,300.81	517.45	3,932.04	3,877.37	54.66	71.931		
6,400.00	6,382.27	6,430.56	6,408.39	28.49	27.52	-27.90	-4,300.33	516.37	3,924.49	3,868.93	55.55	70.642		
6,500.00	6,481.96	6,532.90	6,510.73	28.94	27.96	-27.94	-4,299.83	515.33	3,916.89	3,860.47	56.43	69.413		
6,600.00	6,581.66	6,640.26	6,618.08	29.39	28.41	-27.98	-4,299.10	513.96	3,909.08	3,851.75	57.32	68.196		
6,700.00	6,681.21	6,737.58	6,715.39	29.83	28.83	-66.89	-4,298.45	512.58	3,901.67	3,843.50	58.18	67.065		
6,800.00	6,778.96	6,840.37	6,818.15	30.28	29.26	-85.07	-4,297.86	510.68	3,896.79	3,837.74	59.05	65.994		
6,900.00	6,872.51	6,948.94	6,926.68	30.70	29.73	-91.11	-4,297.05	507.76	3,894.64	3,834.71	59.93	64.988		
6,919.22	6,889.81	6,968.44	6,946.17	30.77	29.81	-91.85	-4,296.87	507.18	3,894.58	3,834.49	60.09	64.809 CC, ES		
7,000.00	6,959.55	7,047.87	7,025.56	31.10	30.15	-94.17	-4,296.09	504.68	3,895.71	3,834.94	60.77	64.102		
7,100.00	7,037.93	7,134.43	7,112.05	31.48	30.52	-95.89	-4,295.16	501.36	3,900.50	3,838.91	61.60	63.323		
7,200.00	7,105.74	7,205.03	7,182.59	31.88	30.82	-96.66	-4,294.39	498.54	3,909.63	3,847.21	62.42	62.632		
7,300.00	7,161.29	7,263.79	7,241.30	32.41	31.07	-96.67	-4,293.75	496.20	3,923.46	3,860.16	63.30	61.977		
7,400.00	7,203.22	7,309.26	7,286.72	33.13	31.27	-95.93	-4,293.26	494.39	3,942.16	3,877.89	64.27	61.337		
7,500.00	7,230.50	7,340.31	7,317.75	34.04	31.40	-94.42	-4,292.92	493.15	3,965.68	3,900.35	65.33	60.706		
7,600.00	7,242.45	7,356.19	7,333.62	35.13	31.47	-92.13	-4,292.75	492.51	3,993.70	3,927.25	66.45	60.101		
7,700.00	7,242.72	7,360.44	7,337.87	36.39	31.49	-91.36	-4,292.70	492.34	4,025.31	3,957.68	67.63	59.518		
7,800.00	7,242.33	7,364.03	7,341.45	37.81	31.50	-91.41	-4,292.66	492.20	4,059.20	3,990.27	68.93	58.885		
7,900.00	7,241.93	7,367.62	7,345.04	39.40	31.52	-91.46	-4,292.62	492.06	4,095.25	4,024.91	70.34	58.224		
8,000.00	7,241.54	7,371.21	7,348.62	41.13	31.53	-91.52	-4,292.59	491.91	4,133.40	4,061.58	71.82	57.555		
8,100.00	7,241.15	7,374.80	7,352.21	42.97	31.55	-91.57	-4,292.55	491.77	4,173.60	4,100.24	73.35	56.897		
8,200.00	7,240.75	7,378.38	7,355.79	44.92	31.56	-91.63	-4,292.51	491.63	4,215.78	4,140.84	74.93	56.260		
8,300.00	7,240.36	7,381.97	7,359.38	46.97	31.58	-91.68	-4,292.47	491.49	4,259.89	4,183.35	76.54	55.656		
8,400.00	7,239.97	7,385.56	7,362.96	49.10	31.59	-91.73	-4,292.43	491.34	4,305.86	4,227.70	78.16	55.090		
8,500.00	7,239.57	7,389.15	7,366.55	51.29	31.61	-91.79	-4,292.39	491.20	4,353.65	4,273.86	79.79	54.567		
8,600.00	7,239.18	7,392.74	7,370.13	53.56	31.62	-91.84	-4,292.35	491.06	4,403.18	4,321.78	81.41	54.088		
8,700.00	7,238.79	7,396.32	7,373.72	55.87	31.64	-91.90	-4,292.31	490.91	4,454.41	4,371.39	83.02	53.657		
8,800.00	7,238.39	7,399.91	7,377.30	58.24	31.65	-91.95	-4,292.27	490.77	4,507.27	4,422.66	84.61	53.272		
8,900.00	7,238.00	7,403.50	7,380.89	60.64	31.67	-92.00	-4,292.23	490.63	4,561.71	4,475.53	86.18	52.933		
9,000.00	7,237.61	7,407.09	7,384.47	63.09	31.68	-92.06	-4,292.20	490.48	4,617.67	4,529.94	87.72	52.639		
9,100.00	7,237.21	7,410.68	7,388.06	65.56	31.70	-92.11	-4,292.16	490.34	4,675.09	4,585.85	89.24	52.389		
9,200.00	7,236.82	7,414.26	7,391.64	68.07	31.72	-92.17	-4,292.12	490.20	4,733.93	4,643.21	90.72	52.181		
9,300.00	7,236.43	7,417.85	7,395.23	70.61	31.73	-92.22	-4,292.08	490.05	4,794.13	4,701.96	92.17	52.013		
9,400.00	7,236.03	7,421.44	7,398.81	73.16	31.75	-92.27	-4,292.04	489.91	4,855.64	4,762.05	93.59	51.883		
9,500.00	7,235.64	7,425.03	7,402.40	75.74	31.76	-92.33	-4,292.00	489.77	4,918.41	4,823.44	94.97	51.789		
9,600.00	7,235.25	7,428.62	7,405.98	78.34	31.78	-92.38	-4,291.96	489.62	4,982.40	4,886.09	96.31	51.731 SF		
9,700.00	7,234.85	7,400.00	7,377.39	80.96	31.65	-91.95	-4,292.27	490.77	5,047.66	4,950.16	97.50	51.772		
9,800.00	7,234.46	7,400.00	7,377.39	83.59	31.65	-91.95	-4,292.27	490.77	5,113.96	5,015.20	98.76	51.784		
9,900.00	7,234.07	7,400.00	7,377.39	86.24	31.65	-91.95	-4,292.27	490.77	5,181.34	5,081.36	99.98	51.825		
10,000.00	7,233.67	7,400.00	7,377.39	88.90	31.65	-91.95	-4,292.27	490.77	5,249.76	5,148.59	101.16	51.894		
10,100.00	7,233.28	7,400.00	7,377.39	91.57	31.65	-91.95	-4,292.27	490.77	5,319.18	5,216.86	102.31	51.989		
10,200.00	7,232.89	7,400.00	7,377.39	94.25	31.65	-91.95	-4,292.27	490.77	5,389.56	5,286.13	103.43	52.108		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,400.00	7,377.39	96.95	31.65	-91.95	-4,292.27	490.77	5,460.87	5,356.36	104.51	52.251	
10,400.00	7,232.10	7,400.00	7,377.39	99.65	31.65	-91.95	-4,292.27	490.77	5,533.06	5,427.50	105.56	52.416	
10,500.00	7,231.71	7,400.00	7,377.39	102.36	31.65	-91.95	-4,292.27	490.77	5,606.11	5,499.53	106.58	52.601	
10,600.00	7,231.32	7,400.00	7,377.39	105.08	31.65	-91.95	-4,292.27	490.77	5,679.98	5,572.42	107.56	52.807	
10,700.00	7,230.92	7,400.00	7,377.39	107.80	31.65	-91.95	-4,292.27	490.77	5,754.64	5,646.13	108.52	53.031	
10,800.00	7,230.53	7,400.00	7,377.39	110.53	31.65	-91.95	-4,292.27	490.77	5,830.06	5,720.62	109.44	53.272	
10,900.00	7,230.14	7,400.00	7,377.39	113.27	31.65	-91.95	-4,292.27	490.77	5,906.21	5,795.87	110.33	53.530	
11,000.00	7,229.74	7,400.00	7,377.39	116.02	31.65	-91.95	-4,292.27	490.77	5,983.06	5,871.86	111.20	53.803	
11,100.00	7,229.35	7,400.00	7,377.39	118.77	31.65	-91.95	-4,292.27	490.77	6,060.59	5,948.55	112.04	54.092	
11,200.00	7,228.96	7,400.00	7,377.39	121.52	31.65	-91.95	-4,292.27	490.77	6,138.76	6,025.91	112.86	54.395	
11,300.00	7,228.56	7,400.00	7,377.39	124.28	31.65	-91.95	-4,292.27	490.77	6,217.57	6,103.92	113.64	54.711	
11,400.00	7,228.17	7,400.00	7,377.39	127.04	31.65	-91.95	-4,292.27	490.77	6,296.97	6,182.56	114.41	55.039	
11,500.00	7,227.78	7,400.00	7,377.39	129.81	31.65	-91.95	-4,292.27	490.77	6,376.95	6,261.81	115.15	55.380	
11,600.00	7,227.38	7,400.00	7,377.39	132.58	31.65	-91.95	-4,292.27	490.77	6,457.50	6,341.63	115.87	55.732	
11,700.00	7,226.99	7,400.00	7,377.39	135.36	31.65	-91.95	-4,292.27	490.77	6,538.57	6,422.01	116.56	56.095	
11,800.00	7,226.60	7,400.00	7,377.39	138.14	31.65	-91.95	-4,292.27	490.77	6,620.17	6,502.93	117.24	56.469	
11,900.00	7,226.20	7,400.00	7,377.39	140.92	31.65	-91.95	-4,292.27	490.77	6,702.27	6,584.38	117.89	56.852	
12,000.00	7,225.81	7,400.00	7,377.39	143.70	31.65	-91.95	-4,292.27	490.77	6,784.84	6,666.32	118.52	57.244	
12,100.00	7,225.42	7,400.00	7,377.39	146.49	31.65	-91.95	-4,292.27	490.77	6,867.88	6,748.74	119.14	57.645	
12,200.00	7,225.02	7,400.00	7,377.39	149.28	31.65	-91.95	-4,292.27	490.77	6,951.37	6,831.63	119.74	58.055	
12,300.00	7,224.63	7,400.00	7,377.39	152.08	31.65	-91.95	-4,292.27	490.77	7,035.28	6,914.97	120.32	58.473	
12,400.00	7,224.24	7,400.00	7,377.39	154.87	31.65	-91.95	-4,292.27	490.77	7,119.61	6,998.73	120.88	58.898	
12,500.00	7,223.84	7,400.00	7,377.39	157.67	31.65	-91.95	-4,292.27	490.77	7,204.35	7,082.92	121.43	59.331	
12,600.00	7,223.45	7,400.00	7,377.39	160.47	31.65	-91.95	-4,292.27	490.77	7,289.47	7,167.51	121.96	59.771	
12,700.00	7,223.06	7,400.00	7,377.39	163.27	31.65	-91.95	-4,292.27	490.77	7,374.96	7,252.49	122.47	60.217	
12,800.00	7,222.66	7,400.00	7,377.39	166.07	31.65	-91.95	-4,292.27	490.77	7,460.81	7,337.84	122.97	60.670	
12,900.00	7,222.27	7,400.00	7,377.39	168.88	31.65	-91.95	-4,292.27	490.77	7,547.01	7,423.55	123.46	61.129	
13,000.00	7,221.88	7,400.00	7,377.39	171.69	31.65	-91.95	-4,292.27	490.77	7,633.55	7,509.62	123.93	61.593	
13,100.00	7,221.48	7,400.00	7,377.39	174.49	31.65	-91.95	-4,292.27	490.77	7,720.42	7,596.02	124.40	62.063	
13,200.00	7,221.09	7,400.00	7,377.39	177.30	31.65	-91.95	-4,292.27	490.77	7,807.60	7,682.75	124.84	62.539	
13,300.00	7,220.70	7,400.00	7,377.39	180.12	31.65	-91.95	-4,292.27	490.77	7,895.08	7,769.80	125.28	63.019	
13,400.00	7,220.30	7,400.00	7,377.39	182.93	31.65	-91.95	-4,292.27	490.77	7,982.85	7,857.15	125.70	63.505	
13,500.00	7,219.91	7,400.00	7,377.39	185.74	31.65	-91.95	-4,292.27	490.77	8,070.92	7,944.80	126.12	63.995	
13,600.00	7,219.52	7,400.00	7,377.39	188.56	31.65	-91.95	-4,292.27	490.77	8,159.25	8,032.73	126.52	64.489	
13,700.00	7,219.12	7,400.00	7,377.39	191.38	31.65	-91.95	-4,292.27	490.77	8,247.85	8,120.94	126.91	64.988	
13,800.00	7,218.73	7,400.00	7,377.39	194.20	31.65	-91.95	-4,292.27	490.77	8,336.71	8,209.42	127.30	65.491	
13,900.00	7,218.34	7,400.00	7,377.39	197.02	31.65	-91.95	-4,292.27	490.77	8,425.82	8,298.15	127.67	65.998	
14,000.00	7,217.94	7,400.00	7,377.39	199.84	31.65	-91.95	-4,292.27	490.77	8,515.17	8,387.14	128.03	66.508	
14,100.00	7,217.55	7,400.00	7,377.39	202.66	31.65	-91.95	-4,292.27	490.77	8,604.76	8,476.37	128.39	67.022	
14,200.00	7,217.16	7,400.00	7,377.39	205.48	31.65	-91.95	-4,292.27	490.77	8,694.57	8,565.84	128.73	67.540	
14,300.00	7,216.76	7,400.00	7,377.39	208.30	31.65	-91.95	-4,292.27	490.77	8,784.61	8,655.54	129.07	68.061	
14,400.00	7,216.37	7,400.00	7,377.39	211.13	31.65	-91.95	-4,292.27	490.77	8,874.85	8,745.45	129.40	68.585	
14,500.00	7,215.98	7,400.00	7,377.39	213.96	31.65	-91.95	-4,292.27	490.77	8,965.31	8,835.59	129.72	69.112	
14,600.00	7,215.58	7,400.00	7,377.39	216.78	31.65	-91.95	-4,292.27	490.77	9,055.96	8,925.92	130.04	69.642	
14,700.00	7,215.19	7,400.00	7,377.39	219.61	31.65	-91.95	-4,292.27	490.77	9,146.81	9,016.47	130.34	70.174	
14,800.00	7,214.80	7,400.00	7,377.39	222.44	31.65	-91.95	-4,292.27	490.77	9,237.85	9,107.20	130.64	70.710	
14,900.00	7,214.40	7,400.00	7,377.39	225.27	31.65	-91.95	-4,292.27	490.77	9,329.07	9,198.13	130.94	71.248	
15,000.00	7,214.01	7,400.00	7,377.39	228.10	31.65	-91.95	-4,292.27	490.77	9,420.47	9,289.25	131.23	71.788	
15,002.44	7,214.00	7,400.00	7,377.39	228.16	31.65	-91.95	-4,292.27	490.77	9,422.70	9,291.47	131.23	71.802	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	22.83	-0.17	3.28	3.28	-25.87	2,382.94	-1,155.56	2,648.35					
100.00	100.00	120.88	97.88	3.28	3.29	-25.87	2,382.87	-1,155.77	2,648.37	2,641.79	6.58	402.567		
200.00	200.00	218.76	195.76	3.34	3.36	-25.87	2,383.03	-1,155.85	2,648.56	2,641.86	6.70	395.572		
300.00	300.00	328.30	305.30	3.44	3.49	-25.87	2,383.03	-1,155.50	2,648.40	2,641.47	6.93	381.942		
341.92	341.92	364.92	341.92	3.51	3.55	-25.87	2,383.03	-1,155.41	2,648.36	2,641.31	7.05	375.600		
400.00	400.00	419.95	396.95	3.60	3.64	-25.86	2,383.12	-1,155.38	2,648.43	2,641.18	7.24	365.571		
500.00	500.00	528.22	505.21	3.81	3.86	-25.86	2,383.05	-1,155.32	2,648.34	2,640.67	7.67	345.259		
507.90	507.90	536.16	513.16	3.82	3.88	135.97	2,383.04	-1,155.30	2,648.34	2,640.63	7.71	343.692 CC, ES		
600.00	599.98	635.07	612.07	4.03	4.12	135.99	2,382.89	-1,155.05	2,649.36	2,641.20	8.16	324.719		
700.00	699.84	740.80	717.80	4.29	4.41	136.04	2,382.33	-1,154.44	2,652.39	2,643.69	8.70	304.887		
800.00	799.54	838.58	815.57	4.57	4.70	136.14	2,382.03	-1,153.95	2,657.48	2,648.21	9.27	286.637		
900.00	899.23	945.88	922.87	4.87	5.04	136.28	2,381.38	-1,153.13	2,662.26	2,652.35	9.92	268.493		
1,000.00	998.92	1,038.27	1,015.26	5.20	5.35	136.39	2,380.89	-1,152.55	2,667.20	2,656.65	10.55	252.870		
1,100.00	1,098.61	1,134.70	1,111.68	5.54	5.68	136.51	2,380.59	-1,152.05	2,672.39	2,661.17	11.22	238.141		
1,200.00	1,198.30	1,237.25	1,214.23	5.90	6.05	136.63	2,380.21	-1,151.52	2,677.54	2,665.59	11.94	224.207		
1,300.00	1,298.00	1,335.22	1,312.19	6.27	6.40	136.75	2,379.78	-1,151.08	2,682.67	2,670.00	12.67	211.789		
1,400.00	1,397.69	1,431.54	1,408.52	6.66	6.76	136.87	2,379.61	-1,150.44	2,687.96	2,674.56	13.40	200.570		
1,500.00	1,497.38	1,534.85	1,511.82	7.05	7.15	137.00	2,379.39	-1,149.84	2,693.26	2,679.08	14.18	189.968		
1,600.00	1,597.07	1,638.08	1,615.05	7.44	7.55	137.12	2,378.81	-1,149.47	2,698.35	2,683.39	14.97	180.301		
1,700.00	1,696.76	1,732.03	1,709.00	7.85	7.91	137.22	2,378.11	-1,149.69	2,703.54	2,687.81	15.73	171.894		
1,800.00	1,796.45	1,831.55	1,808.51	8.25	8.30	137.32	2,377.64	-1,149.94	2,708.97	2,692.45	16.52	163.975		
1,900.00	1,896.15	1,939.33	1,916.29	8.67	8.73	137.43	2,376.68	-1,150.08	2,713.99	2,696.64	17.35	156.383		
2,000.00	1,995.84	2,031.38	2,008.34	9.08	9.09	137.52	2,375.92	-1,150.58	2,719.24	2,701.11	18.13	149.973		
2,100.00	2,095.53	2,136.42	2,113.38	9.50	9.51	137.62	2,375.11	-1,151.04	2,724.52	2,705.55	18.97	143.643		
2,200.00	2,195.22	2,239.63	2,216.58	9.92	9.93	137.72	2,374.10	-1,151.28	2,729.53	2,709.73	19.80	137.848		
2,300.00	2,294.91	2,335.83	2,312.77	10.35	10.32	137.81	2,373.20	-1,151.69	2,734.67	2,714.06	20.61	132.686		
2,400.00	2,394.60	2,435.96	2,412.89	10.77	10.73	137.90	2,372.15	-1,152.38	2,739.81	2,718.37	21.44	127.795		
2,500.00	2,494.30	2,532.77	2,509.69	11.20	11.12	137.98	2,371.10	-1,153.27	2,745.03	2,722.77	22.26	123.329		
2,600.00	2,593.99	2,627.78	2,604.70	11.63	11.51	138.06	2,370.18	-1,154.20	2,750.37	2,727.30	23.07	119.211		
2,700.00	2,693.68	2,718.48	2,695.39	12.07	11.88	138.14	2,369.61	-1,154.97	2,755.99	2,732.12	23.87	115.465		
2,800.00	2,793.37	2,807.98	2,784.89	12.50	12.25	138.22	2,369.37	-1,155.85	2,761.98	2,737.32	24.66	111.994		
2,900.00	2,893.06	2,911.95	2,888.86	12.93	12.68	138.31	2,369.17	-1,156.91	2,768.08	2,742.56	25.52	108.468		
3,000.00	2,992.76	3,009.70	2,986.59	13.37	13.08	138.38	2,368.79	-1,158.28	2,774.15	2,747.80	26.35	105.268		
3,100.00	3,092.45	3,109.25	3,086.13	13.81	13.49	138.46	2,368.36	-1,159.83	2,780.25	2,753.05	27.20	102.228		
3,200.00	3,192.14	3,201.05	3,177.91	14.25	13.88	138.52	2,368.05	-1,161.46	2,786.52	2,758.51	28.01	99.492		
3,300.00	3,291.83	3,294.88	3,271.72	14.68	14.27	138.58	2,367.78	-1,163.55	2,793.02	2,764.19	28.83	96.884		
3,400.00	3,391.52	3,392.82	3,369.63	15.12	14.68	138.64	2,367.55	-1,165.97	2,799.67	2,770.00	29.67	94.361		
3,500.00	3,491.21	3,499.22	3,476.00	15.56	15.12	138.70	2,367.25	-1,168.50	2,806.24	2,775.69	30.55	91.856		
3,600.00	3,590.91	3,593.68	3,570.43	16.00	15.52	138.76	2,367.01	-1,170.61	2,812.78	2,781.40	31.38	89.642		
3,700.00	3,690.60	3,730.94	3,707.65	16.45	16.09	138.84	2,365.72	-1,173.67	2,818.68	2,786.28	32.40	86.997		
3,800.00	3,790.29	3,839.57	3,816.24	16.89	16.55	138.89	2,363.82	-1,175.92	2,823.79	2,790.49	33.29	84.813		
3,900.00	3,889.98	3,940.13	3,916.76	17.33	16.97	138.95	2,361.94	-1,177.93	2,828.76	2,794.61	34.15	82.823		
4,000.00	3,989.67	4,039.91	4,016.51	17.77	17.39	139.00	2,360.04	-1,180.05	2,833.76	2,798.75	35.01	80.937		
4,100.00	4,089.36	4,141.70	4,118.25	18.22	17.82	139.04	2,358.03	-1,182.26	2,838.71	2,802.83	35.88	79.118		
4,200.00	4,189.06	4,243.54	4,220.05	18.66	18.25	139.09	2,355.97	-1,184.40	2,843.59	2,806.84	36.75	77.382		
4,300.00	4,288.75	4,344.09	4,320.56	19.10	18.67	139.14	2,353.88	-1,186.48	2,848.41	2,810.80	37.61	75.734		
4,400.00	4,388.44	4,443.70	4,420.12	19.55	19.09	139.19	2,351.84	-1,188.55	2,853.25	2,814.78	38.47	74.168		
4,500.00	4,488.13	4,544.93	4,521.31	19.99	19.52	139.24	2,349.67	-1,190.78	2,858.07	2,818.73	39.34	72.655		
4,600.00	4,587.82	4,644.49	4,620.82	20.44	19.94	139.28	2,347.49	-1,192.97	2,862.85	2,822.65	40.20	71.218		
4,700.00	4,687.51	4,751.20	4,727.48	20.89	20.39	139.33	2,345.14	-1,195.33	2,867.62	2,826.53	41.09	69.787		
4,800.00	4,787.21	4,860.88	4,837.09	21.33	20.86	139.38	2,342.28	-1,197.59	2,871.95	2,829.95	42.00	68.384		
4,900.00	4,886.90	4,958.52	4,934.68	21.78	21.27	139.42	2,339.64	-1,199.55	2,876.18	2,833.33	42.85	67.120		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,986.59	5,053.96	5,030.07	22.22	21.68	139.47	2,337.25	-1,201.40	2,880.57	2,836.88	43.70	65.923		
5,100.00	5,086.28	5,148.24	5,124.31	22.67	22.08	139.52	2,335.09	-1,203.11	2,885.12	2,840.58	44.54	64.783		
5,200.00	5,185.97	5,241.66	5,217.69	23.12	22.47	139.56	2,333.19	-1,204.82	2,889.90	2,844.53	45.37	63.696		
5,300.00	5,285.66	5,335.31	5,311.32	23.56	22.87	139.62	2,331.53	-1,206.40	2,894.88	2,848.67	46.21	62.651		
5,400.00	5,385.36	5,429.55	5,405.54	24.01	23.27	139.68	2,330.29	-1,207.53	2,900.10	2,853.06	47.04	61.646		
5,500.00	5,485.05	5,527.13	5,503.11	24.46	23.68	139.75	2,329.13	-1,208.62	2,905.41	2,857.51	47.90	60.658		
5,600.00	5,584.74	5,618.42	5,594.39	24.90	24.07	139.81	2,328.18	-1,209.77	2,910.92	2,862.19	48.72	59.745		
5,700.00	5,684.43	5,708.68	5,684.64	25.35	24.45	139.89	2,327.71	-1,210.67	2,916.80	2,867.26	49.54	58.876		
5,800.00	5,784.12	5,834.34	5,810.30	25.80	24.99	140.00	2,326.91	-1,210.73	2,922.22	2,871.69	50.53	57.836		
5,900.00	5,883.81	5,937.37	5,913.33	26.25	25.42	140.10	2,325.98	-1,210.52	2,927.32	2,875.91	51.41	56.945		
6,000.00	5,983.51	6,091.47	6,067.40	26.70	26.08	140.27	2,324.02	-1,208.58	2,931.87	2,879.36	52.51	55.833		
6,100.00	6,083.20	6,199.50	6,175.37	27.14	26.54	140.41	2,321.44	-1,206.09	2,934.84	2,881.43	53.41	54.947		
6,200.00	6,182.89	6,357.27	6,332.95	27.59	27.21	140.61	2,315.72	-1,201.13	2,936.15	2,881.64	54.51	53.861		
6,300.00	6,282.58	6,431.80	6,407.39	28.04	27.53	140.69	2,312.50	-1,199.35	2,937.38	2,882.10	55.28	53.136		
6,400.00	6,382.27	6,500.00	6,475.55	28.49	27.82	140.76	2,310.32	-1,198.55	2,939.97	2,883.95	56.02	52.483		
6,500.00	6,481.96	6,554.77	6,530.31	28.94	28.05	140.81	2,309.18	-1,198.34	2,943.82	2,887.13	56.69	51.931		
6,600.00	6,581.66	6,629.86	6,605.39	29.39	28.37	140.87	2,308.29	-1,198.34	2,948.77	2,891.33	57.44	51.336		
6,700.00	6,681.21	6,719.97	6,695.49	29.83	28.76	102.32	2,307.55	-1,198.62	2,953.31	2,895.05	58.26	50.691		
6,800.00	6,778.96	6,800.00	6,775.52	30.28	29.10	85.17	2,307.09	-1,199.18	2,953.27	2,894.24	59.03	50.034		
6,900.00	6,872.51	6,872.46	6,847.97	30.70	29.40	80.69	2,307.06	-1,200.00	2,948.69	2,888.95	59.74	49.358		
7,000.00	6,959.55	6,952.80	6,928.30	31.10	29.74	79.69	2,307.57	-1,201.19	2,940.11	2,879.61	60.50	48.599		
7,100.00	7,037.93	7,033.83	7,009.33	31.48	30.09	80.34	2,308.06	-1,202.26	2,927.65	2,866.36	61.28	47.771		
7,200.00	7,105.74	7,100.38	7,075.87	31.88	30.37	81.78	2,308.50	-1,203.11	2,912.41	2,850.35	62.07	46.924		
7,300.00	7,161.29	7,156.20	7,131.68	32.41	30.61	83.65	2,308.92	-1,203.74	2,895.54	2,832.63	62.91	46.027		
7,400.00	7,203.22	7,198.24	7,173.72	33.13	30.78	85.63	2,309.27	-1,204.12	2,878.14	2,814.30	63.84	45.082		
7,500.00	7,230.50	7,226.43	7,201.91	34.04	30.91	87.51	2,309.51	-1,204.35	2,861.27	2,796.38	64.89	44.092		
7,600.00	7,242.45	7,239.41	7,214.89	35.13	30.96	89.09	2,309.62	-1,204.47	2,845.79	2,779.74	66.05	43.088		
7,700.00	7,242.72	7,240.63	7,216.11	36.39	30.96	89.48	2,309.63	-1,204.48	2,832.61	2,765.31	67.30	42.088		
7,800.00	7,242.33	7,241.19	7,216.67	37.81	30.97	89.50	2,309.63	-1,204.49	2,822.87	2,754.14	68.73	41.073		
7,900.00	7,241.93	7,241.75	7,217.23	39.40	30.97	89.51	2,309.64	-1,204.49	2,816.64	2,746.34	70.30	40.066		
8,000.00	7,241.54	7,242.31	7,217.79	41.13	30.97	89.52	2,309.64	-1,204.50	2,813.95	2,741.96	71.99	39.086		
8,025.65	7,241.44	7,242.46	7,217.94	41.60	30.97	89.52	2,309.64	-1,204.50	2,813.83	2,741.38	72.46	38.835		
8,100.00	7,241.15	7,242.88	7,218.36	42.97	30.97	89.53	2,309.65	-1,204.50	2,814.82	2,741.03	73.78	38.149		
8,200.00	7,240.75	7,243.46	7,218.94	44.92	30.98	89.54	2,309.65	-1,204.51	2,819.23	2,743.58	75.65	37.268		
8,300.00	7,240.36	7,244.04	7,219.52	46.97	30.98	89.55	2,309.66	-1,204.51	2,827.18	2,749.62	77.56	36.452		
8,400.00	7,239.97	7,244.62	7,220.10	49.10	30.98	89.57	2,309.66	-1,204.52	2,838.62	2,759.13	79.50	35.707		
8,500.00	7,239.57	7,245.21	7,220.69	51.29	30.98	89.58	2,309.67	-1,204.52	2,853.53	2,772.09	81.45	35.035		
8,600.00	7,239.18	7,245.81	7,221.29	53.56	30.98	89.59	2,309.67	-1,204.53	2,871.85	2,788.46	83.39	34.440		
8,700.00	7,238.79	7,246.41	7,221.89	55.87	30.99	89.60	2,309.68	-1,204.54	2,893.51	2,808.20	85.31	33.919		
8,800.00	7,238.39	7,247.01	7,222.49	58.24	30.99	89.61	2,309.68	-1,204.54	2,918.43	2,831.24	87.19	33.472		
8,900.00	7,238.00	7,247.63	7,223.11	60.64	30.99	89.63	2,309.69	-1,204.55	2,946.54	2,857.51	89.03	33.096		
9,000.00	7,237.61	7,248.24	7,223.72	63.09	31.00	89.64	2,309.69	-1,204.55	2,977.75	2,886.93	90.81	32.789		
9,100.00	7,237.21	7,248.86	7,224.34	65.56	31.00	89.65	2,309.70	-1,204.56	3,011.95	2,919.41	92.54	32.548		
9,200.00	7,236.82	7,249.49	7,224.97	68.07	31.00	89.66	2,309.70	-1,204.57	3,049.05	2,954.85	94.20	32.368		
9,300.00	7,236.43	7,250.13	7,225.61	70.61	31.00	89.68	2,309.71	-1,204.57	3,088.94	2,993.15	95.79	32.247		
9,400.00	7,236.03	7,250.76	7,226.24	73.16	31.01	89.69	2,309.71	-1,204.58	3,131.52	3,034.21	97.31	32.181		
9,500.00	7,235.64	7,251.41	7,226.89	75.74	31.01	89.70	2,309.72	-1,204.58	3,176.68	3,077.92	98.76	32.166 SF		
9,600.00	7,235.25	7,252.06	7,227.54	78.34	31.01	89.72	2,309.72	-1,204.59	3,224.30	3,124.17	100.13	32.201		
9,700.00	7,234.85	7,252.72	7,228.20	80.96	31.01	89.73	2,309.73	-1,204.60	3,274.29	3,172.86	101.43	32.280		
9,800.00	7,234.46	7,253.38	7,228.86	83.59	31.02	89.74	2,309.73	-1,204.60	3,326.54	3,223.87	102.66	32.402		
9,900.00	7,234.07	7,254.05	7,229.53	86.24	31.02	89.76	2,309.74	-1,204.61	3,380.93	3,277.11	103.83	32.564		
10,000.00	7,233.67	7,254.73	7,230.20	88.90	31.02	89.77	2,309.74	-1,204.62	3,437.38	3,332.46	104.92	32.762		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,233.28	7,255.41	7,230.89	91.57	31.03	89.79	2,309.75	-1,204.62	3,495.77	3,389.82	105.95	32.995		
10,200.00	7,232.89	7,256.10	7,231.57	94.25	31.03	89.80	2,309.76	-1,204.63	3,556.02	3,449.10	106.92	33.260		
10,300.00	7,232.49	7,256.79	7,232.27	96.95	31.03	89.81	2,309.76	-1,204.64	3,618.03	3,510.21	107.82	33.555		
10,400.00	7,232.10	7,257.49	7,232.97	99.65	31.03	89.83	2,309.77	-1,204.65	3,681.71	3,573.04	108.67	33.879		
10,500.00	7,231.71	7,258.20	7,233.68	102.36	31.04	89.84	2,309.77	-1,204.65	3,746.98	3,637.51	109.47	34.228		
10,600.00	7,231.32	7,258.91	7,234.39	105.08	31.04	89.86	2,309.78	-1,204.66	3,813.75	3,703.53	110.22	34.603		
10,700.00	7,230.92	7,259.64	7,235.12	107.80	31.04	89.87	2,309.78	-1,204.67	3,881.95	3,771.04	110.91	35.000		
10,800.00	7,230.53	7,260.37	7,235.84	110.53	31.05	89.89	2,309.79	-1,204.67	3,951.50	3,839.94	111.57	35.418		
10,900.00	7,230.14	7,261.10	7,236.58	113.27	31.05	89.90	2,309.80	-1,204.68	4,022.34	3,910.16	112.18	35.857		
11,000.00	7,229.74	7,261.84	7,237.32	116.02	31.05	89.92	2,309.80	-1,204.69	4,094.40	3,981.65	112.75	36.314		
11,100.00	7,229.35	7,262.59	7,238.07	118.77	31.06	89.93	2,309.81	-1,204.70	4,167.60	4,054.32	113.28	36.790		
11,200.00	7,228.96	7,263.35	7,238.83	121.52	31.06	89.95	2,309.81	-1,204.71	4,241.91	4,128.12	113.78	37.281		
11,300.00	7,228.56	7,264.12	7,239.60	124.28	31.06	89.96	2,309.82	-1,204.71	4,317.25	4,203.00	114.25	37.788		
11,400.00	7,228.17	7,264.89	7,240.37	127.04	31.07	89.98	2,309.83	-1,204.72	4,393.57	4,278.89	114.68	38.310		
11,500.00	7,227.78	7,265.67	7,241.15	129.81	31.07	89.99	2,309.83	-1,204.73	4,470.83	4,355.73	115.09	38.846		
11,600.00	7,227.38	7,266.46	7,241.94	132.58	31.07	90.01	2,309.84	-1,204.74	4,548.97	4,433.50	115.47	39.394		
11,700.00	7,226.99	7,267.26	7,242.73	135.36	31.08	90.03	2,309.85	-1,204.75	4,627.96	4,512.12	115.83	39.954		
11,800.00	7,226.60	7,268.06	7,243.54	138.14	31.08	90.04	2,309.85	-1,204.75	4,707.74	4,591.57	116.17	40.526		
11,900.00	7,226.20	7,268.87	7,244.35	140.92	31.08	90.06	2,309.86	-1,204.76	4,788.28	4,671.80	116.48	41.109		
12,000.00	7,225.81	7,269.70	7,245.17	143.70	31.09	90.08	2,309.87	-1,204.77	4,869.55	4,752.78	116.77	41.702		
12,100.00	7,225.42	7,270.53	7,246.00	146.49	31.09	90.09	2,309.87	-1,204.78	4,951.50	4,834.45	117.05	42.304		
12,200.00	7,225.02	7,271.36	7,246.84	149.28	31.09	90.11	2,309.88	-1,204.79	5,034.10	4,916.80	117.30	42.915		
12,300.00	7,224.63	7,272.21	7,247.69	152.08	31.10	90.13	2,309.89	-1,204.80	5,117.32	4,999.78	117.55	43.535		
12,400.00	7,224.24	7,273.07	7,248.54	154.87	31.10	90.14	2,309.89	-1,204.81	5,201.14	5,083.36	117.77	44.162		
12,500.00	7,223.84	7,273.93	7,249.41	157.67	31.10	90.16	2,309.90	-1,204.82	5,285.51	5,167.53	117.99	44.798		
12,600.00	7,223.45	7,274.81	7,250.28	160.47	31.11	90.18	2,309.91	-1,204.83	5,370.43	5,252.24	118.19	45.440		
12,700.00	7,223.06	7,275.69	7,251.17	163.27	31.11	90.20	2,309.91	-1,204.84	5,455.85	5,337.48	118.38	46.089		
12,800.00	7,222.66	7,276.58	7,252.06	166.07	31.12	90.22	2,309.92	-1,204.85	5,541.76	5,423.21	118.55	46.745		
12,900.00	7,222.27	7,277.49	7,252.96	168.88	31.12	90.23	2,309.93	-1,204.86	5,628.14	5,509.42	118.72	47.407		
13,000.00	7,221.88	7,278.40	7,253.88	171.69	31.12	90.25	2,309.93	-1,204.87	5,714.96	5,596.08	118.88	48.074		
13,100.00	7,221.48	7,279.32	7,254.80	174.49	31.13	90.27	2,309.94	-1,204.88	5,802.21	5,683.18	119.03	48.747		
13,200.00	7,221.09	7,280.25	7,255.73	177.30	31.13	90.29	2,309.95	-1,204.89	5,889.86	5,770.69	119.17	49.425		
13,300.00	7,220.70	7,281.20	7,256.67	180.12	31.13	90.31	2,309.96	-1,204.90	5,977.90	5,858.60	119.30	50.108		
13,400.00	7,220.30	7,282.15	7,257.63	182.93	31.14	90.33	2,309.96	-1,204.91	6,066.31	5,946.88	119.43	50.795		
13,500.00	7,219.91	7,283.11	7,258.59	185.74	31.14	90.35	2,309.97	-1,204.92	6,155.07	6,035.53	119.55	51.487		
13,600.00	7,219.52	7,284.09	7,259.57	188.56	31.15	90.37	2,309.98	-1,204.93	6,244.17	6,124.52	119.66	52.183		
13,700.00	7,219.12	7,285.08	7,260.55	191.38	31.15	90.39	2,309.99	-1,204.94	6,333.60	6,213.84	119.77	52.883		
13,800.00	7,218.73	7,286.07	7,261.55	194.20	31.16	90.41	2,309.99	-1,204.95	6,423.34	6,303.48	119.87	53.587		
13,900.00	7,218.34	7,287.08	7,262.56	197.02	31.16	90.43	2,310.00	-1,204.96	6,513.38	6,393.42	119.97	54.294		
14,000.00	7,217.94	7,288.10	7,263.58	199.84	31.16	90.45	2,310.01	-1,204.98	6,603.71	6,483.65	120.06	55.004		
14,100.00	7,217.55	7,289.13	7,264.61	202.66	31.17	90.47	2,310.02	-1,204.99	6,694.31	6,574.16	120.15	55.718		
14,200.00	7,217.16	7,290.18	7,265.65	205.48	31.17	90.49	2,310.03	-1,205.00	6,785.17	6,664.94	120.23	56.434		
14,300.00	7,216.76	7,291.23	7,266.71	208.30	31.18	90.51	2,310.03	-1,205.01	6,876.29	6,755.98	120.31	57.154		
14,400.00	7,216.37	7,292.30	7,267.78	211.13	31.18	90.54	2,310.04	-1,205.02	6,967.65	6,847.26	120.39	57.876		
14,500.00	7,215.98	7,293.38	7,268.86	213.96	31.19	90.56	2,310.05	-1,205.04	7,059.25	6,938.79	120.46	58.601		
14,600.00	7,215.58	7,294.48	7,269.95	216.78	31.19	90.58	2,310.06	-1,205.05	7,151.07	7,030.53	120.54	59.328		
14,700.00	7,215.19	7,295.58	7,271.06	219.61	31.20	90.60	2,310.07	-1,205.06	7,243.11	7,122.50	120.60	60.057		
14,800.00	7,214.80	7,296.70	7,272.18	222.44	31.20	90.63	2,310.08	-1,205.07	7,335.35	7,214.68	120.67	60.788		
14,900.00	7,214.40	7,297.84	7,273.31	225.27	31.21	90.65	2,310.09	-1,205.09	7,427.80	7,307.06	120.73	61.522		
15,000.00	7,214.01	7,298.99	7,274.46	228.10	31.21	90.67	2,310.09	-1,205.10	7,520.44	7,399.64	120.80	62.257		
15,002.44	7,214.00	7,299.01	7,274.49	228.16	31.21	90.67	2,310.09	-1,205.10	7,522.70	7,401.90	120.80	62.275		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	21.00	3.28	3.28	-65.98	965.14	-2,166.06	2,371.44				
100.00	100.00	79.00	100.00	3.28	3.56	-65.98	965.14	-2,166.06	2,371.35	2,364.51	6.84	346.547	
200.00	200.00	179.00	200.00	3.34	5.57	-65.98	965.14	-2,166.06	2,371.35	2,362.44	8.91	266.196	
300.00	300.00	279.00	300.00	3.44	8.64	-65.98	965.14	-2,166.06	2,371.35	2,359.26	12.09	196.206	
400.00	400.00	379.00	400.00	3.60	11.94	-65.98	965.14	-2,166.06	2,371.35	2,355.80	15.55	152.519	
500.00	500.00	479.00	500.00	3.81	15.33	-65.98	965.14	-2,166.06	2,371.35	2,352.21	19.14	123.912	
600.00	599.98	578.98	599.98	4.03	18.76	95.89	965.14	-2,166.06	2,371.53	2,348.74	22.79	104.061	
700.00	699.84	678.84	699.84	4.29	22.20	96.01	965.14	-2,166.06	2,372.07	2,345.59	26.48	89.577	
800.00	799.54	778.54	799.54	4.57	25.64	96.19	965.14	-2,166.06	2,372.90	2,342.69	30.21	78.550	
900.00	899.23	878.23	899.23	4.87	29.10	96.37	965.14	-2,166.06	2,373.76	2,339.79	33.97	69.878	
1,000.00	998.92	977.92	998.92	5.20	32.56	96.56	965.14	-2,166.06	2,374.64	2,336.88	37.76	62.891	
1,100.00	1,098.61	1,077.61	1,098.61	5.54	36.02	96.75	965.14	-2,166.06	2,375.56	2,333.99	41.57	57.149	
1,200.00	1,198.30	1,177.30	1,198.30	5.90	39.49	96.94	965.14	-2,166.06	2,376.49	2,331.10	45.39	52.353	
1,300.00	1,298.00	1,277.00	1,298.00	6.27	42.96	97.12	965.14	-2,166.06	2,377.46	2,328.22	49.23	48.288	
1,400.00	1,397.69	1,376.69	1,397.69	6.66	46.43	97.31	965.14	-2,166.06	2,378.44	2,325.36	53.09	44.803	
1,500.00	1,497.38	1,476.38	1,497.38	7.05	49.90	97.50	965.14	-2,166.06	2,379.46	2,322.51	56.95	41.783	
1,600.00	1,597.07	1,576.07	1,597.07	7.44	53.38	97.68	965.14	-2,166.06	2,380.50	2,319.68	60.82	39.141	
1,700.00	1,696.76	1,675.76	1,696.76	7.85	56.85	97.87	965.14	-2,166.06	2,381.56	2,316.87	64.69	36.812	
1,800.00	1,796.45	1,775.45	1,796.45	8.25	60.32	98.06	965.14	-2,166.06	2,382.65	2,314.08	68.58	34.744	
1,900.00	1,896.15	1,875.15	1,896.15	8.67	63.80	98.24	965.14	-2,166.06	2,383.77	2,311.31	72.46	32.896	
2,000.00	1,995.84	1,974.84	1,995.84	9.08	67.28	98.43	965.14	-2,166.06	2,384.91	2,308.56	76.36	31.234	
2,100.00	2,095.53	2,074.53	2,095.53	9.50	70.75	98.62	965.14	-2,166.06	2,386.08	2,305.83	80.25	29.733	
2,200.00	2,195.22	2,174.22	2,195.22	9.92	74.23	98.80	965.14	-2,166.06	2,387.27	2,303.12	84.15	28.369	
2,300.00	2,294.91	2,273.91	2,294.91	10.35	77.71	98.99	965.14	-2,166.06	2,388.49	2,300.43	88.05	27.126	
2,400.00	2,394.60	2,373.60	2,394.60	10.77	81.18	99.17	965.14	-2,166.06	2,389.73	2,297.77	91.95	25.988	
2,500.00	2,494.30	2,473.30	2,494.30	11.20	84.66	99.36	965.14	-2,166.06	2,390.99	2,295.13	95.86	24.942	
2,600.00	2,593.99	2,572.99	2,593.99	11.63	88.14	99.54	965.14	-2,166.06	2,392.29	2,292.52	99.77	23.978	
2,700.00	2,693.68	2,672.68	2,693.68	12.07	91.62	99.73	965.14	-2,166.06	2,393.60	2,289.93	103.68	23.087	
2,800.00	2,793.37	2,772.37	2,793.37	12.50	95.09	99.91	965.14	-2,166.06	2,394.95	2,287.36	107.59	22.260	
2,900.00	2,893.06	2,872.06	2,893.06	12.93	98.57	100.10	965.14	-2,166.06	2,396.31	2,284.81	111.50	21.491	
3,000.00	2,992.76	2,971.76	2,992.76	13.37	102.05	100.28	965.14	-2,166.06	2,397.70	2,282.29	115.42	20.775	
3,100.00	3,092.45	3,071.45	3,092.45	13.81	105.53	100.46	965.14	-2,166.06	2,399.12	2,279.79	119.33	20.105	
3,200.00	3,192.14	3,171.14	3,192.14	14.25	109.01	100.65	965.14	-2,166.06	2,400.56	2,277.32	123.25	19.478	
3,300.00	3,291.83	3,270.83	3,291.83	14.68	112.49	100.83	965.14	-2,166.06	2,402.03	2,274.87	127.16	18.889	
3,400.00	3,391.52	3,370.52	3,391.52	15.12	115.97	101.01	965.14	-2,166.06	2,403.52	2,272.44	131.08	18.336	
3,500.00	3,491.21	3,470.21	3,491.21	15.56	119.44	101.20	965.14	-2,166.06	2,405.04	2,270.04	135.00	17.815	
3,600.00	3,590.91	3,569.91	3,590.91	16.00	122.92	101.38	965.14	-2,166.06	2,406.58	2,267.66	138.92	17.324	
3,700.00	3,690.60	3,669.60	3,690.60	16.45	126.40	101.56	965.14	-2,166.06	2,408.14	2,265.30	142.84	16.859	
3,800.00	3,790.29	3,769.29	3,790.29	16.89	129.88	101.74	965.14	-2,166.06	2,409.73	2,262.97	146.76	16.420	
3,900.00	3,889.98	3,868.98	3,889.98	17.33	133.36	101.93	965.14	-2,166.06	2,411.34	2,260.67	150.68	16.003	
4,000.00	3,989.67	3,968.67	3,989.67	17.77	136.84	102.11	965.14	-2,166.06	2,412.98	2,258.38	154.60	15.608	
4,100.00	4,089.36	4,068.36	4,089.36	18.22	140.32	102.29	965.14	-2,166.06	2,414.65	2,256.12	158.52	15.232	
4,200.00	4,189.06	4,168.06	4,189.06	18.66	143.80	102.47	965.14	-2,166.06	2,416.33	2,253.89	162.44	14.875	
4,300.00	4,288.75	4,267.75	4,288.75	19.10	147.28	102.65	965.14	-2,166.06	2,418.04	2,251.68	166.37	14.534	
4,400.00	4,388.44	4,367.44	4,388.44	19.55	150.76	102.83	965.14	-2,166.06	2,419.78	2,249.49	170.29	14.210	
4,500.00	4,488.13	4,467.13	4,488.13	19.99	154.24	103.01	965.14	-2,166.06	2,421.54	2,247.33	174.21	13.900	
4,600.00	4,587.82	4,566.82	4,587.82	20.44	157.72	103.19	965.14	-2,166.06	2,423.32	2,245.19	178.14	13.604	
4,700.00	4,687.51	4,666.51	4,687.51	20.89	161.20	103.37	965.14	-2,166.06	2,425.13	2,243.07	182.06	13.321	
4,800.00	4,787.21	4,766.21	4,787.21	21.33	164.68	103.55	965.14	-2,166.06	2,426.96	2,240.98	185.98	13.049	
4,900.00	4,886.90	4,865.90	4,886.90	21.78	168.16	103.73	965.14	-2,166.06	2,428.82	2,238.91	189.91	12.789	
5,000.00	4,986.59	4,965.59	4,986.59	22.22	171.63	103.91	965.14	-2,166.06	2,430.70	2,236.87	193.83	12.540	
5,100.00	5,086.28	5,065.28	5,086.28	22.67	175.11	104.09	965.14	-2,166.06	2,432.60	2,234.85	197.76	12.301	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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
5,200.00	5,185.97	5,164.97	5,185.97	23.12	178.59	104.27	965.14	-2,166.06	2,434.53	2,232.85	201.68	12.071	
5,300.00	5,285.66	5,264.66	5,285.66	23.56	182.07	104.45	965.14	-2,166.06	2,436.48	2,230.87	205.61	11.850	
5,400.00	5,385.36	5,364.36	5,385.36	24.01	185.55	104.62	965.14	-2,166.06	2,438.46	2,228.92	209.53	11.638	
5,500.00	5,485.05	5,464.05	5,485.05	24.46	189.03	104.80	965.14	-2,166.06	2,440.46	2,227.00	213.46	11.433	
5,600.00	5,584.74	5,563.74	5,584.74	24.90	192.51	104.98	965.14	-2,166.06	2,442.48	2,225.09	217.38	11.236	
5,700.00	5,684.43	5,663.43	5,684.43	25.35	195.99	105.16	965.14	-2,166.06	2,444.52	2,223.21	221.31	11.046	
5,800.00	5,784.12	5,763.12	5,784.12	25.80	199.47	105.33	965.14	-2,166.06	2,446.59	2,221.36	225.24	10.862	
5,900.00	5,883.81	5,862.81	5,883.81	26.25	202.95	105.51	965.14	-2,166.06	2,448.68	2,219.52	229.16	10.685	
6,000.00	5,983.51	5,962.51	5,983.51	26.70	206.43	105.69	965.14	-2,166.06	2,450.80	2,217.71	233.09	10.514	
6,100.00	6,083.20	6,062.20	6,083.20	27.14	209.91	105.86	965.14	-2,166.06	2,452.94	2,215.92	237.01	10.349	
6,200.00	6,182.89	6,161.89	6,182.89	27.59	213.39	106.04	965.14	-2,166.06	2,455.10	2,214.16	240.94	10.190	
6,300.00	6,282.58	6,261.58	6,282.58	28.04	216.87	106.21	965.14	-2,166.06	2,457.29	2,212.42	244.87	10.035	
6,400.00	6,382.27	6,361.27	6,382.27	28.49	220.35	106.39	965.14	-2,166.06	2,459.50	2,210.70	248.79	9.886	
6,500.00	6,481.96	6,460.96	6,481.96	28.94	223.83	106.56	965.14	-2,166.06	2,461.73	2,209.01	252.72	9.741	
6,600.00	6,581.66	6,560.66	6,581.66	29.39	227.31	106.74	965.14	-2,166.06	2,463.98	2,207.33	256.65	9.601	
6,700.00	6,681.21	6,660.21	6,681.21	29.83	230.79	106.91	965.14	-2,166.06	2,466.25	2,205.68	260.57	9.457	
6,800.00	6,778.96	6,757.96	6,778.96	30.28	234.20	107.08	965.14	-2,166.06	2,468.53	2,204.01	264.42	9.276	
6,900.00	6,872.51	6,851.51	6,872.51	30.70	237.46	107.25	965.14	-2,166.06	2,470.82	2,202.35	268.11	9.061	
7,000.00	6,959.55	6,938.55	6,959.55	31.10	240.50	107.42	965.14	-2,166.06	2,473.12	2,200.70	271.56	8.817	
7,100.00	7,037.93	7,016.93	7,037.93	31.48	243.24	107.59	965.14	-2,166.06	2,475.43	2,199.05	274.70	8.552	
7,200.00	7,105.74	7,084.74	7,105.74	31.88	245.61	107.76	965.14	-2,166.06	2,477.75	2,197.40	277.49	8.273	
7,300.00	7,161.29	7,140.29	7,161.29	32.41	247.54	107.93	965.14	-2,166.06	2,480.08	2,195.75	279.88	7.987	
7,400.00	7,203.22	7,182.22	7,203.22	33.13	249.01	108.10	965.14	-2,166.06	2,482.42	2,194.10	281.87	7.699	
7,500.00	7,230.50	7,209.50	7,230.50	34.04	249.96	108.27	965.14	-2,166.06	2,484.77	2,192.45	283.46	7.416	
7,600.00	7,242.45	7,221.45	7,242.45	35.13	250.38	108.44	965.14	-2,166.06	2,487.12	2,190.80	284.65	7.143	
7,700.00	7,242.72	7,221.72	7,242.72	36.39	250.39	108.61	965.14	-2,166.06	2,489.48	2,189.15	285.58	6.884	
7,800.00	7,242.33	7,221.33	7,242.33	37.81	250.37	108.78	965.14	-2,166.06	2,491.84	2,187.50	286.70	6.632	
7,900.00	7,241.93	7,220.93	7,241.93	39.40	250.36	108.95	965.14	-2,166.06	2,494.21	2,185.85	288.04	6.388	
8,000.00	7,241.54	7,220.54	7,241.54	41.13	250.35	109.12	965.14	-2,166.06	2,496.58	2,184.20	289.61	6.154	
8,100.00	7,241.15	7,220.15	7,241.15	42.97	250.33	109.29	965.14	-2,166.06	2,498.95	2,182.55	291.40	5.931	
8,200.00	7,240.75	7,219.75	7,240.75	44.92	250.32	109.46	965.14	-2,166.06	2,501.32	2,180.90	293.41	5.720	
8,300.00	7,240.36	7,219.36	7,240.36	46.97	250.30	109.63	965.14	-2,166.06	2,503.70	2,179.25	295.62	5.525	
8,400.00	7,239.97	7,218.97	7,239.97	49.10	250.29	109.80	965.14	-2,166.06	2,506.08	2,177.60	297.99	5.346	
8,500.00	7,239.57	7,218.57	7,239.57	51.29	250.28	109.97	965.14	-2,166.06	2,508.46	2,175.95	300.50	5.186	
8,600.00	7,239.18	7,218.18	7,239.18	53.56	250.26	110.14	965.14	-2,166.06	2,510.84	2,174.30	303.10	5.046	
8,700.00	7,238.79	7,217.79	7,238.79	55.87	250.25	110.31	965.14	-2,166.06	2,513.22	2,172.65	305.73	4.928	
8,800.00	7,238.39	7,217.39	7,238.39	58.24	250.24	110.48	965.14	-2,166.06	2,515.60	2,171.00	308.33	4.832	
8,900.00	7,238.00	7,217.00	7,238.00	60.64	250.22	110.65	965.14	-2,166.06	2,517.98	2,169.35	310.86	4.761	
8,997.62	7,237.62	7,216.62	7,237.62	63.03	250.21	110.82	965.14	-2,166.06	2,520.36	2,167.70	313.19	4.715 CC	
9,000.00	7,237.61	7,216.61	7,237.61	63.09	250.21	110.88	965.14	-2,166.06	2,520.70	2,167.70	313.25	4.715 ES	
9,100.00	7,237.21	7,216.21	7,237.21	65.56	250.19	111.05	965.14	-2,166.06	2,523.08	2,166.05	315.45	4.693 SF	
9,200.00	7,236.82	7,215.82	7,236.82	68.07	250.18	111.22	965.14	-2,166.06	2,525.46	2,164.40	317.44	4.696	
9,300.00	7,236.43	7,215.43	7,236.43	70.61	250.17	111.39	965.14	-2,166.06	2,527.84	2,162.75	319.18	4.723	
9,400.00	7,236.03	7,215.03	7,236.03	73.16	250.15	111.56	965.14	-2,166.06	2,530.22	2,161.10	320.66	4.773	
9,500.00	7,235.64	7,214.64	7,235.64	75.74	250.14	111.73	965.14	-2,166.06	2,532.60	2,159.45	321.89	4.846	
9,600.00	7,235.25	7,214.25	7,235.25	78.34	250.13	111.90	965.14	-2,166.06	2,534.98	2,157.80	322.86	4.940	
9,700.00	7,234.85	7,213.85	7,234.85	80.96	250.11	112.07	965.14	-2,166.06	2,537.36	2,156.15	323.60	5.053	
9,800.00	7,234.46	7,213.46	7,234.46	83.59	250.10	112.24	965.14	-2,166.06	2,539.74	2,154.50	324.13	5.185	
9,900.00	7,234.07	7,213.07	7,234.07	86.24	250.08	112.41	965.14	-2,166.06	2,542.12	2,152.85	324.47	5.334	
10,000.00	7,233.67	7,212.67	7,233.67	88.90	250.07	112.58	965.14	-2,166.06	2,544.50	2,151.20	324.65	5.498	
10,100.00	7,233.28	7,212.28	7,233.28	91.57	250.06	112.75	965.14	-2,166.06	2,546.88	2,149.55	324.70	5.676	
10,200.00	7,232.89	7,211.89	7,232.89	94.25	250.04	112.92	965.14	-2,166.06	2,549.26	2,147.90	324.63	5.866	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	7,232.49	7,211.49	7,232.49	96.95	250.03	89.80	965.14	-2,166.06	1,969.04	1,644.56	324.47	6.068		
10,400.00	7,232.10	7,211.10	7,232.10	99.65	250.02	89.79	965.14	-2,166.06	2,036.56	1,712.32	324.24	6.281		
10,500.00	7,231.71	7,210.71	7,231.71	102.36	250.00	89.77	965.14	-2,166.06	2,106.67	1,782.71	323.95	6.503		
10,600.00	7,231.32	7,210.32	7,231.32	105.08	249.99	89.76	965.14	-2,166.06	2,179.11	1,855.49	323.62	6.734		
10,700.00	7,230.92	7,209.92	7,230.92	107.80	249.97	89.74	965.14	-2,166.06	2,253.66	1,930.41	323.25	6.972		
10,800.00	7,230.53	7,209.53	7,230.53	110.53	249.96	89.72	965.14	-2,166.06	2,330.12	2,007.25	322.87	7.217		
10,900.00	7,230.14	7,209.14	7,230.14	113.27	249.95	89.71	965.14	-2,166.06	2,408.30	2,085.84	322.47	7.468		
11,000.00	7,229.74	7,208.74	7,229.74	116.02	249.93	89.69	965.14	-2,166.06	2,488.05	2,166.00	322.05	7.726		
11,100.00	7,229.35	7,208.35	7,229.35	118.77	249.92	89.68	965.14	-2,166.06	2,569.22	2,247.58	321.64	7.988		
11,200.00	7,228.96	7,207.96	7,228.96	121.52	249.91	89.66	965.14	-2,166.06	2,651.67	2,330.44	321.22	8.255		
11,300.00	7,228.56	7,207.56	7,228.56	124.28	249.89	89.65	965.14	-2,166.06	2,735.29	2,414.48	320.81	8.526		
11,400.00	7,228.17	7,207.17	7,228.17	127.04	249.88	89.63	965.14	-2,166.06	2,819.98	2,499.57	320.41	8.801		
11,500.00	7,227.78	7,206.78	7,227.78	129.81	249.87	89.62	965.14	-2,166.06	2,905.64	2,585.63	320.01	9.080		
11,600.00	7,227.38	7,206.38	7,227.38	132.58	249.85	89.60	965.14	-2,166.06	2,992.19	2,672.58	319.62	9.362		
11,700.00	7,226.99	7,205.99	7,226.99	135.36	249.84	89.59	965.14	-2,166.06	3,079.56	2,760.32	319.24	9.647		
11,800.00	7,226.60	7,205.60	7,226.60	138.14	249.82	89.57	965.14	-2,166.06	3,167.67	2,848.81	318.87	9.934		
11,900.00	7,226.20	7,205.20	7,226.20	140.92	249.81	89.56	965.14	-2,166.06	3,256.47	2,937.97	318.51	10.224		
12,000.00	7,225.81	7,204.81	7,225.81	143.70	249.80	89.54	965.14	-2,166.06	3,345.91	3,027.74	318.16	10.516		
12,100.00	7,225.42	7,204.42	7,225.42	146.49	249.78	89.53	965.14	-2,166.06	3,435.92	3,118.10	317.83	10.811		
12,200.00	7,225.02	7,204.02	7,225.02	149.28	249.77	89.51	965.14	-2,166.06	3,526.48	3,208.97	317.50	11.107		
12,300.00	7,224.63	7,203.63	7,224.63	152.08	249.76	89.50	965.14	-2,166.06	3,617.53	3,300.34	317.19	11.405		
12,400.00	7,224.24	7,203.24	7,224.24	154.87	249.74	89.48	965.14	-2,166.06	3,709.04	3,392.15	316.89	11.705		
12,500.00	7,223.84	7,202.84	7,223.84	157.67	249.73	89.47	965.14	-2,166.06	3,800.98	3,484.38	316.60	12.006		
12,600.00	7,223.45	7,202.45	7,223.45	160.47	249.71	89.45	965.14	-2,166.06	3,893.31	3,577.00	316.32	12.308		
12,700.00	7,223.06	7,202.06	7,223.06	163.27	249.70	89.44	965.14	-2,166.06	3,986.02	3,669.97	316.05	12.612		
12,800.00	7,222.66	7,201.66	7,222.66	166.07	249.69	89.42	965.14	-2,166.06	4,079.07	3,763.28	315.79	12.917		
12,900.00	7,222.27	7,201.27	7,222.27	168.88	249.67	89.40	965.14	-2,166.06	4,172.44	3,856.91	315.54	13.223		
13,000.00	7,221.88	7,200.88	7,221.88	171.69	249.66	89.39	965.14	-2,166.06	4,266.12	3,950.82	315.30	13.530		
13,100.00	7,221.48	7,200.48	7,221.48	174.49	249.65	89.37	965.14	-2,166.06	4,360.07	4,045.00	315.07	13.839		
13,200.00	7,221.09	7,200.09	7,221.09	177.30	249.63	89.36	965.14	-2,166.06	4,454.29	4,139.44	314.85	14.148		
13,300.00	7,220.70	7,200.30	7,220.70	180.12	249.64	89.34	965.14	-2,166.06	4,548.75	4,234.10	314.65	14.456		
13,400.00	7,220.30	7,200.70	7,220.30	182.93	249.65	89.33	965.14	-2,166.06	4,643.45	4,328.97	314.48	14.766		
13,500.00	7,219.91	7,201.09	7,219.91	185.74	249.67	89.31	965.14	-2,166.06	4,738.36	4,424.05	314.31	15.076		
13,600.00	7,219.52	7,201.48	7,219.52	188.56	249.68	89.30	965.14	-2,166.06	4,833.48	4,519.33	314.15	15.386		
13,700.00	7,219.12	7,201.88	7,219.12	191.38	249.69	89.28	965.14	-2,166.06	4,928.79	4,614.80	313.99	15.697		
13,800.00	7,218.73	7,202.27	7,218.73	194.20	249.71	89.27	965.14	-2,166.06	5,024.29	4,710.44	313.85	16.009		
13,900.00	7,218.34	7,202.66	7,218.34	197.02	249.72	89.25	965.14	-2,166.06	5,119.95	4,806.25	313.71	16.321		
14,000.00	7,217.94	7,203.06	7,217.94	199.84	249.74	89.24	965.14	-2,166.06	5,215.78	4,902.21	313.57	16.633		
14,100.00	7,217.55	7,203.45	7,217.55	202.66	249.75	89.22	965.14	-2,166.06	5,311.76	4,998.32	313.45	16.946		
14,200.00	7,217.16	7,203.84	7,217.16	205.48	249.76	89.21	965.14	-2,166.06	5,407.89	5,094.57	313.33	17.260		
14,300.00	7,216.76	7,204.24	7,216.76	208.30	249.78	89.19	965.14	-2,166.06	5,504.16	5,190.95	313.21	17.573		
14,400.00	7,216.37	7,204.63	7,216.37	211.13	249.79	89.18	965.14	-2,166.06	5,600.56	5,287.45	313.10	17.887		
14,500.00	7,215.98	7,205.02	7,215.98	213.96	249.80	89.16	965.14	-2,166.06	5,697.08	5,384.08	313.00	18.201		
14,600.00	7,215.58	7,205.42	7,215.58	216.78	249.82	89.15	965.14	-2,166.06	5,793.72	5,480.81	312.90	18.516		
14,700.00	7,215.19	7,205.81	7,215.19	219.61	249.83	89.13	965.14	-2,166.06	5,890.47	5,577.66	312.81	18.831		
14,800.00	7,214.80	7,206.20	7,214.80	222.44	249.85	89.11	965.14	-2,166.06	5,987.33	5,674.60	312.72	19.146		
14,900.00	7,214.40	7,206.60	7,214.40	225.27	249.86	89.10	965.14	-2,166.06	6,084.29	5,771.64	312.64	19.461		
15,000.00	7,214.01	7,206.99	7,214.01	228.10	249.87	89.08	965.14	-2,166.06	6,181.34	5,868.78	312.56	19.776		
15,002.44	7,214.00	7,207.00	7,214.00	228.16	249.87	89.08	965.14	-2,166.06	6,183.71	5,871.15	312.56	19.784		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-98.26	-368.18	-2,536.10	2,562.94					
100.00	100.00	64.00	100.00	3.28	3.47	-98.26	-368.18	-2,536.10	2,562.69	2,555.94	6.75	379.672		
200.00	200.00	164.00	200.00	3.34	5.16	-98.26	-368.18	-2,536.10	2,562.69	2,554.20	8.49	301.698		
300.00	300.00	264.00	300.00	3.44	8.16	-98.26	-368.18	-2,536.10	2,562.69	2,551.09	11.60	220.846		
400.00	400.00	364.00	400.00	3.60	11.44	-98.26	-368.18	-2,536.10	2,562.69	2,547.64	15.05	170.332		
500.00	500.00	464.00	500.00	3.81	14.82	-98.26	-368.18	-2,536.10	2,562.69	2,544.06	18.63	137.585		
600.00	599.98	563.98	599.98	4.03	18.24	63.62	-368.18	-2,536.10	2,561.91	2,539.64	22.27	115.015		
700.00	699.84	663.84	699.84	4.29	21.68	63.77	-368.18	-2,536.10	2,559.59	2,533.63	25.96	98.585		
800.00	799.54	763.54	799.54	4.57	25.12	63.94	-368.18	-2,536.10	2,556.18	2,526.49	29.69	86.096		
900.00	899.23	863.23	899.23	4.87	28.58	64.10	-368.18	-2,536.10	2,552.73	2,519.28	33.45	76.317		
1,000.00	998.92	962.92	998.92	5.20	32.04	64.26	-368.18	-2,536.10	2,549.30	2,512.07	37.24	68.464		
1,100.00	1,098.61	1,062.61	1,098.61	5.54	35.50	64.42	-368.18	-2,536.10	2,545.90	2,504.85	41.04	62.029		
1,200.00	1,198.30	1,162.30	1,198.30	5.90	38.97	64.57	-368.18	-2,536.10	2,542.51	2,497.64	44.87	56.666		
1,300.00	1,298.00	1,262.00	1,298.00	6.27	42.44	64.73	-368.18	-2,536.10	2,539.14	2,490.43	48.71	52.130		
1,400.00	1,397.69	1,361.69	1,397.69	6.66	45.91	64.89	-368.18	-2,536.10	2,535.79	2,483.24	52.56	48.247		
1,500.00	1,497.38	1,461.38	1,497.38	7.05	49.38	65.05	-368.18	-2,536.10	2,532.47	2,476.05	56.42	44.887		
1,600.00	1,597.07	1,561.07	1,597.07	7.44	52.85	65.22	-368.18	-2,536.10	2,529.16	2,468.87	60.29	41.951		
1,700.00	1,696.76	1,660.76	1,696.76	7.85	56.33	65.38	-368.18	-2,536.10	2,525.87	2,461.71	64.16	39.366		
1,800.00	1,796.45	1,760.45	1,796.45	8.25	59.80	65.54	-368.18	-2,536.10	2,522.60	2,454.56	68.04	37.073		
1,900.00	1,896.15	1,860.15	1,896.15	8.67	63.28	65.70	-368.18	-2,536.10	2,519.36	2,447.43	71.93	35.025		
2,000.00	1,995.84	1,959.84	1,995.84	9.08	66.75	65.86	-368.18	-2,536.10	2,516.13	2,440.31	75.82	33.185		
2,100.00	2,095.53	2,059.53	2,095.53	9.50	70.23	66.03	-368.18	-2,536.10	2,512.92	2,433.21	79.72	31.523		
2,200.00	2,195.22	2,159.22	2,195.22	9.92	73.71	66.19	-368.18	-2,536.10	2,509.74	2,426.12	83.61	30.016		
2,300.00	2,294.91	2,258.91	2,294.91	10.35	77.18	66.35	-368.18	-2,536.10	2,506.57	2,419.06	87.51	28.642		
2,400.00	2,394.60	2,358.60	2,394.60	10.77	80.66	66.52	-368.18	-2,536.10	2,503.43	2,412.01	91.42	27.384		
2,500.00	2,494.30	2,458.30	2,494.30	11.20	84.14	66.68	-368.18	-2,536.10	2,500.30	2,404.98	95.32	26.230		
2,600.00	2,593.99	2,557.99	2,593.99	11.63	87.62	66.85	-368.18	-2,536.10	2,497.20	2,397.97	99.23	25.166		
2,700.00	2,693.68	2,657.68	2,693.68	12.07	91.09	67.01	-368.18	-2,536.10	2,494.12	2,390.98	103.14	24.182		
2,800.00	2,793.37	2,757.37	2,793.37	12.50	94.57	67.18	-368.18	-2,536.10	2,491.05	2,384.00	107.05	23.270		
2,900.00	2,893.06	2,857.06	2,893.06	12.93	98.05	67.34	-368.18	-2,536.10	2,488.01	2,377.05	110.96	22.422		
3,000.00	2,992.76	2,956.76	2,992.76	13.37	101.53	67.51	-368.18	-2,536.10	2,484.99	2,370.12	114.88	21.632		
3,100.00	3,092.45	3,056.45	3,092.45	13.81	105.01	67.68	-368.18	-2,536.10	2,481.99	2,363.20	118.79	20.894		
3,200.00	3,192.14	3,156.14	3,192.14	14.25	108.49	67.84	-368.18	-2,536.10	2,479.02	2,356.31	122.71	20.203		
3,300.00	3,291.83	3,255.83	3,291.83	14.68	111.96	68.01	-368.18	-2,536.10	2,476.06	2,349.44	126.62	19.555		
3,400.00	3,391.52	3,355.52	3,391.52	15.12	115.44	68.18	-368.18	-2,536.10	2,473.13	2,342.58	130.54	18.945		
3,500.00	3,491.21	3,455.21	3,491.21	15.56	118.92	68.35	-368.18	-2,536.10	2,470.21	2,335.75	134.46	18.371		
3,600.00	3,590.91	3,554.91	3,590.91	16.00	122.40	68.52	-368.18	-2,536.10	2,467.32	2,328.94	138.38	17.830		
3,700.00	3,690.60	3,654.60	3,690.60	16.45	125.88	68.69	-368.18	-2,536.10	2,464.45	2,322.15	142.30	17.319		
3,800.00	3,790.29	3,754.29	3,790.29	16.89	129.36	68.86	-368.18	-2,536.10	2,461.60	2,315.38	146.22	16.835		
3,900.00	3,889.98	3,853.98	3,889.98	17.33	132.84	69.03	-368.18	-2,536.10	2,458.77	2,308.63	150.14	16.376		
4,000.00	3,989.67	3,953.67	3,989.67	17.77	136.32	69.20	-368.18	-2,536.10	2,455.97	2,301.91	154.06	15.941		
4,100.00	4,089.36	4,053.36	4,089.36	18.22	139.80	69.37	-368.18	-2,536.10	2,453.19	2,295.20	157.98	15.528		
4,200.00	4,189.06	4,153.06	4,189.06	18.66	143.28	69.54	-368.18	-2,536.10	2,450.42	2,288.52	161.91	15.135		
4,300.00	4,288.75	4,252.75	4,288.75	19.10	146.75	69.71	-368.18	-2,536.10	2,447.68	2,281.85	165.83	14.760		
4,400.00	4,388.44	4,352.44	4,388.44	19.55	150.23	69.88	-368.18	-2,536.10	2,444.97	2,275.21	169.75	14.403		
4,500.00	4,488.13	4,452.13	4,488.13	19.99	153.71	70.05	-368.18	-2,536.10	2,442.27	2,268.59	173.68	14.062		
4,600.00	4,587.82	4,551.82	4,587.82	20.44	157.19	70.23	-368.18	-2,536.10	2,439.60	2,262.00	177.60	13.736		
4,700.00	4,687.51	4,651.51	4,687.51	20.89	160.67	70.40	-368.18	-2,536.10	2,436.95	2,255.42	181.53	13.425		
4,800.00	4,787.21	4,751.21	4,787.21	21.33	164.15	70.57	-368.18	-2,536.10	2,434.32	2,248.87	185.45	13.126		
4,900.00	4,886.90	4,850.90	4,886.90	21.78	167.63	70.75	-368.18	-2,536.10	2,431.72	2,242.34	189.38	12.841		
5,000.00	4,986.59	4,950.59	4,986.59	22.22	171.11	70.92	-368.18	-2,536.10	2,429.13	2,235.83	193.30	12.566		
5,100.00	5,086.28	5,050.28	5,086.28	22.67	174.59	71.10	-368.18	-2,536.10	2,426.57	2,229.34	197.23	12.303		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,185.97	5,149.97	5,185.97	23.12	178.07	71.27	-368.18	-2,536.10	2,424.03	2,222.88	201.16	12.051	
5,300.00	5,285.66	5,249.66	5,285.66	23.56	181.55	71.45	-368.18	-2,536.10	2,421.52	2,216.44	205.08	11.808	
5,400.00	5,385.36	5,349.36	5,385.36	24.01	185.03	71.62	-368.18	-2,536.10	2,419.03	2,210.02	209.01	11.574	
5,500.00	5,485.05	5,449.05	5,485.05	24.46	188.51	71.80	-368.18	-2,536.10	2,416.56	2,203.62	212.94	11.349	
5,600.00	5,584.74	5,548.74	5,584.74	24.90	191.99	71.97	-368.18	-2,536.10	2,414.11	2,197.25	216.86	11.132	
5,700.00	5,684.43	5,648.43	5,684.43	25.35	195.47	72.15	-368.18	-2,536.10	2,411.69	2,190.90	220.79	10.923	
5,800.00	5,784.12	5,748.12	5,784.12	25.80	198.95	72.33	-368.18	-2,536.10	2,409.29	2,184.57	224.72	10.721	
5,900.00	5,883.81	5,847.81	5,883.81	26.25	202.43	72.51	-368.18	-2,536.10	2,406.91	2,178.27	228.64	10.527	
6,000.00	5,983.51	5,947.51	5,983.51	26.70	205.91	72.68	-368.18	-2,536.10	2,404.56	2,171.99	232.57	10.339	
6,100.00	6,083.20	6,047.20	6,083.20	27.14	209.39	72.86	-368.18	-2,536.10	2,402.23	2,165.73	236.50	10.157	
6,200.00	6,182.89	6,146.89	6,182.89	27.59	212.87	73.04	-368.18	-2,536.10	2,399.92	2,159.49	240.43	9.982	
6,300.00	6,282.58	6,246.58	6,282.58	28.04	216.35	73.22	-368.18	-2,536.10	2,397.64	2,153.28	244.36	9.812	
6,400.00	6,382.27	6,346.27	6,382.27	28.49	219.83	73.40	-368.18	-2,536.10	2,395.38	2,147.09	248.29	9.648	
6,500.00	6,481.96	6,445.96	6,481.96	28.94	223.31	73.58	-368.18	-2,536.10	2,393.14	2,140.93	252.21	9.489	
6,600.00	6,581.66	6,545.66	6,581.66	29.39	226.79	73.76	-368.18	-2,536.10	2,390.93	2,134.79	256.14	9.334	
6,700.00	6,681.21	6,645.21	6,681.21	29.83	230.26	73.94	-368.18	-2,536.10	2,388.65	2,128.69	260.07	9.175	
6,800.00	6,778.96	6,742.96	6,778.96	30.28	233.74	74.12	-368.18	-2,536.10	2,386.41	2,122.64	264.00	9.016	
6,900.00	6,872.51	6,836.51	6,872.51	30.70	236.94	74.30	-368.18	-2,536.10	2,384.17	2,116.64	267.93	8.857	
7,000.00	6,969.55	6,933.55	6,969.55	31.10	239.98	74.48	-368.18	-2,536.10	2,381.93	2,110.64	271.86	8.698	
7,100.00	7,037.93	7,001.93	7,037.93	31.48	242.71	74.66	-368.18	-2,536.10	2,379.69	2,104.64	275.79	8.539	
7,200.00	7,105.74	7,069.74	7,105.74	31.88	245.08	74.84	-368.18	-2,536.10	2,377.45	2,098.64	279.72	8.380	
7,300.00	7,161.29	7,125.29	7,161.29	32.41	247.02	75.02	-368.18	-2,536.10	2,375.21	2,092.64	283.65	8.221	
7,400.00	7,203.22	7,167.22	7,203.22	33.13	248.48	75.20	-368.18	-2,536.10	2,372.97	2,086.64	287.58	8.062	
7,500.00	7,230.50	7,205.50	7,230.50	34.04	249.82	75.38	-368.18	-2,536.10	2,370.73	2,080.64	291.51	7.903	
7,600.00	7,242.45	7,206.45	7,242.45	35.13	249.85	75.56	-368.18	-2,536.10	2,368.49	2,074.64	295.44	7.744	
7,700.00	7,242.72	7,206.72	7,242.72	36.39	249.86	75.74	-368.18	-2,536.10	2,366.25	2,068.64	299.37	7.585	
7,800.00	7,242.33	7,206.33	7,242.33	37.81	249.85	75.92	-368.18	-2,536.10	2,364.01	2,062.64	303.30	7.426	
7,900.00	7,241.93	7,205.93	7,241.93	39.40	249.84	76.10	-368.18	-2,536.10	2,361.77	2,056.64	307.23	7.267	
8,000.00	7,241.54	7,205.54	7,241.54	41.13	249.82	76.28	-368.18	-2,536.10	2,359.53	2,050.64	311.16	7.108	
8,100.00	7,241.15	7,205.15	7,241.15	42.97	249.81	76.46	-368.18	-2,536.10	2,357.29	2,044.64	315.09	6.949	
8,200.00	7,240.75	7,204.75	7,240.75	44.92	249.79	76.64	-368.18	-2,536.10	2,355.05	2,038.64	319.02	6.790	
8,300.00	7,240.36	7,204.36	7,240.36	46.97	249.78	76.82	-368.18	-2,536.10	2,352.81	2,032.64	322.95	6.631	
8,400.00	7,239.97	7,203.97	7,239.97	49.10	249.77	77.00	-368.18	-2,536.10	2,350.57	2,026.64	326.88	6.472	
8,500.00	7,239.57	7,203.57	7,239.57	51.29	249.75	77.18	-368.18	-2,536.10	2,348.33	2,020.64	330.81	6.313	
8,600.00	7,239.18	7,203.18	7,239.18	53.56	249.74	77.36	-368.18	-2,536.10	2,346.09	2,014.64	334.74	6.154	
8,700.00	7,238.79	7,202.79	7,238.79	55.87	249.73	77.54	-368.18	-2,536.10	2,343.85	2,008.64	338.67	5.995	
8,800.00	7,238.39	7,202.39	7,238.39	58.24	249.71	77.72	-368.18	-2,536.10	2,341.61	2,002.64	342.60	5.836	
8,900.00	7,238.00	7,202.00	7,238.00	60.64	249.70	77.90	-368.18	-2,536.10	2,339.37	1,996.64	346.53	5.677	
9,000.00	7,237.61	7,201.61	7,237.61	63.09	249.68	78.08	-368.18	-2,536.10	2,337.13	1,990.64	350.46	5.518	
9,100.00	7,237.21	7,201.21	7,237.21	65.56	249.67	78.26	-368.18	-2,536.10	2,334.89	1,984.64	354.39	5.359	
9,200.00	7,236.82	7,200.82	7,236.82	68.07	249.66	78.44	-368.18	-2,536.10	2,332.65	1,978.64	358.32	5.200	
9,300.00	7,236.43	7,200.43	7,236.43	70.61	249.64	78.62	-368.18	-2,536.10	2,330.41	1,972.64	362.25	5.041	
9,378.00	7,236.12	7,200.12	7,236.12	72.60	249.63	78.80	-368.18	-2,536.10	2,328.17	1,966.64	366.18	4.882	
9,400.00	7,236.03	7,200.03	7,236.03	73.16	249.63	78.97	-368.18	-2,536.10	2,325.93	1,960.64	370.11	4.723	
9,500.00	7,235.64	7,200.36	7,235.64	75.74	249.64	79.15	-368.18	-2,536.10	2,323.69	1,954.64	374.04	4.564	
9,600.00	7,235.25	7,200.75	7,235.25	78.34	249.65	79.33	-368.18	-2,536.10	2,321.45	1,948.64	377.97	4.405	
9,700.00	7,234.85	7,201.15	7,234.85	80.96	249.67	79.50	-368.18	-2,536.10	2,319.21	1,942.64	381.90	4.246	
9,800.00	7,234.46	7,201.54	7,234.46	83.59	249.68	79.68	-368.18	-2,536.10	2,316.97	1,936.64	385.83	4.087	
9,900.00	7,234.07	7,201.93	7,234.07	86.24	249.70	79.86	-368.18	-2,536.10	2,314.73	1,930.64	389.76	3.928	
10,000.00	7,233.67	7,202.33	7,233.67	88.90	249.71	79.94	-368.18	-2,536.10	2,312.49	1,924.64	393.69	3.769	
10,100.00	7,233.28	7,202.72	7,233.28	91.57	249.72	80.12	-368.18	-2,536.10	2,310.25	1,918.64	397.62	3.610	
10,200.00	7,232.89	7,203.11	7,232.89	94.25	249.74	80.30	-368.18	-2,536.10	2,308.01	1,912.64	401.55	3.451	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	7,203.51	7,232.49	96.95	249.75	88.58	-368.18	-2,536.10	933.46	648.92	284.55	3.281		
10,400.00	7,232.10	7,203.90	7,232.10	99.65	249.76	88.43	-368.18	-2,536.10	1,032.34	748.07	284.28	3.631		
10,500.00	7,231.71	7,204.29	7,231.71	102.36	249.78	88.27	-368.18	-2,536.10	1,131.42	847.34	284.08	3.983		
10,600.00	7,231.32	7,204.69	7,231.32	105.08	249.79	88.12	-368.18	-2,536.10	1,230.65	946.71	283.94	4.334		
10,700.00	7,230.92	7,205.08	7,230.92	107.80	249.81	87.97	-368.18	-2,536.10	1,329.99	1,046.15	283.84	4.686		
10,800.00	7,230.53	7,205.47	7,230.53	110.53	249.82	87.81	-368.18	-2,536.10	1,429.42	1,145.66	283.77	5.037		
10,900.00	7,230.14	7,205.87	7,230.14	113.27	249.83	87.66	-368.18	-2,536.10	1,528.93	1,245.21	283.72	5.389		
11,000.00	7,229.74	7,206.26	7,229.74	116.02	249.85	87.51	-368.18	-2,536.10	1,628.50	1,344.81	283.69	5.740		
11,100.00	7,229.35	7,206.65	7,229.35	118.77	249.86	87.35	-368.18	-2,536.10	1,728.12	1,444.44	283.67	6.092		
11,200.00	7,228.96	7,207.05	7,228.96	121.52	249.87	87.20	-368.18	-2,536.10	1,827.78	1,544.11	283.67	6.443		
11,300.00	7,228.56	7,207.44	7,228.56	124.28	249.89	87.04	-368.18	-2,536.10	1,927.47	1,643.79	283.68	6.795		
11,400.00	7,228.17	7,207.83	7,228.17	127.04	249.90	86.89	-368.18	-2,536.10	2,027.19	1,743.50	283.69	7.146		
11,500.00	7,227.78	7,208.22	7,227.78	129.81	249.92	86.74	-368.18	-2,536.10	2,126.95	1,843.23	283.71	7.497		
11,600.00	7,227.38	7,208.62	7,227.38	132.58	249.93	86.58	-368.18	-2,536.10	2,226.72	1,942.98	283.74	7.848		
11,700.00	7,226.99	7,209.01	7,226.99	135.36	249.94	86.43	-368.18	-2,536.10	2,326.51	2,042.74	283.77	8.198		
11,800.00	7,226.60	7,209.40	7,226.60	138.14	249.96	86.28	-368.18	-2,536.10	2,426.32	2,142.51	283.81	8.549		
11,900.00	7,226.20	7,209.80	7,226.20	140.92	249.97	86.12	-368.18	-2,536.10	2,526.14	2,242.29	283.85	8.899		
12,000.00	7,225.81	7,189.81	7,225.81	143.70	249.27	85.97	-368.18	-2,536.10	2,625.98	2,342.79	283.19	9.273		
12,100.00	7,225.42	7,189.42	7,225.42	146.49	249.26	85.82	-368.18	-2,536.10	2,725.83	2,442.62	283.21	9.625		
12,200.00	7,225.02	7,189.02	7,225.02	149.28	249.25	85.66	-368.18	-2,536.10	2,825.69	2,542.46	283.23	9.977		
12,300.00	7,224.63	7,188.63	7,224.63	152.08	249.23	85.51	-368.18	-2,536.10	2,925.56	2,642.30	283.26	10.328		
12,400.00	7,224.24	7,188.24	7,224.24	154.87	249.22	85.36	-368.18	-2,536.10	3,025.44	2,742.15	283.29	10.680		
12,500.00	7,223.84	7,187.84	7,223.84	157.67	249.20	85.21	-368.18	-2,536.10	3,125.32	2,842.00	283.32	11.031		
12,600.00	7,223.45	7,187.45	7,223.45	160.47	249.19	85.05	-368.18	-2,536.10	3,225.22	2,941.86	283.35	11.382		
12,700.00	7,223.06	7,187.06	7,223.06	163.27	249.18	84.90	-368.18	-2,536.10	3,325.12	3,041.73	283.39	11.733		
12,800.00	7,222.66	7,186.66	7,222.66	166.07	249.16	84.75	-368.18	-2,536.10	3,425.02	3,141.59	283.43	12.084		
12,900.00	7,222.27	7,186.27	7,222.27	168.88	249.15	84.60	-368.18	-2,536.10	3,524.93	3,241.46	283.47	12.435		
13,000.00	7,221.88	7,185.88	7,221.88	171.69	249.14	84.44	-368.18	-2,536.10	3,624.85	3,341.34	283.51	12.786		
13,100.00	7,221.48	7,185.48	7,221.48	174.49	249.12	84.29	-368.18	-2,536.10	3,724.77	3,441.21	283.55	13.136		
13,200.00	7,221.09	7,185.09	7,221.09	177.30	249.11	84.14	-368.18	-2,536.10	3,824.69	3,541.09	283.60	13.486		
13,300.00	7,220.70	7,184.70	7,220.70	180.12	249.09	83.99	-368.18	-2,536.10	3,924.62	3,640.97	283.64	13.836		
13,400.00	7,220.30	7,184.30	7,220.30	182.93	249.08	83.83	-368.18	-2,536.10	4,024.55	3,740.86	283.69	14.186		
13,500.00	7,219.91	7,183.91	7,219.91	185.74	249.07	83.68	-368.18	-2,536.10	4,124.48	3,840.74	283.74	14.536		
13,600.00	7,219.52	7,183.52	7,219.52	188.56	249.05	83.53	-368.18	-2,536.10	4,224.42	3,940.63	283.79	14.886		
13,700.00	7,219.12	7,183.12	7,219.12	191.38	249.04	83.38	-368.18	-2,536.10	4,324.36	4,040.52	283.84	15.235		
13,800.00	7,218.73	7,182.73	7,218.73	194.20	249.03	83.23	-368.18	-2,536.10	4,424.31	4,140.41	283.89	15.584		
13,900.00	7,218.34	7,182.34	7,218.34	197.02	249.01	83.07	-368.18	-2,536.10	4,524.25	4,240.30	283.95	15.933		
14,000.00	7,217.94	7,181.94	7,217.94	199.84	249.00	82.92	-368.18	-2,536.10	4,624.20	4,340.19	284.00	16.282		
14,100.00	7,217.55	7,181.55	7,217.55	202.66	248.98	82.77	-368.18	-2,536.10	4,724.15	4,440.09	284.06	16.631		
14,200.00	7,217.16	7,181.16	7,217.16	205.48	248.97	82.62	-368.18	-2,536.10	4,824.10	4,539.98	284.12	16.979		
14,300.00	7,216.76	7,180.76	7,216.76	208.30	248.96	82.47	-368.18	-2,536.10	4,924.06	4,639.88	284.18	17.327		
14,400.00	7,216.37	7,180.37	7,216.37	211.13	248.94	82.32	-368.18	-2,536.10	5,024.01	4,739.77	284.24	17.675		
14,500.00	7,215.98	7,179.98	7,215.98	213.96	248.93	82.17	-368.18	-2,536.10	5,123.97	4,839.67	284.30	18.023		
14,600.00	7,215.58	7,179.58	7,215.58	216.78	248.92	82.01	-368.18	-2,536.10	5,223.93	4,939.57	284.36	18.371		
14,700.00	7,215.19	7,179.19	7,215.19	219.61	248.90	81.86	-368.18	-2,536.10	5,323.89	5,039.47	284.42	18.718		
14,800.00	7,214.80	7,178.80	7,214.80	222.44	248.89	81.71	-368.18	-2,536.10	5,423.85	5,139.36	284.49	19.065		
14,900.00	7,214.40	7,178.40	7,214.40	225.27	248.87	81.56	-368.18	-2,536.10	5,523.81	5,239.26	284.55	19.412		
15,000.00	7,214.01	7,178.01	7,214.01	228.10	248.86	81.41	-368.18	-2,536.10	5,623.78	5,339.16	284.62	19.759		
15,002.44	7,214.00	7,178.00	7,214.00	228.16	248.86	81.41	-368.18	-2,536.10	5,626.22	5,341.60	284.62	19.767		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	47.00	3.28	3.28	-107.77	-1,537.27	-4,797.63	5,038.12				
100.00	100.00	53.00	100.00	3.28	3.41	-107.77	-1,537.27	-4,797.63	5,037.90	5,031.21	6.69	752.747	
200.00	200.00	153.00	200.00	3.34	4.87	-107.77	-1,537.27	-4,797.63	5,037.90	5,029.70	8.20	614.076	
300.00	300.00	253.00	300.00	3.44	7.81	-107.77	-1,537.27	-4,797.63	5,037.90	5,026.65	11.25	447.659	
400.00	400.00	353.00	400.00	3.60	11.07	-107.77	-1,537.27	-4,797.63	5,037.90	5,023.22	14.68	343.229	
500.00	500.00	453.00	500.00	3.81	14.45	-107.77	-1,537.27	-4,797.63	5,037.90	5,019.65	18.25	276.018	
600.00	599.98	552.98	599.98	4.03	17.86	54.10	-1,537.27	-4,797.63	5,036.88	5,014.98	21.90	230.025	
700.00	699.84	652.84	699.84	4.29	21.30	54.20	-1,537.27	-4,797.63	5,033.81	5,008.22	25.58	196.754	
800.00	799.54	752.54	799.54	4.57	24.74	54.29	-1,537.27	-4,797.63	5,029.28	4,999.97	29.31	171.591	
900.00	899.23	852.23	899.23	4.87	28.20	54.36	-1,537.27	-4,797.63	5,024.69	4,991.63	33.07	151.951	
1,000.00	998.92	951.92	998.92	5.20	31.66	54.43	-1,537.27	-4,797.63	5,020.12	4,983.26	36.85	136.220	
1,100.00	1,098.61	1,051.61	1,098.61	5.54	35.12	54.51	-1,537.27	-4,797.63	5,015.55	4,974.89	40.66	123.355	
1,200.00	1,198.30	1,151.30	1,198.30	5.90	38.59	54.58	-1,537.27	-4,797.63	5,010.99	4,966.50	44.48	112.649	
1,300.00	1,298.00	1,251.00	1,298.00	6.27	42.05	54.65	-1,537.27	-4,797.63	5,006.43	4,958.11	48.32	103.607	
1,400.00	1,397.69	1,350.69	1,397.69	6.66	45.53	54.73	-1,537.27	-4,797.63	5,001.89	4,949.72	52.17	95.875	
1,500.00	1,497.38	1,450.38	1,497.38	7.05	49.00	54.80	-1,537.27	-4,797.63	4,997.35	4,941.32	56.03	89.191	
1,600.00	1,597.07	1,550.07	1,597.07	7.44	52.47	54.87	-1,537.27	-4,797.63	4,992.83	4,932.93	59.90	83.356	
1,700.00	1,696.76	1,649.76	1,696.76	7.85	55.94	54.95	-1,537.27	-4,797.63	4,988.31	4,924.53	63.77	78.221	
1,800.00	1,796.45	1,749.45	1,796.45	8.25	59.42	55.02	-1,537.27	-4,797.63	4,983.79	4,916.14	67.65	73.668	
1,900.00	1,896.15	1,849.15	1,896.15	8.67	62.89	55.09	-1,537.27	-4,797.63	4,979.29	4,907.75	71.54	69.605	
2,000.00	1,995.84	1,948.84	1,995.84	9.08	66.37	55.17	-1,537.27	-4,797.63	4,974.80	4,899.37	75.43	65.956	
2,100.00	2,095.53	2,048.53	2,095.53	9.50	69.85	55.24	-1,537.27	-4,797.63	4,970.31	4,890.99	79.32	62.662	
2,200.00	2,195.22	2,148.22	2,195.22	9.92	73.32	55.32	-1,537.27	-4,797.63	4,965.83	4,882.61	83.22	59.675	
2,300.00	2,294.91	2,247.91	2,294.91	10.35	76.80	55.39	-1,537.27	-4,797.63	4,961.36	4,874.25	87.11	56.952	
2,400.00	2,394.60	2,347.60	2,394.60	10.77	80.28	55.46	-1,537.27	-4,797.63	4,956.90	4,865.88	91.02	54.462	
2,500.00	2,494.30	2,447.30	2,494.30	11.20	83.75	55.54	-1,537.27	-4,797.63	4,952.45	4,857.53	94.92	52.175	
2,600.00	2,593.99	2,546.99	2,593.99	11.63	87.23	55.61	-1,537.27	-4,797.63	4,948.00	4,849.17	98.83	50.068	
2,700.00	2,693.68	2,646.68	2,693.68	12.07	90.71	55.69	-1,537.27	-4,797.63	4,943.56	4,840.83	102.73	48.120	
2,800.00	2,793.37	2,746.37	2,793.37	12.50	94.19	55.76	-1,537.27	-4,797.63	4,939.14	4,832.49	106.64	46.315	
2,900.00	2,893.06	2,846.06	2,893.06	12.93	97.67	55.84	-1,537.27	-4,797.63	4,934.72	4,824.16	110.55	44.637	
3,000.00	2,992.76	2,945.76	2,992.76	13.37	101.14	55.91	-1,537.27	-4,797.63	4,930.31	4,815.84	114.47	43.073	
3,100.00	3,092.45	3,045.45	3,092.45	13.81	104.62	55.99	-1,537.27	-4,797.63	4,925.90	4,807.53	118.38	41.612	
3,200.00	3,192.14	3,145.14	3,192.14	14.25	108.10	56.07	-1,537.27	-4,797.63	4,921.51	4,799.22	122.29	40.244	
3,300.00	3,291.83	3,244.83	3,291.83	14.68	111.58	56.14	-1,537.27	-4,797.63	4,917.12	4,790.92	126.21	38.961	
3,400.00	3,391.52	3,344.52	3,391.52	15.12	115.06	56.22	-1,537.27	-4,797.63	4,912.75	4,782.62	130.12	37.754	
3,500.00	3,491.21	3,444.21	3,491.21	15.56	118.54	56.29	-1,537.27	-4,797.63	4,908.38	4,774.34	134.04	36.619	
3,600.00	3,590.91	3,543.91	3,590.91	16.00	122.02	56.37	-1,537.27	-4,797.63	4,904.02	4,766.06	137.96	35.547	
3,700.00	3,690.60	3,643.60	3,690.60	16.45	125.50	56.45	-1,537.27	-4,797.63	4,899.67	4,757.79	141.88	34.535	
3,800.00	3,790.29	3,743.29	3,790.29	16.89	128.97	56.52	-1,537.27	-4,797.63	4,895.33	4,749.53	145.80	33.577	
3,900.00	3,889.98	3,842.98	3,889.98	17.33	132.45	56.60	-1,537.27	-4,797.63	4,891.00	4,741.28	149.71	32.669	
4,000.00	3,989.67	3,942.67	3,989.67	17.77	135.93	56.67	-1,537.27	-4,797.63	4,886.67	4,733.04	153.63	31.807	
4,100.00	4,089.36	4,042.36	4,089.36	18.22	139.41	56.75	-1,537.27	-4,797.63	4,882.36	4,724.80	157.56	30.988	
4,200.00	4,189.06	4,142.06	4,189.06	18.66	142.89	56.83	-1,537.27	-4,797.63	4,878.05	4,716.57	161.48	30.209	
4,300.00	4,288.75	4,241.75	4,288.75	19.10	146.37	56.91	-1,537.27	-4,797.63	4,873.75	4,708.35	165.40	29.467	
4,400.00	4,388.44	4,341.44	4,388.44	19.55	149.85	56.98	-1,537.27	-4,797.63	4,869.46	4,700.14	169.32	28.759	
4,500.00	4,488.13	4,441.13	4,488.13	19.99	153.33	57.06	-1,537.27	-4,797.63	4,865.18	4,691.94	173.24	28.083	
4,600.00	4,587.82	4,540.82	4,587.82	20.44	156.81	57.14	-1,537.27	-4,797.63	4,860.91	4,683.75	177.16	27.437	
4,700.00	4,687.51	4,640.51	4,687.51	20.89	160.29	57.22	-1,537.27	-4,797.63	4,856.65	4,675.56	181.09	26.819	
4,800.00	4,787.21	4,740.21	4,787.21	21.33	163.77	57.29	-1,537.27	-4,797.63	4,852.39	4,667.38	185.01	26.228	
4,900.00	4,886.90	4,839.90	4,886.90	21.78	167.25	57.37	-1,537.27	-4,797.63	4,848.15	4,659.22	188.93	25.660	
5,000.00	4,986.59	4,939.59	4,986.59	22.22	170.73	57.45	-1,537.27	-4,797.63	4,843.91	4,651.06	192.86	25.116	
5,100.00	5,086.28	5,039.28	5,086.28	22.67	174.21	57.53	-1,537.27	-4,797.63	4,839.69	4,642.91	196.78	24.594	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,138.97	5,185.97	23.12	177.69	57.61	-1,537.27	-4,797.63	4,835.47	4,634.76	200.71	24.092		
5,300.00	5,285.66	5,238.66	5,285.66	23.56	181.17	57.68	-1,537.27	-4,797.63	4,831.26	4,626.63	204.63	23.610		
5,400.00	5,385.36	5,338.36	5,385.36	24.01	184.65	57.76	-1,537.27	-4,797.63	4,827.06	4,618.51	208.56	23.145		
5,500.00	5,485.05	5,438.05	5,485.05	24.46	188.13	57.84	-1,537.27	-4,797.63	4,822.87	4,610.39	212.48	22.698		
5,600.00	5,584.74	5,537.74	5,584.74	24.90	191.61	57.92	-1,537.27	-4,797.63	4,818.69	4,602.28	216.41	22.267		
5,700.00	5,684.43	5,637.43	5,684.43	25.35	195.09	58.00	-1,537.27	-4,797.63	4,814.52	4,594.19	220.33	21.851		
5,800.00	5,784.12	5,737.12	5,784.12	25.80	198.56	58.08	-1,537.27	-4,797.63	4,810.36	4,586.10	224.26	21.450		
5,900.00	5,883.81	5,836.81	5,883.81	26.25	202.04	58.16	-1,537.27	-4,797.63	4,806.20	4,578.02	228.18	21.063		
6,000.00	5,983.51	5,936.51	5,983.51	26.70	205.52	58.24	-1,537.27	-4,797.63	4,802.06	4,569.95	232.11	20.689		
6,100.00	6,083.20	6,036.20	6,083.20	27.14	209.00	58.32	-1,537.27	-4,797.63	4,797.92	4,561.89	236.04	20.327		
6,200.00	6,182.89	6,135.89	6,182.89	27.59	212.48	58.40	-1,537.27	-4,797.63	4,793.80	4,553.84	239.96	19.977		
6,300.00	6,282.58	6,235.58	6,282.58	28.04	215.96	58.48	-1,537.27	-4,797.63	4,789.68	4,545.79	243.89	19.639		
6,400.00	6,382.27	6,335.27	6,382.27	28.49	219.44	58.55	-1,537.27	-4,797.63	4,785.58	4,537.76	247.82	19.311		
6,500.00	6,481.96	6,434.96	6,481.96	28.94	222.92	58.63	-1,537.27	-4,797.63	4,781.48	4,529.73	251.74	18.993		
6,600.00	6,581.66	6,534.66	6,581.66	29.39	226.40	58.72	-1,537.27	-4,797.63	4,777.39	4,521.72	255.67	18.686		
6,700.00	6,681.21	6,634.21	6,681.21	29.83	229.88	20.21	-1,537.27	-4,797.63	4,770.79	4,511.20	259.59	18.378		
6,800.00	6,778.96	6,731.96	6,778.96	30.28	233.29	2.38	-1,537.27	-4,797.63	4,750.41	4,486.97	263.44	18.032		
6,900.00	6,872.51	6,825.51	6,872.51	30.70	236.56	-3.76	-1,537.27	-4,797.63	4,715.37	4,448.26	267.11	17.653		
7,000.00	6,959.55	6,912.55	6,959.55	31.10	239.59	-7.57	-1,537.27	-4,797.63	4,666.54	4,396.02	270.51	17.251		
7,100.00	7,037.93	7,009.07	7,037.93	31.48	242.96	-11.06	-1,537.27	-4,797.63	4,605.11	4,330.91	274.20	16.795		
7,200.00	7,105.74	7,058.74	7,105.74	31.88	244.70	-15.20	-1,537.27	-4,797.63	4,532.63	4,256.44	276.19	16.411		
7,300.00	7,161.29	7,114.29	7,161.29	32.41	246.64	-21.14	-1,537.27	-4,797.63	4,450.91	4,172.58	278.33	15.991		
7,400.00	7,203.22	7,156.22	7,203.22	33.13	248.10	-30.93	-1,537.27	-4,797.63	4,361.98	4,082.04	279.94	15.582		
7,500.00	7,230.50	7,183.50	7,230.50	34.04	249.05	-48.98	-1,537.27	-4,797.63	4,268.07	3,987.09	280.98	15.190		
7,600.00	7,242.45	7,204.55	7,242.45	35.13	249.79	-80.34	-1,537.27	-4,797.63	4,171.53	3,889.76	281.78	14.804		
7,700.00	7,242.72	7,204.28	7,242.72	36.39	249.78	-90.89	-1,537.27	-4,797.63	4,074.55	3,792.73	281.82	14.458		
7,800.00	7,242.33	7,204.67	7,242.33	37.81	249.79	-90.86	-1,537.27	-4,797.63	3,977.71	3,695.81	281.90	14.110		
7,900.00	7,241.93	7,205.07	7,241.93	39.40	249.81	-90.84	-1,537.27	-4,797.63	3,881.04	3,599.03	282.01	13.762		
8,000.00	7,241.54	7,205.46	7,241.54	41.13	249.82	-90.82	-1,537.27	-4,797.63	3,784.54	3,502.38	282.16	13.413		
8,100.00	7,241.15	7,205.85	7,241.15	42.97	249.83	-90.80	-1,537.27	-4,797.63	3,688.23	3,405.89	282.33	13.063		
8,200.00	7,240.75	7,206.25	7,240.75	44.92	249.85	-90.77	-1,537.27	-4,797.63	3,592.12	3,309.56	282.55	12.713		
8,300.00	7,240.36	7,206.64	7,240.36	46.97	249.86	-90.75	-1,537.27	-4,797.63	3,496.22	3,213.41	282.81	12.362		
8,400.00	7,239.97	7,207.03	7,239.97	49.10	249.87	-90.73	-1,537.27	-4,797.63	3,400.56	3,117.44	283.12	12.011		
8,500.00	7,239.57	7,207.43	7,239.57	51.29	249.89	-90.71	-1,537.27	-4,797.63	3,305.16	3,021.68	283.48	11.659		
8,600.00	7,239.18	7,207.82	7,239.18	53.56	249.90	-90.68	-1,537.27	-4,797.63	3,210.04	2,926.13	283.91	11.307		
8,700.00	7,238.79	7,208.21	7,238.79	55.87	249.92	-90.66	-1,537.27	-4,797.63	3,115.23	2,830.82	284.40	10.954		
8,800.00	7,238.39	7,208.61	7,238.39	58.24	249.93	-90.64	-1,537.27	-4,797.63	3,020.75	2,735.77	284.98	10.600		
8,900.00	7,238.00	7,209.00	7,238.00	60.64	249.94	-90.62	-1,537.27	-4,797.63	2,926.63	2,640.99	285.64	10.246		
9,000.00	7,237.61	7,209.39	7,237.61	63.09	249.96	-90.59	-1,537.27	-4,797.63	2,832.92	2,546.52	286.40	9.892		
9,100.00	7,237.21	7,209.79	7,237.21	65.56	249.97	-90.57	-1,537.27	-4,797.63	2,739.66	2,452.39	287.27	9.537		
9,200.00	7,236.82	7,189.82	7,236.82	68.07	249.27	-90.55	-1,537.27	-4,797.63	2,646.88	2,359.34	287.54	9.205		
9,300.00	7,236.43	7,189.43	7,236.43	70.61	249.26	-90.53	-1,537.27	-4,797.63	2,554.65	2,266.01	288.64	8.851		
9,400.00	7,236.03	7,189.03	7,236.03	73.16	249.25	-90.50	-1,537.27	-4,797.63	2,463.03	2,173.14	289.89	8.497		
9,500.00	7,235.64	7,188.64	7,235.64	75.74	249.23	-90.48	-1,537.27	-4,797.63	2,372.08	2,080.78	291.30	8.143		
9,600.00	7,235.25	7,188.25	7,235.25	78.34	249.22	-90.46	-1,537.27	-4,797.63	2,281.89	1,989.00	292.90	7.791		
9,700.00	7,234.85	7,187.85	7,234.85	80.96	249.20	-90.44	-1,537.27	-4,797.63	2,192.56	1,897.86	294.70	7.440		
9,800.00	7,234.46	7,187.46	7,234.46	83.59	249.19	-90.41	-1,537.27	-4,797.63	2,104.18	1,807.46	296.72	7.091		
9,900.00	7,234.07	7,187.07	7,234.07	86.24	249.18	-90.39	-1,537.27	-4,797.63	2,016.89	1,717.89	299.00	6.745		
10,000.00	7,233.67	7,186.67	7,233.67	88.90	249.16	-90.37	-1,537.27	-4,797.63	1,930.83	1,629.29	301.54	6.403		
10,100.00	7,233.28	7,186.28	7,233.28	91.57	249.15	-90.35	-1,537.27	-4,797.63	1,846.18	1,541.79	304.39	6.065		
10,200.00	7,232.89	7,185.89	7,232.89	94.25	249.14	-90.32	-1,537.27	-4,797.63	1,763.13	1,455.57	307.56	5.733		
10,300.00	7,232.49	7,185.49	7,232.49	96.95	249.12	-90.30	-1,537.27	-4,797.63	1,681.93	1,370.85	311.08	5.407		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,185.10	7,232.10	99.65	249.11	-90.28	-1,537.27	-4,797.63	1,602.86	1,287.88	314.98	5.089	
10,500.00	7,231.71	7,184.71	7,231.71	102.36	249.09	-90.26	-1,537.27	-4,797.63	1,526.24	1,206.96	319.29	4.780	
10,600.00	7,231.32	7,184.32	7,231.32	105.08	249.08	-90.24	-1,537.27	-4,797.63	1,452.48	1,128.47	324.01	4.483	
10,700.00	7,230.92	7,183.92	7,230.92	107.80	249.07	-90.21	-1,537.27	-4,797.63	1,382.01	1,052.85	329.16	4.199	
10,800.00	7,230.53	7,183.53	7,230.53	110.53	249.05	-90.19	-1,537.27	-4,797.63	1,315.37	980.65	334.72	3.930	
10,900.00	7,230.14	7,183.14	7,230.14	113.27	249.04	-90.17	-1,537.27	-4,797.63	1,253.18	912.52	340.67	3.679	
11,000.00	7,229.74	7,182.74	7,229.74	116.02	249.03	-90.15	-1,537.27	-4,797.63	1,196.13	849.21	346.92	3.448	
11,100.00	7,229.35	7,182.35	7,229.35	118.77	249.01	-90.12	-1,537.27	-4,797.63	1,144.99	791.61	353.38	3.240	
11,200.00	7,228.96	7,181.96	7,228.96	121.52	249.00	-90.10	-1,537.27	-4,797.63	1,100.57	740.71	359.86	3.058	
11,300.00	7,228.56	7,181.56	7,228.56	124.28	248.98	-90.08	-1,537.27	-4,797.63	1,063.73	697.57	366.15	2.905	
11,400.00	7,228.17	7,181.17	7,228.17	127.04	248.97	-90.06	-1,537.27	-4,797.63	1,035.27	663.27	372.00	2.783	
11,500.00	7,227.78	7,180.78	7,227.78	129.81	248.96	-90.03	-1,537.27	-4,797.63	1,015.89	638.77	377.12	2.694	
11,600.00	7,227.38	7,180.38	7,227.38	132.58	248.94	-90.01	-1,537.27	-4,797.63	1,006.13	624.88	381.25	2.639	
11,648.70	7,227.19	7,180.19	7,227.19	133.94	248.94	-90.00	-1,537.27	-4,797.63	1,004.95	622.10	382.85	2.625 CC	
11,700.00	7,226.99	7,179.99	7,226.99	135.36	248.93	-89.99	-1,537.27	-4,797.63	1,006.26	622.04	384.22	2.619 ES, SF	
11,800.00	7,226.60	7,179.60	7,226.60	138.14	248.92	-89.97	-1,537.27	-4,797.63	1,016.27	630.36	385.92	2.633	
11,900.00	7,226.20	7,179.20	7,226.20	140.92	248.90	-89.94	-1,537.27	-4,797.63	1,035.89	649.52	386.38	2.681	
12,000.00	7,225.81	7,178.81	7,225.81	143.70	248.89	-89.92	-1,537.27	-4,797.63	1,064.58	678.87	385.71	2.760	
12,100.00	7,225.42	7,178.42	7,225.42	146.49	248.88	-89.90	-1,537.27	-4,797.63	1,101.63	717.52	384.11	2.868	
12,200.00	7,225.02	7,178.02	7,225.02	149.28	248.86	-89.88	-1,537.27	-4,797.63	1,146.23	764.44	381.79	3.002	
12,300.00	7,224.63	7,177.63	7,224.63	152.08	248.85	-89.85	-1,537.27	-4,797.63	1,197.54	818.58	378.96	3.160	
12,400.00	7,224.24	7,177.24	7,224.24	154.87	248.83	-89.83	-1,537.27	-4,797.63	1,254.74	878.92	375.81	3.339	
12,500.00	7,223.84	7,176.84	7,223.84	157.67	248.82	-89.81	-1,537.27	-4,797.63	1,317.05	944.55	372.50	3.536	
12,600.00	7,223.45	7,176.45	7,223.45	160.47	248.81	-89.79	-1,537.27	-4,797.63	1,383.79	1,014.65	369.14	3.749	
12,700.00	7,223.06	7,176.06	7,223.06	163.27	248.79	-89.76	-1,537.27	-4,797.63	1,454.35	1,088.54	365.81	3.976	
12,800.00	7,222.66	7,175.66	7,222.66	166.07	248.78	-89.74	-1,537.27	-4,797.63	1,528.20	1,165.62	362.58	4.215	
12,900.00	7,222.27	7,175.27	7,222.27	168.88	248.77	-89.72	-1,537.27	-4,797.63	1,604.88	1,245.41	359.47	4.465	
13,000.00	7,221.88	7,174.88	7,221.88	171.69	248.75	-89.70	-1,537.27	-4,797.63	1,684.01	1,327.49	356.52	4.723	
13,100.00	7,221.48	7,174.48	7,221.48	174.49	248.74	-89.67	-1,537.27	-4,797.63	1,765.26	1,411.53	353.73	4.990	
13,200.00	7,221.09	7,174.09	7,221.09	177.30	248.72	-89.65	-1,537.27	-4,797.63	1,848.35	1,497.25	351.11	5.264	
13,300.00	7,220.70	7,173.70	7,220.70	180.12	248.71	-89.63	-1,537.27	-4,797.63	1,933.05	1,584.40	348.64	5.544	
13,400.00	7,220.30	7,173.30	7,220.30	182.93	248.70	-89.61	-1,537.27	-4,797.63	2,019.14	1,672.80	346.34	5.830	
13,500.00	7,219.91	7,172.91	7,219.91	185.74	248.68	-89.58	-1,537.27	-4,797.63	2,106.46	1,762.28	344.18	6.120	
13,600.00	7,219.52	7,172.52	7,219.52	188.56	248.67	-89.56	-1,537.27	-4,797.63	2,194.86	1,852.70	342.16	6.415	
13,700.00	7,219.12	7,172.12	7,219.12	191.38	248.66	-89.54	-1,537.27	-4,797.63	2,284.22	1,943.95	340.28	6.713	
13,800.00	7,218.73	7,171.73	7,218.73	194.20	248.64	-89.52	-1,537.27	-4,797.63	2,374.43	2,035.92	338.52	7.014	
13,900.00	7,218.34	7,171.34	7,218.34	197.02	248.63	-89.50	-1,537.27	-4,797.63	2,465.40	2,128.53	336.87	7.319	
14,000.00	7,217.94	7,170.94	7,217.94	199.84	248.61	-89.47	-1,537.27	-4,797.63	2,557.04	2,221.71	335.32	7.626	
14,100.00	7,217.55	7,170.55	7,217.55	202.66	248.60	-89.45	-1,537.27	-4,797.63	2,649.28	2,315.40	333.88	7.935	
14,200.00	7,217.16	7,170.16	7,217.16	205.48	248.59	-89.43	-1,537.27	-4,797.63	2,742.07	2,409.54	332.53	8.246	
14,300.00	7,216.76	7,169.76	7,216.76	208.30	248.57	-89.41	-1,537.27	-4,797.63	2,835.35	2,504.09	331.26	8.559	
14,400.00	7,216.37	7,169.37	7,216.37	211.13	248.56	-89.38	-1,537.27	-4,797.63	2,929.07	2,599.01	330.06	8.874	
14,500.00	7,215.98	7,168.98	7,215.98	213.96	248.55	-89.36	-1,537.27	-4,797.63	3,023.19	2,694.25	328.94	9.191	
14,600.00	7,215.58	7,168.58	7,215.58	216.78	248.53	-89.34	-1,537.27	-4,797.63	3,117.68	2,789.80	327.89	9.508	
14,700.00	7,215.19	7,168.19	7,215.19	219.61	248.52	-89.32	-1,537.27	-4,797.63	3,212.51	2,885.61	326.89	9.827	
14,800.00	7,214.80	7,167.80	7,214.80	222.44	248.50	-89.29	-1,537.27	-4,797.63	3,307.63	2,981.68	325.96	10.148	
14,900.00	7,214.40	7,167.40	7,214.40	225.27	248.49	-89.27	-1,537.27	-4,797.63	3,403.04	3,077.97	325.07	10.469	
15,000.00	7,214.01	7,167.01	7,214.01	228.10	248.48	-89.25	-1,537.27	-4,797.63	3,498.71	3,174.47	324.24	10.791	
15,002.44	7,214.00	7,167.00	7,214.00	228.16	248.48	-89.25	-1,537.27	-4,797.63	3,501.04	3,176.82	324.22	10.798	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	50.00	3.28	3.28	-122.31	-3,038.20	-4,803.49	5,683.89					
100.00	100.00	50.00	100.00	3.28	3.39	-122.31	-3,038.20	-4,803.49	5,683.67	5,676.99	6.68	850.996		
200.00	200.00	150.00	200.00	3.34	4.79	-122.31	-3,038.20	-4,803.49	5,683.67	5,675.54	8.13	699.342		
300.00	300.00	250.00	300.00	3.44	7.71	-122.31	-3,038.20	-4,803.49	5,683.67	5,672.51	11.16	509.337		
400.00	400.00	350.00	400.00	3.60	10.97	-122.31	-3,038.20	-4,803.49	5,683.67	5,669.09	14.58	389.881		
500.00	500.00	450.00	500.00	3.81	14.34	-122.31	-3,038.20	-4,803.49	5,683.67	5,665.52	18.15	313.149		
600.00	599.98	549.98	599.98	4.03	17.76	39.55	-3,038.20	-4,803.49	5,682.33	5,660.53	21.79	260.725		
700.00	699.84	649.84	699.84	4.29	21.20	39.64	-3,038.20	-4,803.49	5,678.29	5,652.81	25.48	222.837		
800.00	799.54	749.54	799.54	4.57	24.64	39.70	-3,038.20	-4,803.49	5,672.33	5,643.12	29.21	194.210		
900.00	899.23	849.23	899.23	4.87	28.09	39.75	-3,038.20	-4,803.49	5,666.29	5,633.32	32.96	171.892		
1,000.00	998.92	948.92	998.92	5.20	31.55	39.81	-3,038.20	-4,803.49	5,660.25	5,623.50	36.75	154.029		
1,100.00	1,098.61	1,048.61	1,098.61	5.54	35.02	39.86	-3,038.20	-4,803.49	5,654.22	5,613.66	40.55	139.428		
1,200.00	1,198.30	1,148.30	1,198.30	5.90	38.48	39.91	-3,038.20	-4,803.49	5,648.19	5,603.81	44.37	127.283		
1,300.00	1,298.00	1,248.00	1,298.00	6.27	41.95	39.96	-3,038.20	-4,803.49	5,642.16	5,593.95	48.21	117.030		
1,400.00	1,397.69	1,347.69	1,397.69	6.66	45.42	40.01	-3,038.20	-4,803.49	5,636.14	5,584.08	52.06	108.265		
1,500.00	1,497.38	1,447.38	1,497.38	7.05	48.89	40.06	-3,038.20	-4,803.49	5,630.13	5,574.21	55.92	100.689		
1,600.00	1,597.07	1,547.07	1,597.07	7.44	52.37	40.11	-3,038.20	-4,803.49	5,624.12	5,564.34	59.78	94.078		
1,700.00	1,696.76	1,646.76	1,696.76	7.85	55.84	40.16	-3,038.20	-4,803.49	5,618.11	5,554.46	63.65	88.261		
1,800.00	1,796.45	1,746.45	1,796.45	8.25	59.31	40.22	-3,038.20	-4,803.49	5,612.11	5,544.58	67.53	83.104		
1,900.00	1,896.15	1,846.15	1,896.15	8.67	62.79	40.27	-3,038.20	-4,803.49	5,606.11	5,534.70	71.41	78.501		
2,000.00	1,995.84	1,945.84	1,995.84	9.08	66.27	40.32	-3,038.20	-4,803.49	5,600.12	5,524.82	75.30	74.370		
2,100.00	2,095.53	2,045.53	2,095.53	9.50	69.74	40.37	-3,038.20	-4,803.49	5,594.13	5,514.94	79.19	70.640		
2,200.00	2,195.22	2,145.22	2,195.22	9.92	73.22	40.42	-3,038.20	-4,803.49	5,588.15	5,505.06	83.09	67.257		
2,300.00	2,294.91	2,244.91	2,294.91	10.35	76.69	40.47	-3,038.20	-4,803.49	5,582.17	5,495.19	86.98	64.176		
2,400.00	2,394.60	2,344.60	2,394.60	10.77	80.17	40.53	-3,038.20	-4,803.49	5,576.20	5,485.31	90.88	61.356		
2,500.00	2,494.30	2,444.30	2,494.30	11.20	83.65	40.58	-3,038.20	-4,803.49	5,570.23	5,475.44	94.78	58.768		
2,600.00	2,593.99	2,543.99	2,593.99	11.63	87.13	40.63	-3,038.20	-4,803.49	5,564.26	5,465.58	98.69	56.383		
2,700.00	2,693.68	2,643.68	2,693.68	12.07	90.60	40.68	-3,038.20	-4,803.49	5,558.30	5,455.71	102.59	54.178		
2,800.00	2,793.37	2,743.37	2,793.37	12.50	94.08	40.74	-3,038.20	-4,803.49	5,552.35	5,445.85	106.50	52.135		
2,900.00	2,893.06	2,843.06	2,893.06	12.93	97.56	40.79	-3,038.20	-4,803.49	5,546.40	5,435.99	110.41	50.236		
3,000.00	2,992.76	2,942.76	2,992.76	13.37	101.04	40.84	-3,038.20	-4,803.49	5,540.45	5,426.13	114.32	48.465		
3,100.00	3,092.45	3,042.45	3,092.45	13.81	104.52	40.90	-3,038.20	-4,803.49	5,534.51	5,416.28	118.23	46.812		
3,200.00	3,192.14	3,142.14	3,192.14	14.25	108.00	40.95	-3,038.20	-4,803.49	5,528.57	5,406.43	122.14	45.264		
3,300.00	3,291.83	3,241.83	3,291.83	14.68	111.48	41.00	-3,038.20	-4,803.49	5,522.64	5,396.59	126.05	43.812		
3,400.00	3,391.52	3,341.52	3,391.52	15.12	114.95	41.06	-3,038.20	-4,803.49	5,516.71	5,386.75	129.97	42.447		
3,500.00	3,491.21	3,441.21	3,491.21	15.56	118.43	41.11	-3,038.20	-4,803.49	5,510.79	5,376.91	133.88	41.162		
3,600.00	3,590.91	3,540.91	3,590.91	16.00	121.91	41.16	-3,038.20	-4,803.49	5,504.88	5,367.08	137.80	39.949		
3,700.00	3,690.60	3,640.60	3,690.60	16.45	125.39	41.22	-3,038.20	-4,803.49	5,498.96	5,357.25	141.71	38.804		
3,800.00	3,790.29	3,740.29	3,790.29	16.89	128.87	41.27	-3,038.20	-4,803.49	5,493.06	5,347.43	145.63	37.720		
3,900.00	3,889.98	3,839.98	3,889.98	17.33	132.35	41.32	-3,038.20	-4,803.49	5,487.15	5,337.61	149.55	36.692		
4,000.00	3,989.67	3,939.67	3,989.67	17.77	135.83	41.38	-3,038.20	-4,803.49	5,481.25	5,327.79	153.46	35.717		
4,100.00	4,089.36	4,039.36	4,089.36	18.22	139.31	41.43	-3,038.20	-4,803.49	5,475.36	5,317.98	157.38	34.790		
4,200.00	4,189.06	4,139.06	4,189.06	18.66	142.79	41.49	-3,038.20	-4,803.49	5,469.47	5,308.17	161.30	33.909		
4,300.00	4,288.75	4,238.75	4,288.75	19.10	146.27	41.54	-3,038.20	-4,803.49	5,463.59	5,298.37	165.22	33.069		
4,400.00	4,388.44	4,338.44	4,388.44	19.55	149.75	41.60	-3,038.20	-4,803.49	5,457.71	5,288.57	169.14	32.268		
4,500.00	4,488.13	4,438.13	4,488.13	19.99	153.23	41.65	-3,038.20	-4,803.49	5,451.84	5,278.78	173.06	31.503		
4,600.00	4,587.82	4,537.82	4,587.82	20.44	156.70	41.71	-3,038.20	-4,803.49	5,445.97	5,268.99	176.98	30.772		
4,700.00	4,687.51	4,637.51	4,687.51	20.89	160.18	41.76	-3,038.20	-4,803.49	5,440.11	5,259.21	180.90	30.073		
4,800.00	4,787.21	4,737.21	4,787.21	21.33	163.66	41.82	-3,038.20	-4,803.49	5,434.25	5,249.43	184.82	29.403		
4,900.00	4,886.90	4,836.90	4,886.90	21.78	167.14	41.87	-3,038.20	-4,803.49	5,428.40	5,239.65	188.74	28.761		
5,000.00	4,986.59	4,936.59	4,986.59	22.22	170.62	41.93	-3,038.20	-4,803.49	5,422.55	5,229.88	192.66	28.145		
5,100.00	5,086.28	5,036.28	5,086.28	22.67	174.10	41.98	-3,038.20	-4,803.49	5,416.70	5,220.12	196.58	27.554		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,135.97	5,185.97	23.12	177.58	42.04	-3,038.20	-4,803.49	5,410.87	5,210.36	200.51	26.986		
5,300.00	5,285.66	5,235.66	5,285.66	23.56	181.06	42.09	-3,038.20	-4,803.49	5,405.03	5,200.60	204.43	26.440		
5,400.00	5,385.36	5,335.36	5,385.36	24.01	184.54	42.15	-3,038.20	-4,803.49	5,399.21	5,190.85	208.35	25.914		
5,500.00	5,485.05	5,435.05	5,485.05	24.46	188.02	42.20	-3,038.20	-4,803.49	5,393.38	5,181.11	212.27	25.408		
5,600.00	5,584.74	5,534.74	5,584.74	24.90	191.50	42.26	-3,038.20	-4,803.49	5,387.56	5,171.37	216.20	24.920		
5,700.00	5,684.43	5,634.43	5,684.43	25.35	194.98	42.32	-3,038.20	-4,803.49	5,381.75	5,161.63	220.12	24.449		
5,800.00	5,784.12	5,734.12	5,784.12	25.80	198.46	42.37	-3,038.20	-4,803.49	5,375.95	5,151.90	224.04	23.995		
5,900.00	5,883.81	5,833.81	5,883.81	26.25	201.94	42.43	-3,038.20	-4,803.49	5,370.14	5,142.18	227.97	23.557		
6,000.00	5,983.51	5,933.51	5,983.51	26.70	205.42	42.49	-3,038.20	-4,803.49	5,364.35	5,132.46	231.89	23.133		
6,100.00	6,083.20	6,033.20	6,083.20	27.14	208.90	42.54	-3,038.20	-4,803.49	5,358.55	5,122.74	235.81	22.724		
6,200.00	6,182.89	6,132.89	6,182.89	27.59	212.38	42.60	-3,038.20	-4,803.49	5,352.77	5,113.03	239.74	22.328		
6,300.00	6,282.58	6,232.58	6,282.58	28.04	215.86	42.66	-3,038.20	-4,803.49	5,346.99	5,103.32	243.66	21.944		
6,400.00	6,382.27	6,332.27	6,382.27	28.49	219.34	42.71	-3,038.20	-4,803.49	5,341.21	5,093.62	247.59	21.573		
6,500.00	6,481.96	6,431.96	6,481.96	28.94	222.82	42.77	-3,038.20	-4,803.49	5,335.44	5,083.93	251.51	21.214		
6,600.00	6,581.66	6,531.66	6,581.66	29.39	226.30	42.83	-3,038.20	-4,803.49	5,329.67	5,074.24	255.44	20.865		
6,700.00	6,681.21	6,631.21	6,681.21	29.83	229.77	4.15	-3,038.20	-4,803.49	5,321.65	5,062.29	259.35	20.519		
6,800.00	6,778.96	6,728.96	6,778.96	30.28	233.19	-14.25	-3,038.20	-4,803.49	5,301.26	5,038.06	263.19	20.142		
6,900.00	6,872.51	6,822.51	6,872.51	30.70	236.45	-21.34	-3,038.20	-4,803.49	5,267.78	5,000.92	266.86	19.740		
7,000.00	6,959.55	6,909.55	6,959.55	31.10	239.49	-26.55	-3,038.20	-4,803.49	5,222.07	4,951.81	270.26	19.322		
7,100.00	7,037.93	6,987.93	7,037.93	31.48	242.23	-31.93	-3,038.20	-4,803.49	5,165.35	4,892.03	273.32	18.899		
7,200.00	7,105.74	7,055.74	7,105.74	31.88	244.59	-38.44	-3,038.20	-4,803.49	5,099.09	4,823.12	275.97	18.477		
7,300.00	7,161.29	7,111.29	7,161.29	32.41	246.53	-46.86	-3,038.20	-4,803.49	5,025.04	4,746.89	278.16	18.066		
7,400.00	7,203.22	7,153.22	7,203.22	33.13	248.00	-57.80	-3,038.20	-4,803.49	4,945.17	4,665.31	279.86	17.670		
7,500.00	7,230.50	7,180.50	7,230.50	34.04	248.95	-71.28	-3,038.20	-4,803.49	4,861.55	4,580.50	281.05	17.298		
7,600.00	7,242.45	7,207.55	7,242.45	35.13	249.89	-86.11	-3,038.20	-4,803.49	4,776.37	4,494.10	282.27	16.921		
7,700.00	7,242.72	7,207.28	7,242.72	36.39	249.88	-90.36	-3,038.20	-4,803.49	4,691.51	4,408.91	282.60	16.601		
7,800.00	7,242.33	7,207.67	7,242.33	37.81	249.90	-90.35	-3,038.20	-4,803.49	4,607.28	4,324.23	283.05	16.277		
7,900.00	7,241.93	7,208.07	7,241.93	39.40	249.91	-90.34	-3,038.20	-4,803.49	4,523.69	4,240.09	283.60	15.951		
8,000.00	7,241.54	7,208.46	7,241.54	41.13	249.92	-90.33	-3,038.20	-4,803.49	4,440.78	4,156.51	284.27	15.622		
8,100.00	7,241.15	7,208.85	7,241.15	42.97	249.94	-90.32	-3,038.20	-4,803.49	4,358.59	4,073.54	285.05	15.291		
8,200.00	7,240.75	7,209.25	7,240.75	44.92	249.95	-90.31	-3,038.20	-4,803.49	4,277.15	3,991.20	285.95	14.958		
8,300.00	7,240.36	7,209.64	7,240.36	46.97	249.97	-90.30	-3,038.20	-4,803.49	4,196.52	3,909.55	286.98	14.623		
8,400.00	7,239.97	7,189.97	7,239.97	49.10	249.28	-90.29	-3,038.20	-4,803.49	4,116.74	3,829.31	287.43	14.323		
8,500.00	7,239.57	7,189.57	7,239.57	51.29	249.26	-90.28	-3,038.20	-4,803.49	4,037.86	3,749.17	288.69	13.987		
8,600.00	7,239.18	7,189.18	7,239.18	53.56	249.25	-90.28	-3,038.20	-4,803.49	3,959.93	3,669.84	290.09	13.651		
8,700.00	7,238.79	7,188.79	7,238.79	55.87	249.24	-90.27	-3,038.20	-4,803.49	3,883.01	3,591.40	291.62	13.315		
8,800.00	7,238.39	7,188.39	7,238.39	58.24	249.22	-90.26	-3,038.20	-4,803.49	3,807.17	3,513.88	293.29	12.981		
8,900.00	7,238.00	7,188.00	7,238.00	60.64	249.21	-90.25	-3,038.20	-4,803.49	3,732.46	3,437.37	295.10	12.648		
9,000.00	7,237.61	7,187.61	7,237.61	63.09	249.20	-90.24	-3,038.20	-4,803.49	3,658.97	3,361.92	297.05	12.318		
9,100.00	7,237.21	7,187.21	7,237.21	65.56	249.18	-90.23	-3,038.20	-4,803.49	3,586.75	3,287.62	299.13	11.990		
9,200.00	7,236.82	7,186.82	7,236.82	68.07	249.17	-90.22	-3,038.20	-4,803.49	3,515.90	3,214.53	301.36	11.667		
9,300.00	7,236.43	7,186.43	7,236.43	70.61	249.15	-90.21	-3,038.20	-4,803.49	3,446.49	3,142.75	303.73	11.347		
9,400.00	7,236.03	7,186.03	7,236.03	73.16	249.14	-90.20	-3,038.20	-4,803.49	3,378.61	3,072.37	306.24	11.033		
9,500.00	7,235.64	7,185.64	7,235.64	75.74	249.13	-90.19	-3,038.20	-4,803.49	3,312.37	3,003.48	308.89	10.724		
9,600.00	7,235.25	7,185.25	7,235.25	78.34	249.11	-90.19	-3,038.20	-4,803.49	3,247.85	2,936.18	311.67	10.421		
9,700.00	7,234.85	7,184.85	7,234.85	80.96	249.10	-90.18	-3,038.20	-4,803.49	3,185.16	2,870.59	314.58	10.125		
9,800.00	7,234.46	7,184.46	7,234.46	83.59	249.09	-90.17	-3,038.20	-4,803.49	3,124.42	2,806.81	317.61	9.837		
9,900.00	7,234.07	7,184.07	7,234.07	86.24	249.07	-90.16	-3,038.20	-4,803.49	3,065.74	2,744.96	320.78	9.557		
10,000.00	7,233.67	7,183.67	7,233.67	88.90	249.06	-90.15	-3,038.20	-4,803.49	3,009.24	2,685.18	324.05	9.286		
10,100.00	7,233.28	7,183.28	7,233.28	91.57	249.04	-90.14	-3,038.20	-4,803.49	2,955.04	2,627.60	327.44	9.025		
10,200.00	7,232.89	7,182.89	7,232.89	94.25	249.03	-90.13	-3,038.20	-4,803.49	2,903.27	2,572.35	330.93	8.773		
10,300.00	7,232.49	7,182.49	7,232.49	96.95	249.02	-90.12	-3,038.20	-4,803.49	2,854.07	2,519.57	334.50	8.532		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,182.10	7,232.10	99.65	249.00	-90.11	-3,038.20	-4,803.49	2,807.58	2,469.42	338.15	8.303		
10,500.00	7,231.71	7,181.71	7,231.71	102.36	248.99	-90.10	-3,038.20	-4,803.49	2,763.92	2,422.05	341.87	8.085		
10,600.00	7,231.32	7,181.32	7,231.32	105.08	248.98	-90.10	-3,038.20	-4,803.49	2,723.23	2,377.60	345.63	7.879		
10,700.00	7,230.92	7,180.92	7,230.92	107.80	248.96	-90.09	-3,038.20	-4,803.49	2,685.65	2,336.23	349.42	7.686		
10,800.00	7,230.53	7,180.53	7,230.53	110.53	248.95	-90.08	-3,038.20	-4,803.49	2,651.31	2,298.09	353.23	7.506		
10,900.00	7,230.14	7,180.14	7,230.14	113.27	248.94	-90.07	-3,038.20	-4,803.49	2,620.34	2,263.33	357.02	7.340		
11,000.00	7,229.74	7,179.74	7,229.74	116.02	248.92	-90.06	-3,038.20	-4,803.49	2,592.86	2,232.09	360.77	7.187		
11,100.00	7,229.35	7,179.35	7,229.35	118.77	248.91	-90.05	-3,038.20	-4,803.49	2,568.99	2,204.51	364.47	7.049		
11,200.00	7,228.96	7,178.96	7,228.96	121.52	248.89	-90.04	-3,038.20	-4,803.49	2,548.81	2,180.72	368.09	6.924		
11,300.00	7,228.56	7,178.56	7,228.56	124.28	248.88	-90.03	-3,038.20	-4,803.49	2,532.42	2,160.82	371.60	6.815		
11,400.00	7,228.17	7,178.17	7,228.17	127.04	248.87	-90.02	-3,038.20	-4,803.49	2,519.90	2,144.91	374.99	6.720		
11,500.00	7,227.78	7,177.78	7,227.78	129.81	248.85	-90.01	-3,038.20	-4,803.49	2,511.30	2,133.07	378.23	6.640		
11,600.00	7,227.38	7,177.38	7,227.38	132.58	248.84	-90.01	-3,038.20	-4,803.49	2,506.67	2,125.37	381.30	6.574		
11,666.30	7,227.12	7,177.12	7,227.12	134.42	248.83	-90.00	-3,038.20	-4,803.49	2,505.79	2,122.56	383.23	6.539 CC		
11,700.00	7,226.99	7,176.99	7,226.99	135.36	248.83	-90.00	-3,038.20	-4,803.49	2,506.02	2,121.84	384.18	6.523 ES		
11,800.00	7,226.60	7,176.60	7,226.60	138.14	248.81	-89.99	-3,038.20	-4,803.49	2,509.36	2,122.49	386.86	6.486		
11,900.00	7,226.20	7,176.20	7,226.20	140.92	248.80	-89.98	-3,038.20	-4,803.49	2,516.67	2,127.34	389.33	6.464		
12,000.00	7,225.81	7,175.81	7,225.81	143.70	248.78	-89.97	-3,038.20	-4,803.49	2,527.91	2,136.34	391.58	6.456 SF		
12,100.00	7,225.42	7,175.42	7,225.42	146.49	248.77	-89.96	-3,038.20	-4,803.49	2,543.05	2,149.46	393.59	6.461		
12,200.00	7,225.02	7,175.02	7,225.02	149.28	248.76	-89.95	-3,038.20	-4,803.49	2,562.00	2,166.62	395.38	6.480		
12,300.00	7,224.63	7,174.63	7,224.63	152.08	248.74	-89.94	-3,038.20	-4,803.49	2,584.68	2,187.74	396.94	6.512		
12,400.00	7,224.24	7,174.24	7,224.24	154.87	248.73	-89.93	-3,038.20	-4,803.49	2,611.00	2,212.73	398.27	6.556		
12,500.00	7,223.84	7,173.84	7,223.84	157.67	248.72	-89.93	-3,038.20	-4,803.49	2,640.84	2,241.45	399.39	6.612		
12,600.00	7,223.45	7,173.45	7,223.45	160.47	248.70	-89.92	-3,038.20	-4,803.49	2,674.09	2,273.80	400.30	6.680		
12,700.00	7,223.06	7,173.06	7,223.06	163.27	248.69	-89.91	-3,038.20	-4,803.49	2,710.63	2,309.62	401.01	6.760		
12,800.00	7,222.66	7,172.66	7,222.66	166.07	248.67	-89.90	-3,038.20	-4,803.49	2,750.32	2,348.79	401.53	6.850		
12,900.00	7,222.27	7,172.27	7,222.27	168.88	248.66	-89.89	-3,038.20	-4,803.49	2,793.03	2,391.14	401.88	6.950		
13,000.00	7,221.88	7,171.88	7,221.88	171.69	248.65	-89.88	-3,038.20	-4,803.49	2,838.61	2,436.53	402.08	7.060		
13,100.00	7,221.48	7,171.48	7,221.48	174.49	248.63	-89.87	-3,038.20	-4,803.49	2,886.95	2,484.82	402.13	7.179		
13,200.00	7,221.09	7,171.09	7,221.09	177.30	248.62	-89.86	-3,038.20	-4,803.49	2,937.89	2,535.84	402.05	7.307		
13,300.00	7,220.70	7,170.70	7,220.70	180.12	248.61	-89.85	-3,038.20	-4,803.49	2,991.31	2,589.46	401.85	7.444		
13,400.00	7,220.30	7,170.30	7,220.30	182.93	248.59	-89.84	-3,038.20	-4,803.49	3,047.08	2,645.53	401.54	7.588		
13,500.00	7,219.91	7,169.91	7,219.91	185.74	248.58	-89.84	-3,038.20	-4,803.49	3,105.06	2,703.91	401.15	7.740		
13,600.00	7,219.52	7,169.52	7,219.52	188.56	248.56	-89.83	-3,038.20	-4,803.49	3,165.14	2,764.47	400.67	7.900		
13,700.00	7,219.12	7,169.12	7,219.12	191.38	248.55	-89.82	-3,038.20	-4,803.49	3,227.21	2,827.09	400.12	8.066		
13,800.00	7,218.73	7,168.73	7,218.73	194.20	248.54	-89.81	-3,038.20	-4,803.49	3,291.14	2,891.63	399.52	8.238		
13,900.00	7,218.34	7,168.34	7,218.34	197.02	248.52	-89.80	-3,038.20	-4,803.49	3,356.83	2,957.98	398.86	8.416		
14,000.00	7,217.94	7,167.94	7,217.94	199.84	248.51	-89.79	-3,038.20	-4,803.49	3,424.19	3,026.03	398.16	8.600		
14,100.00	7,217.55	7,167.55	7,217.55	202.66	248.50	-89.78	-3,038.20	-4,803.49	3,493.11	3,095.69	397.42	8.789		
14,200.00	7,217.16	7,167.16	7,217.16	205.48	248.48	-89.77	-3,038.20	-4,803.49	3,563.50	3,166.85	396.66	8.984		
14,300.00	7,216.76	7,166.76	7,216.76	208.30	248.47	-89.76	-3,038.20	-4,803.49	3,635.28	3,239.41	395.87	9.183		
14,400.00	7,216.37	7,166.37	7,216.37	211.13	248.45	-89.75	-3,038.20	-4,803.49	3,708.37	3,313.31	395.06	9.387		
14,500.00	7,215.98	7,165.98	7,215.98	213.96	248.44	-89.75	-3,038.20	-4,803.49	3,782.69	3,388.44	394.25	9.595		
14,600.00	7,215.58	7,165.58	7,215.58	216.78	248.43	-89.74	-3,038.20	-4,803.49	3,858.17	3,464.75	393.42	9.807		
14,700.00	7,215.19	7,165.19	7,215.19	219.61	248.41	-89.73	-3,038.20	-4,803.49	3,934.74	3,542.16	392.59	10.023		
14,800.00	7,214.80	7,164.80	7,214.80	222.44	248.40	-89.72	-3,038.20	-4,803.49	4,012.35	3,620.59	391.75	10.242		
14,900.00	7,214.40	7,164.40	7,214.40	225.27	248.39	-89.71	-3,038.20	-4,803.49	4,090.92	3,700.00	390.92	10.465		
15,000.00	7,214.01	7,164.01	7,214.01	228.10	248.37	-89.70	-3,038.20	-4,803.49	4,170.42	3,780.33	390.09	10.691		
15,002.44	7,214.00	7,164.00	7,214.00	228.16	248.37	-89.70	-3,038.20	-4,803.49	4,172.37	3,782.29	390.07	10.696		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	68.00	3.28	3.28	-142.17	-4,209.32	-3,268.13	5,329.51					
100.00	100.00	909.73	947.41	3.28	5.19	-142.36	-4,160.11	-3,208.09	5,321.32	5,312.83	8.49	626.543		
200.00	200.00	1,008.39	1,044.74	3.34	5.60	-142.40	-4,149.90	-3,195.62	5,305.40	5,296.52	8.88	597.207		
300.00	300.00	1,107.05	1,142.07	3.44	6.04	-142.44	-4,139.69	-3,183.16	5,289.48	5,280.14	9.34	566.159		
400.00	400.00	1,205.70	1,239.40	3.60	6.50	-142.48	-4,129.47	-3,170.70	5,273.56	5,263.70	9.86	534.655		
500.00	500.00	1,304.36	1,336.73	3.81	6.96	-142.52	-4,119.26	-3,158.23	5,257.64	5,247.21	10.44	503.688		
600.00	599.98	1,402.76	1,433.81	4.03	7.44	19.40	-4,109.07	-3,145.80	5,240.11	5,229.06	11.05	474.162		
700.00	699.84	1,500.55	1,530.29	4.29	7.92	19.52	-4,098.94	-3,133.44	5,219.34	5,207.65	11.70	446.273		
800.00	799.54	1,597.85	1,626.28	4.57	8.40	19.54	-4,088.87	-3,121.15	5,196.27	5,183.90	12.37	420.152		
900.00	899.23	1,695.12	1,722.25	4.87	8.89	19.53	-4,078.80	-3,108.86	5,173.09	5,160.03	13.06	396.105		
1,000.00	998.92	1,792.39	1,818.21	5.20	9.39	19.52	-4,068.73	-3,096.57	5,149.92	5,136.14	13.78	373.786		
1,100.00	1,098.61	1,889.66	1,914.18	5.54	9.89	19.51	-4,058.66	-3,084.29	5,126.74	5,112.23	14.52	353.157		
1,200.00	1,198.30	1,986.93	2,010.14	5.90	10.39	19.49	-4,048.58	-3,072.00	5,103.57	5,088.30	15.27	334.132		
1,300.00	1,298.00	2,084.21	2,106.11	6.27	10.90	19.48	-4,038.51	-3,059.71	5,080.40	5,064.35	16.05	316.604		
1,400.00	1,397.69	2,181.48	2,202.07	6.66	11.41	19.47	-4,028.44	-3,047.42	5,057.22	5,040.39	16.83	300.456		
1,500.00	1,497.38	2,278.75	2,298.04	7.05	11.92	19.46	-4,018.37	-3,035.13	5,034.05	5,016.42	17.63	285.569		
1,600.00	1,597.07	2,376.02	2,394.00	7.44	12.43	19.44	-4,008.30	-3,022.84	5,010.88	4,992.44	18.43	271.831		
1,700.00	1,696.76	2,473.29	2,489.97	7.85	12.94	19.43	-3,998.23	-3,010.55	4,987.70	4,968.46	19.25	259.133		
1,800.00	1,796.45	2,570.57	2,585.93	8.25	13.46	19.42	-3,988.16	-2,998.26	4,964.53	4,944.46	20.07	247.379		
1,900.00	1,896.15	2,667.84	2,681.90	8.67	13.98	19.41	-3,978.09	-2,985.97	4,941.36	4,920.46	20.90	236.480		
2,000.00	1,995.84	2,765.11	2,777.87	9.08	14.50	19.39	-3,968.02	-2,973.68	4,918.19	4,896.46	21.73	226.355		
2,100.00	2,095.53	2,862.38	2,873.83	9.50	15.02	19.38	-3,957.94	-2,961.39	4,895.02	4,872.45	22.56	216.932		
2,200.00	2,195.22	2,959.65	2,969.80	9.92	15.54	19.36	-3,947.87	-2,949.11	4,871.84	4,848.44	23.41	208.145		
2,300.00	2,294.91	3,056.93	3,065.76	10.35	16.06	19.35	-3,937.80	-2,936.82	4,848.67	4,824.42	24.25	199.938		
2,400.00	2,394.60	3,154.20	3,161.73	10.77	16.58	19.34	-3,927.73	-2,924.53	4,825.50	4,800.40	25.10	192.258		
2,500.00	2,494.30	3,251.47	3,257.69	11.20	17.11	19.32	-3,917.66	-2,912.24	4,802.33	4,776.38	25.95	185.060		
2,600.00	2,593.99	3,348.74	3,353.66	11.63	17.63	19.31	-3,907.59	-2,899.95	4,779.16	4,752.36	26.80	178.301		
2,700.00	2,693.68	3,446.01	3,449.62	12.07	18.15	19.29	-3,897.52	-2,887.66	4,755.99	4,728.33	27.66	171.944		
2,800.00	2,793.37	3,543.28	3,545.59	12.50	18.68	19.28	-3,887.45	-2,875.37	4,732.82	4,704.30	28.52	165.957		
2,900.00	2,893.06	3,640.56	3,641.55	12.93	19.21	19.27	-3,877.37	-2,863.08	4,709.65	4,680.27	29.38	160.309		
3,000.00	2,992.76	3,737.83	3,737.52	13.37	19.73	19.25	-3,867.30	-2,850.79	4,686.48	4,656.24	30.24	154.972		
3,100.00	3,092.45	3,835.10	3,833.49	13.81	20.26	19.24	-3,857.23	-2,838.50	4,663.31	4,632.21	31.10	149.924		
3,200.00	3,192.14	3,932.37	3,929.45	14.25	20.79	19.22	-3,847.16	-2,826.21	4,640.14	4,608.17	31.97	145.142		
3,300.00	3,291.83	4,029.64	4,025.42	14.68	21.31	19.21	-3,837.09	-2,813.93	4,616.98	4,584.14	32.84	140.606		
3,400.00	3,391.52	4,126.92	4,121.38	15.12	21.84	19.19	-3,827.02	-2,801.64	4,593.81	4,560.10	33.70	136.298		
3,500.00	3,491.21	4,225.83	4,217.35	15.56	22.38	19.18	-3,816.95	-2,789.35	4,570.64	4,536.06	34.58	132.173		
3,600.00	3,590.91	4,328.56	4,313.31	16.00	22.94	19.16	-3,806.88	-2,777.06	4,547.47	4,512.00	35.48	128.185		
3,700.00	3,690.60	4,431.29	4,409.28	16.45	23.49	19.14	-3,796.80	-2,764.77	4,524.30	4,487.93	36.37	124.389		
3,800.00	3,790.29	4,516.00	4,505.24	16.89	23.96	19.13	-3,786.73	-2,752.48	4,501.14	4,463.95	37.19	121.043		
3,900.00	3,889.98	4,613.28	4,601.21	17.33	24.48	19.11	-3,776.66	-2,740.19	4,477.97	4,439.91	38.06	117.658		
4,000.00	3,989.67	4,710.55	4,697.17	17.77	25.01	19.10	-3,766.59	-2,727.90	4,454.81	4,415.87	38.93	114.422		
4,100.00	4,089.36	4,807.82	4,793.14	18.22	25.54	19.08	-3,756.52	-2,715.61	4,431.64	4,391.83	39.81	111.327		
4,200.00	4,189.06	4,905.09	4,889.11	18.66	26.07	19.06	-3,746.45	-2,703.32	4,408.47	4,367.79	40.68	108.362		
4,300.00	4,288.75	5,002.36	4,985.07	19.10	26.60	19.05	-3,736.38	-2,691.03	4,385.31	4,343.75	41.56	105.521		
4,400.00	4,388.44	5,099.63	5,081.04	19.55	27.13	19.03	-3,726.31	-2,678.75	4,362.14	4,319.71	42.44	102.796		
4,500.00	4,488.13	5,196.91	5,177.00	19.99	27.66	19.01	-3,716.24	-2,666.46	4,338.98	4,295.67	43.31	100.179		
4,600.00	4,587.82	5,294.18	5,272.97	20.44	28.19	19.00	-3,706.16	-2,654.17	4,315.82	4,271.63	44.19	97.665		
4,700.00	4,687.51	5,391.45	5,368.93	20.89	28.73	18.98	-3,696.09	-2,641.88	4,292.65	4,247.58	45.07	95.248		
4,800.00	4,787.21	5,488.72	5,464.90	21.33	29.26	18.96	-3,686.02	-2,629.59	4,269.49	4,223.54	45.95	92.922		
4,900.00	4,886.90	5,585.99	5,560.86	21.78	29.79	18.94	-3,675.95	-2,617.30	4,246.33	4,199.50	46.83	90.683		
5,000.00	4,986.59	5,683.27	5,656.83	22.22	30.32	18.92	-3,665.88	-2,605.01	4,223.16	4,175.46	47.71	88.525		
5,100.00	5,086.28	5,780.54	5,752.79	22.67	30.85	18.91	-3,655.81	-2,592.72	4,200.00	4,151.42	48.59	86.444		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,877.81	5,848.76	23.12	31.38	18.89	-3,645.74	-2,580.43	4,176.84	4,127.37	49.47	84.437		
5,300.00	5,285.66	5,975.08	5,944.73	23.56	31.91	18.87	-3,635.67	-2,568.14	4,153.68	4,103.33	50.35	82.500		
5,400.00	5,385.36	6,072.35	6,040.69	24.01	32.44	18.85	-3,625.59	-2,555.85	4,130.52	4,079.29	51.23	80.628		
5,500.00	5,485.05	6,169.63	6,136.66	24.46	32.98	18.83	-3,615.52	-2,543.57	4,107.36	4,055.25	52.11	78.820		
5,600.00	5,584.74	6,260.38	6,226.19	24.90	33.47	18.81	-3,606.13	-2,532.10	4,084.20	4,031.23	52.97	77.101		
5,700.00	5,684.43	6,281.52	6,247.09	25.35	33.58	18.81	-3,603.94	-2,529.78	4,062.09	4,008.50	53.60	75.790		
5,800.00	5,784.12	6,300.00	6,265.41	25.80	33.68	18.82	-3,602.04	-2,528.32	4,041.86	3,987.66	54.20	74.576		
5,900.00	5,883.81	6,325.01	6,290.27	26.25	33.79	18.84	-3,599.48	-2,527.20	4,023.53	3,968.73	54.80	73.422		
6,000.00	5,983.51	6,350.00	6,315.12	26.70	33.90	18.87	-3,596.94	-2,527.06	4,007.14	3,951.76	55.38	72.354		
6,100.00	6,083.20	6,350.00	6,315.12	27.14	33.90	18.87	-3,596.94	-2,527.06	3,992.71	3,936.85	55.85	71.484		
6,200.00	6,182.89	6,400.00	6,364.79	27.59	34.08	18.96	-3,591.93	-2,529.72	3,980.30	3,923.81	56.48	70.467		
6,300.00	6,282.58	6,400.00	6,364.79	28.04	34.08	18.96	-3,591.93	-2,529.72	3,969.56	3,912.65	56.91	69.752		
6,400.00	6,382.27	6,425.01	6,389.52	28.49	34.16	19.02	-3,589.47	-2,532.53	3,961.02	3,903.62	57.40	69.004		
6,500.00	6,481.96	6,450.00	6,414.10	28.94	34.23	19.10	-3,587.05	-2,536.30	3,954.53	3,896.66	57.87	68.332		
6,600.00	6,581.66	6,450.00	6,414.10	29.39	34.23	19.10	-3,587.05	-2,536.30	3,950.09	3,891.88	58.21	67.857		
6,700.00	6,681.21	6,500.00	6,462.76	29.83	34.34	-19.42	-3,582.33	-2,546.73	3,946.17	3,887.43	58.74	67.181		
6,800.00	6,778.96	6,500.00	6,462.76	30.28	34.34	-37.66	-3,582.33	-2,546.73	3,935.28	3,876.26	59.02	66.677		
6,900.00	6,872.51	6,525.01	6,486.76	30.70	34.39	-44.32	-3,580.03	-2,553.39	3,917.29	3,857.91	59.38	65.968		
7,000.00	6,969.55	6,550.00	6,510.46	31.10	34.44	-48.75	-3,577.79	-2,560.97	3,892.38	3,832.66	59.72	65.173		
7,100.00	7,037.93	6,550.00	6,510.46	31.48	34.44	-52.65	-3,577.79	-2,560.97	3,861.01	3,801.06	59.94	64.411		
7,200.00	7,105.74	6,578.20	6,536.83	31.88	34.48	-56.76	-3,575.32	-2,570.65	3,823.81	3,763.48	60.33	63.379		
7,300.00	7,161.29	6,600.00	6,556.91	32.41	34.51	-61.22	-3,573.46	-2,578.93	3,781.78	3,721.01	60.77	62.231		
7,400.00	7,203.22	6,611.42	6,567.31	33.13	34.52	-66.00	-3,572.50	-2,583.54	3,735.81	3,674.52	61.28	60.959		
7,500.00	7,230.50	6,625.01	6,579.58	34.04	34.53	-71.17	-3,571.38	-2,589.27	3,687.04	3,625.06	61.98	59.486		
7,600.00	7,242.45	6,638.00	6,591.20	35.13	34.54	-76.56	-3,570.33	-2,594.99	3,636.70	3,573.83	62.87	57.842		
7,700.00	7,242.72	6,650.00	6,601.82	36.39	34.55	-78.27	-3,569.37	-2,600.49	3,586.47	3,522.51	63.96	56.074		
7,800.00	7,242.33	6,650.00	6,601.82	37.81	34.55	-78.27	-3,569.37	-2,600.49	3,538.19	3,472.99	65.20	54.265		
7,900.00	7,241.93	6,672.13	6,621.13	39.40	34.56	-78.62	-3,567.64	-2,611.15	3,491.83	3,425.10	66.73	52.326		
8,000.00	7,241.54	6,700.00	6,644.92	41.13	34.58	-79.04	-3,565.54	-2,625.52	3,447.75	3,379.28	68.46	50.360		
8,100.00	7,241.15	6,700.00	6,644.92	42.97	34.58	-79.04	-3,565.54	-2,625.52	3,405.58	3,335.31	70.28	48.461		
8,200.00	7,240.75	6,714.00	6,656.63	44.92	34.58	-79.25	-3,564.52	-2,633.13	3,365.55	3,293.46	72.30	46.553		
8,300.00	7,240.36	6,725.01	6,665.72	46.97	34.59	-79.41	-3,563.74	-2,639.29	3,328.22	3,253.75	74.47	44.694		
8,400.00	7,239.97	6,750.00	6,685.94	49.10	34.59	-79.77	-3,562.00	-2,653.86	3,292.98	3,216.17	76.81	42.873		
8,500.00	7,239.57	6,766.34	6,698.85	51.29	34.59	-80.01	-3,560.91	-2,663.82	3,260.10	3,180.85	79.25	41.138		
8,600.00	7,239.18	6,800.00	6,724.63	53.56	34.59	-80.47	-3,558.78	-2,685.35	3,229.70	3,147.87	81.83	39.470		
8,700.00	7,238.79	6,808.71	6,731.11	55.87	34.59	-80.59	-3,558.25	-2,691.14	3,201.55	3,117.09	84.45	37.909		
8,800.00	7,238.39	6,832.58	6,748.47	58.24	34.59	-80.90	-3,556.85	-2,707.47	3,175.89	3,088.71	87.19	36.427		
8,900.00	7,238.00	6,850.00	6,760.75	60.64	34.59	-81.13	-3,555.88	-2,719.79	3,152.69	3,062.71	89.97	35.040		
9,000.00	7,237.61	6,886.52	6,785.37	63.09	34.58	-81.58	-3,553.98	-2,746.68	3,131.82	3,038.97	92.85	33.729		
9,100.00	7,237.21	6,916.92	6,804.68	65.56	34.58	-81.93	-3,552.55	-2,770.12	3,113.35	3,017.59	95.76	32.512		
9,200.00	7,236.82	6,950.00	6,824.40	68.07	34.57	-82.29	-3,551.14	-2,796.64	3,097.19	2,998.48	98.71	31.377		
9,300.00	7,236.43	6,985.34	6,843.92	70.61	34.58	-82.65	-3,549.82	-2,826.06	3,083.30	2,981.60	101.70	30.317		
9,400.00	7,236.03	7,025.01	6,863.87	73.16	34.60	-83.02	-3,548.57	-2,860.32	3,071.58	2,966.86	104.72	29.331		
9,500.00	7,235.64	7,064.44	6,881.55	75.74	34.63	-83.35	-3,547.57	-2,895.54	3,061.95	2,954.17	107.78	28.410		
9,600.00	7,235.25	7,107.96	6,898.51	78.34	34.70	-83.67	-3,546.75	-2,935.60	3,054.32	2,943.45	110.86	27.550		
9,700.00	7,234.85	7,150.00	6,912.27	80.96	34.81	-83.93	-3,546.25	-2,975.31	3,048.58	2,934.61	113.97	26.749		
9,800.00	7,234.46	7,200.00	6,925.21	83.59	35.00	-84.17	-3,546.04	-3,023.60	3,044.63	2,927.48	117.15	25.989		
9,900.00	7,234.07	7,250.00	6,934.34	86.24	35.27	-84.35	-3,546.23	-3,072.74	3,042.40	2,922.04	120.36	25.277		
9,990.44	7,233.71	7,300.00	6,939.60	88.64	35.64	-84.45	-3,546.83	-3,122.45	3,041.80	2,918.47	123.33	24.663 CC		
10,000.00	7,233.67	7,300.00	6,939.60	88.90	35.64	-84.45	-3,546.83	-3,122.45	3,041.82	2,918.22	123.60	24.610		
10,100.00	7,233.28	7,362.80	6,940.93	91.57	36.22	-84.48	-3,548.12	-3,185.20	3,042.81	2,915.82	126.99	23.960		
10,200.00	7,232.89	7,462.79	6,940.52	94.25	37.44	-84.48	-3,550.45	-3,285.16	3,044.35	2,913.39	130.96	23.246		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,562.77	6,940.10	96.95	38.96	-84.49	-3,552.77	-3,385.12	3,045.89	2,910.72	135.17	22.533		
10,400.00	7,232.10	7,662.76	6,939.68	99.65	40.72	-84.49	-3,555.10	-3,485.08	3,047.43	2,907.82	139.61	21.828		
10,500.00	7,231.71	7,762.75	6,939.27	102.36	42.68	-84.49	-3,557.42	-3,585.04	3,048.97	2,904.73	144.24	21.138		
10,600.00	7,231.32	7,862.74	6,938.85	105.08	44.80	-84.49	-3,559.75	-3,685.00	3,050.51	2,901.46	149.05	20.467		
10,700.00	7,230.92	7,962.73	6,938.43	107.80	47.07	-84.50	-3,562.07	-3,784.96	3,052.04	2,898.04	154.00	19.818		
10,800.00	7,230.53	8,062.71	6,938.01	110.53	49.45	-84.50	-3,564.40	-3,884.92	3,053.58	2,894.50	159.08	19.195		
10,900.00	7,230.14	8,162.70	6,937.60	113.27	51.94	-84.50	-3,566.72	-3,984.88	3,055.12	2,890.85	164.28	18.597		
11,000.00	7,229.74	8,262.69	6,937.18	116.02	54.51	-84.50	-3,569.05	-4,084.84	3,056.66	2,887.09	169.57	18.026		
11,100.00	7,229.35	8,362.68	6,936.76	118.77	57.17	-84.51	-3,571.37	-4,184.80	3,058.20	2,883.26	174.94	17.481		
11,200.00	7,228.96	8,462.67	6,936.35	121.52	59.88	-84.51	-3,573.70	-4,284.76	3,059.74	2,879.35	180.39	16.962		
11,300.00	7,228.56	8,562.65	6,935.93	124.28	62.66	-84.51	-3,576.02	-4,384.72	3,061.27	2,875.38	185.90	16.467		
11,400.00	7,228.17	8,662.64	6,935.51	127.04	65.49	-84.51	-3,578.35	-4,484.68	3,062.81	2,871.35	191.47	15.997		
11,500.00	7,227.78	8,762.63	6,935.10	129.81	68.36	-84.52	-3,580.67	-4,584.64	3,064.35	2,867.27	197.08	15.549		
11,600.00	7,227.38	8,862.62	6,934.68	132.58	71.27	-84.52	-3,583.00	-4,684.60	3,065.89	2,863.15	202.74	15.122		
11,700.00	7,226.99	8,962.61	6,934.26	135.36	74.21	-84.52	-3,585.32	-4,784.56	3,067.43	2,858.99	208.44	14.716		
11,800.00	7,226.60	9,062.60	6,933.84	138.14	77.19	-84.52	-3,587.65	-4,884.52	3,068.97	2,854.79	214.17	14.329		
11,900.00	7,226.20	9,162.58	6,933.43	140.92	80.19	-84.52	-3,589.97	-4,984.48	3,070.51	2,850.57	219.94	13.961		
12,000.00	7,225.81	9,262.57	6,933.01	143.70	83.22	-84.53	-3,592.30	-5,084.44	3,072.04	2,846.32	225.73	13.610		
12,100.00	7,225.42	9,362.56	6,932.59	146.49	86.27	-84.53	-3,594.62	-5,184.41	3,073.58	2,842.04	231.54	13.274		
12,200.00	7,225.02	9,462.55	6,932.18	149.28	89.34	-84.53	-3,596.95	-5,284.37	3,075.12	2,837.74	237.38	12.954		
12,300.00	7,224.63	9,562.54	6,931.76	152.08	92.42	-84.53	-3,599.27	-5,384.33	3,076.66	2,833.42	243.24	12.649		
12,400.00	7,224.24	9,662.52	6,931.34	154.87	95.53	-84.54	-3,601.60	-5,484.29	3,078.20	2,829.08	249.11	12.357		
12,500.00	7,223.84	9,762.51	6,930.92	157.67	98.64	-84.54	-3,603.92	-5,584.25	3,079.74	2,824.73	255.01	12.077		
12,600.00	7,223.45	9,862.50	6,930.51	160.47	101.77	-84.54	-3,606.25	-5,684.21	3,081.27	2,820.36	260.91	11.810		
12,700.00	7,223.06	9,962.49	6,930.09	163.27	104.91	-84.54	-3,608.57	-5,784.17	3,082.81	2,815.98	266.84	11.553		
12,800.00	7,222.66	10,062.48	6,929.67	166.07	108.07	-84.54	-3,610.90	-5,884.13	3,084.35	2,811.58	272.77	11.307		
12,900.00	7,222.27	10,162.46	6,929.26	168.88	111.23	-84.55	-3,613.22	-5,984.09	3,085.89	2,807.17	278.72	11.072		
13,000.00	7,221.88	10,262.45	6,928.84	171.69	114.40	-84.55	-3,615.55	-6,084.05	3,087.43	2,802.75	284.67	10.845		
13,100.00	7,221.48	10,362.44	6,928.42	174.49	117.58	-84.55	-3,617.87	-6,184.01	3,088.97	2,798.32	290.64	10.628		
13,200.00	7,221.09	10,462.43	6,928.01	177.30	120.77	-84.55	-3,620.20	-6,283.97	3,090.51	2,793.89	296.62	10.419		
13,300.00	7,220.70	10,562.42	6,927.59	180.12	123.97	-84.56	-3,622.53	-6,383.93	3,092.05	2,789.46	302.67	10.204		
13,400.00	7,220.30	10,662.41	6,927.17	182.93	127.20	-84.56	-3,624.85	-6,483.89	3,093.59	2,785.03	308.74	10.000		
13,500.00	7,219.91	10,762.40	6,926.75	185.74	130.47	-84.57	-3,627.18	-6,583.85	3,095.13	2,780.60	314.81	9.806		
13,600.00	7,219.52	10,862.39	6,926.33	188.56	133.74	-84.57	-3,629.50	-6,683.81	3,096.67	2,776.17	320.88	9.622		
13,700.00	7,219.12	10,962.38	6,925.91	191.38	137.01	-84.58	-3,631.83	-6,783.77	3,098.21	2,771.74	326.95	9.448		
13,800.00	7,218.73	11,062.37	6,925.49	194.20	140.28	-84.58	-3,634.15	-6,883.73	3,100.00	2,767.31	333.02	9.284		
13,900.00	7,218.34	11,162.36	6,925.07	197.02	143.55	-84.59	-3,636.48	-6,983.69	3,101.79	2,762.88	339.09	9.130		
14,000.00	7,217.95	11,262.35	6,924.65	199.84	146.82	-84.60	-3,638.80	-7,083.65	3,103.58	2,758.45	345.16	8.986		
14,100.00	7,217.55	11,362.34	6,924.23	202.66	150.09	-84.60	-3,641.13	-7,183.61	3,105.37	2,754.02	351.23	8.852		
14,200.00	7,217.16	11,462.33	6,923.81	205.48	153.36	-84.62	-3,643.45	-7,283.57	3,107.16	2,749.59	357.30	8.728		
14,300.00	7,216.76	11,562.32	6,923.39	208.30	156.63	-84.70	-3,645.78	-7,383.53	3,108.95	2,745.16	363.37	8.614		
14,400.00	7,216.37	11,662.31	6,922.97	211.13	159.90	-84.70	-3,648.10	-7,483.49	3,110.74	2,740.73	369.44	8.510		
14,500.00	7,215.98	11,762.30	6,922.55	213.96	163.17	-84.70	-3,650.43	-7,583.45	3,112.53	2,736.30	375.51	8.416		
14,600.00	7,215.58	11,862.29	6,922.13	216.78	166.44	-84.70	-3,652.75	-7,683.41	3,114.32	2,731.87	381.58	8.332		
14,700.00	7,215.19	11,962.28	6,921.71	219.61	169.71	-84.70	-3,655.08	-7,783.37	3,116.11	2,727.44	387.65	8.258		
14,800.00	7,214.80	12,062.27	6,921.29	222.44	172.98	-84.69	-3,657.40	-7,883.33	3,117.90	2,723.01	393.72	8.194		
14,900.00	7,214.40	12,162.26	6,920.87	225.27	176.25	-84.69	-3,659.73	-7,983.29	3,119.69	2,718.58	400.00	8.140		
15,000.00	7,214.01	12,262.25	6,920.45	228.10	179.52	-84.69	-3,662.05	-8,083.25	3,121.48	2,714.15	406.07	8.096		
15,002.44	7,214.00	12,362.24	6,920.03	228.16	181.18	-84.69	-3,662.33	-8,158.29	3,124.38	2,766.79	407.59	7.788 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN												Offset Site Error:	0.00 ft
Survey Program: 25-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	25.00	68.00	3.28	0.00	-142.31	-4,229.36	-3,268.13	5,345.35				
100.00	100.00	57.00	100.00	3.28	0.07	-142.31	-4,229.36	-3,268.13	5,344.92	5,341.56	3.36	1,593.102	
200.00	200.00	89.41	931.05	3.34	3.79	-142.52	-4,200.48	-3,220.28	5,343.10	5,335.90	7.19	743.008	
300.00	300.00	99.33	1,028.90	3.44	4.29	-142.58	-4,192.98	-3,207.85	5,329.42	5,321.68	7.74	688.843	
400.00	400.00	1,089.24	1,126.74	3.60	4.80	-142.64	-4,185.48	-3,195.42	5,315.74	5,307.41	8.33	637.819	
500.00	500.00	1,188.16	1,224.59	3.81	5.31	-142.70	-4,177.98	-3,182.99	5,302.07	5,293.09	8.98	590.572	
600.00	599.98	1,286.87	1,322.22	4.03	5.83	19.19	-4,170.49	-3,170.59	5,286.78	5,277.13	9.65	547.727	
700.00	699.84	1,385.06	1,419.36	4.29	6.34	19.27	-4,163.05	-3,158.25	5,268.24	5,257.89	10.35	508.934	
800.00	799.54	1,482.82	1,516.06	4.57	6.85	19.28	-4,155.63	-3,145.97	5,247.38	5,236.30	11.07	473.823	
900.00	899.23	1,580.56	1,612.74	4.87	7.36	19.24	-4,148.22	-3,133.69	5,226.42	5,214.60	11.81	442.382	
1,000.00	998.92	1,678.30	1,709.42	5.20	7.87	19.21	-4,140.81	-3,121.41	5,205.46	5,192.88	12.58	413.933	
1,100.00	1,098.61	1,776.04	1,806.10	5.54	8.39	19.18	-4,133.40	-3,109.13	5,184.50	5,171.14	13.35	388.208	
1,200.00	1,198.30	1,873.78	1,902.78	5.90	8.90	19.15	-4,125.99	-3,096.85	5,163.54	5,149.39	14.15	364.932	
1,300.00	1,298.00	1,971.52	1,999.46	6.27	9.41	19.12	-4,118.58	-3,084.57	5,142.59	5,127.63	14.96	343.841	
1,400.00	1,397.69	2,069.26	2,096.15	6.66	9.93	19.09	-4,111.17	-3,072.29	5,121.64	5,105.86	15.77	324.691	
1,500.00	1,497.38	2,167.00	2,192.83	7.05	10.44	19.05	-4,103.75	-3,060.00	5,100.68	5,084.08	16.60	307.263	
1,600.00	1,597.07	2,264.74	2,289.51	7.44	10.96	19.02	-4,096.34	-3,047.72	5,079.73	5,062.30	17.43	291.361	
1,700.00	1,696.76	2,362.48	2,386.19	7.85	11.48	18.99	-4,088.93	-3,035.44	5,058.79	5,040.51	18.28	276.813	
1,800.00	1,796.45	2,460.22	2,482.87	8.25	11.99	18.96	-4,081.52	-3,023.16	5,037.84	5,018.72	19.12	263.467	
1,900.00	1,896.15	2,557.96	2,579.55	8.67	12.51	18.92	-4,074.11	-3,010.88	5,016.89	4,996.92	19.97	251.192	
2,000.00	1,995.84	2,655.70	2,676.23	9.08	13.02	18.89	-4,066.70	-2,998.60	4,995.95	4,975.12	20.83	239.872	
2,100.00	2,095.53	2,753.44	2,772.92	9.50	13.54	18.85	-4,059.29	-2,986.32	4,975.01	4,953.32	21.69	229.405	
2,200.00	2,195.22	2,851.17	2,869.60	9.92	14.06	18.82	-4,051.88	-2,974.04	4,954.07	4,931.52	22.55	219.705	
2,300.00	2,294.91	2,948.91	2,966.28	10.35	14.57	18.79	-4,044.46	-2,961.76	4,933.13	4,909.72	23.41	210.694	
2,400.00	2,394.60	3,046.65	3,062.96	10.77	15.09	18.75	-4,037.05	-2,949.48	4,912.19	4,887.91	24.28	202.304	
2,500.00	2,494.30	3,144.39	3,159.64	11.20	15.61	18.71	-4,029.64	-2,937.20	4,891.26	4,866.11	25.15	194.475	
2,600.00	2,593.99	3,242.13	3,256.32	11.63	16.13	18.68	-4,022.23	-2,924.92	4,870.33	4,844.30	26.02	187.155	
2,700.00	2,693.68	3,339.87	3,353.00	12.07	16.64	18.64	-4,014.82	-2,912.63	4,849.39	4,822.50	26.90	180.297	
2,800.00	2,793.37	3,437.61	3,449.69	12.50	17.16	18.61	-4,007.41	-2,900.35	4,828.46	4,800.69	27.77	173.861	
2,900.00	2,893.06	3,535.35	3,546.37	12.93	17.68	18.57	-4,000.00	-2,888.07	4,807.54	4,778.89	28.65	167.810	
3,000.00	2,992.76	3,633.09	3,643.05	13.37	18.19	18.53	-3,992.58	-2,875.79	4,786.61	4,757.08	29.53	162.110	
3,100.00	3,092.45	3,730.83	3,739.73	13.81	18.71	18.50	-3,985.17	-2,863.51	4,765.69	4,735.28	30.41	156.733	
3,200.00	3,192.14	3,828.57	3,836.41	14.25	19.23	18.46	-3,977.76	-2,851.23	4,744.77	4,713.48	31.29	151.653	
3,300.00	3,291.83	3,926.31	3,933.09	14.68	19.75	18.42	-3,970.35	-2,838.95	4,723.85	4,691.68	32.17	146.847	
3,400.00	3,391.52	4,024.05	4,029.77	15.12	20.28	18.38	-3,962.94	-2,826.67	4,702.93	4,669.87	33.06	142.254	
3,500.00	3,491.21	4,121.79	4,126.46	15.56	20.82	18.35	-3,955.53	-2,814.39	4,682.01	4,648.05	33.96	137.849	
3,600.00	3,590.91	4,219.53	4,223.14	16.00	21.36	18.31	-3,948.12	-2,802.11	4,661.10	4,626.23	34.87	133.669	
3,700.00	3,690.60	4,317.27	4,319.82	16.45	21.82	18.27	-3,940.70	-2,789.83	4,640.19	4,604.48	35.70	129.963	
3,800.00	3,790.29	4,415.01	4,416.50	16.89	22.34	18.23	-3,933.29	-2,777.54	4,619.28	4,582.69	36.59	126.245	
3,900.00	3,889.98	4,512.75	4,513.18	17.33	22.85	18.19	-3,925.88	-2,765.26	4,598.37	4,560.89	37.48	122.701	
4,000.00	3,989.67	4,610.49	4,609.86	17.77	23.37	18.15	-3,918.47	-2,752.98	4,577.46	4,539.10	38.36	119.319	
4,100.00	4,089.36	4,708.23	4,706.54	18.22	23.89	18.11	-3,911.06	-2,740.70	4,556.56	4,517.31	39.25	116.087	
4,200.00	4,189.06	4,805.97	4,803.23	18.66	24.41	18.07	-3,903.65	-2,728.42	4,535.66	4,495.52	40.14	112.998	
4,300.00	4,288.75	4,903.71	4,899.91	19.10	24.93	18.03	-3,896.24	-2,716.14	4,514.76	4,473.73	41.03	110.040	
4,400.00	4,388.44	5,001.45	4,996.59	19.55	25.44	17.98	-3,888.83	-2,703.86	4,493.86	4,451.95	41.92	107.207	
4,500.00	4,488.13	5,100.19	5,093.27	19.99	25.97	17.94	-3,881.41	-2,691.58	4,472.97	4,430.15	42.82	104.472	
4,600.00	4,587.82	5,196.93	5,189.95	20.44	26.48	17.90	-3,874.00	-2,679.30	4,452.08	4,408.38	43.70	101.883	
4,700.00	4,687.51	5,294.67	5,286.63	20.89	27.00	17.86	-3,866.59	-2,667.02	4,431.19	4,386.60	44.59	99.379	
4,800.00	4,787.21	5,392.41	5,383.31	21.33	27.52	17.81	-3,859.18	-2,654.74	4,410.30	4,364.82	45.48	96.973	
4,900.00	4,886.90	5,490.15	5,480.00	21.78	28.03	17.77	-3,851.77	-2,642.46	4,389.41	4,343.04	46.37	94.658	
5,000.00	4,986.59	5,587.89	5,576.68	22.22	28.55	17.72	-3,844.36	-2,630.17	4,368.53	4,321.27	47.26	92.430	
5,100.00	5,086.28	5,685.63	5,673.36	22.67	29.07	17.68	-3,836.95	-2,617.89	4,347.65	4,299.50	48.16	90.283	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,783.36	5,770.04	23.12	29.59	17.64	-3,829.53	-2,605.61	4,326.78	4,277.73	49.05	88.214		
5,300.00	5,285.66	5,881.10	5,866.72	23.56	30.11	17.59	-3,822.12	-2,593.33	4,305.90	4,255.96	49.94	86.219		
5,400.00	5,385.36	5,978.84	5,963.40	24.01	30.62	17.54	-3,814.71	-2,581.05	4,285.03	4,234.19	50.84	84.293		
5,500.00	5,485.05	6,076.58	6,060.08	24.46	31.14	17.50	-3,807.30	-2,568.77	4,264.16	4,212.43	51.73	82.433		
5,600.00	5,584.74	6,174.32	6,156.76	24.90	31.66	17.45	-3,799.89	-2,556.49	4,243.29	4,190.67	52.62	80.635		
5,700.00	5,684.43	6,272.06	6,253.45	25.35	32.18	17.40	-3,792.48	-2,544.21	4,222.43	4,168.91	53.52	78.898		
5,800.00	5,784.12	6,369.80	6,350.13	25.80	32.70	17.36	-3,785.07	-2,531.93	4,201.57	4,147.15	54.41	77.217		
5,900.00	5,883.81	6,400.00	6,380.05	26.25	32.85	17.35	-3,782.78	-2,528.62	4,181.55	4,126.48	55.07	75.936		
6,000.00	5,983.51	6,413.89	6,393.87	26.70	32.92	17.35	-3,781.74	-2,527.57	4,163.31	4,107.67	55.65	74.818		
6,100.00	6,083.20	6,425.01	6,404.94	27.14	32.97	17.35	-3,780.91	-2,526.94	4,147.01	4,090.81	56.19	73.797		
6,200.00	6,182.89	6,450.00	6,429.85	27.59	33.08	17.37	-3,779.06	-2,526.25	4,132.49	4,075.71	56.77	72.791		
6,300.00	6,282.58	6,474.62	6,454.40	28.04	33.17	17.39	-3,777.26	-2,526.52	4,119.88	4,062.56	57.32	71.873		
6,400.00	6,382.27	6,500.00	6,479.68	28.49	33.26	17.43	-3,775.42	-2,527.80	4,109.21	4,051.35	57.86	71.023		
6,500.00	6,481.96	6,515.16	6,494.75	28.94	33.31	17.46	-3,774.34	-2,529.05	4,100.43	4,042.10	58.33	70.297		
6,600.00	6,581.66	6,535.32	6,514.74	29.39	33.37	17.50	-3,772.92	-2,531.26	4,093.60	4,034.81	58.80	69.624		
6,700.00	6,681.21	6,550.00	6,529.24	29.83	33.41	-21.24	-3,771.89	-2,533.27	4,087.22	4,028.00	59.22	69.021		
6,800.00	6,778.96	6,575.56	6,554.37	30.28	33.47	-39.61	-3,770.14	-2,537.57	4,074.44	4,014.79	59.65	68.303		
6,900.00	6,872.51	6,600.00	6,578.23	30.70	33.53	-46.46	-3,768.50	-2,542.62	4,054.73	3,994.68	60.06	67.512		
7,000.00	6,959.55	6,615.17	6,592.93	31.10	33.56	-51.05	-3,767.50	-2,546.22	4,028.47	3,968.06	60.41	66.689		
7,100.00	7,037.93	6,625.01	6,602.42	31.48	33.58	-55.12	-3,766.86	-2,548.73	3,996.30	3,935.57	60.73	65.804		
7,200.00	7,105.74	6,650.00	6,626.34	31.88	33.63	-59.36	-3,765.26	-2,555.79	3,958.81	3,897.65	61.15	64.736		
7,300.00	7,161.29	6,669.13	6,644.45	32.41	33.65	-63.86	-3,764.06	-2,561.82	3,916.99	3,855.36	61.63	63.559		
7,400.00	7,203.22	6,700.00	6,673.28	33.13	33.70	-68.84	-3,762.19	-2,572.70	3,871.96	3,809.68	62.28	62.171		
7,500.00	7,230.50	6,700.00	6,673.28	34.04	33.70	-73.75	-3,762.19	-2,572.70	3,824.43	3,761.45	62.98	60.729		
7,600.00	7,242.45	6,709.41	6,681.95	35.13	33.71	-78.87	-3,761.63	-2,576.29	3,776.02	3,712.12	63.90	59.092		
7,700.00	7,242.72	6,725.01	6,696.23	36.39	33.73	-80.56	-3,760.72	-2,582.54	3,728.16	3,663.11	65.04	57.318		
7,800.00	7,242.33	6,725.01	6,696.23	37.81	33.73	-80.56	-3,760.72	-2,582.54	3,682.19	3,615.85	66.34	55.509		
7,900.00	7,241.93	6,739.96	6,709.75	39.40	33.74	-80.79	-3,759.87	-2,588.84	3,638.27	3,570.40	67.87	53.604		
8,000.00	7,241.54	6,750.00	6,718.75	41.13	33.75	-80.94	-3,759.31	-2,593.25	3,596.48	3,526.90	69.58	51.688		
8,100.00	7,241.15	6,750.00	6,718.75	42.97	33.75	-80.94	-3,759.31	-2,593.25	3,556.95	3,485.52	71.43	49.794		
8,200.00	7,240.75	6,778.04	6,743.51	44.92	33.77	-81.37	-3,757.79	-2,606.32	3,519.44	3,445.93	73.52	47.872		
8,300.00	7,240.36	6,800.00	6,762.49	46.97	33.79	-81.69	-3,756.64	-2,617.31	3,484.33	3,408.61	75.73	46.012		
8,400.00	7,239.97	6,809.06	6,770.21	49.10	33.80	-81.83	-3,756.18	-2,622.04	3,451.49	3,373.46	78.03	44.230		
8,500.00	7,239.57	6,825.01	6,783.63	51.29	33.81	-82.06	-3,755.39	-2,630.62	3,421.02	3,340.55	80.47	42.513		
8,600.00	7,239.18	6,850.00	6,804.21	53.56	33.82	-82.41	-3,754.20	-2,644.74	3,392.94	3,309.92	83.02	40.870		
8,700.00	7,238.79	6,867.00	6,817.89	55.87	33.82	-82.65	-3,753.43	-2,654.80	3,367.24	3,281.60	85.64	39.320		
8,800.00	7,238.39	6,900.00	6,843.66	58.24	33.84	-83.10	-3,752.00	-2,675.35	3,343.97	3,255.63	88.34	37.851		
8,900.00	7,238.00	6,915.53	6,855.41	60.64	33.84	-83.30	-3,751.37	-2,685.48	3,323.03	3,231.93	91.09	36.480		
9,000.00	7,237.61	6,943.48	6,875.94	63.09	33.85	-83.66	-3,750.30	-2,704.43	3,304.48	3,210.58	93.90	35.193		
9,100.00	7,237.21	6,974.27	6,897.56	65.56	33.86	-84.04	-3,749.21	-2,726.31	3,288.25	3,191.51	96.74	33.989		
9,200.00	7,236.82	7,008.16	6,920.11	68.07	33.88	-84.43	-3,748.13	-2,751.59	3,274.28	3,174.66	99.62	32.868		
9,300.00	7,236.43	7,050.00	6,946.05	70.61	33.92	-84.89	-3,746.98	-2,784.38	3,262.50	3,159.96	102.53	31.819		
9,400.00	7,236.03	7,086.35	6,966.80	73.16	33.96	-85.25	-3,746.14	-2,814.20	3,252.77	3,147.31	105.46	30.842		
9,500.00	7,235.64	7,131.04	6,989.94	75.74	34.04	-85.66	-3,745.31	-2,852.42	3,245.01	3,136.57	108.43	29.927		
9,600.00	7,235.25	7,179.58	7,011.98	78.34	34.17	-86.05	-3,744.69	-2,895.65	3,239.05	3,127.60	111.45	29.063		
9,700.00	7,234.85	7,231.83	7,031.96	80.96	34.36	-86.41	-3,744.33	-2,943.92	3,234.77	3,120.26	114.52	28.248		
9,800.00	7,234.46	7,287.46	7,048.82	83.59	34.65	-86.71	-3,744.32	-2,996.91	3,232.02	3,114.36	117.66	27.469		
9,900.00	7,234.07	7,345.89	7,061.49	86.24	35.04	-86.94	-3,744.70	-3,053.92	3,230.65	3,109.78	120.87	26.728		
9,956.59	7,233.85	7,379.88	7,066.45	87.74	35.33	-87.03	-3,745.11	-3,087.55	3,230.45	3,107.71	122.73	26.321 CC		
10,000.00	7,233.67	7,406.28	7,069.06	88.90	35.56	-87.08	-3,745.53	-3,113.81	3,230.56	3,106.40	124.17	26.018		
10,100.00	7,233.28	7,472.34	7,070.93	91.57	36.23	-87.12	-3,746.92	-3,179.81	3,231.69	3,104.11	127.58	25.331		
10,200.00	7,232.89	7,572.33	7,070.33	94.25	37.50	-87.11	-3,749.27	-3,279.76	3,233.27	3,101.72	131.55	24.578		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,672.31	7,069.73	96.95	39.01	-87.11	-3,751.63	-3,379.72	3,234.85	3,099.09	135.76	23.827		
10,400.00	7,232.10	7,772.30	7,069.13	99.65	40.76	-87.11	-3,753.99	-3,479.68	3,236.43	3,096.24	140.20	23.085		
10,500.00	7,231.71	7,872.29	7,068.53	102.36	42.70	-87.11	-3,756.34	-3,579.64	3,238.02	3,093.19	144.83	22.357		
10,600.00	7,231.32	7,972.28	7,067.92	105.08	44.80	-87.11	-3,758.70	-3,679.59	3,239.60	3,089.96	149.64	21.649		
10,700.00	7,230.92	8,072.26	7,067.32	107.80	47.05	-87.10	-3,761.06	-3,779.55	3,241.18	3,086.59	154.59	20.966		
10,800.00	7,230.53	8,172.25	7,066.72	110.53	49.41	-87.10	-3,763.41	-3,879.51	3,242.77	3,083.09	159.68	20.308		
10,900.00	7,230.14	8,272.24	7,066.12	113.27	51.89	-87.10	-3,765.77	-3,979.47	3,244.35	3,079.47	164.88	19.677		
11,000.00	7,229.74	8,372.23	7,065.52	116.02	54.45	-87.10	-3,768.12	-4,079.43	3,245.93	3,075.76	170.17	19.074		
11,100.00	7,229.35	8,472.21	7,064.91	118.77	57.09	-87.09	-3,770.48	-4,179.38	3,247.52	3,071.96	175.56	18.499		
11,200.00	7,228.96	8,572.20	7,064.31	121.52	59.80	-87.09	-3,772.84	-4,279.34	3,249.10	3,068.09	181.01	17.950		
11,300.00	7,228.56	8,672.19	7,063.71	124.28	62.57	-87.09	-3,775.19	-4,379.30	3,250.68	3,064.15	186.53	17.427		
11,400.00	7,228.17	8,772.18	7,063.11	127.04	65.39	-87.09	-3,777.55	-4,479.26	3,252.27	3,060.16	192.10	16.930		
11,500.00	7,227.78	8,872.16	7,062.51	129.81	68.25	-87.08	-3,779.91	-4,579.21	3,253.85	3,056.12	197.73	16.456		
11,600.00	7,227.38	8,972.15	7,061.90	132.58	71.16	-87.08	-3,782.26	-4,679.17	3,255.43	3,052.03	203.40	16.005		
11,700.00	7,226.99	9,072.14	7,061.30	135.36	74.10	-87.08	-3,784.62	-4,779.13	3,257.02	3,047.91	209.11	15.576		
11,800.00	7,226.60	9,172.13	7,060.70	138.14	77.07	-87.08	-3,786.98	-4,879.09	3,258.60	3,043.75	214.85	15.167		
11,900.00	7,226.20	9,272.11	7,060.10	140.92	80.07	-87.08	-3,789.33	-4,979.05	3,260.18	3,039.56	220.63	14.777		
12,000.00	7,225.81	9,372.10	7,059.50	143.70	83.10	-87.07	-3,791.69	-5,079.00	3,261.77	3,035.34	226.43	14.405		
12,100.00	7,225.42	9,472.09	7,058.89	146.49	86.14	-87.07	-3,794.04	-5,178.96	3,263.35	3,031.09	232.26	14.051		
12,200.00	7,225.02	9,572.08	7,058.29	149.28	89.21	-87.07	-3,796.40	-5,278.92	3,264.93	3,026.83	238.11	13.712		
12,300.00	7,224.63	9,672.06	7,057.69	152.08	92.29	-87.07	-3,798.76	-5,378.88	3,266.52	3,022.54	243.98	13.389		
12,400.00	7,224.24	9,772.05	7,057.09	154.87	95.39	-87.06	-3,801.11	-5,478.83	3,268.10	3,018.23	249.86	13.079		
12,500.00	7,223.84	9,872.04	7,056.49	157.67	98.51	-87.06	-3,803.47	-5,578.79	3,269.68	3,013.91	255.77	12.784		
12,600.00	7,223.45	9,972.02	7,055.88	160.47	101.64	-87.06	-3,805.83	-5,678.75	3,271.26	3,009.57	261.69	12.500		
12,700.00	7,223.06	10,072.01	7,055.28	163.27	104.78	-87.06	-3,808.18	-5,778.71	3,272.85	3,005.22	267.63	12.229		
12,800.00	7,222.66	10,172.00	7,054.68	166.07	107.93	-87.06	-3,810.54	-5,878.67	3,274.43	3,000.86	273.58	11.969		
12,900.00	7,222.27	10,271.99	7,054.08	168.88	111.09	-87.05	-3,812.90	-5,978.62	3,276.01	2,996.48	279.54	11.719		
13,000.00	7,221.88	10,371.97	7,053.48	171.69	114.26	-87.05	-3,815.25	-6,078.58	3,277.60	2,992.09	285.51	11.480		
13,100.00	7,221.48	10,471.96	7,052.87	174.49	117.44	-87.05	-3,817.61	-6,178.54	3,279.18	2,987.69	291.49	11.250		
13,200.00	7,221.09	10,571.95	7,052.27	177.30	120.63	-87.05	-3,819.96	-6,278.50	3,280.76	2,983.28	297.48	11.029		
13,300.00	7,220.70	10,671.94	7,051.67	180.12	123.82	-87.04	-3,822.32	-6,378.46	3,282.35	2,978.87	303.48	10.816		
13,400.00	7,220.30	10,771.92	7,051.07	182.93	127.03	-87.04	-3,824.68	-6,478.41	3,283.93	2,974.44	309.49	10.611		
13,500.00	7,219.91	10,871.91	7,050.46	185.74	130.23	-87.04	-3,827.03	-6,578.37	3,285.51	2,970.01	315.50	10.414		
13,600.00	7,219.52	10,971.90	7,049.86	188.56	133.45	-87.04	-3,829.39	-6,678.33	3,287.10	2,965.57	321.52	10.223		
13,700.00	7,219.12	11,071.89	7,049.26	191.38	136.67	-87.04	-3,831.75	-6,778.29	3,288.68	2,961.13	327.55	10.040		
13,800.00	7,218.73	11,171.87	7,048.66	194.20	139.89	-87.03	-3,834.10	-6,878.24	3,290.26	2,956.68	333.59	9.863		
13,900.00	7,218.34	11,271.86	7,048.06	197.02	143.12	-87.03	-3,836.46	-6,978.20	3,291.85	2,952.22	339.63	9.692		
14,000.00	7,217.94	11,371.85	7,047.45	199.84	146.35	-87.03	-3,838.82	-7,078.16	3,293.43	2,947.76	345.67	9.528		
14,100.00	7,217.55	11,471.84	7,046.85	202.66	149.59	-87.03	-3,841.17	-7,178.12	3,295.01	2,943.29	351.73	9.368		
14,200.00	7,217.16	11,571.82	7,046.25	205.48	152.83	-87.02	-3,843.53	-7,278.08	3,296.60	2,938.82	357.78	9.214		
14,300.00	7,216.76	11,671.81	7,045.65	208.30	156.08	-87.02	-3,845.88	-7,378.03	3,298.18	2,934.34	363.84	9.065		
14,400.00	7,216.37	11,771.80	7,045.05	211.13	159.32	-87.02	-3,848.24	-7,477.99	3,299.76	2,929.86	369.91	8.921		
14,500.00	7,215.98	11,871.79	7,044.44	213.96	162.58	-87.02	-3,850.60	-7,577.95	3,301.35	2,925.37	375.98	8.781		
14,600.00	7,215.58	11,971.77	7,043.84	216.78	165.83	-87.02	-3,852.95	-7,677.91	3,302.93	2,920.88	382.05	8.645		
14,700.00	7,215.19	12,071.76	7,043.24	219.61	169.09	-87.01	-3,855.31	-7,777.86	3,304.51	2,916.39	388.12	8.514		
14,800.00	7,214.80	12,171.75	7,042.64	222.44	172.35	-87.01	-3,857.67	-7,877.82	3,306.10	2,911.89	394.20	8.387		
14,900.00	7,214.40	12,271.73	7,042.04	225.27	175.61	-87.01	-3,860.02	-7,977.78	3,307.68	2,907.39	400.29	8.263		
15,000.00	7,214.01	12,371.72	7,041.43	228.10	178.87	-87.01	-3,862.38	-8,077.74	3,309.26	2,902.89	406.37	8.143		
15,002.44	7,214.00	12,374.16	7,041.42	228.16	178.95	-87.01	-3,862.44	-8,080.17	3,309.30	2,902.78	406.52	8.141 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,789.89	7,243.40	3.28	247.79	0.58	2,143.78	21.55	7,554.01					
100.00	100.00	15,809.93	7,243.40	3.28	248.36	0.57	2,143.78	21.30	7,458.18	7,339.33	118.85	62.752		
200.00	200.00	15,809.68	7,243.40	3.34	248.35	0.56	2,143.78	21.06	7,362.46	7,243.18	119.28	61.725		
300.00	300.00	15,809.44	7,243.40	3.44	248.35	0.56	2,143.78	20.81	7,266.85	7,147.12	119.73	60.694		
400.00	400.00	15,790.87	7,243.40	3.60	247.82	0.55	2,143.78	20.57	7,171.36	7,051.38	119.98	59.773		
500.00	500.00	15,808.95	7,243.40	3.81	248.33	0.54	2,143.78	20.33	7,076.00	6,955.29	120.70	58.624		
600.00	599.98	15,808.16	7,243.41	4.03	248.31	164.06	2,143.78	19.54	6,981.29	6,860.05	121.24	57.580		
700.00	699.84	15,806.30	7,243.41	4.29	248.26	165.40	2,143.79	17.67	6,887.89	6,766.03	121.86	56.521		
800.00	799.54	15,803.65	7,243.42	4.57	248.18	165.65	2,143.79	15.03	6,795.58	6,673.03	122.56	55.448		
900.00	899.23	15,799.09	7,243.42	4.87	248.05	165.59	2,143.80	12.35	6,703.54	6,580.26	123.28	54.378		
1,000.00	998.92	15,801.76	7,243.43	5.20	248.13	165.53	2,143.80	9.68	6,611.72	6,487.59	124.13	53.266		
1,100.00	1,098.61	15,804.44	7,243.44	5.54	248.20	165.47	2,143.81	7.00	6,520.15	6,395.13	125.02	52.153		
1,200.00	1,198.30	15,807.11	7,243.44	5.90	248.28	165.41	2,143.81	4.33	6,428.82	6,302.86	125.96	51.040		
1,300.00	1,298.00	15,809.79	7,243.45	6.27	248.36	165.36	2,143.82	1.65	6,337.75	6,210.81	126.94	49.927		
1,400.00	1,397.69	15,812.47	7,243.46	6.66	248.43	165.30	2,143.82	-1.03	6,246.96	6,118.99	127.97	48.815		
1,500.00	1,497.38	15,815.14	7,243.46	7.05	248.51	165.24	2,143.83	-3.70	6,156.45	6,027.40	129.05	47.705		
1,600.00	1,597.07	15,817.82	7,243.47	7.44	248.58	165.18	2,143.83	-6.38	6,066.24	5,936.05	130.19	46.596		
1,700.00	1,696.76	15,820.50	7,243.48	7.85	248.66	165.12	2,143.83	-9.05	5,976.34	5,844.96	131.38	45.490		
1,800.00	1,796.45	15,823.17	7,243.48	8.25	248.73	165.07	2,143.84	-11.73	5,886.76	5,754.13	132.63	44.386		
1,900.00	1,896.15	15,825.85	7,243.49	8.67	248.81	165.01	2,143.84	-14.41	5,797.52	5,663.59	133.93	43.287		
2,000.00	1,995.84	15,828.52	7,243.50	9.08	248.89	164.95	2,143.85	-17.08	5,708.64	5,573.33	135.30	42.192		
2,100.00	2,095.53	15,831.20	7,243.50	9.50	248.96	164.89	2,143.85	-19.76	5,620.13	5,483.39	136.74	41.102		
2,200.00	2,195.22	15,833.88	7,243.51	9.92	249.04	164.83	2,143.86	-22.44	5,532.01	5,393.77	138.24	40.018		
2,300.00	2,294.91	15,836.55	7,243.52	10.35	249.11	164.77	2,143.86	-25.11	5,444.30	5,304.49	139.80	38.942		
2,400.00	2,394.60	15,839.23	7,243.52	10.77	249.19	164.72	2,143.87	-27.79	5,357.01	5,215.57	141.44	37.874		
2,500.00	2,494.30	15,841.90	7,243.53	11.20	249.26	164.66	2,143.87	-30.46	5,270.18	5,127.03	143.16	36.814		
2,600.00	2,593.99	15,844.58	7,243.54	11.63	249.34	164.60	2,143.88	-33.14	5,183.83	5,038.88	144.94	35.765		
2,700.00	2,693.68	15,847.26	7,243.54	12.07	249.42	164.54	2,143.88	-35.82	5,097.96	4,951.16	146.81	34.726		
2,800.00	2,793.37	15,849.93	7,243.55	12.50	249.49	164.48	2,143.89	-38.49	5,012.63	4,863.88	148.75	33.699		
2,900.00	2,893.06	15,852.61	7,243.55	12.93	249.57	164.43	2,143.89	-41.17	4,927.84	4,777.07	150.77	32.684		
3,000.00	2,992.76	15,855.29	7,243.56	13.37	249.64	164.37	2,143.90	-43.84	4,843.63	4,690.75	152.88	31.683		
3,100.00	3,092.45	15,857.96	7,243.57	13.81	249.72	164.31	2,143.90	-46.52	4,760.03	4,604.97	155.07	30.697		
3,200.00	3,192.14	15,860.64	7,243.57	14.25	249.79	164.25	2,143.91	-49.20	4,677.08	4,519.73	157.34	29.725		
3,300.00	3,291.83	15,863.31	7,243.58	14.68	249.87	164.19	2,143.91	-51.87	4,594.80	4,435.09	159.71	28.770		
3,400.00	3,391.52	15,865.99	7,243.59	15.12	249.95	164.14	2,143.92	-54.55	4,513.23	4,351.06	162.17	27.831		
3,500.00	3,491.21	15,868.67	7,243.59	15.56	250.02	164.08	2,143.92	-57.23	4,432.42	4,267.70	164.72	26.909		
3,600.00	3,590.91	15,871.34	7,243.60	16.00	250.10	164.02	2,143.93	-59.90	4,352.40	4,185.04	167.36	26.006		
3,700.00	3,690.60	15,874.02	7,243.61	16.45	250.17	163.96	2,143.93	-62.58	4,273.23	4,103.13	170.10	25.122		
3,800.00	3,790.29	15,876.70	7,243.61	16.89	250.25	163.90	2,143.94	-65.25	4,194.94	4,022.00	172.94	24.257		
3,900.00	3,889.98	15,879.37	7,243.62	17.33	250.32	163.84	2,143.94	-67.93	4,117.59	3,941.72	175.87	23.412		
4,000.00	3,989.67	15,882.05	7,243.63	17.77	250.40	163.79	2,143.95	-70.61	4,041.23	3,862.33	178.91	22.588		
4,100.00	4,089.36	15,884.72	7,243.63	18.22	250.48	163.73	2,143.95	-73.28	3,965.93	3,783.88	182.04	21.786		
4,200.00	4,189.06	15,887.40	7,243.64	18.66	250.55	163.67	2,143.95	-75.96	3,891.73	3,706.45	185.28	21.005		
4,300.00	4,288.75	15,909.99	7,243.65	19.10	251.19	163.61	2,143.96	-78.63	3,818.71	3,629.71	189.00	20.205		
4,400.00	4,388.44	15,907.31	7,243.65	19.55	251.11	163.55	2,143.96	-81.31	3,746.93	3,554.60	192.33	19.482		
4,500.00	4,488.13	15,904.64	7,243.66	19.99	251.04	163.50	2,143.97	-83.99	3,676.47	3,480.71	195.76	18.780		
4,600.00	4,587.82	15,901.96	7,243.67	20.44	250.96	163.44	2,143.97	-86.66	3,607.40	3,408.12	199.28	18.102		
4,700.00	4,687.51	15,900.78	7,243.67	20.89	250.93	163.38	2,143.98	-89.34	3,539.81	3,336.89	202.92	17.444		
4,800.00	4,787.21	15,903.46	7,243.68	21.33	251.01	163.32	2,143.98	-92.02	3,473.78	3,267.06	206.72	16.804		
4,900.00	4,886.90	15,906.13	7,243.69	21.78	251.08	163.26	2,143.99	-94.69	3,409.41	3,198.80	210.61	16.188		
5,000.00	4,986.59	15,908.81	7,243.69	22.22	251.16	163.20	2,143.99	-97.37	3,346.78	3,132.21	214.56	15.598		
5,100.00	5,086.28	15,911.49	7,243.70	22.67	251.23	163.15	2,144.00	-100.04	3,286.00	3,067.41	218.59	15.033		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	15,914.16	7,243.71	23.12	251.31	163.09	2,144.00	-102.72	3,227.17	3,004.51	222.66	14.494		
5,300.00	5,285.66	15,916.84	7,243.71	23.56	251.38	163.03	2,144.01	-105.40	3,170.40	2,943.62	226.78	13.980		
5,400.00	5,385.36	15,919.51	7,243.72	24.01	251.46	162.97	2,144.01	-108.07	3,115.81	2,884.88	230.93	13.493		
5,500.00	5,485.05	15,922.19	7,243.72	24.46	251.54	162.91	2,144.02	-110.75	3,063.51	2,828.42	235.08	13.032		
5,600.00	5,584.74	15,924.87	7,243.73	24.90	251.61	162.86	2,144.02	-113.43	3,013.61	2,774.38	239.23	12.597		
5,700.00	5,684.43	15,927.54	7,243.74	25.35	251.69	162.80	2,144.03	-116.10	2,966.25	2,722.89	243.36	12.189		
5,800.00	5,784.12	15,930.22	7,243.74	25.80	251.76	162.74	2,144.03	-118.78	2,921.54	2,674.11	247.43	11.808		
5,900.00	5,883.81	15,932.89	7,243.75	26.25	251.84	162.68	2,144.04	-121.45	2,879.61	2,628.18	251.43	11.453		
6,000.00	5,983.51	15,935.57	7,243.76	26.70	251.91	162.62	2,144.04	-124.13	2,840.58	2,585.25	255.33	11.125		
6,100.00	6,083.20	15,938.25	7,243.76	27.14	251.99	162.56	2,144.05	-126.81	2,804.56	2,545.47	259.10	10.824		
6,200.00	6,182.89	15,940.92	7,243.77	27.59	252.07	162.51	2,144.05	-129.48	2,771.69	2,508.98	262.71	10.550		
6,300.00	6,282.58	15,943.60	7,243.78	28.04	252.14	162.45	2,144.06	-132.16	2,742.07	2,475.93	266.14	10.303		
6,400.00	6,382.27	15,946.28	7,243.78	28.49	252.22	162.39	2,144.06	-134.83	2,715.81	2,446.46	269.36	10.083		
6,500.00	6,481.96	15,948.95	7,243.79	28.94	252.29	162.33	2,144.07	-137.51	2,693.01	2,420.68	272.33	9.889		
6,600.00	6,581.66	15,951.63	7,243.80	29.39	252.37	162.27	2,144.07	-140.19	2,673.75	2,398.72	275.04	9.721		
6,700.00	6,681.21	15,956.89	7,243.81	29.83	252.52	124.45	2,144.08	-145.45	2,658.16	2,380.65	277.51	9.578		
6,800.00	6,778.96	15,976.30	7,243.86	30.28	253.07	107.64	2,144.11	-164.86	2,646.57	2,366.53	280.04	9.451		
6,900.00	6,872.51	16,010.81	7,243.94	30.70	254.04	102.28	2,144.18	-199.36	2,639.01	2,356.39	282.62	9.338		
7,000.00	6,969.55	16,059.55	7,244.06	31.10	255.42	99.23	2,144.26	-248.11	2,635.12	2,349.87	285.25	9.238		
7,082.88	7,025.21	16,109.89	7,244.18	31.41	256.85	97.24	2,144.35	-298.44	2,634.22	2,346.74	287.48	9.163 CC		
7,100.00	7,037.93	16,121.33	7,244.21	31.48	257.17	96.86	2,144.37	-309.89	2,634.26	2,346.30	287.95	9.148		
7,200.00	7,105.74	16,205.44	7,244.39	31.88	259.55	94.81	2,144.51	-383.19	2,635.60	2,344.50	291.10	9.054		
7,300.00	7,161.29	16,277.64	7,244.59	32.41	261.60	93.03	2,144.66	-466.20	2,638.23	2,344.38	293.85	8.978		
7,400.00	7,203.22	16,368.33	7,244.82	33.13	264.16	91.60	2,144.82	-556.88	2,641.27	2,344.09	297.18	8.888		
7,500.00	7,230.50	16,464.45	7,245.05	34.04	266.89	90.59	2,144.99	-653.01	2,643.97	2,343.16	300.80	8.790		
7,600.00	7,242.45	16,563.64	7,245.29	35.13	269.70	90.09	2,145.17	-752.20	2,645.80	2,341.11	304.70	8.683		
7,700.00	7,242.72	16,663.63	7,245.54	36.39	272.53	90.06	2,145.35	-852.18	2,646.81	2,338.02	308.79	8.572		
7,800.00	7,242.33	16,763.62	7,245.78	37.81	275.36	90.07	2,145.53	-952.17	2,647.78	2,334.71	313.06	8.458		
7,900.00	7,241.93	16,863.61	7,246.03	39.40	278.20	90.09	2,145.71	-1,052.17	2,648.74	2,331.25	317.49	8.343		
8,000.00	7,241.54	16,963.61	7,246.27	41.13	281.03	90.10	2,145.89	-1,152.16	2,649.70	2,327.64	322.06	8.227		
8,100.00	7,241.15	17,063.60	7,246.51	42.97	283.87	90.11	2,146.07	-1,252.15	2,650.66	2,323.92	326.74	8.112		
8,200.00	7,240.75	17,163.59	7,246.76	44.92	286.70	90.13	2,146.25	-1,352.15	2,651.63	2,320.09	331.54	7.998		
8,300.00	7,240.36	17,263.59	7,247.00	46.97	289.54	90.14	2,146.42	-1,452.14	2,652.59	2,316.17	336.42	7.885		
8,400.00	7,239.97	17,363.58	7,247.25	49.10	292.38	90.16	2,146.60	-1,552.13	2,653.55	2,312.16	341.39	7.773		
8,500.00	7,239.57	17,463.57	7,247.49	51.29	295.21	90.17	2,146.78	-1,652.12	2,654.52	2,308.08	346.43	7.662		
8,600.00	7,239.18	17,563.57	7,247.74	53.56	298.05	90.18	2,146.96	-1,752.12	2,655.48	2,303.94	351.54	7.554		
8,700.00	7,238.79	17,663.56	7,247.98	55.87	300.89	90.20	2,147.14	-1,852.11	2,656.44	2,299.75	356.69	7.447		
8,800.00	7,238.39	17,763.55	7,248.22	58.24	303.73	90.21	2,147.32	-1,952.10	2,657.41	2,295.51	361.90	7.343		
8,900.00	7,238.00	17,863.55	7,248.47	60.64	306.57	90.22	2,147.50	-2,052.10	2,658.37	2,291.22	367.15	7.241		
9,000.00	7,237.61	17,963.54	7,248.71	63.09	309.41	90.24	2,147.68	-2,152.09	2,659.34	2,286.90	372.43	7.140		
9,100.00	7,237.21	18,063.53	7,248.96	65.56	312.25	90.25	2,147.86	-2,252.08	2,660.30	2,282.55	377.75	7.042		
9,200.00	7,236.82	18,163.53	7,249.20	68.07	315.09	90.26	2,148.04	-2,352.07	2,661.27	2,278.16	383.10	6.947		
9,300.00	7,236.43	18,263.52	7,249.45	70.61	317.93	90.28	2,148.22	-2,452.07	2,662.23	2,273.75	388.48	6.853		
9,400.00	7,236.03	18,363.51	7,249.69	73.16	320.77	90.29	2,148.40	-2,552.06	2,663.19	2,269.31	393.88	6.761		
9,500.00	7,235.64	18,463.51	7,249.93	75.74	323.61	90.31	2,148.58	-2,652.05	2,664.16	2,264.85	399.31	6.672		
9,600.00	7,235.25	18,563.50	7,250.18	78.34	326.45	90.32	2,148.76	-2,752.05	2,665.13	2,260.38	404.75	6.585		
9,700.00	7,234.85	18,663.49	7,250.42	80.96	329.29	90.33	2,148.94	-2,852.04	2,666.09	2,255.88	410.21	6.499		
9,800.00	7,234.46	18,763.49	7,250.67	83.59	332.13	90.35	2,149.12	-2,952.03	2,667.06	2,251.37	415.69	6.416		
9,900.00	7,234.07	18,863.48	7,250.91	86.24	334.98	90.36	2,149.30	-3,052.03	2,668.02	2,246.84	421.18	6.335		
10,000.00	7,233.67	18,963.47	7,251.16	88.90	337.82	90.37	2,149.48	-3,152.02	2,668.99	2,242.31	426.68	6.255		
10,100.00	7,233.28	19,063.47	7,251.40	91.57	340.66	90.39	2,149.66	-3,252.01	2,669.95	2,237.76	432.20	6.178		
10,200.00	7,232.89	19,118.26	7,251.53	94.25	342.22	90.39	2,149.75	-3,306.80	2,671.30	2,234.93	436.37	6.122 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	19,118.26	7,251.53	96.95	342.22	90.39	2,149.75	-3,306.80	2,675.83	2,237.33	438.50	6.102		
10,400.00	7,232.10	19,118.26	7,251.53	99.65	342.22	90.39	2,149.75	-3,306.80	2,684.07	2,244.05	440.03	6.100 SF		
10,500.00	7,231.71	19,118.26	7,251.53	102.36	342.22	90.39	2,149.75	-3,306.80	2,696.01	2,255.03	440.98	6.114		
10,600.00	7,231.32	19,118.26	7,251.53	105.08	342.22	90.39	2,149.75	-3,306.80	2,711.58	2,270.23	441.35	6.144		
10,700.00	7,230.92	19,118.26	7,251.53	107.80	342.22	90.39	2,149.75	-3,306.80	2,730.72	2,289.56	441.17	6.190		
10,800.00	7,230.53	19,118.26	7,251.53	110.53	342.22	90.39	2,149.75	-3,306.80	2,753.37	2,312.92	440.45	6.251		
10,900.00	7,230.14	19,118.26	7,251.53	113.27	342.22	90.39	2,149.75	-3,306.80	2,779.43	2,340.21	439.22	6.328		
11,000.00	7,229.74	19,118.26	7,251.53	116.02	342.22	90.39	2,149.75	-3,306.80	2,808.82	2,371.29	437.52	6.420		
11,100.00	7,229.35	19,118.26	7,251.53	118.77	342.22	90.39	2,149.75	-3,306.80	2,841.42	2,406.03	435.39	6.526		
11,200.00	7,228.96	19,118.26	7,251.53	121.52	342.22	90.39	2,149.75	-3,306.80	2,877.13	2,444.28	432.85	6.647		
11,300.00	7,228.56	19,118.26	7,251.53	124.28	342.22	90.39	2,149.75	-3,306.80	2,915.83	2,485.88	429.95	6.782		
11,400.00	7,228.17	19,118.26	7,251.53	127.04	342.22	90.39	2,149.75	-3,306.80	2,957.41	2,530.68	426.73	6.930		
11,500.00	7,227.78	19,118.26	7,251.53	129.81	342.22	90.39	2,149.75	-3,306.80	3,001.74	2,578.52	423.22	7.093		
11,600.00	7,227.38	19,118.26	7,251.53	132.58	342.22	90.39	2,149.75	-3,306.80	3,048.71	2,629.24	419.47	7.268		
11,700.00	7,226.99	19,118.26	7,251.53	135.36	342.22	90.39	2,149.75	-3,306.80	3,098.20	2,682.69	415.51	7.456		
11,800.00	7,226.60	19,118.26	7,251.53	138.14	342.22	90.39	2,149.75	-3,306.80	3,150.09	2,738.71	411.38	7.657		
11,900.00	7,226.20	19,118.26	7,251.53	140.92	342.22	90.39	2,149.75	-3,306.80	3,204.26	2,797.15	407.10	7.871		
12,000.00	7,225.81	19,118.26	7,251.53	143.70	342.22	90.39	2,149.75	-3,306.80	3,260.59	2,857.88	402.71	8.097		
12,100.00	7,225.42	19,118.26	7,251.53	146.49	342.22	90.39	2,149.75	-3,306.80	3,318.99	2,920.75	398.24	8.334		
12,200.00	7,225.02	19,118.26	7,251.53	149.28	342.22	90.39	2,149.75	-3,306.80	3,379.33	2,985.63	393.70	8.583		
12,300.00	7,224.63	19,118.26	7,251.53	152.08	342.22	90.39	2,149.75	-3,306.80	3,441.52	3,052.39	389.13	8.844		
12,400.00	7,224.24	19,118.26	7,251.53	154.87	342.22	90.39	2,149.75	-3,306.80	3,505.46	3,120.93	384.53	9.116		
12,500.00	7,223.84	19,118.26	7,251.53	157.67	342.22	90.39	2,149.75	-3,306.80	3,571.06	3,191.12	379.94	9.399		
12,600.00	7,223.45	19,118.26	7,251.53	160.47	342.22	90.39	2,149.75	-3,306.80	3,638.22	3,262.86	375.36	9.693		
12,700.00	7,223.06	19,118.26	7,251.53	163.27	342.22	90.39	2,149.75	-3,306.80	3,706.87	3,336.06	370.81	9.997		
12,800.00	7,222.66	19,118.26	7,251.53	166.07	342.22	90.39	2,149.75	-3,306.80	3,776.91	3,410.62	366.29	10.311		
12,900.00	7,222.27	19,118.26	7,251.53	168.88	342.22	90.39	2,149.75	-3,306.80	3,848.28	3,486.45	361.83	10.636		
13,000.00	7,221.88	19,118.26	7,251.53	171.69	342.22	90.39	2,149.75	-3,306.80	3,920.90	3,563.48	357.42	10.970		
13,100.00	7,221.48	19,118.26	7,251.53	174.49	342.22	90.39	2,149.75	-3,306.80	3,994.71	3,641.63	353.08	11.314		
13,200.00	7,221.09	19,118.26	7,251.53	177.30	342.22	90.39	2,149.75	-3,306.80	4,069.63	3,720.82	348.80	11.667		
13,300.00	7,220.70	19,118.26	7,251.53	180.12	342.22	90.39	2,149.75	-3,306.80	4,145.61	3,801.00	344.61	12.030		
13,400.00	7,220.30	19,118.26	7,251.53	182.93	342.22	90.39	2,149.75	-3,306.80	4,222.59	3,882.11	340.49	12.402		
13,500.00	7,219.91	19,118.26	7,251.53	185.74	342.22	90.39	2,149.75	-3,306.80	4,300.52	3,964.07	336.45	12.782		
13,600.00	7,219.52	19,118.26	7,251.53	188.56	342.22	90.39	2,149.75	-3,306.80	4,379.35	4,046.86	332.49	13.171		
13,700.00	7,219.12	19,118.26	7,251.53	191.38	342.22	90.39	2,149.75	-3,306.80	4,459.02	4,130.40	328.62	13.569		
13,800.00	7,218.73	19,118.26	7,251.53	194.20	342.22	90.39	2,149.75	-3,306.80	4,539.50	4,214.67	324.83	13.975		
13,900.00	7,218.34	19,118.26	7,251.53	197.02	342.22	90.39	2,149.75	-3,306.80	4,620.74	4,299.61	321.13	14.389		
14,000.00	7,217.94	19,118.26	7,251.53	199.84	342.22	90.39	2,149.75	-3,306.80	4,702.71	4,385.20	317.51	14.811		
14,100.00	7,217.55	19,118.26	7,251.53	202.66	342.22	90.39	2,149.75	-3,306.80	4,785.36	4,471.38	313.98	15.241		
14,200.00	7,217.16	19,118.26	7,251.53	205.48	342.22	90.39	2,149.75	-3,306.80	4,868.66	4,558.12	310.54	15.678		
14,300.00	7,216.76	19,118.26	7,251.53	208.30	342.22	90.39	2,149.75	-3,306.80	4,952.58	4,645.41	307.18	16.123		
14,400.00	7,216.37	19,118.26	7,251.53	211.13	342.22	90.39	2,149.75	-3,306.80	5,037.09	4,733.19	303.90	16.575		
14,500.00	7,215.98	19,118.26	7,251.53	213.96	342.22	90.39	2,149.75	-3,306.80	5,122.16	4,821.46	300.70	17.034		
14,600.00	7,215.58	19,118.26	7,251.53	216.78	342.22	90.39	2,149.75	-3,306.80	5,207.75	4,910.17	297.58	17.500		
14,700.00	7,215.19	19,118.26	7,251.53	219.61	342.22	90.39	2,149.75	-3,306.80	5,293.85	4,999.31	294.54	17.973		
14,800.00	7,214.80	19,118.26	7,251.53	222.44	342.22	90.39	2,149.75	-3,306.80	5,380.44	5,088.85	291.58	18.453		
14,900.00	7,214.40	19,118.26	7,251.53	225.27	342.22	90.39	2,149.75	-3,306.80	5,467.47	5,178.78	288.69	18.939		
15,000.00	7,214.01	19,118.26	7,251.53	228.10	342.22	90.39	2,149.75	-3,306.80	5,554.95	5,269.07	285.88	19.431		
15,002.44	7,214.00	19,118.26	7,251.53	228.16	342.22	90.39	2,149.75	-3,306.80	5,557.09	5,271.28	285.81	19.443		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	15,715.60	7,135.45	3.28	248.01	-0.08	1,983.52	-2.89	7,406.01				
100.00	100.00	15,715.84	7,135.45	3.28	248.02	-0.09	1,983.51	-3.14	7,309.71	7,192.96	116.75	62.610	
200.00	200.00	15,716.09	7,135.45	3.34	248.02	-0.10	1,983.51	-3.38	7,213.51	7,096.37	117.15	61.576	
300.00	300.00	15,716.33	7,135.45	3.44	248.03	-0.10	1,983.51	-3.62	7,117.42	6,999.85	117.57	60.539	
400.00	400.00	15,716.57	7,135.45	3.60	248.04	-0.11	1,983.51	-3.87	7,021.44	6,903.43	118.01	59.499	
500.00	500.00	15,716.82	7,135.45	3.81	248.04	-0.12	1,983.50	-4.11	6,925.57	6,807.09	118.48	58.456	
600.00	599.98	15,717.62	7,135.45	4.03	248.07	163.56	1,983.49	-4.92	6,830.32	6,711.32	119.00	57.398	
700.00	699.84	15,719.55	7,135.46	4.29	248.12	165.01	1,983.48	-6.84	6,736.30	6,616.68	119.62	56.312	
800.00	799.54	15,722.28	7,135.47	4.57	248.20	165.28	1,983.45	-9.58	6,643.32	6,522.98	120.35	55.202	
900.00	899.23	15,725.05	7,135.47	4.87	248.28	165.21	1,983.42	-12.34	6,550.59	6,429.47	121.12	54.085	
1,000.00	998.92	15,727.81	7,135.48	5.20	248.36	165.15	1,983.39	-15.11	6,458.07	6,336.14	121.93	52.967	
1,100.00	1,098.61	15,730.58	7,135.49	5.54	248.43	165.08	1,983.36	-17.87	6,365.78	6,243.00	122.78	51.847	
1,200.00	1,198.30	15,733.34	7,135.49	5.90	248.51	165.02	1,983.33	-20.64	6,273.72	6,150.04	123.67	50.728	
1,300.00	1,298.00	15,736.11	7,135.50	6.27	248.59	164.96	1,983.31	-23.40	6,181.90	6,057.29	124.62	49.608	
1,400.00	1,397.69	15,738.88	7,135.51	6.66	248.67	164.89	1,983.28	-26.17	6,090.35	5,964.74	125.61	48.488	
1,500.00	1,497.38	15,741.64	7,135.51	7.05	248.75	164.83	1,983.25	-28.94	5,999.06	5,872.41	126.65	47.369	
1,600.00	1,597.07	15,744.41	7,135.52	7.44	248.82	164.76	1,983.22	-31.70	5,908.05	5,780.31	127.74	46.251	
1,700.00	1,696.76	15,747.17	7,135.53	7.85	248.90	164.70	1,983.19	-34.47	5,817.34	5,688.45	128.89	45.134	
1,800.00	1,796.45	15,749.94	7,135.53	8.25	248.98	164.64	1,983.16	-37.23	5,726.93	5,596.84	130.10	44.021	
1,900.00	1,896.15	15,752.71	7,135.54	8.67	249.06	164.57	1,983.14	-40.00	5,636.85	5,505.49	131.36	42.910	
2,000.00	1,995.84	15,755.47	7,135.55	9.08	249.14	164.51	1,983.11	-42.76	5,547.11	5,414.41	132.70	41.803	
2,100.00	2,095.53	15,758.24	7,135.55	9.50	249.21	164.44	1,983.08	-45.53	5,457.72	5,323.62	134.09	40.701	
2,200.00	2,195.22	15,761.00	7,135.56	9.92	249.29	164.38	1,983.05	-48.29	5,368.70	5,233.14	135.56	39.605	
2,300.00	2,294.91	15,763.77	7,135.57	10.35	249.37	164.32	1,983.02	-51.06	5,280.08	5,142.98	137.09	38.515	
2,400.00	2,394.60	15,766.53	7,135.57	10.77	249.45	164.25	1,982.99	-53.83	5,191.86	5,053.16	138.70	37.432	
2,500.00	2,494.30	15,769.30	7,135.58	11.20	249.53	164.19	1,982.97	-56.59	5,104.08	4,963.70	140.39	36.358	
2,600.00	2,593.99	15,772.07	7,135.59	11.63	249.61	164.12	1,982.94	-59.36	5,016.76	4,874.61	142.15	35.293	
2,700.00	2,693.68	15,774.83	7,135.59	12.07	249.68	164.06	1,982.91	-62.12	4,929.92	4,785.93	143.99	34.238	
2,800.00	2,793.37	15,777.60	7,135.60	12.50	249.76	163.99	1,982.88	-64.89	4,843.58	4,697.66	145.92	33.194	
2,900.00	2,893.06	15,780.36	7,135.61	12.93	249.84	163.93	1,982.85	-67.65	4,757.78	4,609.85	147.93	32.163	
3,000.00	2,992.76	15,783.13	7,135.61	13.37	249.92	163.87	1,982.82	-70.42	4,672.53	4,522.51	150.03	31.144	
3,100.00	3,092.45	15,785.90	7,135.62	13.81	250.00	163.80	1,982.80	-73.19	4,587.89	4,435.67	152.22	30.140	
3,200.00	3,192.14	15,788.66	7,135.63	14.25	250.07	163.74	1,982.77	-75.95	4,503.87	4,349.37	154.50	29.151	
3,300.00	3,291.83	15,808.64	7,135.63	14.68	250.64	163.67	1,982.74	-78.72	4,420.51	4,263.36	157.16	28.128	
3,400.00	3,391.52	15,805.87	7,135.64	15.12	250.56	163.61	1,982.71	-81.48	4,337.86	4,178.31	159.55	27.189	
3,500.00	3,491.21	15,803.10	7,135.65	15.56	250.48	163.55	1,982.68	-84.25	4,255.95	4,093.91	162.04	26.265	
3,600.00	3,590.91	15,800.34	7,135.65	16.00	250.40	163.48	1,982.65	-87.01	4,174.82	4,010.20	164.62	25.360	
3,700.00	3,690.60	15,802.49	7,135.66	16.45	250.46	163.42	1,982.63	-89.78	4,094.53	3,927.13	167.40	24.460	
3,800.00	3,790.29	15,805.26	7,135.67	16.89	250.54	163.35	1,982.60	-92.55	4,015.12	3,844.83	170.29	23.578	
3,900.00	3,889.98	15,808.02	7,135.67	17.33	250.62	163.29	1,982.57	-95.31	3,936.65	3,763.36	173.29	22.717	
4,000.00	3,989.67	15,810.79	7,135.68	17.77	250.70	163.22	1,982.54	-98.08	3,859.18	3,682.77	176.41	21.876	
4,100.00	4,089.36	15,813.55	7,135.69	18.22	250.78	163.16	1,982.51	-100.84	3,782.75	3,603.12	179.63	21.058	
4,200.00	4,189.06	15,816.32	7,135.69	18.66	250.86	163.10	1,982.48	-103.61	3,707.45	3,524.48	182.97	20.263	
4,300.00	4,288.75	15,819.09	7,135.70	19.10	250.93	163.03	1,982.46	-106.37	3,633.34	3,446.92	186.42	19.490	
4,400.00	4,388.44	15,821.85	7,135.71	19.55	251.01	162.97	1,982.43	-109.14	3,560.49	3,370.50	189.99	18.741	
4,500.00	4,488.13	15,824.62	7,135.72	19.99	251.09	162.90	1,982.40	-111.91	3,488.98	3,295.32	193.66	18.016	
4,600.00	4,587.82	15,827.38	7,135.72	20.44	251.17	162.84	1,982.37	-114.67	3,418.90	3,221.46	197.44	17.316	
4,700.00	4,687.51	15,830.15	7,135.73	20.89	251.25	162.77	1,982.34	-117.44	3,350.34	3,149.01	201.33	16.641	
4,800.00	4,787.21	15,832.91	7,135.74	21.33	251.32	162.71	1,982.31	-120.20	3,283.39	3,078.07	205.32	15.991	
4,900.00	4,886.90	15,835.68	7,135.74	21.78	251.40	162.65	1,982.29	-122.97	3,218.16	3,008.75	209.41	15.368	
5,000.00	4,986.59	15,838.45	7,135.75	22.22	251.48	162.58	1,982.26	-125.73	3,154.74	2,941.16	213.58	14.771	
5,100.00	5,086.28	15,841.21	7,135.76	22.67	251.56	162.52	1,982.23	-128.50	3,093.25	2,875.42	217.83	14.201	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	15,843.98	7,135.76	23.12	251.64	162.45	1,982.20	-131.27	3,033.81	2,811.67	222.14	13.657		
5,300.00	5,285.66	15,846.74	7,135.77	23.56	251.72	162.39	1,982.17	-134.03	2,976.54	2,750.04	226.50	13.141		
5,400.00	5,385.36	15,849.51	7,135.78	24.01	251.79	162.32	1,982.14	-136.80	2,921.57	2,690.68	230.90	12.653		
5,500.00	5,485.05	15,852.28	7,135.78	24.46	251.87	162.26	1,982.12	-139.56	2,869.04	2,633.73	235.31	12.193		
5,600.00	5,584.74	15,855.04	7,135.79	24.90	251.95	162.20	1,982.09	-142.33	2,819.06	2,579.35	239.71	11.760		
5,700.00	5,684.43	15,857.81	7,135.80	25.35	252.03	162.13	1,982.06	-145.09	2,771.80	2,527.71	244.08	11.356		
5,800.00	5,784.12	15,860.57	7,135.80	25.80	252.11	162.07	1,982.03	-147.86	2,727.38	2,478.98	248.39	10.980		
5,900.00	5,883.81	15,863.34	7,135.81	26.25	252.18	162.00	1,982.00	-150.62	2,685.94	2,433.33	252.61	10.633		
6,000.00	5,983.51	15,866.10	7,135.82	26.70	252.26	161.94	1,981.97	-153.39	2,647.64	2,390.93	256.71	10.314		
6,100.00	6,083.20	15,868.87	7,135.82	27.14	252.34	161.87	1,981.95	-156.16	2,612.60	2,351.94	260.65	10.023		
6,200.00	6,182.89	15,871.64	7,135.83	27.59	252.42	161.81	1,981.92	-158.92	2,580.95	2,316.55	264.40	9.761		
6,300.00	6,282.58	15,874.40	7,135.84	28.04	252.50	161.75	1,981.89	-161.69	2,552.83	2,284.91	267.93	9.528		
6,400.00	6,382.27	15,877.17	7,135.84	28.49	252.57	161.68	1,981.86	-164.45	2,528.36	2,257.17	271.19	9.323		
6,500.00	6,481.96	15,879.93	7,135.85	28.94	252.65	161.62	1,981.83	-167.22	2,507.63	2,233.47	274.16	9.147		
6,600.00	6,581.66	15,882.70	7,135.86	29.39	252.73	161.55	1,981.80	-169.98	2,490.74	2,213.94	276.80	8.998		
6,700.00	6,681.21	15,888.05	7,135.87	29.83	252.88	123.58	1,981.75	-175.34	2,477.79	2,198.63	279.16	8.876		
6,800.00	6,778.96	15,907.55	7,135.92	30.28	253.43	106.49	1,981.55	-194.84	2,468.91	2,187.40	281.51	8.770		
6,900.00	6,872.51	15,942.14	7,136.00	30.70	254.41	100.84	1,981.19	-229.42	2,464.00	2,180.14	283.86	8.680		
6,995.85	6,966.10	15,988.67	7,136.12	31.08	255.73	97.62	1,980.72	-275.95	2,462.60	2,176.46	286.13	8.606 CC		
7,000.00	6,959.55	16,009.10	7,136.12	31.10	256.30	97.50	1,980.69	-278.24	2,462.60	2,175.85	286.74	8.588		
7,100.00	7,037.93	16,052.82	7,136.27	31.48	257.54	94.86	1,980.06	-340.09	2,463.94	2,175.27	288.67	8.535		
7,200.00	7,105.74	16,126.18	7,136.45	31.88	259.61	92.58	1,979.31	-413.46	2,467.07	2,175.81	291.25	8.471		
7,300.00	7,161.29	16,209.25	7,136.66	32.41	261.96	90.62	1,978.46	-496.52	2,470.96	2,176.89	294.07	8.403		
7,400.00	7,203.22	16,299.98	7,136.88	33.13	264.53	89.07	1,977.53	-587.24	2,474.66	2,177.46	297.21	8.326		
7,500.00	7,230.50	16,403.94	7,137.11	34.04	267.47	88.03	1,976.54	-683.38	2,477.37	2,176.45	300.92	8.233		
7,600.00	7,242.45	16,504.73	7,137.35	35.13	270.32	87.57	1,975.53	-782.58	2,478.51	2,173.72	304.79	8.132		
7,700.00	7,242.72	16,604.74	7,137.60	36.39	273.15	87.57	1,974.50	-882.57	2,478.32	2,169.44	308.88	8.024		
7,800.00	7,242.33	16,704.74	7,137.84	37.81	275.98	87.58	1,973.48	-982.56	2,478.05	2,164.90	313.15	7.913		
7,900.00	7,241.93	16,804.75	7,138.09	39.40	278.81	87.60	1,972.45	-1,082.55	2,477.78	2,160.20	317.58	7.802		
8,000.00	7,241.54	16,904.75	7,138.33	41.13	281.65	87.61	1,971.43	-1,182.55	2,477.52	2,155.37	322.15	7.691		
8,100.00	7,241.15	17,004.75	7,138.58	42.97	284.48	87.63	1,970.40	-1,282.54	2,477.25	2,150.41	326.83	7.580		
8,200.00	7,240.75	17,104.76	7,138.82	44.92	287.31	87.64	1,969.38	-1,382.53	2,476.98	2,145.35	331.63	7.469		
8,300.00	7,240.36	17,204.76	7,139.06	46.97	290.14	87.66	1,968.35	-1,482.52	2,476.71	2,140.20	336.51	7.360		
8,400.00	7,239.97	17,304.76	7,139.31	49.10	292.98	87.67	1,967.33	-1,582.52	2,476.44	2,134.96	341.48	7.252		
8,500.00	7,239.57	17,404.76	7,139.55	51.29	295.81	87.69	1,966.30	-1,682.51	2,476.17	2,129.65	346.52	7.146		
8,600.00	7,239.18	17,504.77	7,139.80	53.56	298.65	87.70	1,965.28	-1,782.50	2,475.90	2,124.28	351.62	7.041		
8,700.00	7,238.79	17,604.77	7,140.04	55.87	301.48	87.71	1,964.25	-1,882.49	2,475.64	2,118.86	356.78	6.939		
8,800.00	7,238.39	17,704.77	7,140.29	58.24	304.32	87.73	1,963.23	-1,982.48	2,475.37	2,113.39	361.98	6.838		
8,900.00	7,238.00	17,804.77	7,140.53	60.64	307.15	87.74	1,962.20	-2,082.48	2,475.10	2,107.87	367.23	6.740		
9,000.00	7,237.61	17,904.78	7,140.77	63.09	309.99	87.76	1,961.18	-2,182.47	2,474.83	2,102.32	372.52	6.644		
9,100.00	7,237.21	18,004.78	7,141.02	65.56	312.83	87.77	1,960.15	-2,282.46	2,474.57	2,096.73	377.84	6.549		
9,200.00	7,236.82	18,104.78	7,141.26	68.07	315.66	87.79	1,959.13	-2,382.45	2,474.30	2,091.11	383.19	6.457		
9,300.00	7,236.43	18,204.79	7,141.51	70.61	318.50	87.80	1,958.10	-2,482.44	2,474.03	2,085.47	388.56	6.367		
9,400.00	7,236.03	18,304.79	7,141.75	73.16	321.34	87.82	1,957.08	-2,582.44	2,473.77	2,079.80	393.96	6.279		
9,500.00	7,235.64	18,404.79	7,142.00	75.74	324.18	87.83	1,956.06	-2,682.43	2,473.50	2,074.11	399.39	6.193		
9,600.00	7,235.25	18,504.79	7,142.24	78.34	327.01	87.85	1,955.03	-2,782.42	2,473.23	2,068.40	404.83	6.109		
9,700.00	7,234.85	18,604.80	7,142.49	80.96	329.85	87.86	1,954.01	-2,882.41	2,472.97	2,062.68	410.29	6.027		
9,800.00	7,234.46	18,704.80	7,142.73	83.59	332.69	87.87	1,952.98	-2,982.41	2,472.70	2,056.94	415.76	5.947		
9,900.00	7,234.07	18,804.80	7,142.97	86.24	335.53	87.89	1,951.96	-3,082.40	2,472.43	2,051.18	421.25	5.869		
10,000.00	7,233.67	18,904.80	7,143.22	88.90	338.37	87.90	1,950.93	-3,182.39	2,472.17	2,045.41	426.76	5.793		
10,100.00	7,233.28	18,995.27	7,143.46	91.57	340.94	87.92	1,949.91	-3,282.38	2,471.90	2,039.90	432.00	5.722		
10,129.63	7,233.17	19,018.34	7,143.52	92.37	341.60	87.92	1,949.67	-3,305.45	2,471.83	2,038.38	433.46	5.703		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,232.89	19,018.34	7,143.52	94.25	341.60	87.92	1,949.67	-3,305.45	2,472.83	2,037.66	435.17	5.682 ES		
10,300.00	7,232.49	19,018.34	7,143.52	96.95	341.60	87.92	1,949.67	-3,305.45	2,477.70	2,040.66	437.03	5.669 SF		
10,400.00	7,232.10	19,018.34	7,143.52	99.65	341.60	87.92	1,949.67	-3,305.45	2,486.58	2,048.36	438.21	5.674		
10,500.00	7,231.71	19,018.34	7,143.52	102.36	341.60	87.92	1,949.67	-3,305.45	2,499.43	2,060.71	438.71	5.697		
10,600.00	7,231.32	19,018.34	7,143.52	105.08	341.60	87.92	1,949.67	-3,305.45	2,516.19	2,077.63	438.56	5.737		
10,700.00	7,230.92	19,018.34	7,143.52	107.80	341.60	87.92	1,949.67	-3,305.45	2,536.78	2,099.01	437.77	5.795		
10,800.00	7,230.53	19,018.34	7,143.52	110.53	341.60	87.92	1,949.67	-3,305.45	2,561.12	2,124.74	436.39	5.869		
10,900.00	7,230.14	19,018.34	7,143.52	113.27	341.60	87.92	1,949.67	-3,305.45	2,589.10	2,154.66	434.44	5.960		
11,000.00	7,229.74	19,018.34	7,143.52	116.02	341.60	87.92	1,949.67	-3,305.45	2,620.59	2,188.61	431.98	6.066		
11,100.00	7,229.35	19,018.34	7,143.52	118.77	341.60	87.92	1,949.67	-3,305.45	2,655.48	2,226.43	429.05	6.189		
11,200.00	7,228.96	19,018.34	7,143.52	121.52	341.60	87.92	1,949.67	-3,305.45	2,693.63	2,267.93	425.70	6.328		
11,300.00	7,228.56	19,018.34	7,143.52	124.28	341.60	87.92	1,949.67	-3,305.45	2,734.91	2,312.93	421.98	6.481		
11,400.00	7,228.17	19,018.34	7,143.52	127.04	341.60	87.92	1,949.67	-3,305.45	2,779.17	2,361.23	417.94	6.650		
11,500.00	7,227.78	19,018.34	7,143.52	129.81	341.60	87.92	1,949.67	-3,305.45	2,826.28	2,412.65	413.63	6.833		
11,600.00	7,227.38	19,018.34	7,143.52	132.58	341.60	87.92	1,949.67	-3,305.45	2,876.10	2,467.00	409.10	7.030		
11,700.00	7,226.99	19,018.34	7,143.52	135.36	341.60	87.92	1,949.67	-3,305.45	2,928.48	2,524.11	404.38	7.242		
11,800.00	7,226.60	19,018.34	7,143.52	138.14	341.60	87.92	1,949.67	-3,305.45	2,983.30	2,583.79	399.51	7.467		
11,900.00	7,226.20	19,018.34	7,143.52	140.92	341.60	87.92	1,949.67	-3,305.45	3,040.42	2,645.88	394.54	7.706		
12,000.00	7,225.81	19,018.34	7,143.52	143.70	341.60	87.92	1,949.67	-3,305.45	3,099.71	2,710.23	389.49	7.958		
12,100.00	7,225.42	19,018.34	7,143.52	146.49	341.60	87.92	1,949.67	-3,305.45	3,161.06	2,776.67	384.39	8.224		
12,200.00	7,225.02	19,018.34	7,143.52	149.28	341.60	87.92	1,949.67	-3,305.45	3,224.34	2,845.07	379.28	8.501		
12,300.00	7,224.63	19,018.34	7,143.52	152.08	341.60	87.92	1,949.67	-3,305.45	3,289.45	2,915.28	374.16	8.791		
12,400.00	7,224.24	19,018.34	7,143.52	154.87	341.60	87.92	1,949.67	-3,305.45	3,356.27	2,987.20	369.07	9.094		
12,500.00	7,223.84	19,018.34	7,143.52	157.67	341.60	87.92	1,949.67	-3,305.45	3,424.70	3,060.69	364.02	9.408		
12,600.00	7,223.45	19,018.34	7,143.52	160.47	341.60	87.92	1,949.67	-3,305.45	3,494.66	3,135.65	359.02	9.734		
12,700.00	7,223.06	19,018.34	7,143.52	163.27	341.60	87.92	1,949.67	-3,305.45	3,566.05	3,211.97	354.08	10.071		
12,800.00	7,222.66	19,018.34	7,143.52	166.07	341.60	87.92	1,949.67	-3,305.45	3,638.79	3,289.57	349.22	10.420		
12,900.00	7,222.27	19,018.34	7,143.52	168.88	341.60	87.92	1,949.67	-3,305.45	3,712.80	3,368.36	344.44	10.779		
13,000.00	7,221.88	19,018.34	7,143.52	171.69	341.60	87.92	1,949.67	-3,305.45	3,788.00	3,448.25	339.75	11.149		
13,100.00	7,221.48	19,018.34	7,143.52	174.49	341.60	87.92	1,949.67	-3,305.45	3,864.33	3,529.17	335.16	11.530		
13,200.00	7,221.09	19,018.34	7,143.52	177.30	341.60	87.92	1,949.67	-3,305.45	3,941.71	3,611.05	330.66	11.921		
13,300.00	7,220.70	19,018.34	7,143.52	180.12	341.60	87.92	1,949.67	-3,305.45	4,020.10	3,693.83	326.27	12.321		
13,400.00	7,220.30	19,018.34	7,143.52	182.93	341.60	87.92	1,949.67	-3,305.45	4,099.42	3,777.44	321.98	12.732		
13,500.00	7,219.91	19,018.34	7,143.52	185.74	341.60	87.92	1,949.67	-3,305.45	4,179.63	3,861.84	317.79	13.152		
13,600.00	7,219.52	19,018.34	7,143.52	188.56	341.60	87.92	1,949.67	-3,305.45	4,260.68	3,946.98	313.71	13.582		
13,700.00	7,219.12	19,018.34	7,143.52	191.38	341.60	87.92	1,949.67	-3,305.45	4,342.52	4,032.79	309.73	14.021		
13,800.00	7,218.73	19,018.34	7,143.52	194.20	341.60	87.92	1,949.67	-3,305.45	4,425.10	4,119.26	305.85	14.468		
13,900.00	7,218.34	19,018.34	7,143.52	197.02	341.60	87.92	1,949.67	-3,305.45	4,508.39	4,206.32	302.07	14.925		
14,000.00	7,217.94	19,018.34	7,143.52	199.84	341.60	87.92	1,949.67	-3,305.45	4,592.35	4,293.95	298.40	15.390		
14,100.00	7,217.55	19,018.34	7,143.52	202.66	341.60	87.92	1,949.67	-3,305.45	4,676.94	4,382.11	294.83	15.863		
14,200.00	7,217.16	19,018.34	7,143.52	205.48	341.60	87.92	1,949.67	-3,305.45	4,762.13	4,470.77	291.35	16.345		
14,300.00	7,216.76	19,018.34	7,143.52	208.30	341.60	87.92	1,949.67	-3,305.45	4,847.88	4,559.91	287.97	16.835		
14,400.00	7,216.37	19,018.34	7,143.52	211.13	341.60	87.92	1,949.67	-3,305.45	4,934.17	4,649.48	284.68	17.332		
14,500.00	7,215.98	19,018.34	7,143.52	213.96	341.60	87.92	1,949.67	-3,305.45	5,020.96	4,739.48	281.49	17.837		
14,600.00	7,215.58	19,018.34	7,143.52	216.78	341.60	87.92	1,949.67	-3,305.45	5,108.24	4,829.86	278.38	18.350		
14,700.00	7,215.19	19,018.34	7,143.52	219.61	341.60	87.92	1,949.67	-3,305.45	5,195.98	4,920.62	275.36	18.870		
14,800.00	7,214.80	19,018.34	7,143.52	222.44	341.60	87.92	1,949.67	-3,305.45	5,284.15	5,011.74	272.42	19.397		
14,900.00	7,214.40	19,018.34	7,143.52	225.27	341.60	87.92	1,949.67	-3,305.45	5,372.74	5,103.18	269.56	19.931		
15,000.00	7,214.01	19,018.34	7,143.52	228.10	341.60	87.92	1,949.67	-3,305.45	5,461.72	5,194.94	266.78	20.472		
15,002.44	7,214.00	19,018.34	7,143.52	228.16	341.60	87.92	1,949.67	-3,305.45	5,463.90	5,197.18	266.72	20.486		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,500.98	1,549.35	3.28	8.07	-118.34	-4,055.39	-7,519.37	8,682.60					
100.00	100.00	1,584.00	1,631.02	3.28	8.51	-118.30	-4,044.14	-7,509.60	8,665.64	8,654.55	11.09	781.485		
200.00	200.00	1,584.00	1,631.02	3.34	8.51	-118.30	-4,044.14	-7,509.60	8,648.53	8,637.42	11.11	778.640		
300.00	300.00	1,657.47	1,703.37	3.44	8.89	-118.27	-4,034.11	-7,501.66	8,632.41	8,620.89	11.51	749.928		
400.00	400.00	1,724.60	1,769.43	3.60	9.24	-118.24	-4,024.58	-7,494.47	8,616.24	8,604.31	11.94	721.708		
500.00	500.00	1,778.29	1,822.34	3.81	9.52	-118.21	-4,017.40	-7,488.84	8,600.63	8,588.27	12.35	696.277		
600.00	599.98	1,868.00	1,910.81	4.03	9.98	43.90	-4,006.07	-7,479.21	8,583.94	8,570.98	12.96	662.456		
700.00	699.84	1,935.83	1,977.72	4.29	10.33	44.21	-3,997.49	-7,472.10	8,565.03	8,551.54	13.49	634.754		
800.00	799.54	2,225.65	2,263.32	4.57	11.87	44.51	-3,960.73	-7,439.46	8,543.82	8,528.76	15.06	567.233		
900.00	899.23	2,476.75	2,509.98	4.87	13.26	44.70	-3,927.69	-7,406.05	8,520.49	8,504.00	16.49	516.852		
1,000.00	998.92	2,532.37	2,564.55	5.20	13.58	44.74	-3,920.29	-7,398.23	8,496.34	8,479.30	17.04	498.625		
1,100.00	1,098.61	1,100.00	2,764.55	5.54	5.65	44.90	-3,892.45	-7,369.43	8,472.18	8,461.11	11.06	765.798		
1,200.00	1,198.30	2,911.25	2,935.37	5.90	15.79	45.05	-3,865.93	-7,343.05	8,446.04	8,426.60	19.44	434.446		
1,300.00	1,298.00	2,957.23	2,980.31	6.27	16.07	45.09	-3,859.06	-7,336.14	8,420.34	8,400.33	20.01	420.866		
1,400.00	1,397.69	1,400.00	3,103.70	6.66	7.14	45.19	-3,841.28	-7,316.94	8,394.90	8,381.57	13.33	629.996		
1,500.00	1,497.38	3,158.05	3,176.70	7.05	17.27	45.24	-3,831.03	-7,304.94	8,368.98	8,347.31	21.67	386.250		
1,600.00	1,597.07	3,200.00	3,217.79	7.44	17.52	45.27	-3,825.54	-7,298.55	8,343.89	8,321.64	22.25	375.090		
1,700.00	1,696.76	3,321.77	3,337.07	7.85	18.23	45.36	-3,809.57	-7,280.02	8,318.91	8,295.72	23.19	358.766		
1,800.00	1,796.45	3,391.00	3,404.90	8.25	18.64	45.42	-3,800.49	-7,269.56	8,294.01	8,270.11	23.90	346.994		
1,900.00	1,896.15	3,391.00	3,404.90	8.67	18.64	45.42	-3,800.49	-7,269.56	8,269.78	8,245.46	24.31	340.112		
2,000.00	1,995.84	3,436.98	3,450.03	9.08	18.90	45.45	-3,794.50	-7,263.12	8,246.19	8,221.25	24.94	330.675		
2,100.00	2,095.53	3,486.00	3,498.27	9.50	19.18	45.49	-3,788.13	-7,257.14	8,223.68	8,198.11	25.58	321.507		
2,200.00	2,195.22	3,531.85	3,543.42	9.92	19.43	45.53	-3,782.09	-7,251.89	8,201.76	8,175.55	26.21	312.919		
2,300.00	2,294.91	3,581.00	3,591.77	10.35	19.70	45.58	-3,775.45	-7,246.09	8,179.91	8,153.05	26.86	304.528		
2,400.00	2,394.60	3,630.67	3,640.65	10.77	19.98	45.62	-3,768.55	-7,240.64	8,158.64	8,131.12	27.52	296.477		
2,500.00	2,494.30	4,058.00	4,059.73	11.20	22.43	46.09	-3,699.82	-7,194.03	8,136.93	8,107.02	29.91	272.012		
2,600.00	2,593.99	4,120.33	4,120.76	11.63	22.80	46.15	-3,690.74	-7,185.19	8,112.43	8,081.79	30.64	264.789		
2,700.00	2,693.68	4,248.00	4,245.85	12.07	23.56	46.25	-3,673.83	-7,166.09	8,087.68	8,056.03	31.65	255.567		
2,800.00	2,793.37	4,303.27	4,299.97	12.50	23.88	46.29	-3,666.43	-7,157.62	8,062.98	8,030.64	32.34	249.313		
2,900.00	2,893.06	4,343.00	4,338.99	12.93	24.11	46.33	-3,661.35	-7,152.18	8,039.46	8,006.49	32.97	243.838		
3,000.00	2,992.76	4,394.70	4,389.82	13.37	24.41	46.37	-3,654.73	-7,145.47	8,016.61	7,982.95	33.65	238.209		
3,100.00	3,092.45	4,470.49	4,464.30	13.81	24.84	46.44	-3,644.57	-7,135.74	7,993.85	7,959.40	34.44	232.080		
3,200.00	3,192.14	4,534.00	4,526.77	14.25	25.20	46.50	-3,636.16	-7,128.06	7,971.71	7,936.53	35.18	226.573		
3,300.00	3,291.83	4,575.63	4,567.78	14.68	25.43	46.53	-3,630.88	-7,123.16	7,950.07	7,914.25	35.83	221.905		
3,400.00	3,391.52	4,629.00	4,620.39	15.12	25.72	46.58	-3,624.58	-7,116.79	7,928.89	7,892.37	36.52	217.107		
3,500.00	3,491.21	4,664.38	4,655.31	15.56	25.91	46.60	-3,620.65	-7,112.71	7,908.39	7,871.26	37.13	212.964		
3,600.00	3,590.91	4,693.46	4,684.06	16.00	26.06	46.63	-3,617.52	-7,109.62	7,888.76	7,851.03	37.72	209.128		
3,700.00	3,690.60	4,724.00	4,714.28	16.45	26.23	46.65	-3,614.34	-7,106.61	7,869.98	7,831.67	38.32	205.400		
3,800.00	3,790.29	4,819.00	4,808.35	16.89	26.71	46.72	-3,604.99	-7,097.17	7,851.41	7,812.23	39.18	200.380		
3,900.00	3,889.98	4,871.70	4,860.56	17.33	26.98	46.76	-3,600.12	-7,091.93	7,833.24	7,793.37	39.87	196.480		
4,000.00	3,989.67	4,915.00	4,903.51	17.77	27.19	46.79	-3,596.28	-7,088.05	7,815.90	7,775.39	40.51	192.922		
4,100.00	4,089.36	4,954.52	4,942.75	18.22	27.38	46.82	-3,592.87	-7,084.78	7,799.29	7,758.15	41.14	189.577		
4,200.00	4,189.06	5,003.28	4,991.19	18.66	27.61	46.86	-3,588.73	-7,081.02	7,783.32	7,741.51	41.81	186.174		
4,300.00	4,288.75	5,052.13	5,039.75	19.10	27.85	46.90	-3,584.68	-7,077.54	7,767.98	7,725.51	42.47	182.892		
4,400.00	4,388.44	5,104.00	5,091.34	19.55	28.09	46.94	-3,580.47	-7,074.19	7,753.29	7,710.14	43.15	179.674		
4,500.00	4,488.13	5,104.00	5,091.34	19.99	28.09	46.94	-3,580.47	-7,074.19	7,739.51	7,695.90	43.60	177.494		
4,600.00	4,587.82	5,180.57	5,167.57	20.44	28.43	46.99	-3,574.84	-7,069.87	7,726.05	7,681.67	44.38	174.086		
4,700.00	4,687.51	5,220.20	5,207.08	20.89	28.60	47.02	-3,572.34	-7,067.93	7,713.59	7,668.59	45.00	171.418		
4,800.00	4,787.21	5,294.00	5,280.71	21.33	28.92	47.07	-3,568.42	-7,064.85	7,702.08	7,656.31	45.76	168.305		
4,900.00	4,886.90	5,294.00	5,280.71	21.78	28.92	47.07	-3,568.42	-7,064.85	7,690.97	7,644.76	46.21	166.451		
5,000.00	4,986.59	5,363.95	5,350.55	22.22	29.20	47.11	-3,565.35	-7,062.41	7,680.63	7,633.69	46.94	163.621		
5,100.00	5,086.28	5,425.15	5,411.67	22.67	29.44	47.15	-3,562.96	-7,060.49	7,670.79	7,623.15	47.64	161.017		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,486.44	5,472.90	23.12	29.68	47.19	-3,560.85	-7,058.78	7,661.46	7,613.12	48.34	158.499		
5,300.00	5,285.66	5,579.00	5,565.40	23.56	30.05	47.24	-3,558.17	-7,056.58	7,652.73	7,603.56	49.17	155.642		
5,400.00	5,385.36	5,579.00	5,565.40	24.01	30.05	47.24	-3,558.17	-7,056.58	7,644.39	7,594.79	49.60	154.120		
5,500.00	5,485.05	5,671.58	5,657.94	24.46	30.39	47.29	-3,556.05	-7,054.87	7,636.45	7,586.03	50.42	151.446		
5,600.00	5,584.74	5,733.70	5,720.04	24.90	30.62	47.32	-3,554.89	-7,054.03	7,629.10	7,577.99	51.12	149.251		
5,700.00	5,684.43	5,795.88	5,782.21	25.35	30.85	47.35	-3,553.94	-7,053.42	7,622.25	7,570.44	51.81	147.126		
5,800.00	5,784.12	5,864.00	5,850.32	25.80	31.11	47.38	-3,553.15	-7,053.02	7,615.89	7,563.37	52.52	144.998		
5,900.00	5,883.81	5,931.51	5,917.83	26.25	31.34	47.42	-3,552.50	-7,052.87	7,609.96	7,556.73	53.23	142.965		
6,000.00	5,983.51	6,006.10	5,992.42	26.70	31.60	47.46	-3,551.83	-7,052.95	7,604.36	7,550.39	53.96	140.915		
6,100.00	6,083.20	6,080.70	6,067.02	27.14	31.86	47.49	-3,551.18	-7,053.28	7,599.09	7,544.40	54.70	138.927		
6,200.00	6,182.89	6,157.54	6,143.85	27.59	32.13	47.53	-3,550.56	-7,053.89	7,594.16	7,538.72	55.44	136.976		
6,300.00	6,282.58	6,270.39	6,256.69	28.04	32.53	47.59	-3,549.56	-7,054.87	7,589.29	7,532.95	56.34	134.708		
6,400.00	6,382.27	6,383.20	6,369.49	28.49	32.93	47.65	-3,548.36	-7,055.72	7,584.24	7,527.01	57.24	132.510		
6,500.00	6,481.96	6,483.04	6,469.32	28.94	33.28	47.71	-3,547.14	-7,056.41	7,579.08	7,521.00	58.08	130.495		
6,600.00	6,581.66	6,571.08	6,557.35	29.39	33.59	47.76	-3,546.00	-7,057.16	7,574.04	7,515.16	58.88	128.643		
6,700.00	6,681.21	6,659.01	6,645.27	29.83	33.91	9.13	-3,544.81	-7,058.08	7,566.79	7,507.12	59.67	126.810		
6,800.00	6,778.96	6,723.00	6,709.25	30.28	34.14	-9.07	-3,543.91	-7,058.85	7,546.81	7,486.46	60.34	125.063		
6,900.00	6,872.51	6,802.96	6,789.19	30.70	34.42	-15.80	-3,542.87	-7,060.06	7,513.37	7,452.32	61.05	123.060		
7,000.00	6,959.55	6,861.89	6,848.10	31.10	34.62	-20.48	-3,542.24	-7,061.18	7,467.41	7,405.77	61.64	121.151		
7,100.00	7,037.93	6,915.44	6,901.64	31.48	34.81	-25.12	-3,541.76	-7,062.38	7,409.97	7,347.82	62.15	119.222		
7,200.00	7,105.74	6,962.33	6,948.52	31.88	34.98	-30.73	-3,541.42	-7,063.56	7,342.43	7,279.84	62.59	117.303		
7,300.00	7,161.29	7,010.00	6,996.17	32.41	35.14	-38.28	-3,541.15	-7,064.89	7,266.40	7,203.40	63.00	115.345		
7,400.00	7,203.22	7,045.13	7,031.28	33.13	35.27	-48.83	-3,540.92	-7,065.93	7,183.67	7,120.35	63.32	113.450		
7,500.00	7,230.50	7,078.49	7,064.62	34.04	35.38	-63.56	-3,540.59	-7,066.96	7,096.25	7,032.63	63.62	111.541		
7,600.00	7,242.45	7,095.16	7,081.28	35.13	35.44	-81.85	-3,540.39	-7,067.48	7,006.35	6,942.50	63.85	109.730		
7,700.00	7,242.72	7,098.97	7,085.09	36.39	35.46	-87.45	-3,540.34	-7,067.61	6,916.07	6,852.02	64.05	107.973		
7,800.00	7,242.33	7,102.07	7,088.19	37.81	35.47	-87.51	-3,540.30	-7,067.70	6,826.06	6,761.74	64.31	106.139		
7,900.00	7,241.93	7,105.19	7,091.31	39.40	35.48	-87.57	-3,540.26	-7,067.80	6,736.32	6,671.69	64.63	104.222		
8,000.00	7,241.54	7,108.33	7,094.45	41.13	35.49	-87.63	-3,540.21	-7,067.90	6,646.88	6,581.86	65.02	102.225		
8,100.00	7,241.15	7,111.49	7,097.61	42.97	35.50	-87.69	-3,540.17	-7,068.01	6,557.75	6,492.27	65.48	100.151		
8,200.00	7,240.75	7,114.67	7,100.78	44.92	35.51	-87.75	-3,540.12	-7,068.11	6,468.92	6,402.92	66.01	98.003		
8,300.00	7,240.36	7,117.87	7,103.98	46.97	35.52	-87.81	-3,540.07	-7,068.21	6,380.43	6,313.82	66.61	95.789		
8,400.00	7,239.97	7,121.09	7,107.20	49.10	35.53	-87.87	-3,540.03	-7,068.32	6,292.28	6,225.00	67.29	93.514		
8,500.00	7,239.57	7,124.34	7,110.44	51.29	35.54	-87.94	-3,539.98	-7,068.42	6,204.49	6,136.45	68.04	91.184		
8,600.00	7,239.18	7,127.60	7,113.70	53.56	35.56	-88.00	-3,539.93	-7,068.53	6,117.08	6,048.20	68.88	88.808		
8,700.00	7,238.79	7,130.88	7,116.98	55.87	35.57	-88.06	-3,539.87	-7,068.63	6,030.05	5,960.25	69.80	86.393		
8,800.00	7,238.39	7,134.18	7,120.28	58.24	35.58	-88.12	-3,539.82	-7,068.74	5,943.43	5,872.63	70.80	83.948		
8,900.00	7,238.00	7,137.51	7,123.61	60.64	35.59	-88.19	-3,539.76	-7,068.85	5,857.23	5,785.35	71.88	81.482		
9,000.00	7,237.61	7,140.86	7,126.95	63.09	35.60	-88.25	-3,539.71	-7,068.96	5,771.48	5,698.42	73.05	79.002		
9,100.00	7,237.21	7,144.23	7,130.32	65.56	35.61	-88.32	-3,539.65	-7,069.07	5,686.19	5,611.88	74.31	76.518		
9,200.00	7,236.82	7,147.62	7,133.71	68.07	35.63	-88.38	-3,539.59	-7,069.19	5,601.39	5,525.73	75.66	74.036		
9,300.00	7,236.43	7,151.03	7,137.12	70.61	35.64	-88.45	-3,539.53	-7,069.30	5,517.09	5,440.00	77.09	71.566		
9,400.00	7,236.03	7,154.47	7,140.55	73.16	35.65	-88.51	-3,539.47	-7,069.41	5,433.32	5,354.71	78.61	69.114		
9,500.00	7,235.64	7,157.93	7,144.01	75.74	35.66	-88.58	-3,539.40	-7,069.53	5,350.11	5,269.89	80.23	66.687		
9,600.00	7,235.25	7,161.41	7,147.49	78.34	35.67	-88.64	-3,539.34	-7,069.65	5,267.49	5,185.55	81.93	64.290		
9,700.00	7,234.85	7,164.91	7,150.99	80.96	35.69	-88.71	-3,539.27	-7,069.77	5,185.47	5,101.74	83.73	61.930		
9,800.00	7,234.46	7,168.44	7,154.51	83.59	35.70	-88.78	-3,539.20	-7,069.88	5,104.09	5,018.47	85.62	59.612		
9,900.00	7,234.07	7,171.99	7,158.06	86.24	35.71	-88.85	-3,539.13	-7,070.00	5,023.38	4,935.77	87.61	57.339		
10,000.00	7,233.67	7,175.57	7,161.63	88.90	35.72	-88.92	-3,539.06	-7,070.13	4,943.38	4,853.69	89.69	55.116		
10,100.00	7,233.28	7,179.17	7,165.23	91.57	35.74	-88.98	-3,538.99	-7,070.25	4,864.11	4,772.24	91.87	52.946		
10,200.00	7,232.89	7,182.79	7,168.85	94.25	35.75	-89.05	-3,538.91	-7,070.37	4,785.61	4,691.47	94.15	50.832		
10,300.00	7,232.49	7,186.44	7,172.50	96.95	35.76	-89.12	-3,538.84	-7,070.50	4,707.93	4,611.41	96.52	48.776		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,190.11	7,176.17	99.65	35.78	-89.19	-3,538.76	-7,070.62	4,631.11	4,532.11	99.00	46.780		
10,500.00	7,231.71	7,193.81	7,179.86	102.36	35.79	-89.27	-3,538.68	-7,070.75	4,555.18	4,453.60	101.57	44.846		
10,600.00	7,231.32	7,197.53	7,183.58	105.08	35.80	-89.34	-3,538.59	-7,070.88	4,480.19	4,375.94	104.26	42.973		
10,700.00	7,230.92	7,201.28	7,187.33	107.80	35.82	-89.41	-3,538.51	-7,071.01	4,406.20	4,299.16	107.04	41.164		
10,800.00	7,230.53	7,205.06	7,191.10	110.53	35.83	-89.48	-3,538.42	-7,071.14	4,333.24	4,223.32	109.93	39.419		
10,900.00	7,230.14	7,208.86	7,194.90	113.27	35.84	-89.55	-3,538.34	-7,071.27	4,261.39	4,148.47	112.92	37.738		
11,000.00	7,229.74	7,212.69	7,198.73	116.02	35.86	-89.63	-3,538.25	-7,071.41	4,190.68	4,074.66	116.02	36.120		
11,100.00	7,229.35	7,216.54	7,202.58	118.77	35.87	-89.70	-3,538.15	-7,071.54	4,121.18	4,001.96	119.23	34.566		
11,200.00	7,228.96	7,220.43	7,206.45	121.52	35.88	-89.78	-3,538.06	-7,071.68	4,052.96	3,930.42	122.54	33.075		
11,300.00	7,228.56	7,224.33	7,210.36	124.28	35.90	-89.85	-3,537.96	-7,071.82	3,986.07	3,860.12	125.95	31.647		
11,400.00	7,228.17	7,228.27	7,214.29	127.04	35.91	-89.93	-3,537.87	-7,071.96	3,920.60	3,791.12	129.47	30.281		
11,500.00	7,227.78	7,232.23	7,218.25	129.81	35.92	-90.00	-3,537.77	-7,072.10	3,856.60	3,723.50	133.10	28.975		
11,600.00	7,227.38	7,236.23	7,222.24	132.58	35.94	-90.08	-3,537.66	-7,072.24	3,794.15	3,657.32	136.83	27.730		
11,700.00	7,226.99	7,240.25	7,226.26	135.36	35.95	-90.15	-3,537.56	-7,072.39	3,733.33	3,592.68	140.65	26.544		
11,800.00	7,226.60	7,244.30	7,230.30	138.14	35.97	-90.23	-3,537.45	-7,072.53	3,674.23	3,529.66	144.57	25.415		
11,900.00	7,226.20	7,248.38	7,234.38	140.92	35.98	-90.31	-3,537.34	-7,072.68	3,616.92	3,468.34	148.58	24.344		
12,000.00	7,225.81	7,252.48	7,238.48	143.70	36.00	-90.39	-3,537.23	-7,072.83	3,561.49	3,408.82	152.67	23.328		
12,100.00	7,225.42	7,256.62	7,242.61	146.49	36.01	-90.47	-3,537.12	-7,072.98	3,508.04	3,351.20	156.84	22.366		
12,200.00	7,225.02	7,260.79	7,246.78	149.28	36.03	-90.55	-3,537.00	-7,073.13	3,456.65	3,295.56	161.09	21.458		
12,300.00	7,224.63	7,264.99	7,250.97	152.08	36.04	-90.63	-3,536.88	-7,073.28	3,407.42	3,242.02	165.39	20.602		
12,400.00	7,224.24	7,269.21	7,255.20	154.87	36.05	-90.71	-3,536.76	-7,073.44	3,360.43	3,190.68	169.75	19.796		
12,500.00	7,223.84	7,273.47	7,259.45	157.67	36.07	-90.79	-3,536.64	-7,073.59	3,315.80	3,141.65	174.15	19.040		
12,600.00	7,223.45	7,277.76	7,263.74	160.47	36.08	-90.87	-3,536.51	-7,073.75	3,273.60	3,095.03	178.58	18.332		
12,700.00	7,223.06	7,282.09	7,268.05	163.27	36.10	-90.96	-3,536.38	-7,073.91	3,233.95	3,050.93	183.02	17.670		
12,800.00	7,222.66	7,286.44	7,272.40	166.07	36.12	-91.04	-3,536.25	-7,074.07	3,196.92	3,009.47	187.46	17.054		
12,900.00	7,222.27	7,290.83	7,276.78	168.88	36.13	-91.12	-3,536.12	-7,074.24	3,162.62	2,970.75	191.88	16.483		
13,000.00	7,221.88	7,295.25	7,281.20	171.69	36.15	-91.21	-3,535.98	-7,074.40	3,131.14	2,934.88	196.26	15.954		
13,100.00	7,221.48	7,299.70	7,286.65	174.49	36.16	-91.29	-3,535.84	-7,074.57	3,102.56	2,901.96	200.60	15.467		
13,200.00	7,221.09	7,304.19	7,290.13	177.30	36.18	-91.38	-3,535.69	-7,074.74	3,076.96	2,872.10	204.86	15.020		
13,300.00	7,220.70	7,308.71	7,294.64	180.12	36.19	-91.47	-3,535.55	-7,074.91	3,054.41	2,845.39	209.03	14.613		
13,400.00	7,220.30	7,313.26	7,299.19	182.93	36.21	-91.55	-3,535.40	-7,075.08	3,034.99	2,821.91	213.08	14.243		
13,500.00	7,219.91	7,317.85	7,303.77	185.74	36.23	-91.64	-3,535.25	-7,075.26	3,018.75	2,801.74	217.01	13.911		
13,600.00	7,219.52	7,322.47	7,308.39	188.56	36.24	-91.73	-3,535.09	-7,075.43	3,005.75	2,784.96	220.79	13.614		
13,700.00	7,219.12	7,327.13	7,313.04	191.38	36.26	-91.82	-3,534.93	-7,075.61	2,996.03	2,771.62	224.40	13.351		
13,800.00	7,218.73	7,331.83	7,317.73	194.20	36.28	-91.91	-3,534.77	-7,075.79	2,989.61	2,761.78	227.83	13.122		
13,900.00	7,218.34	7,336.56	7,322.46	197.02	36.29	-92.00	-3,534.61	-7,075.97	2,986.53	2,755.47	231.06	12.925		
13,942.28	7,218.17	7,338.57	7,324.47	198.21	36.30	-92.04	-3,534.54	-7,076.05	2,986.23	2,753.86	232.37	12.851 CC		
14,000.00	7,217.94	7,341.33	7,327.22	199.84	36.31	-92.09	-3,534.44	-7,076.16	2,986.79	2,752.70	234.09	12.759 ES		
14,100.00	7,217.55	7,346.13	7,332.02	202.66	36.33	-92.18	-3,534.27	-7,076.34	2,990.39	2,753.50	236.89	12.624		
14,200.00	7,217.16	7,350.97	7,336.85	205.48	36.34	-92.28	-3,534.09	-7,076.53	2,997.31	2,757.85	239.46	12.517		
14,300.00	7,216.76	7,324.46	7,310.38	208.30	36.25	-91.77	-3,535.13	-7,075.47	3,007.77	2,766.02	241.75	12.442		
14,400.00	7,216.37	7,326.57	7,312.48	211.13	36.26	-91.81	-3,535.07	-7,075.55	3,021.31	2,777.46	243.85	12.390		
14,500.00	7,215.98	7,328.66	7,314.57	213.96	36.27	-91.85	-3,535.02	-7,075.62	3,038.08	2,792.38	245.70	12.365		
14,600.00	7,215.58	7,330.73	7,316.64	216.78	36.27	-91.89	-3,534.96	-7,075.70	3,058.03	2,810.71	247.32	12.365 SF		
14,700.00	7,215.19	7,332.79	7,318.70	219.61	36.28	-91.93	-3,534.91	-7,075.77	3,081.10	2,832.39	248.71	12.389		
14,800.00	7,214.80	7,334.84	7,320.74	222.44	36.29	-91.97	-3,534.86	-7,075.84	3,107.21	2,857.35	249.86	12.436		
14,900.00	7,214.40	7,336.87	7,322.77	225.27	36.30	-92.01	-3,534.81	-7,075.91	3,136.29	2,885.50	250.79	12.505		
15,000.00	7,214.01	7,338.88	7,324.79	228.10	36.30	-92.05	-3,534.76	-7,075.98	3,168.26	2,916.75	251.51	12.597		
15,002.44	7,214.00	7,338.93	7,324.83	228.16	36.30	-92.05	-3,534.76	-7,075.99	3,169.08	2,917.55	251.53	12.599		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	68.00	3.28	3.28	-118.79	-4,210.54	-7,662.63	8,743.52					
100.00	100.00	32.00	100.00	3.28	3.33	-118.79	-4,210.54	-7,662.63	8,743.26	8,736.65	6.61	1,322.344		
200.00	200.00	132.00	200.00	3.34	4.35	-118.79	-4,210.54	-7,662.63	8,743.26	8,735.57	7.69	1,136.886		
300.00	300.00	232.00	300.00	3.44	7.15	-118.79	-4,210.54	-7,662.63	8,743.26	8,732.66	10.60	825.208		
400.00	400.00	332.00	400.00	3.60	10.38	-118.79	-4,210.54	-7,662.63	8,743.26	8,729.28	13.98	625.412		
500.00	500.00	432.00	500.00	3.81	13.73	-118.79	-4,210.54	-7,662.63	8,743.26	8,725.72	17.54	498.501		
600.00	599.98	531.98	599.98	4.03	17.14	43.07	-4,210.54	-7,662.63	8,741.98	8,720.81	21.18	412.803		
700.00	699.84	631.84	699.84	4.29	20.58	43.15	-4,210.54	-7,662.63	8,738.16	8,713.30	24.86	351.481		
800.00	799.54	731.54	799.54	4.57	24.02	43.20	-4,210.54	-7,662.63	8,732.51	8,703.93	28.58	305.501		
900.00	899.23	831.23	899.23	4.87	27.47	43.24	-4,210.54	-7,662.63	8,726.78	8,694.44	32.34	269.844		
1,000.00	998.92	930.92	998.92	5.20	30.93	43.27	-4,210.54	-7,662.63	8,721.06	8,684.94	36.12	241.426		
1,100.00	1,098.61	1,030.61	1,098.61	5.54	34.39	43.31	-4,210.54	-7,662.63	8,715.34	8,675.41	39.93	218.277		
1,200.00	1,198.30	1,130.30	1,198.30	5.90	37.86	43.34	-4,210.54	-7,662.63	8,709.62	8,665.87	43.75	199.078		
1,300.00	1,298.00	1,230.00	1,298.00	6.27	41.32	43.38	-4,210.54	-7,662.63	8,703.91	8,656.33	47.59	182.909		
1,400.00	1,397.69	1,329.69	1,397.69	6.66	44.79	43.41	-4,210.54	-7,662.63	8,698.20	8,646.77	51.43	169.114		
1,500.00	1,497.38	1,429.38	1,497.38	7.05	48.27	43.45	-4,210.54	-7,662.63	8,692.50	8,637.20	55.29	157.213		
1,600.00	1,597.07	1,529.07	1,597.07	7.44	51.74	43.48	-4,210.54	-7,662.63	8,686.79	8,627.64	59.16	146.843		
1,700.00	1,696.76	1,628.76	1,696.76	7.85	55.21	43.52	-4,210.54	-7,662.63	8,681.09	8,618.06	63.03	137.731		
1,800.00	1,796.45	1,728.45	1,796.45	8.25	58.69	43.56	-4,210.54	-7,662.63	8,675.40	8,608.49	66.91	129.663		
1,900.00	1,896.15	1,828.15	1,896.15	8.67	62.16	43.59	-4,210.54	-7,662.63	8,669.70	8,598.91	70.79	122.470		
2,000.00	1,995.84	1,927.84	1,995.84	9.08	65.64	43.63	-4,210.54	-7,662.63	8,664.01	8,589.34	74.68	116.018		
2,100.00	2,095.53	2,027.53	2,095.53	9.50	69.11	43.66	-4,210.54	-7,662.63	8,658.33	8,579.76	78.57	110.200		
2,200.00	2,195.22	2,127.22	2,195.22	9.92	72.59	43.70	-4,210.54	-7,662.63	8,652.65	8,570.18	82.46	104.927		
2,300.00	2,294.91	2,226.91	2,294.91	10.35	76.07	43.73	-4,210.54	-7,662.63	8,646.97	8,560.61	86.36	100.126		
2,400.00	2,394.60	2,326.60	2,394.60	10.77	79.54	43.77	-4,210.54	-7,662.63	8,641.29	8,551.03	90.26	95.737		
2,500.00	2,494.30	2,426.30	2,494.30	11.20	83.02	43.81	-4,210.54	-7,662.63	8,635.62	8,541.46	94.16	91.709		
2,600.00	2,593.99	2,525.99	2,593.99	11.63	86.50	43.84	-4,210.54	-7,662.63	8,629.95	8,531.88	98.07	88.001		
2,700.00	2,693.68	2,625.68	2,693.68	12.07	89.98	43.88	-4,210.54	-7,662.63	8,624.28	8,522.31	101.97	84.575		
2,800.00	2,793.37	2,725.37	2,793.37	12.50	93.45	43.91	-4,210.54	-7,662.63	8,618.62	8,512.74	105.88	81.400		
2,900.00	2,893.06	2,825.06	2,893.06	12.93	96.93	43.95	-4,210.54	-7,662.63	8,612.96	8,503.17	109.79	78.450		
3,000.00	2,992.76	2,924.76	2,992.76	13.37	100.41	43.99	-4,210.54	-7,662.63	8,607.31	8,493.61	113.70	75.703		
3,100.00	3,092.45	3,024.45	3,092.45	13.81	103.89	44.02	-4,210.54	-7,662.63	8,601.65	8,484.05	117.61	73.137		
3,200.00	3,192.14	3,124.14	3,192.14	14.25	107.37	44.06	-4,210.54	-7,662.63	8,596.01	8,474.48	121.52	70.736		
3,300.00	3,291.83	3,223.83	3,291.83	14.68	110.85	44.10	-4,210.54	-7,662.63	8,590.36	8,464.93	125.44	68.484		
3,400.00	3,391.52	3,323.52	3,391.52	15.12	114.33	44.13	-4,210.54	-7,662.63	8,584.72	8,455.37	129.35	66.369		
3,500.00	3,491.21	3,423.21	3,491.21	15.56	117.80	44.17	-4,210.54	-7,662.63	8,579.08	8,445.82	133.26	64.377		
3,600.00	3,590.91	3,522.91	3,590.91	16.00	121.28	44.21	-4,210.54	-7,662.63	8,573.45	8,436.27	137.18	62.498		
3,700.00	3,690.60	3,622.60	3,690.60	16.45	124.76	44.24	-4,210.54	-7,662.63	8,567.82	8,426.72	141.10	60.723		
3,800.00	3,790.29	3,722.29	3,790.29	16.89	128.24	44.28	-4,210.54	-7,662.63	8,562.19	8,417.17	145.01	59.044		
3,900.00	3,889.98	3,821.98	3,889.98	17.33	131.72	44.32	-4,210.54	-7,662.63	8,556.56	8,407.63	148.93	57.453		
4,000.00	3,989.67	3,921.67	3,989.67	17.77	135.20	44.35	-4,210.54	-7,662.63	8,550.94	8,398.09	152.85	55.944		
4,100.00	4,089.36	4,021.36	4,089.36	18.22	138.68	44.39	-4,210.54	-7,662.63	8,545.33	8,388.56	156.77	54.510		
4,200.00	4,189.06	4,121.06	4,189.06	18.66	142.16	44.43	-4,210.54	-7,662.63	8,539.71	8,379.03	160.69	53.145		
4,300.00	4,288.75	4,220.75	4,288.75	19.10	145.64	44.46	-4,210.54	-7,662.63	8,534.10	8,369.50	164.61	51.846		
4,400.00	4,388.44	4,320.44	4,388.44	19.55	149.12	44.50	-4,210.54	-7,662.63	8,528.49	8,359.97	168.53	50.607		
4,500.00	4,488.13	4,420.13	4,488.13	19.99	152.60	44.54	-4,210.54	-7,662.63	8,522.89	8,350.45	172.45	49.424		
4,600.00	4,587.82	4,519.82	4,587.82	20.44	156.08	44.57	-4,210.54	-7,662.63	8,517.29	8,340.93	176.37	48.293		
4,700.00	4,687.51	4,619.51	4,687.51	20.89	159.56	44.61	-4,210.54	-7,662.63	8,511.70	8,331.41	180.29	47.212		
4,800.00	4,787.21	4,719.21	4,787.21	21.33	163.04	44.65	-4,210.54	-7,662.63	8,506.10	8,321.89	184.21	46.177		
4,900.00	4,886.90	4,818.90	4,886.90	21.78	166.51	44.68	-4,210.54	-7,662.63	8,500.51	8,312.38	188.13	45.184		
5,000.00	4,986.59	4,918.59	4,986.59	22.22	169.99	44.72	-4,210.54	-7,662.63	8,494.93	8,302.88	192.05	44.232		
5,100.00	5,086.28	5,018.28	5,086.28	22.67	173.47	44.76	-4,210.54	-7,662.63	8,489.35	8,293.37	195.97	43.319		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,117.97	5,185.97	23.12	176.95	44.80	-4,210.54	-7,662.63	8,483.77	8,283.87	199.90	42.441				
5,300.00	5,285.66	5,217.66	5,285.66	23.56	180.43	44.83	-4,210.54	-7,662.63	8,478.19	8,274.38	203.82	41.597				
5,400.00	5,385.36	5,317.36	5,385.36	24.01	183.91	44.87	-4,210.54	-7,662.63	8,472.62	8,264.88	207.74	40.784				
5,500.00	5,485.05	5,417.05	5,485.05	24.46	187.39	44.91	-4,210.54	-7,662.63	8,467.06	8,255.39	211.66	40.002				
5,600.00	5,584.74	5,516.74	5,584.74	24.90	190.87	44.95	-4,210.54	-7,662.63	8,461.49	8,245.90	215.59	39.248				
5,700.00	5,684.43	5,616.43	5,684.43	25.35	194.35	44.98	-4,210.54	-7,662.63	8,455.93	8,236.42	219.51	38.522				
5,800.00	5,784.12	5,716.12	5,784.12	25.80	197.83	45.02	-4,210.54	-7,662.63	8,450.38	8,226.94	223.43	37.820				
5,900.00	5,883.81	5,815.81	5,883.81	26.25	201.31	45.06	-4,210.54	-7,662.63	8,444.82	8,217.46	227.36	37.143				
6,000.00	5,983.51	5,915.51	5,983.51	26.70	204.79	45.10	-4,210.54	-7,662.63	8,439.27	8,207.99	231.28	36.489				
6,100.00	6,083.20	6,015.20	6,083.20	27.14	208.27	45.13	-4,210.54	-7,662.63	8,433.73	8,198.52	235.21	35.857				
6,200.00	6,182.89	6,114.89	6,182.89	27.59	211.75	45.17	-4,210.54	-7,662.63	8,428.19	8,189.05	239.13	35.245				
6,300.00	6,282.58	6,214.58	6,282.58	28.04	215.23	45.21	-4,210.54	-7,662.63	8,422.65	8,179.59	243.06	34.653				
6,400.00	6,382.27	6,314.27	6,382.27	28.49	218.71	45.25	-4,210.54	-7,662.63	8,417.11	8,170.13	246.98	34.080				
6,500.00	6,481.96	6,413.96	6,481.96	28.94	222.19	45.28	-4,210.54	-7,662.63	8,411.58	8,160.68	250.90	33.525				
6,600.00	6,581.66	6,513.66	6,581.66	29.39	225.67	45.32	-4,210.54	-7,662.63	8,406.05	8,151.23	254.83	32.987				
6,700.00	6,681.21	6,613.21	6,681.21	29.83	229.15	6.66	-4,210.54	-7,662.63	8,398.21	8,139.46	258.75	32.457				
6,800.00	6,778.96	6,710.96	6,778.96	30.28	232.56	-11.66	-4,210.54	-7,662.63	8,377.72	8,115.13	262.59	31.904				
6,900.00	6,872.51	6,804.51	6,872.51	30.70	235.82	-18.59	-4,210.54	-7,662.63	8,343.82	8,077.56	266.26	31.338				
7,000.00	6,959.55	6,908.45	6,959.55	31.10	239.45	-23.55	-4,210.54	-7,662.63	8,297.36	8,027.11	270.25	30.703				
7,100.00	7,037.93	6,969.93	7,037.93	31.48	241.60	-28.61	-4,210.54	-7,662.63	8,239.52	7,966.81	272.71	30.213				
7,200.00	7,105.74	7,037.74	7,105.74	31.88	243.96	-34.77	-4,210.54	-7,662.63	8,171.79	7,896.43	275.36	29.677				
7,300.00	7,161.29	7,106.71	7,161.29	32.41	246.37	-42.93	-4,210.54	-7,662.63	8,095.88	7,817.88	278.00	29.122				
7,400.00	7,203.22	7,135.22	7,203.22	33.13	247.37	-54.01	-4,210.54	-7,662.63	8,013.72	7,734.52	279.20	28.702				
7,500.00	7,230.50	7,162.50	7,230.50	34.04	248.32	-68.52	-4,210.54	-7,662.63	7,927.41	7,647.06	280.36	28.276				
7,600.00	7,242.45	7,174.45	7,242.45	35.13	248.74	-85.45	-4,210.54	-7,662.63	7,839.12	7,558.14	280.99	27.899				
7,700.00	7,242.72	7,174.72	7,242.72	36.39	248.75	-90.42	-4,210.54	-7,662.63	7,750.79	7,469.55	281.24	27.559				
7,800.00	7,242.33	7,174.33	7,242.33	37.81	248.73	-90.42	-4,210.54	-7,662.63	7,662.76	7,381.21	281.54	27.217				
7,900.00	7,241.93	7,173.93	7,241.93	39.40	248.72	-90.41	-4,210.54	-7,662.63	7,575.02	7,293.11	281.91	26.870				
8,000.00	7,241.54	7,173.54	7,241.54	41.13	248.70	-90.40	-4,210.54	-7,662.63	7,487.59	7,205.23	282.36	26.518				
8,100.00	7,241.15	7,173.15	7,241.15	42.97	248.69	-90.40	-4,210.54	-7,662.63	7,400.48	7,117.60	282.88	26.161				
8,200.00	7,240.75	7,172.75	7,240.75	44.92	248.68	-90.39	-4,210.54	-7,662.63	7,313.70	7,030.22	283.48	25.800				
8,300.00	7,240.36	7,172.36	7,240.36	46.97	248.66	-90.38	-4,210.54	-7,662.63	7,227.27	6,943.11	284.16	25.434				
8,400.00	7,239.97	7,171.97	7,239.97	49.10	248.65	-90.38	-4,210.54	-7,662.63	7,141.18	6,856.27	284.92	25.064				
8,500.00	7,239.57	7,171.57	7,239.57	51.29	248.64	-90.37	-4,210.54	-7,662.63	7,055.47	6,769.71	285.76	24.691				
8,600.00	7,239.18	7,171.18	7,239.18	53.56	248.62	-90.37	-4,210.54	-7,662.63	6,970.13	6,683.45	286.68	24.314				
8,700.00	7,238.79	7,170.79	7,238.79	55.87	248.61	-90.36	-4,210.54	-7,662.63	6,885.19	6,597.51	287.68	23.934				
8,800.00	7,238.39	7,170.39	7,238.39	58.24	248.60	-90.35	-4,210.54	-7,662.63	6,800.66	6,511.89	288.76	23.551				
8,900.00	7,238.00	7,170.00	7,238.00	60.64	248.58	-90.35	-4,210.54	-7,662.63	6,716.55	6,426.62	289.93	23.166				
9,000.00	7,237.61	7,169.61	7,237.61	63.09	248.57	-90.34	-4,210.54	-7,662.63	6,632.88	6,341.70	291.18	22.779				
9,100.00	7,237.21	7,169.21	7,237.21	65.56	248.55	-90.33	-4,210.54	-7,662.63	6,549.68	6,257.16	292.51	22.391				
9,200.00	7,236.82	7,168.82	7,236.82	68.07	248.54	-90.33	-4,210.54	-7,662.63	6,466.94	6,173.02	293.92	22.002				
9,300.00	7,236.43	7,168.43	7,236.43	70.61	248.53	-90.32	-4,210.54	-7,662.63	6,384.71	6,089.29	295.42	21.612				
9,400.00	7,236.03	7,168.03	7,236.03	73.16	248.51	-90.32	-4,210.54	-7,662.63	6,302.98	6,005.99	296.99	21.223				
9,500.00	7,235.64	7,167.64	7,235.64	75.74	248.50	-90.31	-4,210.54	-7,662.63	6,221.79	5,923.14	298.65	20.833				
9,600.00	7,235.25	7,167.25	7,235.25	78.34	248.49	-90.30	-4,210.54	-7,662.63	6,141.15	5,840.76	300.39	20.444				
9,700.00	7,234.85	7,166.85	7,234.85	80.96	248.47	-90.30	-4,210.54	-7,662.63	6,061.10	5,758.89	302.21	20.056				
9,800.00	7,234.46	7,166.46	7,234.46	83.59	248.46	-90.29	-4,210.54	-7,662.63	5,981.64	5,677.53	304.11	19.669				
9,900.00	7,234.07	7,166.07	7,234.07	86.24	248.44	-90.29	-4,210.54	-7,662.63	5,902.80	5,596.71	306.09	19.284				
10,000.00	7,233.67	7,165.67	7,233.67	88.90	248.43	-90.28	-4,210.54	-7,662.63	5,824.62	5,516.46	308.16	18.901				
10,100.00	7,233.28	7,165.28	7,233.28	91.57	248.42	-90.27	-4,210.54	-7,662.63	5,747.11	5,436.81	310.30	18.521				
10,200.00	7,232.89	7,164.89	7,232.89	94.25	248.40	-90.27	-4,210.54	-7,662.63	5,670.31	5,357.78	312.53	18.143				
10,300.00	7,232.49	7,164.49	7,232.49	96.95	248.39	-90.26	-4,210.54	-7,662.63	5,594.24	5,279.40	314.84	17.769				

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,164.10	7,232.10	99.65	248.38	-90.25	-4,210.54	-7,662.63	5,518.93	5,201.71	317.22	17.398		
10,500.00	7,231.71	7,163.71	7,231.71	102.36	248.36	-90.25	-4,210.54	-7,662.63	5,444.42	5,124.72	319.70	17.030		
10,600.00	7,231.32	7,163.32	7,231.32	105.08	248.35	-90.24	-4,210.54	-7,662.63	5,370.74	5,048.49	322.25	16.666		
10,700.00	7,230.92	7,162.92	7,230.92	107.80	248.33	-90.24	-4,210.54	-7,662.63	5,297.92	4,973.03	324.89	16.307		
10,800.00	7,230.53	7,162.53	7,230.53	110.53	248.32	-90.23	-4,210.54	-7,662.63	5,226.00	4,898.39	327.60	15.952		
10,900.00	7,230.14	7,162.14	7,230.14	113.27	248.31	-90.22	-4,210.54	-7,662.63	5,155.01	4,824.60	330.41	15.602		
11,000.00	7,229.74	7,161.74	7,229.74	116.02	248.29	-90.22	-4,210.54	-7,662.63	5,085.00	4,751.71	333.29	15.257		
11,100.00	7,229.35	7,161.35	7,229.35	118.77	248.28	-90.21	-4,210.54	-7,662.63	5,016.01	4,679.75	336.25	14.917		
11,200.00	7,228.96	7,160.96	7,228.96	121.52	248.27	-90.21	-4,210.54	-7,662.63	4,948.07	4,608.77	339.30	14.583		
11,300.00	7,228.56	7,160.56	7,228.56	124.28	248.25	-90.20	-4,210.54	-7,662.63	4,881.24	4,538.81	342.43	14.255		
11,400.00	7,228.17	7,160.17	7,228.17	127.04	248.24	-90.19	-4,210.54	-7,662.63	4,815.56	4,469.92	345.64	13.932		
11,500.00	7,227.78	7,159.78	7,227.78	129.81	248.22	-90.19	-4,210.54	-7,662.63	4,751.08	4,402.15	348.93	13.616		
11,600.00	7,227.38	7,159.38	7,227.38	132.58	248.21	-90.18	-4,210.54	-7,662.63	4,687.84	4,335.54	352.30	13.307		
11,700.00	7,226.99	7,158.99	7,226.99	135.36	248.20	-90.17	-4,210.54	-7,662.63	4,625.90	4,270.16	355.74	13.004		
11,800.00	7,226.60	7,158.60	7,226.60	138.14	248.18	-90.17	-4,210.54	-7,662.63	4,565.31	4,206.05	359.26	12.708		
11,900.00	7,226.20	7,158.20	7,226.20	140.92	248.17	-90.16	-4,210.54	-7,662.63	4,506.12	4,143.27	362.85	12.419		
12,000.00	7,225.81	7,157.81	7,225.81	143.70	248.16	-90.16	-4,210.54	-7,662.63	4,448.40	4,081.88	366.51	12.137		
12,100.00	7,225.42	7,157.42	7,225.42	146.49	248.14	-90.15	-4,210.54	-7,662.63	4,392.19	4,021.95	370.24	11.863		
12,200.00	7,225.02	7,157.02	7,225.02	149.28	248.13	-90.14	-4,210.54	-7,662.63	4,337.56	3,963.53	374.03	11.597		
12,300.00	7,224.63	7,156.63	7,224.63	152.08	248.11	-90.14	-4,210.54	-7,662.63	4,284.57	3,906.69	377.88	11.338		
12,400.00	7,224.24	7,156.24	7,224.24	154.87	248.10	-90.13	-4,210.54	-7,662.63	4,233.27	3,851.49	381.78	11.088		
12,500.00	7,223.84	7,155.84	7,223.84	157.67	248.09	-90.13	-4,210.54	-7,662.63	4,183.74	3,798.01	385.74	10.846		
12,600.00	7,223.45	7,155.45	7,223.45	160.47	248.07	-90.12	-4,210.54	-7,662.63	4,136.04	3,746.31	389.73	10.613		
12,700.00	7,223.06	7,155.06	7,223.06	163.27	248.06	-90.11	-4,210.54	-7,662.63	4,090.22	3,696.46	393.76	10.388		
12,800.00	7,222.66	7,154.66	7,222.66	166.07	248.05	-90.11	-4,210.54	-7,662.63	4,046.36	3,648.53	397.82	10.171		
12,900.00	7,222.27	7,154.27	7,222.27	168.88	248.03	-90.10	-4,210.54	-7,662.63	4,004.51	3,602.61	401.90	9.964		
13,000.00	7,221.88	7,153.88	7,221.88	171.69	248.02	-90.09	-4,210.54	-7,662.63	3,964.74	3,558.75	405.99	9.766		
13,100.00	7,221.48	7,153.48	7,221.48	174.49	248.00	-90.09	-4,210.54	-7,662.63	3,927.12	3,517.03	410.09	9.576		
13,200.00	7,221.09	7,153.09	7,221.09	177.30	247.99	-90.08	-4,210.54	-7,662.63	3,891.71	3,477.53	414.18	9.396		
13,300.00	7,220.70	7,152.70	7,220.70	180.12	247.98	-90.08	-4,210.54	-7,662.63	3,858.56	3,440.31	418.25	9.226		
13,400.00	7,220.30	7,152.30	7,220.30	182.93	247.96	-90.07	-4,210.54	-7,662.63	3,827.74	3,405.44	422.29	9.064		
13,500.00	7,219.91	7,151.91	7,219.91	185.74	247.95	-90.06	-4,210.54	-7,662.63	3,799.30	3,373.00	426.30	8.912		
13,600.00	7,219.52	7,151.52	7,219.52	188.56	247.94	-90.06	-4,210.54	-7,662.63	3,773.30	3,343.04	430.25	8.770		
13,700.00	7,219.12	7,151.12	7,219.12	191.38	247.92	-90.05	-4,210.54	-7,662.63	3,749.78	3,315.63	434.15	8.637		
13,800.00	7,218.73	7,150.73	7,218.73	194.20	247.91	-90.05	-4,210.54	-7,662.63	3,728.80	3,290.83	437.97	8.514		
13,900.00	7,218.34	7,150.34	7,218.34	197.02	247.89	-90.04	-4,210.54	-7,662.63	3,710.40	3,268.69	441.70	8.400		
14,000.00	7,217.94	7,149.94	7,217.94	199.84	247.88	-90.03	-4,210.54	-7,662.63	3,694.61	3,249.27	445.34	8.296		
14,100.00	7,217.55	7,149.55	7,217.55	202.66	247.87	-90.03	-4,210.54	-7,662.63	3,681.47	3,232.60	448.87	8.202		
14,200.00	7,217.16	7,149.16	7,217.16	205.48	247.85	-90.02	-4,210.54	-7,662.63	3,671.01	3,218.72	452.29	8.117		
14,300.00	7,216.76	7,148.76	7,216.76	208.30	247.84	-90.01	-4,210.54	-7,662.63	3,663.25	3,207.68	455.57	8.041		
14,400.00	7,216.37	7,148.37	7,216.37	211.13	247.83	-90.01	-4,210.54	-7,662.63	3,658.21	3,199.49	458.72	7.975		
14,500.00	7,215.98	7,147.98	7,215.98	213.96	247.81	-90.00	-4,210.54	-7,662.63	3,655.90	3,194.17	461.73	7.918		
14,534.55	7,215.84	7,147.84	7,215.84	214.93	247.81	-90.00	-4,210.54	-7,662.63	3,655.73	3,193.01	462.73	7.900 CC		
14,600.00	7,215.58	7,147.58	7,215.58	216.78	247.80	-90.00	-4,210.54	-7,662.63	3,656.32	3,191.75	464.57	7.870 ES		
14,700.00	7,215.19	7,147.19	7,215.19	219.61	247.79	-89.99	-4,210.54	-7,662.63	3,659.48	3,192.21	467.26	7.832		
14,800.00	7,214.80	7,146.80	7,214.80	222.44	247.77	-89.98	-4,210.54	-7,662.63	3,665.36	3,195.57	469.79	7.802		
14,900.00	7,214.40	7,146.40	7,214.40	225.27	247.76	-89.98	-4,210.54	-7,662.63	3,673.95	3,201.81	472.15	7.781		
15,000.00	7,214.01	7,146.01	7,214.01	228.10	247.74	-89.97	-4,210.54	-7,662.63	3,685.25	3,210.92	474.33	7.769		
15,002.44	7,214.00	7,146.00	7,214.00	228.16	247.74	-89.97	-4,210.54	-7,662.63	3,685.55	3,211.17	474.38	7.769 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	53.00	3.28	3.28	-107.89	-2,893.14	-8,962.95	9,418.47					
100.00	100.00	47.00	100.00	3.28	3.38	-107.89	-2,893.14	-8,962.95	9,418.32	9,411.65	6.67	1,412.939		
200.00	200.00	147.00	200.00	3.34	4.71	-107.89	-2,893.14	-8,962.95	9,418.32	9,410.27	8.05	1,169.775		
300.00	300.00	247.00	300.00	3.44	7.62	-107.89	-2,893.14	-8,962.95	9,418.32	9,407.25	11.06	851.234		
400.00	400.00	347.00	400.00	3.60	10.87	-107.89	-2,893.14	-8,962.95	9,418.32	9,403.84	14.48	650.524		
500.00	500.00	447.00	500.00	3.81	14.24	-107.89	-2,893.14	-8,962.95	9,418.32	9,400.27	18.05	521.844		
600.00	599.98	546.98	599.98	4.03	17.66	53.97	-2,893.14	-8,962.95	9,417.29	9,395.60	21.69	434.152		
700.00	699.84	646.84	699.84	4.29	21.09	54.05	-2,893.14	-8,962.95	9,414.21	9,388.83	25.38	370.969		
800.00	799.54	746.54	799.54	4.57	24.54	54.10	-2,893.14	-8,962.95	9,409.66	9,380.56	29.10	323.333		
900.00	899.23	846.23	899.23	4.87	27.99	54.14	-2,893.14	-8,962.95	9,405.06	9,372.20	32.86	286.217		
1,000.00	998.92	945.92	998.92	5.20	31.45	54.18	-2,893.14	-8,962.95	9,400.45	9,363.81	36.64	256.530		
1,100.00	1,098.61	1,045.61	1,098.61	5.54	34.91	54.22	-2,893.14	-8,962.95	9,395.85	9,355.40	40.45	232.278		
1,200.00	1,198.30	1,145.30	1,198.30	5.90	38.38	54.26	-2,893.14	-8,962.95	9,391.26	9,346.98	44.27	212.114		
1,300.00	1,298.00	1,245.00	1,298.00	6.27	41.85	54.30	-2,893.14	-8,962.95	9,386.67	9,338.56	48.11	195.099		
1,400.00	1,397.69	1,344.69	1,397.69	6.66	45.32	54.34	-2,893.14	-8,962.95	9,382.08	9,330.12	51.96	180.558		
1,500.00	1,497.38	1,444.38	1,497.38	7.05	48.79	54.37	-2,893.14	-8,962.95	9,377.50	9,321.68	55.82	167.993		
1,600.00	1,597.07	1,544.07	1,597.07	7.44	52.26	54.41	-2,893.14	-8,962.95	9,372.92	9,313.23	59.69	157.032		
1,700.00	1,696.76	1,643.76	1,696.76	7.85	55.73	54.45	-2,893.14	-8,962.95	9,368.35	9,304.79	63.56	147.389		
1,800.00	1,796.45	1,743.45	1,796.45	8.25	59.21	54.49	-2,893.14	-8,962.95	9,363.78	9,296.34	67.44	138.842		
1,900.00	1,896.15	1,843.15	1,896.15	8.67	62.68	54.53	-2,893.14	-8,962.95	9,359.22	9,287.89	71.33	131.216		
2,000.00	1,995.84	1,942.84	1,995.84	9.08	66.16	54.57	-2,893.14	-8,962.95	9,354.66	9,279.44	75.22	124.371		
2,100.00	2,095.53	2,042.53	2,095.53	9.50	69.64	54.61	-2,893.14	-8,962.95	9,350.10	9,270.99	79.11	118.193		
2,200.00	2,195.22	2,142.22	2,195.22	9.92	73.11	54.65	-2,893.14	-8,962.95	9,345.55	9,262.54	83.00	112.590		
2,300.00	2,294.91	2,241.91	2,294.91	10.35	76.59	54.69	-2,893.14	-8,962.95	9,341.00	9,254.10	86.90	107.487		
2,400.00	2,394.60	2,341.60	2,394.60	10.77	80.07	54.73	-2,893.14	-8,962.95	9,336.46	9,245.65	90.81	102.818		
2,500.00	2,494.30	2,441.30	2,494.30	11.20	83.54	54.77	-2,893.14	-8,962.95	9,331.92	9,237.21	94.71	98.533		
2,600.00	2,593.99	2,540.99	2,593.99	11.63	87.02	54.80	-2,893.14	-8,962.95	9,327.39	9,228.77	98.61	94.584		
2,700.00	2,693.68	2,640.68	2,693.68	12.07	90.50	54.84	-2,893.14	-8,962.95	9,322.86	9,220.34	102.52	90.935		
2,800.00	2,793.37	2,740.37	2,793.37	12.50	93.98	54.88	-2,893.14	-8,962.95	9,318.33	9,211.90	106.43	87.553		
2,900.00	2,893.06	2,840.06	2,893.06	12.93	97.46	54.92	-2,893.14	-8,962.95	9,313.81	9,203.47	110.34	84.409		
3,000.00	2,992.76	2,939.76	2,992.76	13.37	100.93	54.96	-2,893.14	-8,962.95	9,309.30	9,195.04	114.25	81.480		
3,100.00	3,092.45	3,039.45	3,092.45	13.81	104.41	55.00	-2,893.14	-8,962.95	9,304.78	9,186.62	118.17	78.743		
3,200.00	3,192.14	3,139.14	3,192.14	14.25	107.89	55.04	-2,893.14	-8,962.95	9,300.28	9,178.20	122.08	76.182		
3,300.00	3,291.83	3,238.83	3,291.83	14.68	111.37	55.08	-2,893.14	-8,962.95	9,295.77	9,169.78	125.99	73.779		
3,400.00	3,391.52	3,338.52	3,391.52	15.12	114.85	55.12	-2,893.14	-8,962.95	9,291.27	9,161.36	129.91	71.521		
3,500.00	3,491.21	3,438.21	3,491.21	15.56	118.33	55.16	-2,893.14	-8,962.95	9,286.78	9,152.95	133.83	69.394		
3,600.00	3,590.91	3,537.91	3,590.91	16.00	121.81	55.20	-2,893.14	-8,962.95	9,282.29	9,144.55	137.74	67.388		
3,700.00	3,690.60	3,637.60	3,690.60	16.45	125.29	55.24	-2,893.14	-8,962.95	9,277.81	9,136.14	141.66	65.492		
3,800.00	3,790.29	3,737.29	3,790.29	16.89	128.77	55.28	-2,893.14	-8,962.95	9,273.33	9,127.74	145.58	63.699		
3,900.00	3,889.98	3,836.98	3,889.98	17.33	132.24	55.32	-2,893.14	-8,962.95	9,268.85	9,119.35	149.50	61.999		
4,000.00	3,989.67	3,936.67	3,989.67	17.77	135.72	55.36	-2,893.14	-8,962.95	9,264.38	9,110.96	153.42	60.386		
4,100.00	4,089.36	4,036.36	4,089.36	18.22	139.20	55.40	-2,893.14	-8,962.95	9,259.91	9,102.57	157.34	58.853		
4,200.00	4,189.06	4,136.06	4,189.06	18.66	142.68	55.44	-2,893.14	-8,962.95	9,255.45	9,094.19	161.26	57.394		
4,300.00	4,288.75	4,235.75	4,288.75	19.10	146.16	55.48	-2,893.14	-8,962.95	9,250.99	9,085.81	165.18	56.005		
4,400.00	4,388.44	4,335.44	4,388.44	19.55	149.64	55.52	-2,893.14	-8,962.95	9,246.54	9,077.43	169.10	54.680		
4,500.00	4,488.13	4,435.13	4,488.13	19.99	153.12	55.56	-2,893.14	-8,962.95	9,242.09	9,069.06	173.03	53.415		
4,600.00	4,587.82	4,534.82	4,587.82	20.44	156.60	55.60	-2,893.14	-8,962.95	9,237.64	9,060.69	176.95	52.205		
4,700.00	4,687.51	4,634.51	4,687.51	20.89	160.08	55.64	-2,893.14	-8,962.95	9,233.20	9,052.33	180.87	51.049		
4,800.00	4,787.21	4,734.21	4,787.21	21.33	163.56	55.68	-2,893.14	-8,962.95	9,228.77	9,043.97	184.79	49.941		
4,900.00	4,886.90	4,833.90	4,886.90	21.78	167.04	55.72	-2,893.14	-8,962.95	9,224.34	9,035.62	188.72	48.879		
5,000.00	4,986.59	4,933.59	4,986.59	22.22	170.52	55.76	-2,893.14	-8,962.95	9,219.91	9,027.27	192.64	47.861		
5,100.00	5,086.28	5,033.28	5,086.28	22.67	174.00	55.80	-2,893.14	-8,962.95	9,215.49	9,018.92	196.56	46.883		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,132.97	5,185.97	23.12	177.48	55.84	-2,893.14	-8,962.95	9,211.07	9,010.58	200.49	45.943		
5,300.00	5,285.66	5,232.66	5,285.66	23.56	180.96	55.88	-2,893.14	-8,962.95	9,206.66	9,002.24	204.41	45.040		
5,400.00	5,385.36	5,332.36	5,385.36	24.01	184.44	55.92	-2,893.14	-8,962.95	9,202.25	8,993.91	208.34	44.170		
5,500.00	5,485.05	5,432.05	5,485.05	24.46	187.92	55.96	-2,893.14	-8,962.95	9,197.84	8,985.58	212.26	43.333		
5,600.00	5,584.74	5,531.74	5,584.74	24.90	191.40	56.00	-2,893.14	-8,962.95	9,193.45	8,977.26	216.19	42.526		
5,700.00	5,684.43	5,631.43	5,684.43	25.35	194.88	56.04	-2,893.14	-8,962.95	9,189.05	8,968.94	220.11	41.747		
5,800.00	5,784.12	5,731.12	5,784.12	25.80	198.36	56.08	-2,893.14	-8,962.95	9,184.66	8,960.62	224.04	40.996		
5,900.00	5,883.81	5,830.81	5,883.81	26.25	201.84	56.12	-2,893.14	-8,962.95	9,180.28	8,952.31	227.96	40.271		
6,000.00	5,983.51	5,930.51	5,983.51	26.70	205.32	56.16	-2,893.14	-8,962.95	9,175.89	8,944.01	231.89	39.570		
6,100.00	6,083.20	6,030.20	6,083.20	27.14	208.79	56.20	-2,893.14	-8,962.95	9,171.52	8,935.71	235.81	38.893		
6,200.00	6,182.89	6,129.89	6,182.89	27.59	212.27	56.24	-2,893.14	-8,962.95	9,167.15	8,927.41	239.74	38.238		
6,300.00	6,282.58	6,229.58	6,282.58	28.04	215.75	56.28	-2,893.14	-8,962.95	9,162.78	8,919.12	243.67	37.604		
6,400.00	6,382.27	6,329.27	6,382.27	28.49	219.23	56.33	-2,893.14	-8,962.95	9,158.42	8,910.83	247.59	36.990		
6,500.00	6,481.96	6,428.96	6,481.96	28.94	222.71	56.37	-2,893.14	-8,962.95	9,154.06	8,902.54	251.52	36.395		
6,600.00	6,581.66	6,528.66	6,581.66	29.39	226.19	56.41	-2,893.14	-8,962.95	9,149.71	8,894.26	255.44	35.819		
6,700.00	6,681.21	6,628.21	6,681.21	29.83	229.67	17.85	-2,893.14	-8,962.95	9,142.86	8,883.50	259.36	35.251		
6,800.00	6,778.96	6,725.96	6,778.96	30.28	233.08	-0.09	-2,893.14	-8,962.95	9,122.38	8,859.18	263.21	34.658		
6,900.00	6,872.51	6,819.51	6,872.51	30.70	236.35	-6.38	-2,893.14	-8,962.95	9,087.41	8,820.53	266.88	34.051		
7,000.00	6,959.55	6,906.55	6,959.55	31.10	239.39	-10.40	-2,893.14	-8,962.95	9,038.79	8,768.50	270.28	33.442		
7,100.00	7,037.93	6,984.93	7,037.93	31.48	242.12	-14.16	-2,893.14	-8,962.95	8,977.74	8,704.40	273.34	32.845		
7,200.00	7,105.74	7,052.74	7,105.74	31.88	244.49	-18.69	-2,893.14	-8,962.95	8,905.78	8,629.81	275.97	32.271		
7,300.00	7,161.29	7,108.29	7,161.29	32.41	246.43	-25.12	-2,893.14	-8,962.95	8,824.69	8,546.58	278.11	31.731		
7,400.00	7,203.22	7,150.22	7,203.22	33.13	247.89	-35.41	-2,893.14	-8,962.95	8,736.49	8,456.77	279.72	31.233		
7,500.00	7,230.50	7,177.50	7,230.50	34.04	248.84	-53.21	-2,893.14	-8,962.95	8,643.38	8,362.60	280.77	30.784		
7,600.00	7,242.45	7,189.45	7,242.45	35.13	249.26	-81.53	-2,893.14	-8,962.95	8,547.66	8,266.40	281.26	30.390		
7,700.00	7,242.72	7,189.72	7,242.72	36.39	249.27	-90.79	-2,893.14	-8,962.95	8,451.48	8,170.14	281.34	30.040		
7,800.00	7,242.33	7,189.33	7,242.33	37.81	249.26	-90.78	-2,893.14	-8,962.95	8,355.40	8,073.98	281.41	29.691		
7,900.00	7,241.93	7,188.93	7,241.93	39.40	249.24	-90.77	-2,893.14	-8,962.95	8,259.40	7,977.89	281.51	29.339		
8,000.00	7,241.54	7,188.54	7,241.54	41.13	249.23	-90.76	-2,893.14	-8,962.95	8,163.51	7,881.87	281.64	28.986		
8,100.00	7,241.15	7,188.15	7,241.15	42.97	249.21	-90.75	-2,893.14	-8,962.95	8,067.71	7,785.92	281.80	28.630		
8,200.00	7,240.75	7,187.75	7,240.75	44.92	249.20	-90.74	-2,893.14	-8,962.95	7,972.02	7,690.04	281.98	28.271		
8,300.00	7,240.36	7,187.36	7,240.36	46.97	249.19	-90.73	-2,893.14	-8,962.95	7,876.43	7,594.23	282.20	27.911		
8,400.00	7,239.97	7,186.97	7,239.97	49.10	249.17	-90.72	-2,893.14	-8,962.95	7,780.96	7,498.51	282.45	27.548		
8,500.00	7,239.57	7,186.57	7,239.57	51.29	249.16	-90.71	-2,893.14	-8,962.95	7,685.60	7,402.86	282.74	27.182		
8,600.00	7,239.18	7,186.18	7,239.18	53.56	249.15	-90.70	-2,893.14	-8,962.95	7,590.36	7,307.30	283.06	26.815		
8,700.00	7,238.79	7,185.79	7,238.79	55.87	249.13	-90.69	-2,893.14	-8,962.95	7,495.24	7,211.82	283.43	26.445		
8,800.00	7,238.39	7,185.39	7,238.39	58.24	249.12	-90.68	-2,893.14	-8,962.95	7,400.26	7,116.43	283.83	26.073		
8,900.00	7,238.00	7,185.00	7,238.00	60.64	249.10	-90.67	-2,893.14	-8,962.95	7,305.40	7,021.14	284.27	25.699		
9,000.00	7,237.61	7,184.61	7,237.61	63.09	249.09	-90.66	-2,893.14	-8,962.95	7,210.69	6,925.94	284.75	25.323		
9,100.00	7,237.21	7,184.21	7,237.21	65.56	249.08	-90.65	-2,893.14	-8,962.95	7,116.12	6,830.84	285.28	24.945		
9,200.00	7,236.82	7,183.82	7,236.82	68.07	249.06	-90.64	-2,893.14	-8,962.95	7,021.70	6,735.85	285.85	24.564		
9,300.00	7,236.43	7,183.43	7,236.43	70.61	249.05	-90.63	-2,893.14	-8,962.95	6,927.44	6,640.97	286.47	24.182		
9,400.00	7,236.03	7,183.03	7,236.03	73.16	249.04	-90.62	-2,893.14	-8,962.95	6,833.34	6,546.20	287.13	23.798		
9,500.00	7,235.64	7,182.64	7,235.64	75.74	249.02	-90.61	-2,893.14	-8,962.95	6,739.41	6,451.56	287.85	23.413		
9,600.00	7,235.25	7,182.25	7,235.25	78.34	249.01	-90.60	-2,893.14	-8,962.95	6,645.65	6,357.04	288.62	23.026		
9,700.00	7,234.85	7,181.85	7,234.85	80.96	249.00	-90.59	-2,893.14	-8,962.95	6,552.09	6,262.65	289.44	22.637		
9,800.00	7,234.46	7,181.46	7,234.46	83.59	248.98	-90.58	-2,893.14	-8,962.95	6,458.71	6,168.40	290.31	22.247		
9,900.00	7,234.07	7,181.07	7,234.07	86.24	248.97	-90.57	-2,893.14	-8,962.95	6,365.54	6,074.29	291.24	21.857		
10,000.00	7,233.67	7,180.67	7,233.67	88.90	248.95	-90.56	-2,893.14	-8,962.95	6,272.57	5,980.34	292.23	21.465		
10,100.00	7,233.28	7,180.28	7,233.28	91.57	248.94	-90.55	-2,893.14	-8,962.95	6,179.83	5,886.55	293.27	21.072		
10,200.00	7,232.89	7,179.89	7,232.89	94.25	248.93	-90.54	-2,893.14	-8,962.95	6,087.31	5,792.93	294.38	20.678		
10,300.00	7,232.49	7,179.49	7,232.49	96.95	248.91	-90.53	-2,893.14	-8,962.95	5,995.04	5,699.49	295.55	20.285		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,179.10	7,232.10	99.65	248.90	-90.53	-2,893.14	-8,962.95	5,903.02	5,606.24	296.78	19.890		
10,500.00	7,231.71	7,178.71	7,231.71	102.36	248.89	-90.52	-2,893.14	-8,962.95	5,811.26	5,513.18	298.08	19.496		
10,600.00	7,231.32	7,178.32	7,231.32	105.08	248.87	-90.51	-2,893.14	-8,962.95	5,719.78	5,420.34	299.44	19.102		
10,700.00	7,230.92	7,177.92	7,230.92	107.80	248.86	-90.50	-2,893.14	-8,962.95	5,628.58	5,327.71	300.87	18.708		
10,800.00	7,230.53	7,177.53	7,230.53	110.53	248.84	-90.49	-2,893.14	-8,962.95	5,537.69	5,235.32	302.38	18.314		
10,900.00	7,230.14	7,177.14	7,230.14	113.27	248.83	-90.48	-2,893.14	-8,962.95	5,447.12	5,143.17	303.96	17.921		
11,000.00	7,229.74	7,176.74	7,229.74	116.02	248.82	-90.47	-2,893.14	-8,962.95	5,356.89	5,051.28	305.61	17.529		
11,100.00	7,229.35	7,176.35	7,229.35	118.77	248.80	-90.46	-2,893.14	-8,962.95	5,267.01	4,959.67	307.34	17.137		
11,200.00	7,228.96	7,175.96	7,228.96	121.52	248.79	-90.45	-2,893.14	-8,962.95	5,177.50	4,868.34	309.15	16.747		
11,300.00	7,228.56	7,175.56	7,228.56	124.28	248.78	-90.44	-2,893.14	-8,962.95	5,088.38	4,777.33	311.05	16.359		
11,400.00	7,228.17	7,175.17	7,228.17	127.04	248.76	-90.43	-2,893.14	-8,962.95	4,999.67	4,686.64	313.03	15.972		
11,500.00	7,227.78	7,174.78	7,227.78	129.81	248.75	-90.42	-2,893.14	-8,962.95	4,911.40	4,596.29	315.10	15.587		
11,600.00	7,227.38	7,174.38	7,227.38	132.58	248.73	-90.41	-2,893.14	-8,962.95	4,823.58	4,506.31	317.26	15.204		
11,700.00	7,226.99	7,173.99	7,226.99	135.36	248.72	-90.40	-2,893.14	-8,962.95	4,736.24	4,416.72	319.52	14.823		
11,800.00	7,226.60	7,173.60	7,226.60	138.14	248.71	-90.39	-2,893.14	-8,962.95	4,649.42	4,327.54	321.88	14.445		
11,900.00	7,226.20	7,173.20	7,226.20	140.92	248.69	-90.38	-2,893.14	-8,962.95	4,563.14	4,238.80	324.34	14.069		
12,000.00	7,225.81	7,172.81	7,225.81	143.70	248.68	-90.37	-2,893.14	-8,962.95	4,477.42	4,150.53	326.90	13.697		
12,100.00	7,225.42	7,172.42	7,225.42	146.49	248.67	-90.36	-2,893.14	-8,962.95	4,392.32	4,062.74	329.57	13.327		
12,200.00	7,225.02	7,172.02	7,225.02	149.28	248.65	-90.35	-2,893.14	-8,962.95	4,307.85	3,975.49	332.36	12.962		
12,300.00	7,224.63	7,171.63	7,224.63	152.08	248.64	-90.34	-2,893.14	-8,962.95	4,224.06	3,888.80	335.26	12.599		
12,400.00	7,224.24	7,171.24	7,224.24	154.87	248.62	-90.33	-2,893.14	-8,962.95	4,140.98	3,802.70	338.28	12.241		
12,500.00	7,223.84	7,170.84	7,223.84	157.67	248.61	-90.32	-2,893.14	-8,962.95	4,058.68	3,717.25	341.43	11.887		
12,600.00	7,223.45	7,170.45	7,223.45	160.47	248.60	-90.31	-2,893.14	-8,962.95	3,977.18	3,632.48	344.70	11.538		
12,700.00	7,223.06	7,170.06	7,223.06	163.27	248.58	-90.30	-2,893.14	-8,962.95	3,896.55	3,548.43	348.11	11.193		
12,800.00	7,222.66	7,169.66	7,222.66	166.07	248.57	-90.29	-2,893.14	-8,962.95	3,816.83	3,465.17	351.66	10.854		
12,900.00	7,222.27	7,169.27	7,222.27	168.88	248.56	-90.28	-2,893.14	-8,962.95	3,738.08	3,382.74	355.35	10.520		
13,000.00	7,221.88	7,168.88	7,221.88	171.69	248.54	-90.27	-2,893.14	-8,962.95	3,660.38	3,301.20	359.18	10.191		
13,100.00	7,221.48	7,168.48	7,221.48	174.49	248.53	-90.26	-2,893.14	-8,962.95	3,583.78	3,220.63	363.15	9.868		
13,200.00	7,221.09	7,168.09	7,221.09	177.30	248.51	-90.25	-2,893.14	-8,962.95	3,508.36	3,141.08	367.28	9.552		
13,300.00	7,220.70	7,167.70	7,220.70	180.12	248.50	-90.24	-2,893.14	-8,962.95	3,434.19	3,062.63	371.56	9.243		
13,400.00	7,220.30	7,167.30	7,220.30	182.93	248.49	-90.23	-2,893.14	-8,962.95	3,361.37	2,985.37	376.00	8.940		
13,500.00	7,219.91	7,166.91	7,219.91	185.74	248.47	-90.22	-2,893.14	-8,962.95	3,289.97	2,909.38	380.58	8.645		
13,600.00	7,219.52	7,166.52	7,219.52	188.56	248.46	-90.22	-2,893.14	-8,962.95	3,220.09	2,834.77	385.33	8.357		
13,700.00	7,219.12	7,166.12	7,219.12	191.38	248.45	-90.21	-2,893.14	-8,962.95	3,151.84	2,761.62	390.22	8.077		
13,800.00	7,218.73	7,165.73	7,218.73	194.20	248.43	-90.20	-2,893.14	-8,962.95	3,085.32	2,690.05	395.26	7.806		
13,900.00	7,218.34	7,165.34	7,218.34	197.02	248.42	-90.19	-2,893.14	-8,962.95	3,020.64	2,620.19	400.45	7.543		
14,000.00	7,217.94	7,164.94	7,217.94	199.84	248.40	-90.18	-2,893.14	-8,962.95	2,957.94	2,552.16	405.77	7.290		
14,100.00	7,217.55	7,164.55	7,217.55	202.66	248.39	-90.17	-2,893.14	-8,962.95	2,897.32	2,486.10	411.22	7.046		
14,200.00	7,217.16	7,164.16	7,217.16	205.48	248.38	-90.16	-2,893.14	-8,962.95	2,838.94	2,422.15	416.79	6.811		
14,300.00	7,216.76	7,163.76	7,216.76	208.30	248.36	-90.15	-2,893.14	-8,962.95	2,782.93	2,360.47	422.45	6.588		
14,400.00	7,216.37	7,163.37	7,216.37	211.13	248.35	-90.14	-2,893.14	-8,962.95	2,729.43	2,301.23	428.20	6.374		
14,500.00	7,215.98	7,162.98	7,215.98	213.96	248.34	-90.13	-2,893.14	-8,962.95	2,678.60	2,244.60	434.00	6.172		
14,600.00	7,215.58	7,162.58	7,215.58	216.78	248.32	-90.12	-2,893.14	-8,962.95	2,630.58	2,190.75	439.83	5.981		
14,700.00	7,215.19	7,162.19	7,215.19	219.61	248.31	-90.11	-2,893.14	-8,962.95	2,585.55	2,139.88	445.67	5.801		
14,800.00	7,214.80	7,161.80	7,214.80	222.44	248.29	-90.10	-2,893.14	-8,962.95	2,543.65	2,092.17	451.48	5.634		
14,900.00	7,214.40	7,161.40	7,214.40	225.27	248.28	-90.09	-2,893.14	-8,962.95	2,505.05	2,047.83	457.22	5.479		
15,000.00	7,214.01	7,161.01	7,214.01	228.10	248.27	-90.08	-2,893.14	-8,962.95	2,469.89	2,007.04	462.85	5.336		
15,002.44	7,214.00	7,161.00	7,214.00	228.16	248.27	-90.08	-2,893.14	-8,962.95	2,469.08	2,006.10	462.98	5.333 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 121-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.64	-2,859.98	-8,995.20	9,438.99					
100.00	100.00	28.72	64.72	3.28	3.28	-107.64	-2,860.04	-8,995.24	9,439.04	9,432.47	6.57	1,437.718		
200.00	200.00	73.59	109.59	3.34	3.28	-107.64	-2,860.38	-8,995.45	9,439.70	9,433.08	6.62	1,425.804		
300.00	300.00	121.00	156.99	3.44	3.29	-107.64	-2,861.07	-8,995.86	9,440.96	9,434.22	6.73	1,401.955		
400.00	400.00	163.77	199.75	3.60	3.31	-107.65	-2,861.81	-8,996.45	9,442.79	9,435.87	6.91	1,366.100		
500.00	500.00	208.00	243.97	3.81	3.34	-107.65	-2,862.52	-8,997.34	9,445.20	9,438.05	7.15	1,321.721		
600.00	599.98	208.00	243.97	4.03	3.34	54.15	-2,862.52	-8,997.34	9,447.41	9,440.04	7.38	1,280.697		
700.00	699.84	256.61	292.55	4.29	3.39	54.15	-2,863.12	-8,998.93	9,448.13	9,440.45	7.67	1,231.310		
800.00	799.54	300.00	335.88	4.57	3.44	54.17	-2,863.41	-9,001.13	9,448.39	9,440.38	8.01	1,180.128		
900.00	899.23	300.00	335.88	4.87	3.44	54.17	-2,863.41	-9,001.13	9,449.24	9,440.92	8.32	1,136.338		
1,000.00	998.92	300.00	335.88	5.20	3.44	54.17	-2,863.41	-9,001.13	9,451.14	9,442.49	8.65	1,093.066		
1,100.00	1,098.61	354.97	390.71	5.54	3.52	54.20	-2,863.33	-9,004.98	9,453.46	9,444.39	9.07	1,042.311		
1,200.00	1,198.30	391.00	426.60	5.90	3.59	54.22	-2,862.94	-9,008.14	9,456.79	9,447.30	9.49	996.669		
1,300.00	1,298.00	391.00	426.60	6.27	3.59	54.22	-2,862.94	-9,008.14	9,460.91	9,451.05	9.86	959.360		
1,400.00	1,397.69	431.18	466.56	6.66	3.67	54.24	-2,862.18	-9,012.26	9,465.75	9,455.43	10.32	917.571		
1,500.00	1,497.38	481.00	516.00	7.05	3.78	54.28	-2,860.72	-9,018.23	9,471.53	9,460.73	10.80	876.602		
1,600.00	1,597.07	481.00	516.00	7.44	3.78	54.28	-2,860.72	-9,018.23	9,477.87	9,466.66	11.20	846.173		
1,700.00	1,696.76	481.00	516.00	7.85	3.78	54.28	-2,860.72	-9,018.23	9,485.25	9,473.65	11.60	817.547		
1,800.00	1,796.45	537.61	572.02	8.25	3.93	54.33	-2,858.54	-9,026.06	9,493.07	9,480.94	12.14	782.251		
1,900.00	1,896.15	572.00	605.97	8.67	4.02	54.36	-2,857.02	-9,031.32	9,501.83	9,489.20	12.63	752.462		
2,000.00	1,995.84	572.00	605.97	9.08	4.02	54.36	-2,857.02	-9,031.32	9,511.40	9,498.36	13.04	729.515		
2,100.00	2,095.53	572.00	605.97	9.50	4.02	54.36	-2,857.02	-9,031.32	9,522.02	9,508.57	13.45	707.946		
2,200.00	2,195.22	633.20	666.21	9.92	4.23	54.42	-2,854.09	-9,041.73	9,532.80	9,518.77	14.03	679.366		
2,300.00	2,294.91	693.00	724.80	10.35	4.44	54.48	-2,851.03	-9,053.29	9,545.07	9,530.45	14.62	652.730		
2,400.00	2,394.60	693.00	724.80	10.77	4.44	54.48	-2,851.03	-9,053.29	9,557.55	9,542.51	15.04	635.586		
2,500.00	2,494.30	693.00	724.80	11.20	4.44	54.48	-2,851.03	-9,053.29	9,571.05	9,555.60	15.45	619.428		
2,600.00	2,593.99	725.61	756.64	11.63	4.57	54.52	-2,849.39	-9,060.10	9,585.37	9,569.40	15.97	600.188		
2,700.00	2,693.68	761.00	791.15	12.07	4.72	54.55	-2,847.80	-9,067.82	9,600.48	9,583.98	16.50	581.774		
2,800.00	2,793.37	761.00	791.15	12.50	4.72	54.55	-2,847.80	-9,067.82	9,616.36	9,599.44	16.91	568.552		
2,900.00	2,893.06	820.41	848.89	12.93	5.00	54.62	-2,844.76	-9,081.48	9,632.77	9,615.22	17.55	549.030		
3,000.00	2,992.76	855.00	882.38	13.37	5.16	54.66	-2,842.52	-9,089.83	9,649.88	9,631.80	18.08	533.783		
3,100.00	3,092.45	855.00	882.38	13.81	5.16	54.66	-2,842.52	-9,089.83	9,667.84	9,649.35	18.49	522.989		
3,200.00	3,192.14	902.87	928.55	14.25	5.42	54.72	-2,839.14	-9,101.99	9,686.30	9,667.22	19.08	507.639		
3,300.00	3,291.83	949.00	972.84	14.68	5.67	54.78	-2,835.77	-9,114.44	9,705.77	9,686.09	19.68	493.112		
3,400.00	3,391.52	949.00	972.84	15.12	5.67	54.78	-2,835.77	-9,114.44	9,725.78	9,705.70	20.08	484.251		
3,500.00	3,491.21	1,002.80	1,024.29	15.56	6.00	54.85	-2,831.41	-9,129.58	9,746.51	9,725.79	20.73	470.275		
3,600.00	3,590.91	1,044.00	1,063.55	16.00	6.25	54.91	-2,827.57	-9,141.46	9,767.72	9,746.40	21.31	458.261		
3,700.00	3,690.60	1,044.00	1,063.55	16.45	6.25	54.91	-2,827.57	-9,141.46	9,789.74	9,768.03	21.71	450.954		
3,800.00	3,790.29	1,099.52	1,116.22	16.89	6.63	54.99	-2,821.96	-9,158.09	9,812.13	9,789.75	22.38	438.502		
3,900.00	3,889.98	1,139.00	1,153.47	17.33	6.90	55.05	-2,817.82	-9,170.48	9,835.48	9,812.51	22.97	428.231		
4,000.00	3,989.67	1,139.00	1,153.47	17.77	6.90	55.05	-2,817.82	-9,170.48	9,859.48	9,836.13	23.35	422.181		
4,100.00	4,089.36	1,175.83	1,188.06	18.22	7.18	55.10	-2,813.74	-9,182.46	9,884.20	9,860.26	23.94	412.921		
4,200.00	4,189.06	1,201.98	1,212.50	18.66	7.37	55.15	-2,810.66	-9,191.22	9,909.63	9,885.17	24.46	405.102		
4,300.00	4,288.75	1,234.00	1,242.31	19.10	7.62	55.20	-2,806.67	-9,202.22	9,935.77	9,910.75	25.02	397.130		
4,400.00	4,388.44	1,234.00	1,242.31	19.55	7.62	55.20	-2,806.67	-9,202.22	9,962.66	9,937.27	25.39	392.351		
4,500.00	4,488.13	1,274.88	1,280.16	19.99	7.96	55.27	-2,801.34	-9,216.73	9,990.15	9,964.14	26.01	384.132		
8,000.00	7,241.54	3,887.00	3,653.90	41.13	35.07	-28.31	-2,488.58	-10,259.84	9,983.66	9,928.40	55.27	180.648		
8,100.00	7,241.15	3,887.00	3,653.90	42.97	35.07	-28.31	-2,488.58	-10,259.84	9,892.27	9,836.86	55.41	178.523		
8,200.00	7,240.75	3,927.60	3,691.02	44.92	35.50	-28.50	-2,483.66	-10,275.53	9,800.81	9,744.93	55.88	175.394		
8,300.00	7,240.36	3,940.91	3,703.17	46.97	35.64	-28.57	-2,482.07	-10,280.74	9,709.57	9,653.41	56.16	172.891		
8,400.00	7,239.97	3,982.00	3,740.58	49.10	36.07	-28.76	-2,477.21	-10,297.00	9,618.57	9,561.91	56.67	169.744		
8,500.00	7,239.57	7,311.39	6,932.15	51.29	57.64	-81.00	-2,288.55	-11,006.25	9,522.40	9,449.87	72.53	131.296		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
8,600.00	7,239.18	7,312.46	6,933.22	53.56	57.65	-81.03	-2,288.58	-11,006.28	9,424.07	9,351.38	72.69	129.647		
8,700.00	7,238.79	7,313.54	6,934.30	55.87	57.65	-81.07	-2,288.61	-11,006.31	9,325.79	9,252.92	72.87	127.981		
8,800.00	7,238.39	7,314.63	6,935.40	58.24	57.65	-81.10	-2,288.64	-11,006.34	9,227.54	9,154.48	73.06	126.297		
8,900.00	7,238.00	7,315.74	6,936.50	60.64	57.65	-81.14	-2,288.67	-11,006.37	9,129.33	9,056.06	73.27	124.595		
9,000.00	7,237.61	7,316.86	6,937.62	63.09	57.66	-81.18	-2,288.70	-11,006.40	9,031.16	8,957.66	73.50	122.876		
9,100.00	7,237.21	7,317.98	6,938.74	65.56	57.66	-81.21	-2,288.73	-11,006.43	8,933.03	8,859.28	73.74	121.138		
9,200.00	7,236.82	7,319.12	6,939.88	68.07	57.66	-81.25	-2,288.76	-11,006.46	8,834.94	8,760.93	74.00	119.384		
9,300.00	7,236.43	7,320.28	6,941.03	70.61	57.67	-81.29	-2,288.80	-11,006.50	8,736.89	8,662.60	74.29	117.613		
9,400.00	7,236.03	7,321.44	6,942.20	73.16	57.67	-81.33	-2,288.83	-11,006.53	8,638.89	8,564.30	74.59	115.825		
9,500.00	7,235.64	7,322.62	6,943.37	75.74	57.67	-81.36	-2,288.86	-11,006.56	8,540.93	8,466.02	74.91	114.021		
9,600.00	7,235.25	7,323.80	6,944.56	78.34	57.67	-81.40	-2,288.90	-11,006.60	8,443.02	8,367.77	75.25	112.201		
9,700.00	7,234.85	7,325.01	6,945.76	80.96	57.68	-81.44	-2,288.93	-11,006.63	8,345.16	8,269.55	75.61	110.366		
9,800.00	7,234.46	7,326.22	6,946.97	83.59	57.68	-81.48	-2,288.97	-11,006.67	8,247.35	8,171.35	76.00	108.517		
9,900.00	7,234.07	7,327.45	6,948.20	86.24	57.68	-81.52	-2,289.00	-11,006.71	8,149.60	8,073.19	76.41	106.654		
10,000.00	7,233.67	7,328.69	6,949.44	88.90	57.69	-81.56	-2,289.04	-11,006.74	8,051.90	7,975.05	76.85	104.778		
10,100.00	7,233.28	7,329.94	6,950.69	91.57	57.69	-81.61	-2,289.08	-11,006.78	7,954.25	7,876.94	77.31	102.890		
10,200.00	7,232.89	7,331.21	6,951.96	94.25	57.69	-81.65	-2,289.11	-11,006.82	7,856.67	7,778.87	77.80	100.991		
10,300.00	7,232.49	7,332.49	6,953.24	96.95	57.70	-81.69	-2,289.15	-11,006.86	7,759.14	7,680.83	78.31	99.081		
10,400.00	7,232.10	7,333.79	6,954.54	99.65	57.70	-81.73	-2,289.19	-11,006.89	7,661.68	7,582.82	78.85	97.162		
10,500.00	7,231.71	7,335.10	6,955.85	102.36	57.70	-81.78	-2,289.23	-11,006.93	7,564.28	7,484.86	79.43	95.234		
10,600.00	7,231.32	7,336.43	6,957.17	105.08	57.70	-81.82	-2,289.27	-11,006.97	7,466.96	7,386.93	80.03	93.300		
10,700.00	7,230.92	7,337.77	6,958.51	107.80	57.71	-81.86	-2,289.31	-11,007.02	7,369.70	7,289.03	80.67	91.359		
10,800.00	7,230.53	7,339.13	6,959.87	110.53	57.71	-81.91	-2,289.35	-11,007.06	7,272.52	7,191.18	81.34	89.413		
10,900.00	7,230.14	7,340.50	6,961.24	113.27	57.71	-81.95	-2,289.39	-11,007.10	7,175.41	7,093.38	82.04	87.464		
11,000.00	7,229.74	7,341.88	6,962.62	116.02	57.72	-82.00	-2,289.44	-11,007.14	7,078.39	6,995.61	82.78	85.512		
11,100.00	7,229.35	7,343.29	6,964.03	118.77	57.72	-82.05	-2,289.48	-11,007.19	6,981.45	6,897.90	83.55	83.559		
11,200.00	7,228.96	7,344.71	6,965.44	121.52	57.72	-82.09	-2,289.52	-11,007.23	6,884.59	6,800.23	84.36	81.606		
11,300.00	7,228.56	7,346.14	6,966.88	124.28	57.73	-82.14	-2,289.57	-11,007.28	6,787.83	6,702.61	85.22	79.655		
11,400.00	7,228.17	7,347.60	6,968.33	127.04	57.73	-82.19	-2,289.61	-11,007.32	6,691.16	6,605.05	86.11	77.707		
11,500.00	7,227.78	7,349.07	6,969.80	129.81	57.74	-82.24	-2,289.66	-11,007.37	6,594.59	6,507.55	87.04	75.763		
11,600.00	7,227.38	7,350.56	6,971.29	132.58	57.74	-82.29	-2,289.71	-11,007.42	6,498.12	6,410.10	88.02	73.824		
11,700.00	7,226.99	7,386.00	7,006.69	135.36	57.82	-83.46	-2,290.90	-11,008.62	6,401.93	6,312.83	89.09	71.855		
11,800.00	7,226.60	7,386.00	7,006.69	138.14	57.82	-83.46	-2,290.90	-11,008.62	6,305.67	6,215.50	90.16	69.936		
11,900.00	7,226.20	7,386.00	7,006.69	140.92	57.82	-83.46	-2,290.90	-11,008.62	6,209.53	6,118.24	91.28	68.026		
12,000.00	7,225.81	7,386.00	7,006.69	143.70	57.82	-83.46	-2,290.90	-11,008.62	6,113.51	6,021.06	92.45	66.127		
12,100.00	7,225.42	7,386.00	7,006.69	146.49	57.82	-83.46	-2,290.90	-11,008.62	6,017.62	5,923.94	93.67	64.241		
12,200.00	7,225.02	7,386.00	7,006.69	149.28	57.82	-83.46	-2,290.90	-11,008.62	5,921.86	5,826.91	94.95	62.368		
12,300.00	7,224.63	7,386.00	7,006.69	152.08	57.82	-83.46	-2,290.90	-11,008.62	5,826.25	5,729.97	96.28	60.511		
12,400.00	7,224.24	7,386.00	7,006.69	154.87	57.82	-83.46	-2,290.90	-11,008.62	5,730.79	5,633.11	97.68	58.670		
12,500.00	7,223.84	7,386.00	7,006.69	157.67	57.82	-83.46	-2,290.90	-11,008.62	5,635.49	5,536.35	99.14	56.846		
12,600.00	7,223.45	7,386.00	7,006.69	160.47	57.82	-83.46	-2,290.90	-11,008.62	5,540.35	5,439.70	100.66	55.042		
12,700.00	7,223.06	7,386.00	7,006.69	163.27	57.82	-83.46	-2,290.90	-11,008.62	5,445.39	5,343.14	102.25	53.258		
12,800.00	7,222.66	7,386.00	7,006.69	166.07	57.82	-83.46	-2,290.90	-11,008.62	5,350.61	5,246.70	103.91	51.495		
12,900.00	7,222.27	7,386.00	7,006.69	168.88	57.82	-83.46	-2,290.90	-11,008.62	5,256.02	5,150.38	105.64	49.755		
13,000.00	7,221.88	7,386.00	7,006.69	171.69	57.82	-83.46	-2,290.90	-11,008.62	5,161.64	5,054.19	107.45	48.038		
13,100.00	7,221.48	7,386.00	7,006.69	174.49	57.82	-83.46	-2,290.90	-11,008.62	5,067.47	4,958.13	109.34	46.346		
13,200.00	7,221.09	7,386.00	7,006.69	177.30	57.82	-83.46	-2,290.90	-11,008.62	4,973.53	4,862.22	111.32	44.680		
13,300.00	7,220.70	7,386.00	7,006.69	180.12	57.82	-83.46	-2,290.90	-11,008.62	4,879.84	4,766.46	113.38	43.040		
13,400.00	7,220.30	7,386.00	7,006.69	182.93	57.82	-83.46	-2,290.90	-11,008.62	4,786.39	4,670.86	115.54	41.428		
13,500.00	7,219.91	7,386.00	7,006.69	185.74	57.82	-83.46	-2,290.90	-11,008.62	4,693.22	4,575.43	117.79	39.844		
13,600.00	7,219.52	7,386.00	7,006.69	188.56	57.82	-83.46	-2,290.90	-11,008.62	4,600.33	4,480.19	120.14	38.290		
13,700.00	7,219.12	7,386.00	7,006.69	191.38	57.82	-83.46	-2,290.90	-11,008.62	4,507.75	4,385.14	122.61	36.766		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
13,800.00	7,218.73	7,386.00	7,006.69	194.20	57.82	-83.46	-2,290.90	-11,008.62	4,415.49	4,290.31	125.18	35.273	
13,900.00	7,218.34	7,386.00	7,006.69	197.02	57.82	-83.46	-2,290.90	-11,008.62	4,323.58	4,195.70	127.88	33.811	
14,000.00	7,217.94	7,394.15	7,014.83	199.84	57.85	-83.73	-2,291.19	-11,008.92	4,232.02	4,101.31	130.71	32.377	
14,100.00	7,217.55	7,396.72	7,017.39	202.66	57.85	-83.82	-2,291.28	-11,009.01	4,140.86	4,007.19	133.66	30.980	
14,200.00	7,217.16	7,399.32	7,020.00	205.48	57.86	-83.90	-2,291.37	-11,009.11	4,050.11	3,913.35	136.76	29.616	
14,300.00	7,216.76	7,401.96	7,022.63	208.30	57.87	-83.99	-2,291.47	-11,009.20	3,959.80	3,819.81	139.99	28.286	
14,400.00	7,216.37	7,404.64	7,025.30	211.13	57.87	-84.08	-2,291.56	-11,009.30	3,869.97	3,726.59	143.38	26.990	
14,500.00	7,215.98	7,407.34	7,028.01	213.96	57.88	-84.17	-2,291.66	-11,009.41	3,780.65	3,633.71	146.94	25.730	
14,600.00	7,215.58	7,410.09	7,030.74	216.78	57.89	-84.26	-2,291.75	-11,009.51	3,691.87	3,541.21	150.66	24.504	
14,700.00	7,215.19	7,412.86	7,033.52	219.61	57.90	-84.35	-2,291.85	-11,009.62	3,603.68	3,449.11	154.56	23.315	
14,800.00	7,214.80	7,415.68	7,036.33	222.44	57.90	-84.45	-2,291.95	-11,009.72	3,516.12	3,357.46	158.66	22.162	
14,900.00	7,214.40	7,418.53	7,039.18	225.27	57.91	-84.54	-2,292.05	-11,009.83	3,429.23	3,266.28	162.95	21.045	
15,000.00	7,214.01	7,421.42	7,042.07	228.10	57.92	-84.64	-2,292.15	-11,009.95	3,343.07	3,175.63	167.45	19.965	
15,002.44	7,214.00	7,421.49	7,042.14	228.16	57.92	-84.64	-2,292.15	-11,009.95	3,340.98	3,173.43	167.56	19.939	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.65	-2,850.89	-8,962.65	9,405.21					
100.00	100.00	0.00	36.00	3.28	3.28	-107.65	-2,850.89	-8,962.65	9,405.36	9,398.80	6.56	1,432.676		
200.00	200.00	57.06	93.05	3.34	3.28	-107.65	-2,851.25	-8,962.88	9,406.08	9,399.46	6.62	1,420.925		
300.00	300.00	577.00	612.23	3.44	3.96	-107.56	-2,836.68	-8,961.75	9,405.17	9,397.75	7.42	1,268.312		
400.00	400.00	577.00	612.23	3.60	3.96	-107.56	-2,836.68	-8,961.75	9,402.38	9,394.81	7.57	1,242.568		
500.00	500.00	635.36	670.12	3.81	4.11	-107.52	-2,829.36	-8,962.59	9,400.12	9,392.20	7.93	1,186.086		
600.00	599.98	675.24	709.61	4.03	4.23	54.39	-2,823.86	-8,963.74	9,397.65	9,389.38	8.27	1,136.740		
700.00	699.84	700.00	861.30	4.29	4.30	54.66	-2,799.50	-8,969.01	9,393.09	9,384.50	8.59	1,093.279		
800.00	799.54	983.29	1,012.78	4.57	5.39	54.92	-2,770.66	-8,974.49	9,386.37	9,376.41	9.96	942.565		
900.00	899.23	1,080.47	1,107.41	4.87	5.85	55.09	-2,748.99	-8,978.92	9,379.64	9,368.92	10.72	874.896		
1,000.00	998.92	1,167.37	1,191.41	5.20	6.30	55.26	-2,727.23	-8,983.56	9,372.95	9,361.45	11.50	815.154		
1,100.00	1,098.61	1,234.08	1,255.47	5.54	6.68	55.40	-2,709.08	-8,987.75	9,366.62	9,354.41	12.21	766.903		
1,200.00	1,198.30	1,324.59	1,341.65	5.90	7.23	55.60	-2,682.22	-8,994.26	9,360.56	9,347.44	13.12	713.391		
1,300.00	1,298.00	1,403.46	1,415.99	6.27	7.75	55.79	-2,656.70	-9,000.62	9,354.73	9,340.72	14.02	667.444		
1,400.00	1,397.69	1,444.75	1,454.65	6.66	8.04	55.90	-2,642.66	-9,004.27	9,349.35	9,334.67	14.68	636.701		
1,500.00	1,497.38	1,478.16	1,485.84	7.05	8.28	55.98	-2,631.12	-9,007.49	9,344.70	9,329.39	15.31	610.300		
1,600.00	1,597.07	1,512.00	1,517.35	7.44	8.53	56.07	-2,619.29	-9,011.02	9,340.80	9,324.85	15.95	585.596		
1,700.00	1,696.76	1,576.61	1,577.30	7.85	9.02	56.24	-2,596.27	-9,018.17	9,337.49	9,320.65	16.84	554.377		
1,800.00	1,796.45	1,632.92	1,629.32	8.25	9.46	56.39	-2,575.73	-9,024.69	9,334.65	9,316.96	17.69	527.692		
1,900.00	1,896.15	1,680.99	1,673.52	8.67	9.85	56.53	-2,557.79	-9,030.58	9,332.40	9,313.91	18.49	504.827		
2,000.00	1,995.84	1,728.48	1,716.99	9.08	10.24	56.66	-2,539.67	-9,036.72	9,330.76	9,311.46	19.29	483.605		
2,100.00	2,095.53	1,775.39	1,759.71	9.50	10.64	56.80	-2,521.37	-9,043.10	9,329.74	9,309.64	20.11	463.954		
2,200.00	2,195.22	1,916.59	1,887.31	9.92	11.90	57.22	-2,464.22	-9,062.82	9,329.00	9,307.21	21.79	428.143		
2,300.00	2,294.91	1,989.00	1,952.35	10.35	12.57	57.44	-2,434.03	-9,072.91	9,328.22	9,305.34	22.88	407.715		
2,391.06	2,385.69	2,034.71	1,993.32	10.74	13.00	57.58	-2,414.83	-9,079.43	9,327.95	9,304.25	23.69	393.679		
2,400.00	2,394.60	2,038.75	1,996.94	10.77	13.04	57.59	-2,413.14	-9,080.02	9,327.95	9,304.18	23.77	392.422		
2,500.00	2,494.30	2,085.00	2,038.37	11.20	13.47	57.74	-2,393.76	-9,086.84	9,328.33	9,303.70	24.63	378.739		
2,600.00	2,593.99	2,210.69	2,150.83	11.63	14.69	58.12	-2,340.74	-9,105.31	9,328.85	9,302.58	26.27	355.142		
2,700.00	2,693.68	2,274.00	2,207.37	12.07	15.30	58.32	-2,313.85	-9,114.68	9,329.71	9,302.40	27.31	341.624		
2,800.00	2,793.37	2,324.03	2,252.04	12.50	15.80	58.48	-2,292.64	-9,122.23	9,331.12	9,302.90	28.23	330.597		
2,900.00	2,893.06	2,369.00	2,292.24	12.93	16.24	58.62	-2,273.69	-9,129.15	9,333.12	9,304.03	29.09	320.828		
3,000.00	2,992.76	2,412.76	2,331.38	13.37	16.67	58.75	-2,255.37	-9,136.07	9,335.79	9,305.84	29.94	311.772		
3,100.00	3,092.45	2,464.00	2,377.22	13.81	17.18	58.91	-2,234.09	-9,144.46	9,339.19	9,308.32	30.87	302.515		
3,200.00	3,192.14	2,528.24	2,434.73	14.25	17.82	59.11	-2,207.53	-9,155.16	9,343.15	9,311.22	31.93	292.620		
3,300.00	3,291.83	2,600.06	2,499.09	14.68	18.53	59.32	-2,177.98	-9,167.09	9,347.41	9,314.35	33.06	282.739		
3,400.00	3,391.52	3,400.00	2,597.41	15.12	26.52	59.66	-2,133.39	-9,185.27	9,351.99	9,310.61	41.38	225.991		
3,500.00	3,491.21	2,890.35	2,758.38	15.56	21.46	60.22	-2,056.28	-9,214.12	9,355.74	9,318.90	36.84	253.961		
3,600.00	3,590.91	2,947.51	2,808.91	16.00	22.06	60.40	-2,031.21	-9,223.32	9,359.98	9,322.12	37.85	247.274		
3,700.00	3,690.60	3,162.47	3,001.25	16.45	24.25	61.06	-1,941.13	-9,256.39	9,364.35	9,323.89	40.46	231.457		
3,800.00	3,790.29	3,221.00	3,053.39	16.89	24.85	61.25	-1,915.98	-9,265.04	9,368.15	9,326.67	41.48	225.872		
3,900.00	3,889.98	3,273.59	3,100.26	17.33	25.39	61.41	-1,893.47	-9,272.98	9,372.51	9,330.09	42.43	220.897		
4,000.00	3,989.67	3,375.30	3,191.48	17.77	26.42	61.72	-1,851.27	-9,288.54	9,377.50	9,333.62	43.88	213.730		
4,100.00	4,089.36	3,454.62	3,262.84	18.22	27.22	61.96	-1,818.70	-9,300.28	9,382.34	9,337.26	45.08	208.112		
4,200.00	4,189.06	3,503.00	3,306.45	18.66	27.70	62.10	-1,799.07	-9,307.61	9,387.79	9,341.81	45.98	204.184		
4,300.00	4,288.75	3,570.98	3,367.68	19.10	28.38	62.30	-1,771.47	-9,318.12	9,393.75	9,346.69	47.07	199.583		
4,400.00	4,388.44	3,699.07	3,482.86	19.55	29.67	62.69	-1,719.05	-9,337.94	9,399.98	9,351.22	48.76	192.761		
4,500.00	4,488.13	3,778.12	3,554.15	19.99	30.46	62.92	-1,687.07	-9,349.95	9,406.22	9,356.27	49.96	188.278		
4,600.00	4,587.82	4,600.00	3,647.07	20.44	38.72	63.23	-1,645.21	-9,365.49	9,412.59	9,354.11	58.48	160.966		
4,700.00	4,687.51	3,926.52	3,687.60	20.89	31.97	63.37	-1,626.19	-9,372.43	9,419.36	9,367.09	52.27	180.208		
4,800.00	4,787.21	3,976.00	3,731.52	21.33	32.49	63.52	-1,604.83	-9,380.37	9,426.86	9,373.68	53.18	177.256		
4,900.00	4,886.90	4,002.71	3,755.08	21.78	32.78	63.61	-1,593.05	-9,384.82	9,435.04	9,381.17	53.87	175.155		
5,000.00	4,986.59	4,041.21	3,788.85	22.22	33.20	63.73	-1,575.79	-9,391.40	9,443.94	9,389.26	54.68	172.724		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (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	5,086.28	4,071.00	3,814.84	22.67	33.53	63.83	-1,562.21	-9,396.64	9,453.55	9,398.17	55.39	170.684		
5,200.00	5,185.97	4,133.56	3,869.05	23.12	34.24	64.03	-1,533.10	-9,407.91	9,463.78	9,407.30	56.48	167.560		
5,300.00	5,285.66	4,165.00	3,896.12	23.56	34.60	64.14	-1,518.19	-9,413.69	9,474.64	9,417.43	57.21	165.603		
5,400.00	5,385.36	4,215.94	3,939.83	24.01	35.20	64.31	-1,493.85	-9,423.28	9,486.16	9,427.98	58.18	163.053		
5,500.00	5,485.05	4,611.95	4,288.63	24.46	39.49	65.56	-1,320.43	-9,493.30	9,498.03	9,435.18	62.85	151.116		
5,600.00	5,584.74	4,751.80	4,416.26	24.90	40.84	65.95	-1,267.40	-9,514.62	9,507.30	9,442.72	64.58	147.209		
5,700.00	5,684.43	5,942.89	5,560.57	25.35	48.94	68.27	-971.83	-9,615.74	9,510.58	9,437.59	73.00	130.291		
5,800.00	5,784.12	6,036.72	5,654.08	25.80	49.27	68.36	-964.26	-9,617.50	9,509.06	9,435.29	73.76	128.912		
5,900.00	5,883.81	6,172.16	5,789.26	26.25	49.71	68.47	-956.15	-9,619.62	9,507.38	9,432.75	74.63	127.396		
6,000.00	5,983.51	6,280.85	5,897.82	26.70	50.03	68.54	-951.08	-9,621.05	9,505.55	9,430.16	75.39	126.091		
6,100.00	6,083.20	6,411.93	6,028.79	27.14	50.40	68.63	-945.96	-9,622.14	9,503.25	9,427.05	76.19	124.726		
6,200.00	6,182.89	6,491.41	6,108.23	27.59	50.62	68.68	-943.45	-9,622.81	9,501.05	9,424.20	76.85	123.625		
6,300.00	6,282.58	6,566.69	6,183.48	28.04	50.82	68.73	-941.51	-9,623.60	9,499.11	9,421.61	77.50	122.570		
6,400.00	6,382.27	6,645.48	6,262.24	28.49	51.03	68.77	-939.93	-9,624.61	9,497.43	9,419.28	78.15	121.524		
6,500.00	6,481.96	6,746.60	6,363.34	28.94	51.28	68.83	-938.41	-9,625.97	9,495.85	9,417.00	78.85	120.431		
6,600.00	6,581.66	6,846.77	6,463.50	29.39	51.53	68.88	-937.38	-9,627.27	9,494.25	9,414.71	79.54	119.363		
6,700.00	6,681.21	6,944.01	6,560.73	29.83	51.77	30.43	-936.67	-9,628.53	9,490.09	9,409.87	80.22	118.300		
6,800.00	6,778.96	7,040.42	6,657.13	30.28	52.01	12.95	-936.16	-9,629.79	9,471.81	9,390.92	80.89	117.097		
6,900.00	6,872.51	7,134.37	6,751.07	30.70	52.24	7.50	-935.71	-9,631.02	9,438.41	9,356.88	81.53	115.768		
7,000.00	6,959.55	7,222.01	6,838.70	31.10	52.45	4.82	-935.29	-9,632.17	9,390.71	9,308.59	82.12	114.354		
7,100.00	7,037.93	7,301.16	6,917.85	31.48	52.65	3.10	-934.91	-9,633.21	9,329.89	9,247.24	82.64	112.891		
7,200.00	7,105.74	7,369.89	6,986.57	31.88	52.82	1.70	-934.58	-9,634.11	9,257.43	9,174.35	83.09	111.417		
7,300.00	7,161.29	7,440.29	7,056.96	32.41	53.00	0.21	-934.25	-9,635.00	9,175.10	9,091.63	83.47	109.918		
7,400.00	7,203.22	7,498.83	7,115.50	33.13	53.15	-2.00	-933.98	-9,635.63	9,084.88	9,001.12	83.76	108.461		
7,500.00	7,230.50	7,537.12	7,153.79	34.04	53.25	-7.03	-933.81	-9,635.98	8,989.05	8,905.11	83.94	107.086		
7,600.00	7,242.45	7,554.45	7,171.12	35.13	53.29	-37.09	-933.73	-9,636.13	8,890.02	8,806.00	84.02	105.806		
7,700.00	7,242.72	7,555.92	7,172.59	36.39	53.30	-84.41	-933.72	-9,636.14	8,790.12	8,706.08	84.04	104.601		
7,800.00	7,242.33	7,556.49	7,173.15	37.81	53.30	-84.50	-933.72	-9,636.15	8,690.20	8,606.16	84.05	103.399		
7,900.00	7,241.93	7,557.05	7,173.72	39.40	53.30	-84.59	-933.72	-9,636.15	8,590.29	8,506.24	84.06	102.195		
8,000.00	7,241.54	7,557.61	7,174.28	41.13	53.30	-84.67	-933.72	-9,636.16	8,490.39	8,406.31	84.07	100.990		
8,100.00	7,241.15	7,558.17	7,174.83	42.97	53.30	-84.76	-933.71	-9,636.16	8,390.48	8,306.39	84.09	99.784		
8,200.00	7,240.75	7,558.72	7,175.38	44.92	53.30	-84.85	-933.71	-9,636.16	8,290.58	8,206.47	84.10	98.575		
8,300.00	7,240.36	7,559.26	7,175.93	46.97	53.30	-84.93	-933.71	-9,636.17	8,190.67	8,106.55	84.12	97.366		
8,400.00	7,239.97	7,559.81	7,176.47	49.10	53.31	-85.02	-933.71	-9,636.17	8,090.77	8,006.63	84.14	96.155		
8,500.00	7,239.57	7,560.35	7,177.01	51.29	53.31	-85.10	-933.71	-9,636.18	7,990.88	7,906.71	84.17	94.942		
8,600.00	7,239.18	7,560.88	7,177.55	53.56	53.31	-85.18	-933.70	-9,636.18	7,890.98	7,806.79	84.19	93.728		
8,700.00	7,238.79	7,561.41	7,178.08	55.87	53.31	-85.27	-933.70	-9,636.19	7,791.09	7,706.87	84.22	92.512		
8,800.00	7,238.39	7,561.94	7,178.60	58.24	53.31	-85.35	-933.70	-9,636.19	7,691.20	7,606.96	84.25	91.295		
8,900.00	7,238.00	7,562.46	7,179.12	60.64	53.31	-85.43	-933.70	-9,636.19	7,591.32	7,507.04	84.28	90.077		
9,000.00	7,237.61	7,562.98	7,179.64	63.09	53.31	-85.51	-933.69	-9,636.20	7,491.43	7,407.12	84.31	88.857		
9,100.00	7,237.21	7,563.49	7,180.16	65.56	53.31	-85.59	-933.69	-9,636.20	7,391.55	7,307.21	84.34	87.636		
9,200.00	7,236.82	7,564.00	7,180.67	68.07	53.32	-85.67	-933.69	-9,636.21	7,291.68	7,207.30	84.38	86.414		
9,300.00	7,236.43	7,564.51	7,181.17	70.61	53.32	-85.75	-933.69	-9,636.21	7,191.80	7,107.38	84.42	85.191		
9,400.00	7,236.03	7,565.01	7,181.68	73.16	53.32	-85.83	-933.68	-9,636.21	7,091.93	7,007.47	84.46	83.966		
9,500.00	7,235.64	7,565.51	7,182.18	75.74	53.32	-85.91	-933.68	-9,636.22	6,992.07	6,907.56	84.51	82.740		
9,600.00	7,235.25	7,566.00	7,182.67	78.34	53.32	-85.99	-933.68	-9,636.22	6,892.21	6,807.65	84.55	81.512		
9,700.00	7,234.85	7,566.50	7,183.16	80.96	53.32	-86.06	-933.68	-9,636.23	6,792.35	6,707.74	84.60	80.284		
9,800.00	7,234.46	7,566.98	7,183.65	83.59	53.32	-86.14	-933.68	-9,636.23	6,692.49	6,607.84	84.66	79.054		
9,900.00	7,234.07	7,567.47	7,184.14	86.24	53.32	-86.22	-933.67	-9,636.23	6,592.64	6,507.93	84.71	77.823		
10,000.00	7,233.67	7,567.95	7,184.62	88.90	53.33	-86.29	-933.67	-9,636.24	6,492.80	6,408.03	84.77	76.590		
10,100.00	7,233.28	7,568.43	7,185.09	91.57	53.33	-86.37	-933.67	-9,636.24	6,392.96	6,308.12	84.84	75.357		
10,200.00	7,232.89	7,568.90	7,185.57	94.25	53.33	-86.44	-933.67	-9,636.25	6,293.12	6,208.22	84.90	74.122		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,569.37	7,186.04	96.95	53.33	-86.51	-933.67	-9,636.25	6,193.29	6,108.32	84.97	72.886		
10,400.00	7,232.10	7,569.84	7,186.51	99.65	53.33	-86.59	-933.66	-9,636.25	6,093.47	6,008.42	85.05	71.649		
10,500.00	7,231.71	7,570.30	7,186.97	102.36	53.33	-86.66	-933.66	-9,636.26	5,993.65	5,908.53	85.12	70.410		
10,600.00	7,231.32	7,570.77	7,187.43	105.08	53.33	-86.73	-933.66	-9,636.26	5,893.84	5,808.63	85.21	69.171		
10,700.00	7,230.92	7,571.22	7,187.89	107.80	53.33	-86.81	-933.66	-9,636.26	5,794.03	5,708.74	85.29	67.930		
10,800.00	7,230.53	7,571.68	7,188.34	110.53	53.34	-86.88	-933.66	-9,636.27	5,694.24	5,608.85	85.39	66.687		
10,900.00	7,230.14	7,572.13	7,188.79	113.27	53.34	-86.95	-933.65	-9,636.27	5,594.44	5,508.96	85.48	65.444		
11,000.00	7,229.74	7,572.58	7,189.24	116.02	53.34	-87.02	-933.65	-9,636.27	5,494.66	5,409.07	85.59	64.199		
11,100.00	7,229.35	7,573.02	7,189.69	118.77	53.34	-87.09	-933.65	-9,636.28	5,394.88	5,309.19	85.70	62.953		
11,200.00	7,228.96	7,573.46	7,190.13	121.52	53.34	-87.16	-933.65	-9,636.28	5,295.12	5,209.30	85.81	61.705		
11,300.00	7,228.56	7,573.90	7,190.57	124.28	53.34	-87.23	-933.65	-9,636.28	5,195.36	5,109.42	85.94	60.456		
11,400.00	7,228.17	7,574.34	7,191.00	127.04	53.34	-87.29	-933.64	-9,636.29	5,095.61	5,009.54	86.07	59.206		
11,500.00	7,227.78	7,574.77	7,191.44	129.81	53.34	-87.36	-933.64	-9,636.29	4,995.87	4,909.66	86.20	57.954		
11,600.00	7,227.38	7,575.20	7,191.87	132.58	53.34	-87.43	-933.64	-9,636.29	4,896.14	4,809.79	86.35	56.701		
11,700.00	7,226.99	7,575.63	7,192.29	135.36	53.35	-87.50	-933.64	-9,636.30	4,796.42	4,709.91	86.51	55.446		
11,800.00	7,226.60	7,576.05	7,192.72	138.14	53.35	-87.56	-933.64	-9,636.30	4,696.71	4,610.04	86.67	54.189		
11,900.00	7,226.20	7,576.47	7,193.14	140.92	53.35	-87.63	-933.63	-9,636.30	4,597.02	4,510.17	86.85	52.931		
12,000.00	7,225.81	7,576.89	7,193.56	143.70	53.35	-87.70	-933.63	-9,636.31	4,497.34	4,410.30	87.04	51.671		
12,100.00	7,225.42	7,577.31	7,193.97	146.49	53.35	-87.76	-933.63	-9,636.31	4,397.68	4,310.44	87.24	50.409		
12,200.00	7,225.02	7,577.72	7,194.38	149.28	53.35	-87.83	-933.63	-9,636.31	4,298.03	4,210.57	87.46	49.145		
12,300.00	7,224.63	7,578.13	7,194.79	152.08	53.35	-87.89	-933.63	-9,636.32	4,198.40	4,110.71	87.69	47.880		
12,400.00	7,224.24	7,578.53	7,195.20	154.87	53.35	-87.96	-933.63	-9,636.32	4,098.78	4,010.85	87.93	46.612		
12,500.00	7,223.84	7,578.94	7,195.60	157.67	53.35	-88.02	-933.62	-9,636.32	3,999.18	3,910.98	88.20	45.342		
12,600.00	7,223.45	7,579.34	7,196.01	160.47	53.35	-88.08	-933.62	-9,636.33	3,899.61	3,811.12	88.49	44.070		
12,700.00	7,223.06	7,579.74	7,196.40	163.27	53.36	-88.14	-933.62	-9,636.33	3,800.06	3,711.26	88.79	42.796		
12,800.00	7,222.66	7,580.14	7,196.80	166.07	53.36	-88.21	-933.62	-9,636.33	3,700.53	3,611.40	89.13	41.520		
12,900.00	7,222.27	7,580.53	7,197.19	168.88	53.36	-88.27	-933.62	-9,636.33	3,601.03	3,511.54	89.49	40.241		
13,000.00	7,221.88	7,580.92	7,197.59	171.69	53.36	-88.33	-933.61	-9,636.34	3,501.55	3,411.68	89.88	38.960		
13,100.00	7,221.48	7,581.31	7,197.97	174.49	53.36	-88.39	-933.61	-9,636.34	3,402.11	3,311.81	90.30	37.676		
13,200.00	7,221.09	7,581.69	7,198.36	177.30	53.36	-88.45	-933.61	-9,636.34	3,302.70	3,211.94	90.76	36.390		
13,300.00	7,220.70	7,582.08	7,198.74	180.12	53.36	-88.51	-933.61	-9,636.35	3,203.32	3,112.07	91.26	35.102		
13,400.00	7,220.30	7,582.46	7,199.13	182.93	53.36	-88.57	-933.61	-9,636.35	3,103.99	3,012.19	91.80	33.811		
13,500.00	7,219.91	7,582.84	7,199.50	185.74	53.36	-88.63	-933.61	-9,636.35	3,004.70	2,912.30	92.40	32.518		
13,600.00	7,219.52	7,583.21	7,199.88	188.56	53.36	-88.69	-933.60	-9,636.35	2,905.46	2,812.41	93.06	31.222		
13,700.00	7,219.12	7,583.59	7,200.25	191.38	53.37	-88.75	-933.60	-9,636.36	2,806.28	2,712.50	93.78	29.925		
13,800.00	7,218.73	7,583.96	7,200.63	194.20	53.37	-88.81	-933.60	-9,636.36	2,707.15	2,612.58	94.57	28.626		
13,900.00	7,218.34	7,584.33	7,200.99	197.02	53.37	-88.87	-933.60	-9,636.36	2,608.09	2,512.64	95.45	27.325		
14,000.00	7,217.94	7,584.70	7,201.36	199.84	53.37	-88.93	-933.60	-9,636.37	2,509.11	2,412.69	96.42	26.024		
14,100.00	7,217.55	7,585.06	7,201.73	202.66	53.37	-88.98	-933.60	-9,636.37	2,410.20	2,312.71	97.49	24.722		
14,200.00	7,217.16	7,585.42	7,202.09	205.48	53.37	-89.04	-933.60	-9,636.37	2,311.40	2,212.70	98.69	23.420		
14,300.00	7,216.76	7,585.78	7,202.45	208.30	53.37	-89.10	-933.59	-9,636.37	2,212.70	2,112.66	100.03	22.119		
14,400.00	7,216.37	7,586.14	7,202.80	211.13	53.37	-89.15	-933.59	-9,636.38	2,114.12	2,012.58	101.54	20.821		
14,500.00	7,215.98	7,586.49	7,203.16	213.96	53.37	-89.21	-933.59	-9,636.38	2,015.68	1,912.45	103.23	19.527		
14,600.00	7,215.58	7,586.85	7,203.51	216.78	53.37	-89.26	-933.59	-9,636.38	1,917.41	1,812.27	105.13	18.238		
14,700.00	7,215.19	7,587.20	7,203.86	219.61	53.37	-89.32	-933.59	-9,636.38	1,819.32	1,712.02	107.30	16.956		
14,800.00	7,214.80	7,587.55	7,204.21	222.44	53.38	-89.37	-933.59	-9,636.39	1,721.45	1,611.69	109.76	15.684		
14,900.00	7,214.40	7,587.89	7,204.56	225.27	53.38	-89.43	-933.58	-9,636.39	1,623.84	1,511.27	112.57	14.426		
15,000.00	7,214.01	7,588.24	7,204.90	228.10	53.38	-89.48	-933.58	-9,636.39	1,526.54	1,410.74	115.80	13.183		
15,002.44	7,214.00	7,588.25	7,204.91	228.16	53.38	-89.49	-933.58	-9,636.39	1,524.18	1,408.29	115.88	13.153 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD												Offset Site Error:	0.00 ft
Survey Program: 57-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	2,207.00	2,140.89	3.28	15.40	-104.71	-2,297.01	-8,750.38	9,296.71				
100.00	100.00	2,260.53	2,189.86	3.28	15.87	-104.59	-2,276.41	-8,743.79	9,273.80	9,255.70	18.10	512.237	
200.00	200.00	2,302.00	2,227.88	3.34	16.24	-104.50	-2,260.57	-8,738.98	9,251.61	9,233.14	18.47	500.987	
300.00	300.00	300.00	2,369.82	3.44	3.54	-104.17	-2,201.73	-8,720.98	9,229.69	9,223.14	6.55	1,408.966	
400.00	400.00	2,552.78	2,457.55	3.60	18.49	-103.96	-2,164.38	-8,709.29	9,207.05	9,186.33	20.72	444.377	
500.00	500.00	2,603.83	2,503.99	3.81	18.95	-103.84	-2,143.97	-8,703.55	9,185.01	9,163.68	21.32	430.771	
600.00	599.98	2,708.40	2,599.11	4.03	19.92	58.65	-2,102.09	-8,691.98	9,162.39	9,139.97	22.41	408.766	
700.00	699.84	2,900.36	2,772.92	4.29	21.72	59.60	-2,023.82	-8,669.36	9,137.11	9,112.82	24.29	376.136	
800.00	799.54	2,964.00	2,830.67	4.57	22.32	59.89	-1,998.22	-8,661.67	9,110.86	9,085.76	25.11	362.900	
900.00	899.23	3,019.28	2,881.14	4.87	22.83	60.05	-1,976.68	-8,654.94	9,085.00	9,059.15	25.86	351.368	
1,000.00	998.92	3,099.92	2,955.19	5.20	23.56	60.26	-1,946.41	-8,644.87	9,059.46	9,032.62	26.84	337.592	
1,100.00	1,098.61	3,191.80	3,039.39	5.54	24.39	60.50	-1,911.40	-8,633.56	9,034.11	9,006.18	27.93	323.480	
1,200.00	1,198.30	3,248.00	3,090.85	5.90	24.90	60.66	-1,889.90	-8,626.63	9,008.93	8,980.18	28.75	313.325	
1,300.00	1,298.00	3,310.62	3,148.44	6.27	25.46	60.82	-1,866.54	-8,618.94	8,984.21	8,954.57	29.63	303.191	
1,400.00	1,397.69	3,346.00	3,181.19	6.66	25.77	60.91	-1,853.87	-8,614.65	8,960.14	8,929.83	30.31	295.629	
1,500.00	1,497.38	3,388.97	3,221.11	7.05	26.14	61.02	-1,838.82	-8,609.58	8,936.72	8,905.68	31.04	287.870	
1,600.00	1,597.07	3,440.00	3,268.68	7.44	26.57	61.15	-1,821.22	-8,603.89	8,914.05	8,882.20	31.85	279.860	
1,700.00	1,696.76	1,700.00	3,342.69	7.85	12.21	61.35	-1,794.64	-8,594.99	8,891.72	8,872.54	19.18	463.679	
1,800.00	1,796.45	3,802.01	3,607.65	8.25	29.57	62.03	-1,701.99	-8,560.11	8,869.19	8,833.82	35.37	250.750	
1,900.00	1,896.15	1,900.00	3,705.77	8.67	13.46	62.29	-1,666.37	-8,545.88	8,845.08	8,823.82	21.27	415.918	
2,000.00	1,995.84	3,969.36	3,763.17	9.08	31.01	62.45	-1,644.44	-8,537.72	8,821.13	8,783.60	37.53	235.019	
2,100.00	2,095.53	4,015.00	3,805.31	9.50	31.42	62.58	-1,627.85	-8,532.10	8,797.82	8,759.47	38.35	229.406	
2,200.00	2,195.22	4,087.22	3,871.89	9.92	32.06	62.78	-1,601.17	-8,523.56	8,775.00	8,735.61	39.39	222.756	
2,300.00	2,294.91	4,154.74	3,934.06	10.35	32.67	62.96	-1,576.05	-8,515.74	8,752.51	8,712.11	40.40	216.623	
2,400.00	2,394.60	4,609.20	4,348.40	10.77	36.90	64.28	-1,399.18	-8,457.69	8,730.11	8,685.47	44.63	195.590	
2,500.00	2,494.30	4,679.00	4,410.34	11.20	37.61	64.51	-1,368.54	-8,447.88	8,704.45	8,658.69	45.76	190.214	
2,600.00	2,593.99	4,723.65	4,450.11	11.63	38.06	64.65	-1,349.22	-8,441.68	8,679.35	8,632.69	46.66	186.021	
2,700.00	2,693.68	4,774.00	4,495.17	12.07	38.57	64.81	-1,327.77	-8,435.00	8,655.04	8,607.43	47.61	181.795	
2,800.00	2,793.37	4,774.00	4,495.17	12.50	38.57	64.81	-1,327.77	-8,435.00	8,631.46	8,583.34	48.11	179.401	
2,900.00	2,893.06	4,827.45	4,543.37	12.93	39.08	64.98	-1,305.68	-8,428.24	8,608.55	8,559.48	49.08	175.409	
3,000.00	2,992.76	4,869.00	4,581.16	13.37	39.48	65.11	-1,289.17	-8,423.18	8,586.46	8,536.52	49.94	171.932	
3,100.00	3,092.45	4,933.27	4,640.00	13.81	40.07	65.30	-1,264.50	-8,415.44	8,564.96	8,513.98	50.98	168.018	
3,200.00	3,192.14	5,045.09	4,742.65	14.25	41.09	65.62	-1,222.30	-8,401.78	8,543.66	8,491.26	52.40	163.037	
3,300.00	3,291.83	5,093.74	4,787.16	14.68	41.53	65.77	-1,203.58	-8,395.89	8,522.56	8,469.24	53.32	159.852	
3,400.00	3,391.52	5,152.00	4,840.75	15.12	42.06	65.94	-1,181.74	-8,389.14	8,502.19	8,447.88	54.31	156.556	
3,500.00	3,491.21	5,175.30	4,862.28	15.56	42.27	66.01	-1,173.21	-8,386.54	8,482.44	8,427.43	55.01	154.211	
3,600.00	3,590.91	5,216.06	4,900.06	16.00	42.62	66.12	-1,158.59	-8,382.11	8,463.44	8,407.60	55.84	151.564	
3,700.00	3,690.60	5,247.00	4,928.86	16.45	42.89	66.21	-1,147.75	-8,378.86	8,445.16	8,388.56	56.60	149.213	
3,800.00	3,790.29	5,297.76	4,976.33	16.89	43.31	66.34	-1,130.52	-8,373.74	8,427.56	8,370.07	57.49	146.585	
3,900.00	3,889.98	5,342.00	5,017.93	17.33	43.68	66.46	-1,116.08	-8,369.49	8,410.69	8,352.35	58.34	144.173	
4,000.00	3,989.67	5,342.00	5,017.93	17.77	43.68	66.46	-1,116.08	-8,369.49	8,394.72	8,335.88	58.84	142.664	
4,100.00	4,089.36	5,398.54	5,071.51	18.22	44.10	66.60	-1,098.71	-8,364.49	8,379.31	8,319.57	59.75	140.249	
4,200.00	4,189.06	5,437.00	5,108.25	18.66	44.40	66.70	-1,087.77	-8,361.43	8,364.90	8,304.38	60.52	138.219	
4,300.00	4,288.75	5,463.16	5,133.36	19.10	44.57	66.76	-1,080.70	-8,359.49	8,351.28	8,290.09	61.18	136.493	
4,400.00	4,388.44	5,500.06	5,168.92	19.55	44.83	66.84	-1,071.21	-8,356.91	8,338.43	8,276.52	61.92	134.672	
4,500.00	4,488.13	5,549.26	5,216.58	19.99	45.15	66.94	-1,059.40	-8,353.73	8,326.34	8,263.63	62.72	132.762	
4,600.00	4,587.82	5,626.00	5,291.24	20.44	45.63	67.09	-1,042.40	-8,348.68	8,314.53	8,250.87	63.66	130.604	
4,700.00	4,687.51	5,694.19	5,357.94	20.89	46.02	67.22	-1,028.99	-8,344.21	8,303.09	8,238.57	64.52	128.695	
4,800.00	4,787.21	5,819.99	5,481.71	21.33	46.69	67.42	-1,008.05	-8,335.97	8,292.03	8,226.40	65.63	126.338	
4,900.00	4,886.90	5,846.25	5,507.62	21.78	46.82	67.46	-1,004.11	-8,334.26	8,281.10	8,214.86	66.24	125.022	
5,000.00	4,986.59	5,877.75	5,538.76	22.22	46.97	67.50	-999.74	-8,332.40	8,270.99	8,204.13	66.86	123.702	
5,100.00	5,086.28	5,909.00	5,569.71	22.67	47.12	67.54	-995.76	-8,330.77	8,261.71	8,194.23	67.48	122.426	

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,986.10	5,646.20	23.12	47.46	67.64	-986.81	-8,327.08	8,252.98	8,184.70	68.28	120.869		
5,300.00	5,285.66	6,047.62	5,707.31	23.56	47.71	67.72	-980.26	-8,324.29	8,244.62	8,175.62	69.00	119.485		
5,400.00	5,385.36	6,097.00	5,756.41	24.01	47.92	67.78	-975.47	-8,322.25	8,236.79	8,167.12	69.67	118.229		
5,500.00	5,485.05	6,149.94	5,809.10	24.46	48.12	67.83	-970.67	-8,320.33	8,229.54	8,159.21	70.34	117.002		
5,600.00	5,584.74	6,192.00	5,850.98	24.90	48.28	67.88	-967.04	-8,319.06	8,222.96	8,152.00	70.96	115.880		
5,700.00	5,684.43	6,262.92	5,921.61	25.35	48.55	67.96	-960.89	-8,317.29	8,216.89	8,145.20	71.70	114.608		
5,800.00	5,784.12	6,335.23	5,993.63	25.80	48.82	68.04	-954.58	-8,315.79	8,211.24	8,138.81	72.43	113.365		
5,900.00	5,883.81	6,412.91	6,071.07	26.25	49.11	68.12	-948.56	-8,314.33	8,205.88	8,132.70	73.18	112.132		
6,000.00	5,983.51	6,492.86	6,150.81	26.70	49.39	68.20	-943.09	-8,312.97	8,200.79	8,126.87	73.93	110.934		
6,100.00	6,083.20	6,570.00	6,227.81	27.14	49.65	68.27	-938.48	-8,311.77	8,195.94	8,121.29	74.65	109.793		
6,200.00	6,182.89	6,624.95	6,282.68	27.59	49.82	68.31	-935.59	-8,311.12	8,191.52	8,116.23	75.28	108.809		
6,300.00	6,282.58	6,683.54	6,341.20	28.04	50.01	68.36	-932.88	-8,310.75	8,187.68	8,111.75	75.93	107.839		
6,400.00	6,382.27	6,768.34	6,425.94	28.49	50.26	68.43	-929.62	-8,310.44	8,184.17	8,107.52	76.64	106.782		
6,500.00	6,481.96	6,880.31	6,537.86	28.94	50.58	68.51	-926.40	-8,309.93	8,180.65	8,103.22	77.43	105.646		
6,600.00	6,581.66	6,979.62	6,637.14	29.39	50.86	68.58	-924.00	-8,309.40	8,177.09	8,098.91	78.18	104.594		
6,700.00	6,681.21	7,078.43	6,735.92	29.83	51.13	30.14	-921.81	-8,308.85	8,170.96	8,092.04	78.92	103.535		
6,800.00	6,778.96	7,174.75	6,832.23	30.28	51.40	12.66	-920.01	-8,308.32	8,150.74	8,071.10	79.64	102.348		
6,900.00	6,872.51	7,266.18	6,923.65	30.70	51.65	7.19	-918.62	-8,307.81	8,115.50	8,035.18	80.31	101.049		
7,000.00	6,959.55	7,350.13	7,007.59	31.10	51.87	4.48	-917.58	-8,307.35	8,066.12	7,985.19	80.92	99.675		
7,100.00	7,037.93	7,427.02	7,084.48	31.48	52.08	2.70	-916.80	-8,306.94	8,003.81	7,922.34	81.47	98.247		
7,200.00	7,105.74	7,515.67	7,173.11	31.88	52.32	1.21	-915.97	-8,306.35	7,929.98	7,848.00	81.98	96.728		
7,300.00	7,161.29	7,587.59	7,245.03	32.41	52.51	-0.47	-915.28	-8,305.70	7,846.42	7,764.04	82.38	95.241		
7,400.00	7,203.22	7,619.70	7,277.14	33.13	52.60	-3.09	-914.92	-8,305.40	7,755.35	7,672.73	82.61	93.875		
7,500.00	7,230.50	7,642.14	7,299.58	34.04	52.66	-9.42	-914.65	-8,305.21	7,659.03	7,576.27	82.75	92.553		
7,600.00	7,242.45	7,651.60	7,309.04	35.13	52.69	-53.03	-914.53	-8,305.13	7,559.81	7,477.01	82.80	91.297		
7,700.00	7,242.72	7,651.13	7,308.57	36.39	52.69	-105.01	-914.54	-8,305.14	7,459.93	7,377.13	82.80	90.096		
7,800.00	7,242.33	7,650.09	7,307.53	37.81	52.69	-104.85	-914.55	-8,305.14	7,360.06	7,277.26	82.79	88.897		
7,900.00	7,241.93	7,649.05	7,306.48	39.40	52.68	-104.70	-914.56	-8,305.15	7,260.18	7,177.39	82.79	87.697		
8,000.00	7,241.54	7,648.00	7,305.43	41.13	52.68	-104.54	-914.58	-8,305.16	7,160.31	7,077.53	82.78	86.495		
8,100.00	7,241.15	7,646.95	7,304.38	42.97	52.68	-104.38	-914.59	-8,305.17	7,060.44	6,977.66	82.78	85.291		
8,200.00	7,240.75	7,645.89	7,303.32	44.92	52.67	-104.22	-914.60	-8,305.18	6,960.58	6,877.80	82.78	84.085		
8,300.00	7,240.36	7,644.83	7,302.26	46.97	52.67	-104.06	-914.62	-8,305.19	6,860.72	6,777.94	82.78	82.878		
8,400.00	7,239.97	7,643.76	7,301.19	49.10	52.67	-103.89	-914.63	-8,305.20	6,760.87	6,678.08	82.78	81.669		
8,500.00	7,239.57	7,642.69	7,300.12	51.29	52.67	-103.73	-914.65	-8,305.21	6,661.01	6,578.23	82.79	80.459		
8,600.00	7,239.18	7,641.61	7,299.05	53.56	52.66	-103.56	-914.66	-8,305.21	6,561.17	6,478.37	82.79	79.246		
8,700.00	7,238.79	7,640.53	7,297.96	55.87	52.66	-103.40	-914.67	-8,305.22	6,461.32	6,378.52	82.80	78.033		
8,800.00	7,238.39	7,639.44	7,296.88	58.24	52.66	-103.23	-914.69	-8,305.23	6,361.49	6,278.67	82.81	76.817		
8,900.00	7,238.00	7,638.35	7,295.79	60.64	52.65	-103.06	-914.70	-8,305.24	6,261.65	6,178.83	82.83	75.600		
9,000.00	7,237.61	7,637.26	7,294.69	63.09	52.65	-102.90	-914.71	-8,305.25	6,161.82	6,078.98	82.84	74.382		
9,100.00	7,237.21	7,636.16	7,293.59	65.56	52.65	-102.73	-914.73	-8,305.26	6,062.00	5,979.14	82.86	73.161		
9,200.00	7,236.82	7,635.05	7,292.49	68.07	52.64	-102.56	-914.74	-8,305.27	5,962.19	5,879.31	82.88	71.940		
9,300.00	7,236.43	7,633.94	7,291.38	70.61	52.64	-102.39	-914.75	-8,305.28	5,862.38	5,779.48	82.90	70.716		
9,400.00	7,236.03	7,632.83	7,290.26	73.16	52.64	-102.21	-914.77	-8,305.29	5,762.57	5,679.65	82.93	69.491		
9,500.00	7,235.64	7,631.71	7,289.14	75.74	52.64	-102.04	-914.78	-8,305.30	5,662.77	5,579.82	82.95	68.264		
9,600.00	7,235.25	7,630.58	7,288.02	78.34	52.63	-101.87	-914.80	-8,305.31	5,562.98	5,480.00	82.98	67.036		
9,700.00	7,234.85	7,629.45	7,286.89	80.96	52.63	-101.69	-914.81	-8,305.32	5,463.20	5,380.18	83.02	65.806		
9,800.00	7,234.46	7,628.32	7,285.75	83.59	52.63	-101.51	-914.82	-8,305.33	5,363.42	5,280.37	83.06	64.574		
9,900.00	7,234.07	7,627.18	7,284.61	86.24	52.62	-101.34	-914.84	-8,305.34	5,263.66	5,180.56	83.10	63.341		
10,000.00	7,233.67	7,626.03	7,283.47	88.90	52.62	-101.16	-914.85	-8,305.35	5,163.90	5,080.75	83.15	62.106		
10,100.00	7,233.28	7,624.88	7,282.32	91.57	52.62	-100.98	-914.86	-8,305.36	5,064.15	4,980.95	83.20	60.869		
10,200.00	7,232.89	7,623.72	7,281.16	94.25	52.61	-100.80	-914.88	-8,305.37	4,964.41	4,881.15	83.25	59.630		
10,300.00	7,232.49	7,622.56	7,280.00	96.95	52.61	-100.62	-914.89	-8,305.38	4,864.68	4,781.36	83.31	58.389		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,621.40	7,278.83	99.65	52.61	-100.44	-914.91	-8,305.39	4,764.96	4,681.58	83.38	57.146		
10,500.00	7,231.71	7,620.22	7,277.66	102.36	52.60	-100.25	-914.92	-8,305.40	4,665.26	4,581.80	83.45	55.902		
10,600.00	7,231.32	7,619.05	7,276.48	105.08	52.60	-100.07	-914.93	-8,305.41	4,565.56	4,482.03	83.53	54.655		
10,700.00	7,230.92	7,617.87	7,275.30	107.80	52.60	-99.88	-914.95	-8,305.42	4,465.88	4,382.26	83.62	53.406		
10,800.00	7,230.53	7,616.68	7,274.11	110.53	52.59	-99.70	-914.96	-8,305.43	4,366.21	4,282.50	83.72	52.155		
10,900.00	7,230.14	7,615.48	7,272.92	113.27	52.59	-99.51	-914.97	-8,305.44	4,266.56	4,182.74	83.82	50.901		
11,000.00	7,229.74	7,614.28	7,271.72	116.02	52.59	-99.32	-914.99	-8,305.45	4,166.93	4,082.99	83.93	49.645		
11,100.00	7,229.35	7,613.08	7,270.52	118.77	52.58	-99.13	-915.00	-8,305.46	4,067.31	3,983.25	84.06	48.387		
11,200.00	7,228.96	7,611.87	7,269.31	121.52	52.58	-98.94	-915.01	-8,305.47	3,967.71	3,883.52	84.19	47.125		
11,300.00	7,228.56	7,610.65	7,268.09	124.28	52.58	-98.75	-915.03	-8,305.49	3,868.14	3,783.79	84.34	45.861		
11,400.00	7,228.17	7,609.43	7,266.87	127.04	52.57	-98.56	-915.04	-8,305.50	3,768.58	3,684.07	84.51	44.595		
11,500.00	7,227.78	7,608.21	7,265.64	129.81	52.57	-98.36	-915.06	-8,305.51	3,669.05	3,584.36	84.69	43.325		
11,600.00	7,227.38	7,606.97	7,264.41	132.58	52.57	-98.17	-915.07	-8,305.52	3,569.54	3,484.66	84.89	42.051		
11,700.00	7,226.99	7,605.73	7,263.17	135.36	52.56	-97.97	-915.08	-8,305.53	3,470.06	3,384.96	85.10	40.775		
11,800.00	7,226.60	7,604.49	7,261.93	138.14	52.56	-97.77	-915.10	-8,305.54	3,370.61	3,285.27	85.34	39.495		
11,900.00	7,226.20	7,603.24	7,260.68	140.92	52.56	-97.58	-915.11	-8,305.55	3,271.20	3,185.59	85.61	38.211		
12,000.00	7,225.81	7,605.86	7,263.30	143.70	52.56	-97.99	-915.10	-8,305.51	3,171.81	3,085.90	85.91	36.922		
12,100.00	7,225.42	7,604.24	7,261.67	146.49	52.56	-97.73	-915.11	-8,305.53	3,072.47	2,986.24	86.23	35.631		
12,200.00	7,225.02	7,602.62	7,260.06	149.28	52.55	-97.48	-915.13	-8,305.55	2,973.17	2,886.58	86.59	34.335		
12,300.00	7,224.63	7,601.02	7,258.46	152.08	52.55	-97.22	-915.14	-8,305.56	2,873.93	2,786.93	86.99	33.036		
12,400.00	7,224.24	7,599.43	7,256.87	154.87	52.54	-96.97	-915.16	-8,305.58	2,774.74	2,687.29	87.44	31.732		
12,500.00	7,223.84	7,597.85	7,255.29	157.67	52.54	-96.72	-915.17	-8,305.60	2,675.60	2,587.66	87.94	30.424		
12,600.00	7,223.45	7,596.28	7,253.72	160.47	52.54	-96.47	-915.19	-8,305.61	2,576.54	2,488.03	88.51	29.111		
12,700.00	7,223.06	7,594.72	7,252.16	163.27	52.53	-96.22	-915.21	-8,305.63	2,477.54	2,388.40	89.14	27.794		
12,800.00	7,222.66	7,593.17	7,250.61	166.07	52.53	-95.97	-915.22	-8,305.64	2,378.63	2,288.78	89.85	26.473		
12,900.00	7,222.27	7,591.63	7,249.07	168.88	52.52	-95.73	-915.24	-8,305.66	2,279.82	2,189.16	90.66	25.148		
13,000.00	7,221.88	7,590.10	7,247.54	171.69	52.52	-95.48	-915.25	-8,305.68	2,181.11	2,089.54	91.57	23.820		
13,100.00	7,221.48	7,588.58	7,246.02	174.49	52.52	-95.24	-915.27	-8,305.69	2,082.52	1,989.92	92.60	22.488		
13,200.00	7,221.09	7,587.07	7,244.51	177.30	52.51	-95.00	-915.28	-8,305.71	1,984.08	1,890.29	93.79	21.155		
13,300.00	7,220.70	7,585.57	7,243.01	180.12	52.51	-94.76	-915.30	-8,305.72	1,885.79	1,790.65	95.14	19.821		
13,400.00	7,220.30	7,584.07	7,241.51	182.93	52.50	-94.52	-915.31	-8,305.74	1,787.70	1,691.00	96.70	18.488		
13,500.00	7,219.91	7,582.59	7,240.03	185.74	52.50	-94.28	-915.33	-8,305.75	1,689.83	1,591.34	98.49	17.157		
13,600.00	7,219.52	7,581.12	7,238.56	188.56	52.49	-94.05	-915.34	-8,305.77	1,592.22	1,491.65	100.57	15.832		
13,700.00	7,219.12	7,579.66	7,237.10	191.38	52.49	-93.81	-915.35	-8,305.78	1,494.92	1,391.93	102.99	14.516		
13,800.00	7,218.73	7,578.20	7,235.64	194.20	52.49	-93.58	-915.37	-8,305.80	1,398.01	1,292.19	105.82	13.211		
13,900.00	7,218.34	7,576.76	7,234.20	197.02	52.48	-93.34	-915.38	-8,305.81	1,301.56	1,192.41	109.16	11.924		
14,000.00	7,217.94	7,575.32	7,232.76	199.84	52.48	-93.11	-915.40	-8,305.82	1,205.69	1,092.58	113.11	10.660		
14,100.00	7,217.55	7,573.89	7,231.34	202.66	52.48	-92.88	-915.41	-8,305.84	1,110.54	992.72	117.82	9.426		
14,200.00	7,217.16	7,572.48	7,229.92	205.48	52.47	-92.66	-915.42	-8,305.85	1,016.33	892.83	123.50	8.230		
14,300.00	7,216.76	7,571.07	7,228.51	208.30	52.47	-92.43	-915.44	-8,305.87	923.33	792.96	130.38	7.082		
14,400.00	7,216.37	7,569.67	7,227.11	211.13	52.46	-92.21	-915.45	-8,305.88	831.96	693.16	138.80	5.994		
14,500.00	7,215.98	7,568.27	7,225.72	213.96	52.46	-91.98	-915.47	-8,305.89	742.81	593.62	149.18	4.979		
14,600.00	7,215.58	7,566.89	7,224.33	216.78	52.46	-91.76	-915.48	-8,305.91	656.78	494.70	162.08	4.052		
14,700.00	7,215.19	7,565.52	7,222.96	219.61	52.45	-91.54	-915.49	-8,305.92	575.30	397.19	178.10	3.230		
14,800.00	7,214.80	7,564.15	7,221.59	222.44	52.45	-91.32	-915.51	-8,305.93	500.56	302.83	197.73	2.532		
14,900.00	7,214.40	7,562.79	7,220.23	225.27	52.45	-91.10	-915.52	-8,305.94	436.07	215.35	220.71	1.976		
15,000.00	7,214.01	7,561.44	7,218.88	228.10	52.44	-90.88	-915.53	-8,305.96	386.97	142.17	244.80	1.581		
15,002.44	7,214.00	7,561.41	7,218.85	228.16	52.44	-90.88	-915.53	-8,305.96	386.01	140.66	245.36	1.573	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.95	-2,916.81	-9,003.85	9,464.58					
100.00	100.00	36.95	72.95	3.28	3.28	-107.95	-2,916.73	-9,003.93	9,464.61	9,458.04	6.57	1,441.542		
200.00	200.00	94.68	130.68	3.34	3.29	-107.95	-2,916.29	-9,004.38	9,465.12	9,458.49	6.62	1,429.152		
300.00	300.00	168.00	203.98	3.44	3.30	-107.94	-2,915.17	-9,005.53	9,466.09	9,459.35	6.74	1,403.874		
400.00	400.00	168.00	203.98	3.60	3.30	-107.94	-2,915.17	-9,005.53	9,467.64	9,460.73	6.90	1,371.629		
500.00	500.00	212.58	248.53	3.81	3.33	-107.93	-2,914.31	-9,006.73	9,469.83	9,462.69	7.13	1,327.657		
600.00	599.98	259.00	294.90	4.03	3.37	53.89	-2,913.42	-9,008.66	9,471.93	9,464.53	7.40	1,279.906		
700.00	699.84	259.00	294.90	4.29	3.37	53.88	-2,913.42	-9,008.66	9,472.60	9,464.94	7.65	1,237.676		
768.72	768.38	259.00	294.90	4.48	3.37	53.88	-2,913.42	-9,008.66	9,472.84	9,464.99	7.85	1,207.286		
800.00	799.54	292.43	328.29	4.57	3.40	53.90	-2,912.89	-9,010.42	9,472.63	9,464.66	7.97	1,188.313		
900.00	899.23	350.00	385.74	4.87	3.48	53.93	-2,912.41	-9,014.05	9,473.53	9,465.17	8.35	1,134.132		
1,000.00	998.92	350.00	385.74	5.20	3.48	53.93	-2,912.41	-9,014.05	9,474.86	9,466.17	8.68	1,091.141		
1,100.00	1,098.61	409.22	444.80	5.54	3.58	53.96	-2,912.24	-9,018.28	9,476.95	9,467.83	9.12	1,038.855		
1,200.00	1,198.30	486.08	521.44	5.90	3.73	54.00	-2,912.08	-9,024.03	9,479.40	9,469.77	9.63	984.674		
1,300.00	1,298.00	532.00	567.24	6.27	3.84	54.03	-2,911.93	-9,027.53	9,482.11	9,472.01	10.10	939.102		
1,400.00	1,397.69	586.93	621.99	6.66	3.98	54.05	-2,911.89	-9,031.96	9,485.31	9,474.70	10.61	894.278		
1,500.00	1,497.38	644.00	678.83	7.05	4.14	54.08	-2,912.21	-9,037.06	9,489.29	9,478.15	11.14	851.836		
1,600.00	1,597.07	673.57	708.26	7.44	4.23	54.10	-2,912.50	-9,039.85	9,493.79	9,482.17	11.61	817.434		
1,700.00	1,696.76	763.93	798.20	7.85	4.51	54.14	-2,913.58	-9,048.52	9,498.71	9,486.43	12.27	774.010		
1,800.00	1,796.45	870.51	904.30	8.25	4.87	54.19	-2,914.86	-9,058.56	9,503.49	9,490.48	13.01	730.656		
1,900.00	1,896.15	1,900.00	1,097.27	8.67	9.11	54.30	-2,915.35	-9,076.68	9,508.01	9,490.62	17.40	546.584		
2,000.00	1,995.84	1,128.71	1,161.39	9.08	5.85	54.33	-2,915.29	-9,082.32	9,511.88	9,497.17	14.72	646.276		
2,100.00	2,095.53	1,154.70	1,187.26	9.50	5.95	54.35	-2,915.19	-9,084.84	9,516.49	9,501.26	15.23	624.947		
2,200.00	2,195.22	1,190.00	1,222.36	9.92	6.09	54.37	-2,914.98	-9,088.62	9,521.89	9,506.11	15.77	603.616		
2,300.00	2,294.91	1,190.00	1,222.36	10.35	6.09	54.37	-2,914.98	-9,088.62	9,528.08	9,511.89	16.19	588.468		
2,400.00	2,394.60	1,243.38	1,275.36	10.77	6.32	54.41	-2,914.61	-9,094.97	9,534.86	9,518.05	16.81	567.108		
2,500.00	2,494.30	1,285.00	1,316.63	11.20	6.50	54.43	-2,914.35	-9,100.35	9,542.44	9,525.04	17.39	548.645		
2,600.00	2,593.99	1,285.00	1,316.63	11.63	6.50	54.43	-2,914.35	-9,100.35	9,550.77	9,532.96	17.81	536.257		
2,700.00	2,693.68	1,343.49	1,374.56	12.07	6.76	54.47	-2,914.37	-9,108.42	9,559.62	9,541.16	18.46	517.863		
2,800.00	2,793.37	1,379.00	1,409.70	12.50	6.92	54.49	-2,914.75	-9,113.55	9,569.25	9,550.23	19.02	503.125		
2,900.00	2,893.06	1,415.07	1,445.35	12.93	7.09	54.51	-2,915.17	-9,119.00	9,579.55	9,559.96	19.58	489.164		
3,000.00	2,992.76	1,475.00	1,504.49	13.37	7.38	54.55	-2,915.40	-9,128.70	9,590.55	9,570.31	20.25	473.661		
3,100.00	3,092.45	1,475.00	1,504.49	13.81	7.38	54.55	-2,915.40	-9,128.70	9,602.10	9,581.44	20.66	464.737		
3,200.00	3,192.14	1,528.19	1,556.88	14.25	7.64	54.59	-2,915.49	-9,137.87	9,614.28	9,592.98	21.30	451.360		
3,300.00	3,291.83	1,570.00	1,598.02	14.68	7.85	54.61	-2,915.76	-9,145.35	9,627.14	9,605.25	21.89	439.751		
3,400.00	3,391.52	1,611.69	1,638.99	15.12	8.07	54.64	-2,916.09	-9,153.05	9,640.59	9,618.10	22.48	428.767		
3,500.00	3,491.21	1,665.00	1,691.32	15.56	8.34	54.68	-2,916.42	-9,163.22	9,654.59	9,631.46	23.13	417.430		
3,600.00	3,590.91	1,665.00	1,691.32	16.00	8.34	54.68	-2,916.42	-9,163.22	9,669.29	9,645.76	23.53	410.859		
3,700.00	3,690.60	1,722.31	1,747.45	16.45	8.65	54.72	-2,916.69	-9,174.74	9,684.46	9,660.27	24.20	400.211		
3,800.00	3,790.29	1,759.00	1,783.31	16.89	8.85	54.74	-2,916.81	-9,182.52	9,700.45	9,675.69	24.77	391.646		
3,900.00	3,889.98	1,759.00	1,783.31	17.33	8.85	54.74	-2,916.81	-9,182.52	9,717.23	9,692.06	25.17	386.105		
4,000.00	3,989.67	1,818.34	1,841.19	17.77	9.19	54.79	-2,917.51	-9,195.58	9,734.46	9,708.62	25.84	376.701		
4,100.00	4,089.36	1,853.00	1,874.94	18.22	9.39	54.81	-2,918.40	-9,203.41	9,752.46	9,726.06	26.40	369.423		
4,200.00	4,189.06	1,907.53	1,927.99	18.66	9.71	54.84	-2,920.06	-9,215.95	9,771.02	9,743.96	27.05	361.205		
4,300.00	4,288.75	1,967.38	1,986.14	19.10	10.06	54.88	-2,921.86	-9,229.96	9,789.98	9,762.25	27.73	353.054		
4,400.00	4,388.44	2,031.83	2,048.71	19.55	10.45	54.92	-2,923.77	-9,245.29	9,809.30	9,780.86	28.43	345.012		
4,500.00	4,488.13	2,042.00	2,058.58	19.99	10.52	54.92	-2,924.07	-9,247.73	9,829.18	9,800.31	28.87	340.499		
4,600.00	4,587.82	2,042.00	2,058.58	20.44	10.52	54.92	-2,924.07	-9,247.73	9,850.03	9,820.79	29.25	336.770		
4,700.00	4,687.51	2,042.00	2,058.58	20.89	10.52	54.92	-2,924.07	-9,247.73	9,871.86	9,842.23	29.63	333.215		
4,800.00	4,787.21	2,094.11	2,108.92	21.33	10.86	54.96	-2,925.49	-9,261.13	9,893.65	9,863.39	30.27	326.887		
4,900.00	4,886.90	2,137.00	2,149.98	21.78	11.14	54.99	-2,926.49	-9,273.47	9,917.13	9,886.28	30.86	321.376		
5,000.00	4,986.59	2,513.00	2,512.26	22.22	13.64	55.28	-2,930.31	-9,373.66	9,938.01	9,904.81	33.20	299.308		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,086.28	2,513.00	2,512.26	22.67	13.64	55.28	-2,930.31	-9,373.66	9,959.08	9,925.50	33.58	296.578		
5,200.00	5,185.97	2,537.81	2,536.09	23.12	13.81	55.30	-2,929.85	-9,380.55	9,981.03	9,946.94	34.09	292.806		
7,400.00	7,203.22	7,088.11	6,972.80	33.13	40.93	-30.34	-2,957.11	-10,249.90	9,998.52	9,934.34	64.18	155.795		
7,500.00	7,230.50	7,112.29	6,996.97	34.04	41.01	-46.41	-2,957.91	-10,250.28	9,905.40	9,841.02	64.38	153.849		
7,600.00	7,242.45	7,123.63	7,008.30	35.13	41.04	-74.99	-2,958.31	-10,250.45	9,809.26	9,744.76	64.50	152.073		
7,700.00	7,242.72	7,125.16	7,009.83	36.39	41.05	-85.30	-2,958.37	-10,250.48	9,712.32	9,647.75	64.57	150.411		
7,800.00	7,242.33	7,126.13	7,010.80	37.81	41.05	-85.33	-2,958.41	-10,250.49	9,615.43	9,550.78	64.65	148.719		
7,900.00	7,241.93	7,127.11	7,011.77	39.40	41.06	-85.35	-2,958.44	-10,250.51	9,518.61	9,453.85	64.76	146.986		
8,000.00	7,241.54	7,128.08	7,012.74	41.13	41.06	-85.37	-2,958.48	-10,250.52	9,421.85	9,356.96	64.88	145.211		
8,100.00	7,241.15	7,129.05	7,013.71	42.97	41.06	-85.39	-2,958.51	-10,250.54	9,325.16	9,260.12	65.03	143.395		
8,200.00	7,240.75	7,130.02	7,014.68	44.92	41.06	-85.42	-2,958.55	-10,250.55	9,228.53	9,163.33	65.20	141.536		
8,300.00	7,240.36	7,130.98	7,015.65	46.97	41.07	-85.44	-2,958.58	-10,250.57	9,131.99	9,066.59	65.40	139.636		
8,400.00	7,239.97	7,131.95	7,016.61	49.10	41.07	-85.46	-2,958.62	-10,250.58	9,035.51	8,969.89	65.62	137.695		
8,500.00	7,239.57	7,132.91	7,017.57	51.29	41.07	-85.49	-2,958.65	-10,250.59	8,939.12	8,873.25	65.87	135.713		
8,600.00	7,239.18	7,133.87	7,018.53	53.56	41.08	-85.51	-2,958.69	-10,250.61	8,842.80	8,776.66	66.14	133.691		
8,700.00	7,238.79	7,134.83	7,019.49	55.87	41.08	-85.53	-2,958.73	-10,250.62	8,746.57	8,680.12	66.45	131.630		
8,800.00	7,238.39	7,135.79	7,020.45	58.24	41.08	-85.56	-2,958.76	-10,250.64	8,650.42	8,583.64	66.78	129.531		
8,900.00	7,238.00	7,136.74	7,021.40	60.64	41.09	-85.58	-2,958.80	-10,250.65	8,554.36	8,487.21	67.15	127.396		
9,000.00	7,237.61	7,137.70	7,022.35	63.09	41.09	-85.60	-2,958.83	-10,250.67	8,458.39	8,390.85	67.54	125.226		
9,100.00	7,237.21	7,138.65	7,023.31	65.56	41.09	-85.62	-2,958.87	-10,250.68	8,362.52	8,294.54	67.98	123.023		
9,200.00	7,236.82	7,139.60	7,024.26	68.07	41.10	-85.65	-2,958.91	-10,250.70	8,266.74	8,198.30	68.44	120.789		
9,300.00	7,236.43	7,140.55	7,025.20	70.61	41.10	-85.67	-2,958.94	-10,250.71	8,171.07	8,102.13	68.94	118.527		
9,400.00	7,236.03	7,141.50	7,026.15	73.16	41.10	-85.69	-2,958.98	-10,250.72	8,075.49	8,006.02	69.47	116.238		
9,500.00	7,235.64	7,142.44	7,027.10	75.74	41.11	-85.72	-2,959.01	-10,250.74	7,980.03	7,909.99	70.05	113.924		
9,600.00	7,235.25	7,143.39	7,028.04	78.34	41.11	-85.74	-2,959.05	-10,250.75	7,884.68	7,814.02	70.66	111.590		
9,700.00	7,234.85	7,144.33	7,028.98	80.96	41.11	-85.76	-2,959.09	-10,250.77	7,789.45	7,718.14	71.31	109.237		
9,800.00	7,234.46	7,145.27	7,029.92	83.59	41.12	-85.78	-2,959.12	-10,250.78	7,694.34	7,622.34	72.00	106.868		
9,900.00	7,234.07	7,146.21	7,030.86	86.24	41.12	-85.81	-2,959.16	-10,250.80	7,599.35	7,526.62	72.73	104.487		
10,000.00	7,233.67	7,147.15	7,031.80	88.90	41.12	-85.83	-2,959.20	-10,250.81	7,504.49	7,430.99	73.50	102.096		
10,100.00	7,233.28	7,148.08	7,032.73	91.57	41.12	-85.85	-2,959.23	-10,250.82	7,409.77	7,335.45	74.32	99.697		
10,200.00	7,232.89	7,149.02	7,033.67	94.25	41.13	-85.87	-2,959.27	-10,250.84	7,315.19	7,240.00	75.19	97.296		
10,300.00	7,232.49	7,149.95	7,034.60	96.95	41.13	-85.90	-2,959.31	-10,250.85	7,220.75	7,144.66	76.09	94.893		
10,400.00	7,232.10	7,150.88	7,035.53	99.65	41.13	-85.92	-2,959.34	-10,250.87	7,126.46	7,049.42	77.05	92.493		
10,500.00	7,231.71	7,151.81	7,036.46	102.36	41.14	-85.94	-2,959.38	-10,250.88	7,032.34	6,954.29	78.05	90.097		
10,600.00	7,231.32	7,152.74	7,037.38	105.08	41.14	-85.96	-2,959.42	-10,250.89	6,938.38	6,859.27	79.11	87.710		
10,700.00	7,230.92	7,153.67	7,038.31	107.80	41.14	-85.98	-2,959.45	-10,250.91	6,844.58	6,764.37	80.21	85.334		
10,800.00	7,230.53	7,154.59	7,039.23	110.53	41.15	-86.01	-2,959.49	-10,250.92	6,750.97	6,669.61	81.36	82.971		
10,900.00	7,230.14	7,155.51	7,040.15	113.27	41.15	-86.03	-2,959.53	-10,250.94	6,657.54	6,574.97	82.57	80.625		
11,000.00	7,229.74	7,156.43	7,041.07	116.02	41.15	-86.05	-2,959.56	-10,250.95	6,564.31	6,480.47	83.84	78.298		
11,100.00	7,229.35	7,157.35	7,041.99	118.77	41.16	-86.07	-2,959.60	-10,250.96	6,471.27	6,386.12	85.16	75.991		
11,200.00	7,228.96	7,158.27	7,042.91	121.52	41.16	-86.09	-2,959.64	-10,250.98	6,378.45	6,291.92	86.54	73.709		
11,300.00	7,228.56	7,159.19	7,043.83	124.28	41.16	-86.12	-2,959.67	-10,250.99	6,285.85	6,197.88	87.97	71.451		
11,400.00	7,228.17	7,160.10	7,044.74	127.04	41.16	-86.14	-2,959.71	-10,251.00	6,193.48	6,104.01	89.47	69.222		
11,500.00	7,227.78	7,161.02	7,045.65	129.81	41.17	-86.16	-2,959.75	-10,251.02	6,101.35	6,010.31	91.04	67.022		
11,600.00	7,227.38	7,161.93	7,046.56	132.58	41.17	-86.18	-2,959.78	-10,251.03	6,009.47	5,916.80	92.66	64.853		
11,700.00	7,226.99	7,162.84	7,047.47	135.36	41.17	-86.20	-2,959.82	-10,251.04	5,917.85	5,823.49	94.36	62.718		
11,800.00	7,226.60	7,163.75	7,048.38	138.14	41.18	-86.23	-2,959.86	-10,251.06	5,826.51	5,730.39	96.12	60.617		
11,900.00	7,226.20	7,164.65	7,049.29	140.92	41.18	-86.25	-2,959.90	-10,251.07	5,735.45	5,637.50	97.96	58.551		
12,000.00	7,225.81	7,165.56	7,050.19	143.70	41.18	-86.27	-2,959.93	-10,251.09	5,644.70	5,544.84	99.87	56.523		
12,100.00	7,225.42	7,166.46	7,051.10	146.49	41.19	-86.29	-2,959.97	-10,251.10	5,554.27	5,452.42	101.85	54.533		
12,200.00	7,225.02	7,167.37	7,052.00	149.28	41.19	-86.31	-2,960.01	-10,251.11	5,464.17	5,360.26	103.92	52.583		
12,300.00	7,224.63	7,168.27	7,052.90	152.08	41.19	-86.33	-2,960.04	-10,251.13	5,374.42	5,268.36	106.06	50.673		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,400.00	7,224.24	7,169.17	7,053.80	154.87	41.19	-86.36	-2,960.08	-10,251.14	5,285.04	5,176.75	108.29	48.803		
12,500.00	7,223.84	7,170.06	7,054.69	157.67	41.20	-86.38	-2,960.12	-10,251.15	5,196.05	5,085.43	110.61	46.976		
12,600.00	7,223.45	7,170.96	7,055.59	160.47	41.20	-86.40	-2,960.16	-10,251.17	5,107.46	4,994.44	113.02	45.190		
12,700.00	7,223.06	7,171.86	7,056.48	163.27	41.20	-86.42	-2,960.19	-10,251.18	5,019.30	4,903.77	115.52	43.448		
12,800.00	7,222.66	7,172.75	7,057.37	166.07	41.21	-86.44	-2,960.23	-10,251.19	4,931.59	4,813.46	118.13	41.749		
12,900.00	7,222.27	7,173.64	7,058.27	168.88	41.21	-86.46	-2,960.27	-10,251.20	4,844.36	4,723.53	120.83	40.093		
13,000.00	7,221.88	7,174.53	7,059.15	171.69	41.21	-86.48	-2,960.31	-10,251.22	4,757.63	4,633.99	123.64	38.481		
13,100.00	7,221.48	7,175.42	7,060.04	174.49	41.22	-86.51	-2,960.35	-10,251.23	4,671.43	4,544.88	126.55	36.913		
13,200.00	7,221.09	7,176.31	7,060.93	177.30	41.22	-86.53	-2,960.38	-10,251.24	4,585.79	4,456.21	129.58	35.389		
13,300.00	7,220.70	7,177.19	7,061.81	180.12	41.22	-86.55	-2,960.42	-10,251.26	4,500.75	4,368.02	132.73	33.910		
13,400.00	7,220.30	7,178.08	7,062.70	182.93	41.22	-86.57	-2,960.46	-10,251.27	4,416.32	4,280.33	135.99	32.474		
13,500.00	7,219.91	7,178.96	7,063.58	185.74	41.23	-86.59	-2,960.50	-10,251.28	4,332.57	4,193.18	139.39	31.083		
13,600.00	7,219.52	7,179.84	7,064.46	188.56	41.23	-86.61	-2,960.53	-10,251.30	4,249.51	4,106.60	142.91	29.736		
13,700.00	7,219.12	7,180.72	7,065.34	191.38	41.23	-86.63	-2,960.57	-10,251.31	4,167.20	4,020.63	146.57	28.432		
13,800.00	7,218.73	7,181.60	7,066.21	194.20	41.24	-86.65	-2,960.61	-10,251.32	4,085.68	3,935.32	150.36	27.172		
13,900.00	7,218.34	7,182.47	7,067.09	197.02	41.24	-86.67	-2,960.65	-10,251.33	4,005.00	3,850.69	154.30	25.956		
14,000.00	7,217.94	7,183.35	7,067.96	199.84	41.24	-86.70	-2,960.69	-10,251.35	3,925.20	3,766.81	158.39	24.782		
14,100.00	7,217.55	7,184.22	7,068.84	202.66	41.24	-86.72	-2,960.72	-10,251.36	3,846.35	3,683.72	162.63	23.652		
14,200.00	7,217.16	7,185.10	7,069.71	205.48	41.25	-86.74	-2,960.76	-10,251.37	3,768.50	3,601.48	167.02	22.563		
14,300.00	7,216.76	7,185.97	7,070.58	208.30	41.25	-86.76	-2,960.80	-10,251.39	3,691.72	3,520.15	171.57	21.517		
14,400.00	7,216.37	7,186.84	7,071.45	211.13	41.25	-86.78	-2,960.84	-10,251.40	3,616.08	3,439.79	176.28	20.513		
14,500.00	7,215.98	7,187.70	7,072.31	213.96	41.26	-86.80	-2,960.88	-10,251.41	3,541.64	3,360.48	181.16	19.550		
14,600.00	7,215.58	7,188.57	7,073.18	216.78	41.26	-86.82	-2,960.91	-10,251.42	3,468.49	3,282.29	186.20	18.628		
14,700.00	7,215.19	7,195.00	7,079.60	219.61	41.28	-86.98	-2,961.20	-10,251.52	3,396.71	3,205.27	191.43	17.744		
14,800.00	7,214.80	7,195.00	7,079.60	222.44	41.28	-86.98	-2,961.20	-10,251.52	3,326.38	3,129.58	196.80	16.902		
14,900.00	7,214.40	7,195.00	7,079.60	225.27	41.28	-86.98	-2,961.20	-10,251.52	3,257.60	3,055.27	202.34	16.100		
15,000.00	7,214.01	7,195.00	7,079.60	228.10	41.28	-86.98	-2,961.20	-10,251.52	3,190.48	2,982.45	208.03	15.337		
15,002.44	7,214.00	7,195.00	7,079.60	228.16	41.28	-86.98	-2,961.20	-10,251.52	3,188.87	2,980.69	208.17	15.318	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.66	-2,849.07	-8,947.91	9,390.61					
100.00	100.00	36.96	72.96	3.28	3.28	-107.66	-2,848.99	-8,947.99	9,390.64	9,384.07	6.57	1,430.292		
200.00	200.00	94.69	130.69	3.34	3.29	-107.66	-2,848.56	-8,948.44	9,391.15	9,384.53	6.62	1,418.093		
300.00	300.00	466.21	502.05	3.44	3.72	-107.60	-2,838.99	-8,947.40	9,389.18	9,382.01	7.17	1,309.478		
400.00	400.00	730.19	765.83	3.60	4.39	-107.57	-2,830.60	-8,942.03	9,386.48	9,378.47	8.00	1,173.026		
500.00	500.00	793.30	828.87	3.81	4.58	-107.55	-2,827.99	-8,940.31	9,382.69	9,374.30	8.39	1,118.152		
600.00	599.98	850.00	885.47	4.03	4.76	54.37	-2,824.86	-8,939.44	9,378.48	9,369.68	8.80	1,066.238		
700.00	699.84	885.74	921.13	4.29	4.88	54.49	-2,822.50	-8,939.23	9,372.78	9,363.62	9.16	1,022.990		
800.00	799.54	945.00	980.22	4.57	5.08	54.57	-2,817.96	-8,939.40	9,366.20	9,356.56	9.64	971.444		
900.00	899.23	1,009.76	1,044.68	4.87	5.31	54.63	-2,811.78	-8,940.23	9,359.98	9,349.80	10.18	919.840		
1,000.00	998.92	1,156.42	1,190.11	5.20	5.87	54.80	-2,793.20	-8,943.27	9,353.64	9,342.58	11.06	845.494		
1,100.00	1,098.61	1,558.77	1,585.31	5.54	7.72	55.41	-2,718.78	-8,951.21	9,345.75	9,332.51	13.24	705.941		
1,200.00	1,198.30	1,200.00	1,961.80	5.90	5.93	56.16	-2,617.54	-8,954.28	9,334.29	9,322.77	11.51	810.638		
1,300.00	1,298.00	2,038.80	2,048.19	6.27	10.51	56.35	-2,592.01	-8,954.05	9,321.60	9,304.91	16.70	558.250		
1,400.00	1,397.69	2,081.00	2,088.61	6.66	10.77	56.44	-2,579.90	-8,954.24	9,309.54	9,292.20	17.34	536.890		
1,500.00	1,497.38	2,121.15	2,127.03	7.05	11.03	56.53	-2,568.26	-8,954.69	9,298.12	9,280.14	17.99	516.967		
1,600.00	1,597.07	2,175.00	2,178.46	7.44	11.38	56.64	-2,552.31	-8,955.71	9,287.34	9,268.61	18.73	495.905		
1,700.00	1,696.76	2,388.61	2,381.77	7.85	12.84	57.12	-2,486.89	-8,959.04	9,276.08	9,255.53	20.55	451.323		
1,800.00	1,796.45	2,484.80	2,473.21	8.25	13.51	57.34	-2,457.04	-8,960.09	9,264.53	9,242.91	21.62	428.577		
1,900.00	1,896.15	2,599.21	2,582.24	8.67	14.30	57.60	-2,422.40	-8,960.80	9,252.86	9,230.05	22.81	405.622		
2,000.00	1,995.84	2,000.00	2,698.42	9.08	10.02	57.88	-2,383.94	-8,961.66	9,241.13	9,222.12	19.01	486.169		
2,100.00	2,095.53	2,820.89	2,792.25	9.50	15.91	58.11	-2,351.46	-8,962.39	9,229.25	9,204.03	25.22	365.902		
2,200.00	2,195.22	2,877.42	2,845.80	9.92	16.32	58.25	-2,333.34	-8,962.85	9,217.79	9,191.73	26.05	353.823		
2,300.00	2,294.91	2,933.00	2,898.91	10.35	16.71	58.37	-2,316.99	-8,963.17	9,206.86	9,179.98	26.87	342.610		
2,400.00	2,394.60	2,994.41	2,957.78	10.77	17.14	58.50	-2,299.49	-8,963.60	9,196.41	9,168.68	27.73	331.692		
2,500.00	2,494.30	3,169.74	3,125.74	11.20	18.36	58.88	-2,249.23	-8,964.34	9,185.77	9,156.42	29.35	312.987		
2,600.00	2,593.99	2,600.00	3,239.06	11.63	14.46	59.13	-2,216.46	-8,963.90	9,174.76	9,148.82	25.94	353.690		
2,700.00	2,693.68	3,359.48	3,307.94	12.07	19.67	59.28	-2,196.30	-8,963.55	9,163.74	9,132.24	31.51	290.858		
2,800.00	2,793.37	3,409.00	3,355.40	12.50	20.02	59.38	-2,182.16	-8,963.69	9,153.35	9,121.06	32.29	283.480		
2,900.00	2,893.06	3,500.58	3,443.23	12.93	20.66	59.58	-2,156.21	-8,964.12	9,143.35	9,109.99	33.36	274.082		
3,000.00	2,992.76	3,575.80	3,515.39	13.37	21.18	59.74	-2,134.95	-8,964.47	9,133.50	9,099.18	34.32	266.102		
3,100.00	3,092.45	3,649.27	3,585.71	13.81	21.70	59.90	-2,113.71	-8,965.09	9,123.98	9,088.70	35.28	258.599		
3,200.00	3,192.14	3,734.80	3,667.45	14.25	22.32	60.10	-2,088.54	-8,966.09	9,114.78	9,078.44	36.34	250.838		
3,300.00	3,291.83	3,833.86	3,761.54	14.68	23.05	60.33	-2,057.60	-8,967.60	9,105.67	9,068.16	37.51	242.760		
3,400.00	3,391.52	3,935.90	3,858.21	15.12	23.82	60.57	-2,024.99	-8,969.27	9,096.66	9,057.94	38.72	234.947		
3,500.00	3,491.21	4,018.26	3,936.24	15.56	24.45	60.77	-1,998.69	-8,970.54	9,087.74	9,047.96	39.78	228.432		
3,600.00	3,590.91	4,071.00	3,986.31	16.00	24.84	60.90	-1,982.12	-8,971.42	9,079.22	9,038.59	40.63	223.464		
3,700.00	3,690.60	4,127.24	4,039.81	16.45	25.26	61.03	-1,964.81	-8,972.52	9,071.24	9,029.75	41.49	218.614		
3,800.00	3,790.29	3,800.00	4,419.05	16.89	22.67	61.99	-1,838.49	-8,976.96	9,063.67	9,024.33	39.34	230.402		
3,900.00	3,889.98	4,592.75	4,480.93	17.33	28.80	62.15	-1,816.42	-8,976.55	9,053.15	9,007.29	45.86	197.406		
4,000.00	3,989.67	4,639.00	4,524.56	17.77	29.16	62.27	-1,801.06	-8,976.50	9,043.28	8,996.59	46.68	193.724		
4,100.00	4,089.36	4,685.31	4,568.42	18.22	29.51	62.38	-1,786.17	-8,976.59	9,034.02	8,986.54	47.49	190.237		
4,200.00	4,189.06	4,736.00	4,616.68	18.66	29.89	62.50	-1,770.68	-8,976.77	9,025.37	8,977.04	48.33	186.758		
4,300.00	4,288.75	4,785.40	4,663.89	19.10	30.25	62.61	-1,756.15	-8,977.09	9,017.29	8,968.15	49.14	183.501		
4,400.00	4,388.44	4,839.44	4,715.65	19.55	30.64	62.73	-1,740.61	-8,977.63	9,009.80	8,959.81	49.98	180.258		
4,500.00	4,488.13	4,919.38	4,792.73	19.99	31.19	62.90	-1,719.46	-8,978.32	9,002.70	8,951.71	50.98	176.588		
4,600.00	4,587.82	4,984.58	4,856.00	20.44	31.61	63.03	-1,703.72	-8,978.79	8,995.93	8,944.07	51.86	173.475		
4,700.00	4,687.51	5,050.37	4,919.99	20.89	32.03	63.15	-1,688.48	-8,979.39	8,989.59	8,936.86	52.73	170.491		
4,800.00	4,787.21	5,118.88	4,986.83	21.33	32.45	63.28	-1,673.42	-8,980.09	8,983.64	8,930.03	53.60	167.590		
4,900.00	4,886.90	5,196.19	5,062.56	21.78	32.91	63.41	-1,657.93	-8,980.85	8,978.02	8,923.51	54.51	164.705		
5,000.00	4,986.59	5,272.62	5,137.81	22.22	33.32	63.53	-1,644.55	-8,981.46	8,972.68	8,917.30	55.38	162.023		
5,100.00	5,086.28	5,346.46	5,210.80	22.67	33.71	63.63	-1,633.38	-8,981.97	8,967.64	8,911.42	56.21	159.530		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,418.59	5,282.23	23.12	34.06	63.73	-1,623.47	-8,982.52	8,962.92	8,905.90	57.02	157.194		
5,300.00	5,285.66	5,493.00	5,356.18	23.56	34.41	63.82	-1,615.19	-8,983.03	8,958.52	8,900.70	57.81	154.959		
5,400.00	5,385.36	5,560.60	5,423.50	24.01	34.69	63.88	-1,609.07	-8,983.49	8,954.45	8,895.90	58.55	152.942		
5,500.00	5,485.05	5,500.00	5,616.76	24.46	34.49	64.06	-1,595.16	-8,983.62	8,950.08	8,891.29	58.79	152.233		
5,600.00	5,584.74	5,831.41	5,693.69	24.90	35.75	64.12	-1,591.17	-8,982.99	8,945.16	8,884.67	60.50	147.865		
5,700.00	5,684.43	5,872.00	5,734.24	25.35	35.89	64.15	-1,589.44	-8,982.83	8,940.81	8,879.71	61.09	146.345		
5,800.00	5,784.12	5,932.36	5,794.56	25.80	36.10	64.19	-1,587.34	-8,982.86	8,936.99	8,875.24	61.75	144.726		
5,900.00	5,883.81	5,995.58	5,857.77	26.25	36.31	64.23	-1,585.75	-8,983.17	8,933.69	8,871.28	62.41	143.137		
6,000.00	5,983.51	6,084.18	5,946.34	26.70	36.60	64.28	-1,583.80	-8,983.77	8,930.66	8,867.50	63.16	141.407		
6,100.00	6,083.20	6,197.40	6,059.53	27.14	36.98	64.35	-1,581.53	-8,984.47	8,927.59	8,863.61	63.98	139.541		
6,200.00	6,182.89	6,282.44	6,144.56	27.59	37.26	64.40	-1,579.90	-8,984.94	8,924.50	8,859.79	64.71	137.914		
6,300.00	6,282.58	6,359.63	6,221.73	28.04	37.52	64.44	-1,578.30	-8,985.59	8,921.66	8,856.25	65.42	136.381		
6,400.00	6,382.27	6,439.82	6,301.89	28.49	37.79	64.49	-1,576.55	-8,986.46	8,919.07	8,852.94	66.14	134.859		
6,500.00	6,481.96	6,521.02	6,383.07	28.94	38.06	64.54	-1,574.87	-8,987.50	8,916.69	8,849.83	66.86	133.366		
6,600.00	6,581.66	6,625.67	6,487.70	29.39	38.41	64.60	-1,572.81	-8,988.93	8,914.43	8,846.76	67.66	131.748		
6,700.00	6,681.21	6,724.48	6,586.47	29.83	38.75	26.14	-1,570.91	-8,990.18	8,909.51	8,841.06	68.45	130.169		
6,800.00	6,778.96	6,802.61	6,664.58	30.28	39.01	8.51	-1,569.46	-8,991.29	8,890.69	8,821.54	69.15	128.576		
6,900.00	6,872.51	6,883.49	6,745.44	30.70	39.29	2.80	-1,567.98	-8,992.60	8,857.06	8,787.23	69.84	126.827		
7,000.00	6,969.55	6,969.48	6,831.39	31.10	39.59	-0.31	-1,566.12	-8,994.09	8,809.30	8,738.79	70.51	124.937		
7,100.00	7,037.93	7,055.21	6,917.08	31.48	39.89	-2.71	-1,563.97	-8,995.60	8,748.53	8,677.39	71.14	122.982		
7,200.00	7,105.74	7,137.09	6,998.93	31.88	40.18	-5.20	-1,561.95	-8,996.93	8,676.14	8,604.44	71.69	121.016		
7,300.00	7,161.29	7,194.54	7,056.36	32.41	40.38	-8.51	-1,560.60	-8,997.79	8,593.96	8,521.87	72.10	119.196		
7,400.00	7,203.22	7,231.99	7,093.80	33.13	40.51	-14.04	-1,559.79	-8,998.37	8,504.13	8,431.76	72.37	117.510		
7,500.00	7,230.50	7,256.91	7,118.71	34.04	40.60	-26.28	-1,559.29	-8,998.76	8,408.85	8,336.31	72.54	115.925		
7,600.00	7,242.45	7,268.63	7,130.43	35.13	40.64	-64.76	-1,559.06	-8,998.95	8,310.44	8,237.83	72.61	114.453		
7,700.00	7,242.72	7,270.25	7,132.04	36.39	40.64	-85.48	-1,559.03	-8,998.97	8,211.18	8,138.55	72.62	113.067		
7,800.00	7,242.33	7,271.29	7,133.08	37.81	40.65	-85.54	-1,559.01	-8,998.99	8,111.93	8,039.29	72.64	111.679		
7,900.00	7,241.93	7,272.34	7,134.13	39.40	40.65	-85.60	-1,558.99	-8,999.01	8,012.69	7,940.04	72.65	110.284		
8,000.00	7,241.54	7,273.38	7,135.17	41.13	40.65	-85.66	-1,558.97	-8,999.02	7,913.48	7,840.80	72.68	108.881		
8,100.00	7,241.15	7,274.43	7,136.22	42.97	40.66	-85.72	-1,558.95	-8,999.04	7,814.29	7,741.57	72.71	107.470		
8,200.00	7,240.75	7,275.48	7,137.27	44.92	40.66	-85.78	-1,558.93	-8,999.06	7,715.11	7,642.36	72.75	106.051		
8,300.00	7,240.36	7,276.54	7,138.33	46.97	40.66	-85.84	-1,558.91	-8,999.07	7,615.96	7,543.17	72.79	104.623		
8,400.00	7,239.97	7,277.59	7,139.38	49.10	40.67	-85.90	-1,558.89	-8,999.09	7,516.83	7,443.99	72.85	103.187		
8,500.00	7,239.57	7,278.65	7,140.44	51.29	40.67	-85.96	-1,558.88	-8,999.11	7,417.73	7,344.82	72.91	101.742		
8,600.00	7,239.18	7,279.71	7,141.50	53.56	40.67	-86.02	-1,558.86	-8,999.13	7,318.64	7,245.67	72.98	100.288		
8,700.00	7,238.79	7,280.78	7,142.56	55.87	40.68	-86.08	-1,558.84	-8,999.14	7,219.59	7,146.53	73.05	98.825		
8,800.00	7,238.39	7,281.84	7,143.63	58.24	40.68	-86.14	-1,558.82	-8,999.16	7,120.56	7,047.42	73.14	97.353		
8,900.00	7,238.00	7,282.91	7,144.70	60.64	40.69	-86.20	-1,558.80	-8,999.18	7,021.55	6,948.31	73.24	95.871		
9,000.00	7,237.61	7,283.98	7,145.77	63.09	40.69	-86.26	-1,558.78	-8,999.19	6,922.58	6,849.23	73.35	94.380		
9,100.00	7,237.21	7,285.05	7,146.84	65.56	40.69	-86.32	-1,558.76	-8,999.21	6,823.63	6,750.17	73.47	92.880		
9,200.00	7,236.82	7,286.13	7,147.92	68.07	40.70	-86.39	-1,558.74	-8,999.23	6,724.72	6,651.12	73.60	91.370		
9,300.00	7,236.43	7,287.21	7,148.99	70.61	40.70	-86.45	-1,558.72	-8,999.25	6,625.84	6,552.09	73.74	89.850		
9,400.00	7,236.03	7,288.29	7,150.07	73.16	40.70	-86.51	-1,558.70	-8,999.26	6,526.99	6,453.09	73.90	88.320		
9,500.00	7,235.64	7,289.37	7,151.15	75.74	40.71	-86.57	-1,558.68	-8,999.28	6,428.18	6,354.10	74.07	86.780		
9,600.00	7,235.25	7,290.45	7,152.24	78.34	40.71	-86.63	-1,558.66	-8,999.30	6,329.40	6,255.14	74.26	85.230		
9,700.00	7,234.85	7,291.54	7,153.33	80.96	40.72	-86.70	-1,558.64	-8,999.32	6,230.67	6,156.20	74.47	83.670		
9,800.00	7,234.46	7,292.63	7,154.42	83.59	40.72	-86.76	-1,558.62	-8,999.34	6,131.97	6,057.28	74.69	82.099		
9,900.00	7,234.07	7,293.72	7,155.51	86.24	40.72	-86.82	-1,558.60	-8,999.35	6,033.32	5,958.39	74.93	80.519		
10,000.00	7,233.67	7,294.82	7,156.60	88.90	40.73	-86.88	-1,558.58	-8,999.37	5,934.71	5,859.52	75.19	78.929		
10,100.00	7,233.28	7,295.92	7,157.70	91.57	40.73	-86.95	-1,558.56	-8,999.39	5,836.15	5,760.68	75.47	77.329		
10,200.00	7,232.89	7,297.01	7,158.80	94.25	40.74	-87.01	-1,558.54	-8,999.41	5,737.64	5,661.86	75.78	75.719		
10,300.00	7,232.49	7,298.12	7,159.90	96.95	40.74	-87.07	-1,558.52	-8,999.43	5,639.18	5,563.08	76.10	74.100		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,299.22	7,161.01	99.65	40.74	-87.14	-1,558.50	-8,999.44	5,540.77	5,464.32	76.46	72.471		
10,500.00	7,231.71	7,300.33	7,162.11	102.36	40.75	-87.20	-1,558.48	-8,999.46	5,442.43	5,365.59	76.84	70.833		
10,600.00	7,231.32	7,301.44	7,163.22	105.08	40.75	-87.27	-1,558.46	-8,999.48	5,344.14	5,266.90	77.24	69.186		
10,700.00	7,230.92	7,302.55	7,164.33	107.80	40.75	-87.33	-1,558.45	-8,999.50	5,245.92	5,168.24	77.68	67.531		
10,800.00	7,230.53	7,303.67	7,165.45	110.53	40.76	-87.39	-1,558.43	-8,999.52	5,147.77	5,069.62	78.15	65.868		
10,900.00	7,230.14	7,304.78	7,166.57	113.27	40.76	-87.46	-1,558.41	-8,999.53	5,049.69	4,971.03	78.66	64.197		
11,000.00	7,229.74	7,305.90	7,167.69	116.02	40.77	-87.52	-1,558.39	-8,999.55	4,951.69	4,872.48	79.20	62.520		
11,100.00	7,229.35	7,307.03	7,168.81	118.77	40.77	-87.59	-1,558.37	-8,999.57	4,853.76	4,773.98	79.78	60.836		
11,200.00	7,228.96	7,308.15	7,169.93	121.52	40.77	-87.65	-1,558.35	-8,999.59	4,755.93	4,675.52	80.41	59.147		
11,300.00	7,228.56	7,309.28	7,171.06	124.28	40.78	-87.72	-1,558.33	-8,999.61	4,658.18	4,577.10	81.08	57.454		
11,400.00	7,228.17	7,310.41	7,172.19	127.04	40.78	-87.78	-1,558.31	-8,999.63	4,560.53	4,478.74	81.79	55.756		
11,500.00	7,227.78	7,311.54	7,173.32	129.81	40.79	-87.85	-1,558.29	-8,999.65	4,462.99	4,380.43	82.56	54.057		
11,600.00	7,227.38	7,312.68	7,174.46	132.58	40.79	-87.91	-1,558.27	-8,999.67	4,365.56	4,282.17	83.38	52.355		
11,700.00	7,226.99	7,313.82	7,175.60	135.36	40.79	-87.98	-1,558.25	-8,999.68	4,268.24	4,183.98	84.26	50.653		
11,800.00	7,226.60	7,314.96	7,176.74	138.14	40.80	-88.04	-1,558.23	-8,999.70	4,171.06	4,085.85	85.21	48.953		
11,900.00	7,226.20	7,316.10	7,177.88	140.92	40.80	-88.11	-1,558.21	-8,999.72	4,074.00	3,987.79	86.22	47.254		
12,000.00	7,225.81	7,317.25	7,179.03	143.70	40.81	-88.18	-1,558.19	-8,999.74	3,977.10	3,889.80	87.30	45.559		
12,100.00	7,225.42	7,318.40	7,180.17	146.49	40.81	-88.24	-1,558.18	-8,999.76	3,880.35	3,791.90	88.45	43.869		
12,200.00	7,225.02	7,319.55	7,181.32	149.28	40.81	-88.31	-1,558.16	-8,999.78	3,783.77	3,694.08	89.69	42.187		
12,300.00	7,224.63	7,320.70	7,182.48	152.08	40.82	-88.37	-1,558.14	-8,999.80	3,687.37	3,596.35	91.02	40.513		
12,400.00	7,224.24	7,321.86	7,183.64	154.87	40.82	-88.44	-1,558.12	-8,999.82	3,591.17	3,498.73	92.44	38.849		
12,500.00	7,223.84	7,323.02	7,184.79	157.67	40.83	-88.51	-1,558.10	-8,999.84	3,495.18	3,401.22	93.96	37.198		
12,600.00	7,223.45	7,324.18	7,185.96	160.47	40.83	-88.57	-1,558.08	-8,999.86	3,399.42	3,303.82	95.60	35.560		
12,700.00	7,223.06	7,325.34	7,187.12	163.27	40.83	-88.64	-1,558.06	-8,999.88	3,303.91	3,206.57	97.35	33.940		
12,800.00	7,222.66	7,326.51	7,188.29	166.07	40.84	-88.71	-1,558.04	-8,999.90	3,208.68	3,109.45	99.23	32.337		
12,900.00	7,222.27	7,327.68	7,189.46	168.88	40.84	-88.78	-1,558.02	-8,999.92	3,113.74	3,012.50	101.24	30.755		
13,000.00	7,221.88	7,328.86	7,190.63	171.69	40.85	-88.84	-1,558.00	-8,999.93	3,019.13	2,915.72	103.41	29.196		
13,100.00	7,221.48	7,330.03	7,191.81	174.49	40.85	-88.91	-1,557.98	-8,999.95	2,924.88	2,819.14	105.74	27.661		
13,200.00	7,221.09	7,331.21	7,192.98	177.30	40.85	-88.98	-1,557.97	-8,999.97	2,831.02	2,722.78	108.25	26.154		
13,300.00	7,220.70	7,332.39	7,194.17	180.12	40.86	-89.05	-1,557.95	-8,999.99	2,737.60	2,626.66	110.94	24.676		
13,400.00	7,220.30	7,333.58	7,195.35	182.93	40.86	-89.12	-1,557.93	-9,000.01	2,644.66	2,530.81	113.85	23.229		
13,500.00	7,219.91	7,334.76	7,196.54	185.74	40.87	-89.18	-1,557.91	-9,000.03	2,552.25	2,435.26	116.98	21.817		
13,600.00	7,219.52	7,335.95	7,197.73	188.56	40.87	-89.25	-1,557.89	-9,000.05	2,460.43	2,340.06	120.37	20.441		
13,700.00	7,219.12	7,337.14	7,198.92	191.38	40.88	-89.32	-1,557.87	-9,000.07	2,369.28	2,245.25	124.02	19.104		
13,800.00	7,218.73	7,338.34	7,200.11	194.20	40.88	-89.39	-1,557.85	-9,000.09	2,278.86	2,150.89	127.97	17.807		
13,900.00	7,218.34	7,339.54	7,201.31	197.02	40.88	-89.46	-1,557.83	-9,000.11	2,189.28	2,057.03	132.25	16.554		
14,000.00	7,217.94	7,340.74	7,202.51	199.84	40.89	-89.53	-1,557.81	-9,000.14	2,100.64	1,963.76	136.88	15.347		
14,100.00	7,217.55	7,341.94	7,203.72	202.66	40.89	-89.60	-1,557.80	-9,000.16	2,013.07	1,871.17	141.90	14.186		
14,200.00	7,217.16	7,343.15	7,204.92	205.48	40.90	-89.67	-1,557.78	-9,000.18	1,926.70	1,779.36	147.34	13.076		
14,300.00	7,216.76	7,344.36	7,206.13	208.30	40.90	-89.74	-1,557.76	-9,000.20	1,841.71	1,688.46	153.25	12.018		
14,400.00	7,216.37	7,345.57	7,207.34	211.13	40.90	-89.81	-1,557.74	-9,000.22	1,758.30	1,598.66	159.65	11.014		
14,500.00	7,215.98	7,346.79	7,208.56	213.96	40.91	-89.88	-1,557.72	-9,000.24	1,676.71	1,510.13	166.58	10.065		
14,600.00	7,215.58	7,348.01	7,209.78	216.78	40.91	-89.95	-1,557.70	-9,000.26	1,597.21	1,423.12	174.09	9.175		
14,700.00	7,215.19	7,349.23	7,211.00	219.61	40.92	-90.02	-1,557.68	-9,000.28	1,520.13	1,337.94	182.19	8.344		
14,800.00	7,214.80	7,350.45	7,212.22	222.44	40.92	-90.09	-1,557.66	-9,000.30	1,445.86	1,254.97	190.89	7.574		
14,900.00	7,214.40	7,351.68	7,213.45	225.27	40.93	-90.16	-1,557.65	-9,000.32	1,374.85	1,174.67	200.19	6.868		
15,000.00	7,214.01	7,352.91	7,214.68	228.10	40.93	-90.23	-1,557.63	-9,000.34	1,307.64	1,097.60	210.04	6.226		
15,002.44	7,214.00	7,352.94	7,214.71	228.16	40.93	-90.23	-1,557.63	-9,000.34	1,306.06	1,095.77	210.29	6.211	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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.64	-2,854.89	-8,978.79	9,421.80					
100.00	100.00	181.47	217.45	3.28	3.33	-107.62	-2,852.04	-8,978.46	9,421.29	9,414.68	6.62	1,424.229		
200.00	200.00	308.52	344.45	3.34	3.47	-107.61	-2,849.05	-8,977.48	9,419.82	9,413.02	6.81	1,383.704		
300.00	300.00	414.54	450.42	3.44	3.65	-107.59	-2,845.81	-8,976.81	9,418.30	9,411.21	7.09	1,327.502		
400.00	400.00	497.98	533.81	3.60	3.83	-107.57	-2,842.73	-8,976.40	9,416.73	9,409.30	7.43	1,267.597		
500.00	500.00	542.00	577.78	3.81	3.93	-107.56	-2,840.83	-8,976.40	9,415.53	9,407.79	7.73	1,217.328		
600.00	599.98	592.07	627.80	4.03	4.06	54.32	-2,838.57	-8,976.73	9,413.86	9,405.77	8.09	1,163.758		
700.00	699.84	648.00	683.67	4.29	4.21	54.40	-2,836.09	-8,977.63	9,410.89	9,402.40	8.49	1,108.394		
800.00	799.54	667.39	703.03	4.57	4.26	54.43	-2,835.26	-8,978.06	9,407.03	9,398.21	8.83	1,065.877		
900.00	899.23	719.87	755.46	4.87	4.41	54.46	-2,833.22	-8,979.46	9,403.79	9,394.51	9.28	1,013.112		
1,000.00	998.92	790.00	825.51	5.20	4.62	54.51	-2,830.66	-8,981.42	9,400.84	9,391.02	9.82	957.222		
1,100.00	1,098.61	840.24	875.69	5.54	4.78	54.54	-2,828.64	-8,983.11	9,398.33	9,388.01	10.32	910.275		
1,200.00	1,198.30	884.00	919.35	5.90	4.93	54.58	-2,826.50	-8,985.00	9,396.46	9,385.63	10.83	867.925		
1,300.00	1,298.00	884.00	919.35	6.27	4.93	54.58	-2,826.50	-8,985.00	9,395.41	9,384.21	11.20	839.071		
1,400.00	1,397.69	937.28	972.47	6.66	5.11	54.62	-2,823.68	-8,987.98	9,394.87	9,383.12	11.76	799.045		
1,402.20	1,399.88	937.88	973.07	6.66	5.11	54.62	-2,823.64	-8,988.01	9,394.87	9,383.10	11.77	798.331		
1,500.00	1,497.38	979.00	1,014.03	7.05	5.25	54.65	-2,821.47	-8,990.88	9,395.28	9,382.99	12.29	764.457		
1,600.00	1,597.07	1,002.86	1,037.78	7.44	5.34	54.67	-2,820.14	-8,992.74	9,396.36	9,383.59	12.77	735.821		
1,700.00	1,696.76	1,053.31	1,087.94	7.85	5.52	54.72	-2,816.92	-8,996.99	9,398.05	9,384.70	13.35	703.839		
1,800.00	1,796.45	1,126.13	1,160.22	8.25	5.80	54.79	-2,811.21	-9,003.79	9,400.20	9,386.17	14.03	669.870		
1,900.00	1,896.15	1,168.00	1,201.70	8.67	5.97	54.84	-2,807.31	-9,007.93	9,402.65	9,388.05	14.60	643.842		
2,000.00	1,995.84	1,223.53	1,256.61	9.08	6.20	54.91	-2,801.50	-9,013.90	9,405.62	9,390.38	15.24	617.089		
2,100.00	2,095.53	1,263.00	1,295.53	9.50	6.37	54.96	-2,796.98	-9,018.61	9,409.32	9,393.51	15.82	594.809		
2,200.00	2,195.22	1,292.56	1,324.62	9.92	6.50	54.99	-2,793.35	-9,022.41	9,413.73	9,397.37	16.36	575.315		
2,300.00	2,294.91	1,324.89	1,356.36	10.35	6.65	55.04	-2,789.11	-9,026.87	9,418.86	9,401.94	16.92	556.635		
2,400.00	2,394.60	1,358.00	1,388.78	10.77	6.80	55.09	-2,784.49	-9,031.75	9,424.71	9,407.23	17.49	539.014		
2,500.00	2,494.30	1,454.78	1,483.43	11.20	7.27	55.23	-2,770.63	-9,046.45	9,430.97	9,412.62	18.36	513.782		
2,600.00	2,593.99	1,547.00	1,573.77	11.63	7.73	55.36	-2,758.18	-9,060.16	9,437.21	9,417.99	19.22	491.112		
2,700.00	2,693.68	1,600.22	1,625.93	12.07	8.00	55.44	-2,751.32	-9,068.13	9,443.79	9,423.90	19.89	474.726		
2,800.00	2,793.37	1,649.02	1,673.71	12.50	8.25	55.51	-2,744.95	-9,075.77	9,450.97	9,430.42	20.55	459.878		
2,900.00	2,893.06	1,831.00	1,852.05	12.93	9.21	55.76	-2,722.02	-9,103.80	9,458.19	9,436.30	21.89	432.174		
3,000.00	2,992.76	1,880.95	1,900.97	13.37	9.48	55.83	-2,715.35	-9,111.38	9,465.02	9,442.46	22.56	419.507		
3,100.00	3,092.45	1,926.00	1,945.04	13.81	9.72	55.89	-2,709.36	-9,118.53	9,472.50	9,449.29	23.21	408.040		
3,200.00	3,192.14	2,068.62	2,084.83	14.25	10.50	56.09	-2,691.49	-9,140.42	9,479.63	9,455.25	24.38	388.862		
3,300.00	3,291.83	2,337.49	2,347.83	14.68	12.02	56.48	-2,653.71	-9,181.34	9,487.06	9,460.81	26.25	361.412		
3,400.00	3,391.52	2,372.21	2,381.82	15.12	12.22	56.53	-2,648.65	-9,186.34	9,493.05	9,466.18	26.86	353.404		
3,500.00	3,491.21	2,414.68	2,423.48	15.56	12.46	56.59	-2,643.18	-9,192.58	9,499.72	9,472.21	27.51	345.271		
3,600.00	3,590.91	2,492.19	2,499.46	16.00	12.90	56.69	-2,633.24	-9,204.20	9,506.80	9,478.45	28.35	335.312		
3,700.00	3,690.60	2,541.39	2,547.62	16.45	13.19	56.76	-2,626.69	-9,211.81	9,514.27	9,485.23	29.04	327.609		
3,800.00	3,790.29	2,590.00	2,595.13	16.89	13.47	56.83	-2,620.03	-9,219.63	9,522.30	9,492.57	29.73	320.320		
3,900.00	3,889.98	2,709.87	2,712.26	17.33	14.18	57.01	-2,603.47	-9,239.02	9,530.43	9,499.61	30.82	309.249		
4,000.00	3,989.67	2,791.43	2,791.96	17.77	14.66	57.12	-2,592.32	-9,252.27	9,538.72	9,507.02	31.69	300.979		
4,100.00	4,089.36	2,874.00	2,872.84	18.22	15.14	57.24	-2,581.84	-9,265.18	9,546.78	9,514.21	32.57	293.147		
4,200.00	4,189.06	2,934.53	2,932.22	18.66	15.49	57.31	-2,574.90	-9,274.64	9,555.25	9,521.94	33.31	286.865		
4,300.00	4,288.75	2,969.00	2,966.02	19.10	15.68	57.36	-2,571.21	-9,280.32	9,564.57	9,530.66	33.91	282.073		
4,400.00	4,388.44	3,200.81	3,193.35	19.55	17.02	57.65	-2,545.93	-9,317.86	9,573.75	9,538.16	35.59	269.010		
4,500.00	4,488.13	3,253.00	3,244.70	19.99	17.31	57.71	-2,541.15	-9,325.84	9,582.35	9,546.07	36.28	264.142		
4,600.00	4,587.82	3,686.65	3,672.56	20.44	19.65	58.19	-2,502.85	-9,384.98	9,589.52	9,550.58	38.93	246.300		
4,700.00	4,687.51	3,729.00	3,714.36	20.89	19.88	58.24	-2,498.50	-9,390.14	9,595.14	9,555.56	39.58	242.441		
4,800.00	4,787.21	3,779.93	3,764.57	21.33	20.17	58.30	-2,492.94	-9,396.69	9,601.29	9,561.02	40.27	238.414		
4,900.00	4,886.90	3,824.00	3,807.87	21.78	20.41	58.36	-2,487.66	-9,402.90	9,608.22	9,567.29	40.93	234.764		
5,000.00	4,986.59	3,849.90	3,833.28	22.22	20.57	58.39	-2,484.41	-9,406.75	9,615.80	9,574.31	41.49	231.776		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,086.28	3,889.20	3,871.78	22.67	20.80	58.44	-2,479.40	-9,412.81	9,624.04	9,581.91	42.12	228.484		
5,200.00	5,185.97	3,939.32	3,920.82	23.12	21.10	58.51	-2,472.89	-9,420.88	9,632.89	9,590.07	42.82	224.985		
5,300.00	5,285.66	4,147.07	4,124.41	23.56	22.33	58.79	-2,447.39	-9,453.37	9,641.65	9,597.24	44.40	217.148		
5,400.00	5,385.36	4,217.57	4,193.57	24.01	22.74	58.88	-2,438.83	-9,464.03	9,649.85	9,604.64	45.21	213.457		
5,500.00	5,485.05	4,341.37	4,314.72	24.46	23.48	59.05	-2,421.92	-9,483.09	9,658.11	9,611.78	46.33	208.451		
5,600.00	5,584.74	4,437.95	4,408.93	24.90	24.08	59.19	-2,406.83	-9,498.10	9,666.18	9,618.87	47.32	204.278		
5,700.00	5,684.43	4,502.86	4,472.03	25.35	24.49	59.30	-2,395.76	-9,508.50	9,674.54	9,626.41	48.12	201.038		
5,800.00	5,784.12	4,554.07	4,521.74	25.80	24.82	59.38	-2,386.80	-9,516.97	9,683.36	9,634.52	48.85	198.240		
5,900.00	5,883.81	4,726.01	4,689.22	26.25	25.90	59.64	-2,359.38	-9,544.46	9,691.93	9,641.64	50.29	192.707		
6,000.00	5,983.51	5,585.38	5,538.50	26.70	30.40	60.58	-2,276.15	-9,636.65	9,698.16	9,643.09	55.07	176.099		
6,100.00	6,083.20	6,100.00	5,900.69	27.14	32.38	60.78	-2,268.93	-9,648.92	9,696.48	9,638.99	57.49	168.664		
6,200.00	6,182.89	6,200.00	6,249.59	27.59	32.74	60.94	-2,265.77	-9,651.04	9,692.64	9,634.40	58.24	166.428		
6,300.00	6,282.58	6,423.05	6,375.79	28.04	33.53	61.00	-2,264.22	-9,650.18	9,687.90	9,628.39	59.51	162.789		
6,400.00	6,382.27	6,467.58	6,420.30	28.49	33.70	61.02	-2,263.52	-9,650.01	9,683.41	9,623.26	60.15	160.999		
6,500.00	6,481.96	6,512.10	6,464.82	28.94	33.86	61.04	-2,262.76	-9,650.10	9,679.49	9,618.71	60.78	159.259		
6,600.00	6,581.66	6,566.00	6,518.71	29.39	34.06	61.07	-2,261.78	-9,650.58	9,676.16	9,614.71	61.44	157.484		
6,700.00	6,681.21	6,610.65	6,563.35	29.83	34.23	22.55	-2,260.98	-9,651.21	9,670.79	9,608.72	62.08	155.789		
6,800.00	6,778.96	6,666.39	6,619.07	30.28	34.44	4.80	-2,260.10	-9,652.19	9,651.96	9,589.22	62.74	153.842		
6,900.00	6,872.51	6,720.04	6,672.71	30.70	34.65	-1.14	-2,259.40	-9,653.34	9,618.67	9,555.30	63.37	151.786		
7,000.00	6,959.55	6,774.98	6,727.63	31.10	34.86	-4.61	-2,258.80	-9,654.73	9,571.69	9,507.72	63.97	149.631		
7,100.00	7,037.93	6,834.49	6,787.11	31.48	35.10	-7.53	-2,258.22	-9,656.37	9,511.98	9,447.45	64.53	147.393		
7,200.00	7,105.74	6,886.57	6,839.16	31.88	35.30	-10.79	-2,257.76	-9,657.90	9,440.95	9,375.94	65.02	145.210		
7,300.00	7,161.29	6,929.92	6,882.50	32.41	35.47	-15.27	-2,257.41	-9,659.25	9,360.29	9,294.88	65.40	143.118		
7,400.00	7,203.22	6,944.00	6,896.57	33.13	35.52	-22.47	-2,257.31	-9,659.70	9,271.95	9,206.33	65.62	141.300		
7,500.00	7,230.50	6,975.81	6,928.36	34.04	35.65	-36.73	-2,257.05	-9,660.78	9,178.02	9,112.18	65.85	139.386		
7,600.00	7,242.45	6,984.57	6,937.11	35.13	35.69	-67.78	-2,256.97	-9,661.09	9,080.84	9,014.90	65.94	137.712		
7,700.00	7,242.72	6,986.78	6,939.32	36.39	35.70	-80.95	-2,256.95	-9,661.17	8,982.66	8,916.68	65.99	136.127		
7,800.00	7,242.33	6,988.63	6,941.17	37.81	35.71	-81.01	-2,256.93	-9,661.24	8,884.51	8,818.47	66.04	134.528		
7,900.00	7,241.93	6,990.50	6,943.04	39.40	35.71	-81.07	-2,256.91	-9,661.31	8,786.39	8,720.28	66.11	132.906		
8,000.00	7,241.54	6,992.40	6,944.93	41.13	35.72	-81.13	-2,256.89	-9,661.38	8,688.32	8,622.13	66.19	131.262		
8,100.00	7,241.15	6,994.31	6,946.85	42.97	35.73	-81.20	-2,256.88	-9,661.45	8,590.29	8,524.01	66.29	129.595		
8,200.00	7,240.75	6,996.25	6,948.78	44.92	35.74	-81.26	-2,256.86	-9,661.52	8,492.31	8,425.91	66.40	127.905		
8,300.00	7,240.36	6,998.20	6,950.74	46.97	35.74	-81.33	-2,256.84	-9,661.59	8,394.37	8,327.85	66.52	126.192		
8,400.00	7,239.97	7,000.18	6,952.71	49.10	35.75	-81.39	-2,256.82	-9,661.66	8,296.48	8,229.82	66.66	124.455		
8,500.00	7,239.57	7,002.18	6,954.71	51.29	35.76	-81.46	-2,256.80	-9,661.74	8,198.64	8,131.82	66.82	122.694		
8,600.00	7,239.18	7,004.20	6,956.73	53.56	35.77	-81.52	-2,256.78	-9,661.82	8,100.86	8,033.86	67.00	120.910		
8,700.00	7,238.79	7,006.25	6,958.77	55.87	35.78	-81.59	-2,256.76	-9,661.89	8,003.12	7,935.93	67.20	119.102		
8,800.00	7,238.39	7,008.32	6,960.84	58.24	35.78	-81.66	-2,256.74	-9,661.97	7,905.45	7,838.04	67.41	117.270		
8,900.00	7,238.00	7,010.41	6,962.93	60.64	35.79	-81.73	-2,256.71	-9,662.05	7,807.83	7,740.18	67.65	115.415		
9,000.00	7,237.61	7,012.53	6,965.05	63.09	35.80	-81.80	-2,256.69	-9,662.14	7,710.27	7,642.36	67.91	113.538		
9,100.00	7,237.21	7,014.67	6,967.18	65.56	35.81	-81.87	-2,256.67	-9,662.22	7,612.77	7,544.58	68.19	111.638		
9,200.00	7,236.82	7,016.83	6,969.35	68.07	35.82	-81.94	-2,256.65	-9,662.30	7,515.34	7,446.84	68.50	109.715		
9,300.00	7,236.43	7,019.02	6,971.54	70.61	35.83	-82.02	-2,256.62	-9,662.39	7,417.98	7,349.15	68.83	107.772		
9,400.00	7,236.03	7,021.24	6,973.75	73.16	35.84	-82.09	-2,256.60	-9,662.48	7,320.68	7,251.49	69.19	105.807		
9,500.00	7,235.64	7,023.48	6,975.99	75.74	35.85	-82.16	-2,256.58	-9,662.56	7,223.46	7,153.89	69.57	103.823		
9,600.00	7,235.25	7,025.75	6,978.26	78.34	35.86	-82.24	-2,256.55	-9,662.66	7,126.32	7,056.33	69.99	101.820		
9,700.00	7,234.85	7,028.04	6,980.55	80.96	35.86	-82.32	-2,256.53	-9,662.75	7,029.25	6,958.81	70.43	99.799		
9,800.00	7,234.46	7,030.37	6,982.87	83.59	35.87	-82.39	-2,256.50	-9,662.84	6,932.26	6,861.35	70.91	97.762		
9,900.00	7,234.07	7,032.72	6,985.22	86.24	35.88	-82.47	-2,256.47	-9,662.94	6,835.36	6,763.95	71.42	95.709		
10,000.00	7,233.67	7,035.10	6,987.60	88.90	35.89	-82.55	-2,256.45	-9,663.03	6,738.55	6,666.59	71.96	93.642		
10,100.00	7,233.28	7,037.51	6,990.00	91.57	35.90	-82.63	-2,256.42	-9,663.13	6,641.84	6,569.30	72.54	91.562		
10,200.00	7,232.89	7,039.94	6,992.44	94.25	35.91	-82.71	-2,256.39	-9,663.23	6,545.22	6,472.06	73.15	89.472		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	7,042.41	6,994.91	96.95	35.92	-82.80	-2,256.36	-9,663.33	6,448.70	6,374.89	73.81	87.373		
10,400.00	7,232.10	7,044.91	6,997.40	99.65	35.93	-82.88	-2,256.33	-9,663.44	6,352.29	6,277.79	74.50	85.266		
10,500.00	7,231.71	7,047.44	6,999.93	102.36	35.94	-82.96	-2,256.30	-9,663.54	6,255.99	6,180.75	75.23	83.153		
10,600.00	7,231.32	7,050.01	7,002.49	105.08	35.95	-83.05	-2,256.27	-9,663.65	6,159.81	6,083.79	76.01	81.036		
10,700.00	7,230.92	7,052.60	7,005.08	107.80	35.96	-83.14	-2,256.24	-9,663.76	6,063.74	5,986.91	76.84	78.918		
10,800.00	7,230.53	7,055.23	7,007.71	110.53	35.97	-83.22	-2,256.21	-9,663.87	5,967.81	5,890.10	77.71	76.800		
10,900.00	7,230.14	7,057.89	7,010.37	113.27	35.99	-83.31	-2,256.18	-9,663.99	5,872.01	5,793.38	78.62	74.685		
11,000.00	7,229.74	7,060.59	7,013.06	116.02	36.00	-83.40	-2,256.14	-9,664.10	5,776.35	5,696.75	79.59	72.573		
11,100.00	7,229.35	7,063.32	7,015.79	118.77	36.01	-83.49	-2,256.11	-9,664.22	5,680.84	5,600.22	80.62	70.468		
11,200.00	7,228.96	7,066.09	7,018.56	121.52	36.02	-83.59	-2,256.07	-9,664.34	5,585.48	5,503.79	81.69	68.372		
11,300.00	7,228.56	7,068.89	7,021.36	124.28	36.03	-83.68	-2,256.04	-9,664.47	5,490.29	5,407.46	82.83	66.286		
11,400.00	7,228.17	7,071.73	7,024.19	127.04	36.04	-83.78	-2,256.00	-9,664.59	5,395.26	5,311.24	84.02	64.213		
11,500.00	7,227.78	7,074.61	7,027.07	129.81	36.05	-83.87	-2,255.96	-9,664.72	5,300.42	5,215.14	85.28	62.154		
11,600.00	7,227.38	7,077.53	7,029.99	132.58	36.06	-83.97	-2,255.93	-9,664.85	5,205.77	5,119.17	86.60	60.112		
11,700.00	7,226.99	7,080.48	7,032.94	135.36	36.08	-84.07	-2,255.89	-9,664.98	5,111.32	5,023.33	87.99	58.090		
11,800.00	7,226.60	7,083.48	7,035.93	138.14	36.09	-84.17	-2,255.85	-9,665.12	5,017.09	4,927.64	89.45	56.088		
11,900.00	7,226.20	7,086.52	7,038.97	140.92	36.10	-84.27	-2,255.81	-9,665.26	4,923.07	4,832.09	90.99	54.108		
12,000.00	7,225.81	7,089.60	7,042.04	143.70	36.11	-84.38	-2,255.76	-9,665.40	4,829.30	4,736.70	92.60	52.153		
12,100.00	7,225.42	7,092.72	7,045.16	146.49	36.13	-84.48	-2,255.72	-9,665.54	4,735.78	4,641.49	94.29	50.225		
12,200.00	7,225.02	7,095.89	7,048.33	149.28	36.14	-84.59	-2,255.68	-9,665.69	4,642.53	4,546.45	96.07	48.324		
12,300.00	7,224.63	7,099.10	7,051.54	152.08	36.15	-84.69	-2,255.63	-9,665.84	4,549.56	4,451.62	97.94	46.453		
12,400.00	7,224.24	7,102.36	7,054.79	154.87	36.17	-84.80	-2,255.59	-9,665.99	4,456.89	4,356.99	99.90	44.613		
12,500.00	7,223.84	7,105.66	7,058.09	157.67	36.18	-84.92	-2,255.54	-9,666.15	4,364.54	4,262.58	101.96	42.806		
12,600.00	7,223.45	7,109.02	7,061.44	160.47	36.19	-85.03	-2,255.49	-9,666.31	4,272.53	4,168.41	104.12	41.033		
12,700.00	7,223.06	7,112.42	7,064.83	163.27	36.21	-85.14	-2,255.44	-9,666.47	4,180.89	4,074.49	106.40	39.296		
12,800.00	7,222.66	7,115.87	7,068.28	166.07	36.22	-85.26	-2,255.39	-9,666.64	4,089.63	3,980.85	108.78	37.595		
12,900.00	7,222.27	7,119.37	7,071.78	168.88	36.23	-85.38	-2,255.34	-9,666.81	3,998.79	3,887.50	111.29	35.932		
13,000.00	7,221.88	7,122.92	7,075.32	171.69	36.25	-85.50	-2,255.29	-9,666.98	3,908.39	3,794.47	113.92	34.309		
13,100.00	7,221.48	7,126.53	7,078.92	174.49	36.26	-85.62	-2,255.23	-9,667.16	3,818.46	3,701.78	116.68	32.725		
13,200.00	7,221.09	7,130.00	7,082.59	177.30	36.29	-85.84	-2,255.13	-9,667.48	3,729.05	3,609.45	119.59	31.181		
13,300.00	7,220.70	7,134.30	7,086.69	180.12	36.29	-85.88	-2,255.11	-9,667.54	3,640.18	3,517.53	122.64	29.681		
13,400.00	7,220.30	7,139.63	7,092.02	182.93	36.32	-86.06	-2,255.03	-9,667.81	3,551.89	3,426.04	125.86	28.222		
13,500.00	7,219.91	7,144.91	7,097.28	185.74	36.34	-86.24	-2,254.95	-9,668.07	3,464.24	3,335.01	129.23	26.806		
13,600.00	7,219.52	7,150.11	7,102.48	188.56	36.36	-86.42	-2,254.87	-9,668.33	3,377.27	3,244.48	132.78	25.435		
13,700.00	7,219.12	7,155.26	7,107.62	191.38	36.38	-86.59	-2,254.79	-9,668.58	3,291.02	3,154.51	136.51	24.108		
13,800.00	7,218.73	7,160.35	7,112.70	194.20	36.40	-86.76	-2,254.71	-9,668.83	3,205.57	3,065.14	140.44	22.826		
13,900.00	7,218.34	7,165.37	7,117.72	197.02	36.42	-86.93	-2,254.64	-9,669.07	3,120.98	2,976.42	144.56	21.590		
14,000.00	7,217.94	7,170.33	7,122.68	199.84	36.44	-87.10	-2,254.56	-9,669.31	3,037.32	2,888.42	148.89	20.399		
14,100.00	7,217.55	7,175.24	7,127.58	202.66	36.46	-87.27	-2,254.49	-9,669.54	2,954.66	2,801.21	153.45	19.255		
14,200.00	7,217.16	7,180.09	7,132.42	205.48	36.48	-87.43	-2,254.42	-9,669.77	2,873.10	2,714.87	158.24	18.157		
14,300.00	7,216.76	7,184.89	7,137.21	208.30	36.50	-87.59	-2,254.35	-9,670.00	2,792.74	2,629.47	163.27	17.106		
14,400.00	7,216.37	7,189.62	7,141.94	211.13	36.52	-87.75	-2,254.28	-9,670.22	2,713.67	2,545.13	168.54	16.101		
14,500.00	7,215.98	7,194.31	7,146.62	213.96	36.54	-87.91	-2,254.21	-9,670.44	2,636.01	2,461.94	174.08	15.143		
14,600.00	7,215.58	7,198.94	7,151.25	216.78	36.56	-88.07	-2,254.14	-9,670.66	2,559.90	2,380.03	179.87	14.232		
14,700.00	7,215.19	7,203.52	7,155.82	219.61	36.58	-88.22	-2,254.07	-9,670.87	2,485.47	2,299.54	185.93	13.368		
14,800.00	7,214.80	7,208.05	7,160.34	222.44	36.60	-88.38	-2,254.01	-9,671.08	2,412.89	2,220.62	192.26	12.550		
14,900.00	7,214.40	7,212.52	7,164.81	225.27	36.62	-88.53	-2,253.94	-9,671.29	2,342.32	2,143.46	198.86	11.779		
15,000.00	7,214.01	7,216.95	7,169.24	228.10	36.63	-88.68	-2,253.88	-9,671.49	2,273.94	2,068.23	205.71	11.054		
15,002.44	7,214.00	7,217.06	7,169.34	228.16	36.63	-88.68	-2,253.88	-9,671.49	2,272.31	2,066.43	205.88	11.037 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.96	-2,913.17	-8,987.16	9,447.58					
100.00	100.00	42.99	78.99	3.28	3.28	-107.96	-2,913.06	-8,987.24	9,447.59	9,441.02	6.57	1,438.940		
200.00	200.00	113.19	149.19	3.34	3.29	-107.95	-2,912.42	-8,987.74	9,447.98	9,441.35	6.63	1,425.076		
300.00	300.00	171.00	206.98	3.44	3.33	-107.95	-2,911.47	-8,988.44	9,448.67	9,441.90	6.77	1,395.740		
400.00	400.00	209.58	245.55	3.60	3.36	-107.94	-2,910.78	-8,989.14	9,449.93	9,442.97	6.96	1,357.562		
500.00	500.00	263.00	298.94	3.81	3.41	-107.94	-2,910.09	-8,990.63	9,452.01	9,444.79	7.22	1,308.795		
600.00	599.98	263.00	298.94	4.03	3.41	53.87	-2,910.09	-8,990.63	9,453.64	9,446.18	7.45	1,268.406		
700.00	699.84	263.00	298.94	4.29	3.41	53.86	-2,910.09	-8,990.63	9,454.26	9,446.56	7.71	1,226.654		
791.83	791.42	303.65	339.56	4.55	3.47	53.88	-2,909.97	-8,992.30	9,454.13	9,446.11	8.02	1,179.034		
800.00	799.54	305.14	341.05	4.57	3.47	53.88	-2,909.98	-8,992.37	9,453.96	9,445.91	8.04	1,175.197		
900.00	899.23	354.00	389.82	4.87	3.55	53.90	-2,910.65	-8,995.24	9,454.89	9,446.46	8.43	1,122.041		
1,000.00	998.92	354.00	389.82	5.20	3.55	53.90	-2,910.65	-8,995.24	9,456.18	9,447.42	8.76	1,079.756		
1,100.00	1,098.61	354.00	389.82	5.54	3.55	53.90	-2,910.65	-8,995.24	9,458.54	9,449.43	9.11	1,038.644		
1,200.00	1,198.30	386.80	422.52	5.90	3.61	53.92	-2,911.63	-8,997.57	9,461.72	9,452.19	9.52	993.585		
1,300.00	1,298.00	411.52	447.14	6.27	3.66	53.92	-2,912.69	-8,999.46	9,465.71	9,455.76	9.94	952.255		
1,400.00	1,397.69	445.00	480.46	6.66	3.73	53.93	-2,914.56	-9,002.21	9,470.50	9,460.12	10.39	911.815		
1,500.00	1,497.38	550.15	584.98	7.05	3.98	53.94	-2,922.45	-9,010.48	9,475.70	9,464.69	11.01	860.988		
1,600.00	1,597.07	620.20	654.55	7.44	4.18	53.94	-2,928.81	-9,015.64	9,480.88	9,469.31	11.58	818.785		
1,700.00	1,696.76	736.82	770.25	7.85	4.55	53.93	-2,940.92	-9,023.86	9,486.19	9,473.87	12.31	770.331		
1,800.00	1,796.45	1,339.86	1,370.82	8.25	6.84	54.01	-2,979.01	-9,058.68	9,490.53	9,475.68	14.86	638.815		
1,815.42	1,811.82	1,343.23	1,374.19	8.32	6.85	54.01	-2,979.08	-9,058.81	9,490.52	9,475.59	14.93	635.561		
1,900.00	1,896.15	1,383.00	1,413.90	8.67	7.01	54.02	-2,979.82	-9,060.81	9,490.93	9,475.49	15.43	615.033		
2,000.00	1,995.84	1,383.00	1,413.90	9.08	7.01	54.02	-2,979.82	-9,060.81	9,491.93	9,476.08	15.85	598.984		
2,100.00	2,095.53	1,383.00	1,413.90	9.50	7.01	54.02	-2,979.82	-9,060.81	9,493.98	9,477.71	16.26	583.748		
2,200.00	2,195.22	1,383.00	1,413.90	9.92	7.01	54.02	-2,979.82	-9,060.81	9,497.08	9,480.40	16.68	569.291		
2,300.00	2,294.91	1,410.71	1,441.54	10.35	7.13	54.03	-2,980.43	-9,062.82	9,500.80	9,483.59	17.21	552.085		
2,400.00	2,394.60	1,445.00	1,475.62	10.77	7.27	54.05	-2,981.54	-9,066.33	9,506.03	9,488.27	17.76	535.173		
2,500.00	2,494.30	1,445.00	1,475.62	11.20	7.27	54.05	-2,981.54	-9,066.33	9,511.64	9,493.46	18.18	523.123		
2,600.00	2,593.99	1,445.00	1,475.62	11.63	7.27	54.05	-2,981.54	-9,066.33	9,518.29	9,499.69	18.60	511.684		
2,700.00	2,693.68	1,460.84	1,491.34	12.07	7.34	54.05	-2,982.17	-9,068.22	9,525.97	9,506.89	19.08	499.137		
2,800.00	2,793.37	1,525.59	1,555.55	12.50	7.63	54.07	-2,985.19	-9,075.96	9,534.21	9,514.44	19.77	482.313		
2,900.00	2,893.06	1,569.00	1,598.58	12.93	7.83	54.09	-2,987.64	-9,081.16	9,542.85	9,522.49	20.36	468.596		
3,000.00	2,992.76	1,607.96	1,637.15	13.37	8.01	54.09	-2,990.32	-9,085.91	9,552.11	9,531.16	20.95	455.985		
3,100.00	3,092.45	1,665.00	1,693.49	13.81	8.29	54.10	-2,995.48	-9,093.20	9,562.25	9,540.64	21.61	442.482		
3,200.00	3,192.14	1,665.00	1,693.49	14.25	8.29	54.10	-2,995.48	-9,093.20	9,572.85	9,550.83	22.03	434.632		
3,300.00	3,291.83	1,665.00	1,693.49	14.68	8.29	54.10	-2,995.48	-9,093.20	9,584.49	9,562.05	22.44	427.160		
3,400.00	3,391.52	1,705.45	1,733.30	15.12	8.49	54.10	-2,999.91	-9,098.77	9,596.72	9,573.69	23.03	416.688		
3,500.00	3,491.21	3,500.00	1,796.96	15.56	18.40	54.10	-3,007.87	-9,108.47	9,609.98	9,578.40	31.58	304.264		
3,600.00	3,590.91	1,905.43	1,929.65	16.00	9.54	54.09	-3,024.41	-9,127.74	9,622.68	9,597.91	24.77	388.410		
3,700.00	3,690.60	3,700.00	2,066.71	16.45	19.55	54.07	-3,042.73	-9,146.91	9,635.23	9,601.70	33.52	287.435		
3,800.00	3,790.29	2,096.14	2,116.95	16.89	10.57	54.07	-3,049.13	-9,153.73	9,647.48	9,620.98	26.50	364.048		
3,900.00	3,889.98	2,136.00	2,156.05	17.33	10.79	54.06	-3,054.17	-9,159.62	9,660.72	9,633.62	27.10	356.483		
4,000.00	3,989.67	2,175.49	2,194.74	17.77	11.01	54.06	-3,059.23	-9,165.69	9,674.56	9,646.86	27.70	349.284		
4,100.00	4,089.36	2,374.25	2,389.54	18.22	12.13	54.04	-3,085.68	-9,194.97	9,688.12	9,659.04	29.09	333.090		
4,200.00	4,189.06	2,419.00	2,433.42	18.66	12.38	54.03	-3,091.85	-9,201.25	9,701.31	9,671.59	29.71	326.482		
4,300.00	4,288.75	2,476.74	2,489.95	19.10	12.72	54.02	-3,100.21	-9,209.53	9,714.94	9,684.53	30.41	319.442		
4,400.00	4,388.44	2,517.00	2,529.27	19.55	12.95	54.01	-3,106.41	-9,215.50	9,729.25	9,698.23	31.02	313.648		
4,500.00	4,488.13	2,590.46	2,600.96	19.99	13.39	53.99	-3,118.00	-9,226.64	9,743.98	9,712.18	31.80	306.400		
4,600.00	4,587.82	2,607.00	2,617.09	20.44	13.49	53.99	-3,120.61	-9,229.17	9,759.19	9,726.90	32.29	302.281		
4,700.00	4,687.51	3,490.91	3,485.27	20.89	18.51	53.83	-3,242.41	-9,337.53	9,767.69	9,730.48	37.21	262.518		
4,800.00	4,787.21	3,550.00	3,543.56	21.33	18.83	53.81	-3,250.51	-9,342.86	9,775.79	9,737.86	37.93	257.747		
4,900.00	4,886.90	3,550.00	3,543.56	21.78	18.83	53.81	-3,250.51	-9,342.86	9,784.43	9,746.08	38.35	255.139		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,986.59	3,600.08	3,592.89	22.22	19.10	53.80	-3,257.54	-9,347.84	9,793.72	9,754.70	39.02	250.971		
5,100.00	5,086.28	3,644.00	3,636.14	22.67	19.35	53.79	-3,263.56	-9,352.63	9,803.70	9,764.04	39.66	247.166		
5,200.00	5,185.97	3,644.00	3,636.14	23.12	19.35	53.79	-3,263.56	-9,352.63	9,814.42	9,774.34	40.08	244.893		
5,300.00	5,285.66	3,683.56	3,675.02	23.56	19.58	53.79	-3,269.10	-9,357.37	9,825.79	9,785.09	40.69	241.462		
5,400.00	5,385.36	3,739.00	3,729.32	24.01	19.91	53.77	-3,277.46	-9,364.76	9,838.25	9,796.86	41.39	237.686		
5,500.00	5,485.05	3,739.00	3,729.32	24.46	19.91	53.77	-3,277.46	-9,364.76	9,851.02	9,809.23	41.79	235.708		
5,600.00	5,584.74	3,739.00	3,729.32	24.90	19.91	53.77	-3,277.46	-9,364.76	9,864.79	9,822.60	42.19	233.819		
5,700.00	5,684.43	3,794.78	3,783.77	25.35	20.25	53.76	-3,286.46	-9,372.84	9,879.12	9,836.23	42.89	230.329		
5,800.00	5,784.12	4,305.00	4,283.41	25.80	23.29	53.62	-3,366.04	-9,437.29	9,889.99	9,843.93	46.06	214.721		
5,900.00	5,883.81	4,360.18	4,337.72	26.25	23.61	53.61	-3,373.41	-9,443.58	9,900.57	9,853.82	46.76	211.738		
6,000.00	5,983.51	4,399.00	4,375.88	26.70	23.83	53.60	-3,378.76	-9,448.38	9,911.95	9,864.58	47.37	209.246		
6,100.00	6,083.20	4,441.64	4,417.75	27.14	24.08	53.60	-3,384.57	-9,453.94	9,923.92	9,875.92	48.00	206.755		
6,200.00	6,182.89	4,495.00	4,470.16	27.59	24.40	53.59	-3,391.45	-9,461.22	9,936.33	9,887.65	48.68	204.104		
6,300.00	6,282.58	4,538.96	4,513.31	28.04	24.66	53.59	-3,397.09	-9,467.46	9,949.25	9,899.93	49.32	201.748		
6,400.00	6,382.27	6,329.50	6,288.34	28.49	33.30	53.86	-3,513.80	-9,613.61	9,961.39	9,903.60	57.79	172.385		
6,500.00	6,481.96	6,431.58	6,390.42	28.94	33.67	53.90	-3,513.67	-9,614.67	9,957.70	9,899.06	58.64	169.821		
6,600.00	6,581.66	6,539.15	6,497.99	29.39	34.06	53.94	-3,513.24	-9,615.80	9,953.95	9,894.45	59.50	167.286		
6,700.00	6,681.21	6,646.55	6,605.37	29.83	34.45	15.38	-3,512.49	-9,616.95	9,947.66	9,887.29	60.37	164.789		
6,800.00	6,778.96	6,869.52	6,828.32	30.28	35.21	-2.62	-3,509.47	-9,618.32	9,927.32	9,865.74	61.58	161.213		
6,900.00	6,872.51	6,990.67	6,949.44	30.70	35.62	-9.06	-3,506.92	-9,618.15	9,891.70	9,829.28	62.42	158.467		
7,000.00	6,959.55	7,053.00	7,011.76	31.10	35.83	-13.31	-3,505.68	-9,618.12	9,842.82	9,779.79	63.03	156.164		
7,100.00	7,037.93	7,109.31	7,068.06	31.48	36.02	-17.40	-3,504.68	-9,618.20	9,781.94	9,718.38	63.56	153.896		
7,200.00	7,105.74	7,158.21	7,116.95	31.88	36.19	-22.34	-3,503.90	-9,618.34	9,710.50	9,646.49	64.01	151.703		
7,300.00	7,161.29	7,198.48	7,157.22	32.41	36.32	-29.28	-3,503.32	-9,618.52	9,630.22	9,565.85	64.37	149.613		
7,400.00	7,203.22	7,229.00	7,187.74	33.13	36.43	-39.98	-3,502.91	-9,618.68	9,543.04	9,478.40	64.64	147.643		
7,500.00	7,230.50	7,249.50	7,208.23	34.04	36.50	-57.23	-3,502.63	-9,618.82	9,451.08	9,386.25	64.83	145.792		
7,600.00	7,242.45	7,258.84	7,217.57	35.13	36.53	-82.25	-3,502.49	-9,618.89	9,356.59	9,291.65	64.94	144.070		
7,700.00	7,242.72	7,259.63	7,218.36	36.39	36.54	-90.20	-3,502.48	-9,618.90	9,261.68	9,196.65	65.03	142.425		
7,800.00	7,242.33	7,259.94	7,218.67	37.81	36.54	-90.21	-3,502.47	-9,618.90	9,166.88	9,101.74	65.14	140.725		
7,900.00	7,241.93	7,260.25	7,218.98	39.40	36.54	-90.21	-3,502.47	-9,618.91	9,072.19	9,006.90	65.28	138.963		
8,000.00	7,241.54	7,260.56	7,219.29	41.13	36.54	-90.22	-3,502.46	-9,618.91	8,977.61	8,912.15	65.46	137.139		
8,100.00	7,241.15	7,260.88	7,219.61	42.97	36.54	-90.22	-3,502.46	-9,618.91	8,883.16	8,817.48	65.68	135.253		
8,200.00	7,240.75	7,261.20	7,219.93	44.92	36.54	-90.23	-3,502.45	-9,618.91	8,788.83	8,722.90	65.93	133.306		
8,300.00	7,240.36	7,261.52	7,220.25	46.97	36.54	-90.24	-3,502.45	-9,618.92	8,694.62	8,628.40	66.22	131.299		
8,400.00	7,239.97	7,261.85	7,220.58	49.10	36.54	-90.24	-3,502.44	-9,618.92	8,600.55	8,534.00	66.55	129.234		
8,500.00	7,239.57	7,262.18	7,220.91	51.29	36.55	-90.25	-3,502.44	-9,618.92	8,506.61	8,439.68	66.92	127.113		
8,600.00	7,239.18	7,262.52	7,221.25	53.56	36.55	-90.26	-3,502.43	-9,618.92	8,412.81	8,345.47	67.34	124.938		
8,700.00	7,238.79	7,262.86	7,221.59	55.87	36.55	-90.26	-3,502.43	-9,618.93	8,319.15	8,251.36	67.79	122.714		
8,800.00	7,238.39	7,263.20	7,221.93	58.24	36.55	-90.27	-3,502.42	-9,618.93	8,225.64	8,157.35	68.30	120.442		
8,900.00	7,238.00	7,263.55	7,222.28	60.64	36.55	-90.28	-3,502.42	-9,618.93	8,132.29	8,063.45	68.84	118.126		
9,000.00	7,237.61	7,263.90	7,222.63	63.09	36.55	-90.28	-3,502.41	-9,618.94	8,039.10	7,969.66	69.44	115.772		
9,100.00	7,237.21	7,264.25	7,222.98	65.56	36.55	-90.29	-3,502.40	-9,618.94	7,946.07	7,875.99	70.08	113.382		
9,200.00	7,236.82	7,264.61	7,223.34	68.07	36.55	-90.30	-3,502.40	-9,618.94	7,853.22	7,782.44	70.77	110.961		
9,300.00	7,236.43	7,264.97	7,223.71	70.61	36.56	-90.30	-3,502.39	-9,618.95	7,760.54	7,689.03	71.52	108.513		
9,400.00	7,236.03	7,265.34	7,224.07	73.16	36.56	-90.31	-3,502.39	-9,618.95	7,668.05	7,595.74	72.31	106.045		
9,500.00	7,235.64	7,265.72	7,224.45	75.74	36.56	-90.32	-3,502.38	-9,618.95	7,575.75	7,502.59	73.15	103.559		
9,600.00	7,235.25	7,266.09	7,224.82	78.34	36.56	-90.33	-3,502.37	-9,618.95	7,483.64	7,409.59	74.05	101.061		
9,700.00	7,234.85	7,266.47	7,225.21	80.96	36.56	-90.33	-3,502.37	-9,618.96	7,391.74	7,316.74	75.00	98.555		
9,800.00	7,234.46	7,266.86	7,225.59	83.59	36.56	-90.34	-3,502.36	-9,618.96	7,300.05	7,224.05	76.00	96.047		
9,900.00	7,234.07	7,267.25	7,225.98	86.24	36.56	-90.35	-3,502.36	-9,618.96	7,208.59	7,131.52	77.06	93.540		
10,000.00	7,233.67	7,267.65	7,226.38	88.90	36.57	-90.36	-3,502.35	-9,618.97	7,117.35	7,039.17	78.18	91.039		
10,100.00	7,233.28	7,268.05	7,226.78	91.57	36.57	-90.36	-3,502.34	-9,618.97	7,026.35	6,947.00	79.35	88.548		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.89	7,268.45	7,227.19	94.25	36.57	-90.37	-3,502.34	-9,618.98	6,935.60	6,855.02	80.58	86.071		
10,300.00	7,232.49	7,268.87	7,227.60	96.95	36.57	-90.38	-3,502.33	-9,618.98	6,845.11	6,763.24	81.87	83.612		
10,400.00	7,232.10	7,269.28	7,228.01	99.65	36.57	-90.39	-3,502.32	-9,618.98	6,754.89	6,671.67	83.21	81.174		
10,500.00	7,231.71	7,269.70	7,228.43	102.36	36.57	-90.40	-3,502.32	-9,618.99	6,664.94	6,580.32	84.62	78.761		
10,600.00	7,231.32	7,270.13	7,228.86	105.08	36.57	-90.40	-3,502.31	-9,618.99	6,575.29	6,489.20	86.09	76.375		
10,700.00	7,230.92	7,270.56	7,229.29	107.80	36.58	-90.41	-3,502.30	-9,618.99	6,485.94	6,398.31	87.62	74.020		
10,800.00	7,230.53	7,271.00	7,229.73	110.53	36.58	-90.42	-3,502.29	-9,619.00	6,396.90	6,307.68	89.22	71.697		
10,900.00	7,230.14	7,271.45	7,230.18	113.27	36.58	-90.43	-3,502.29	-9,619.00	6,308.19	6,217.31	90.88	69.410		
11,000.00	7,229.74	7,271.90	7,230.63	116.02	36.58	-90.44	-3,502.28	-9,619.01	6,219.82	6,127.21	92.61	67.161		
11,100.00	7,229.35	7,272.35	7,231.08	118.77	36.58	-90.45	-3,502.27	-9,619.01	6,131.82	6,037.41	94.41	64.950		
11,200.00	7,228.96	7,272.81	7,231.54	121.52	36.58	-90.46	-3,502.26	-9,619.01	6,044.18	5,947.91	96.27	62.781		
11,300.00	7,228.56	7,273.28	7,232.01	124.28	36.59	-90.47	-3,502.25	-9,619.02	5,956.93	5,858.72	98.21	60.654		
11,400.00	7,228.17	7,273.76	7,232.49	127.04	36.59	-90.48	-3,502.25	-9,619.02	5,870.09	5,769.87	100.22	58.571		
11,500.00	7,227.78	7,274.24	7,232.97	129.81	36.59	-90.48	-3,502.24	-9,619.03	5,783.68	5,681.37	102.31	56.532		
11,600.00	7,227.38	7,274.73	7,233.46	132.58	36.59	-90.49	-3,502.23	-9,619.03	5,697.71	5,593.24	104.47	54.540		
11,700.00	7,226.99	7,275.22	7,233.95	135.36	36.59	-90.50	-3,502.22	-9,619.04	5,612.21	5,505.50	106.71	52.593		
11,800.00	7,226.60	7,275.72	7,234.45	138.14	36.59	-90.51	-3,502.21	-9,619.04	5,527.19	5,418.16	109.03	50.694		
11,900.00	7,226.20	7,276.23	7,234.96	140.92	36.60	-90.52	-3,502.20	-9,619.05	5,442.68	5,331.24	111.43	48.842		
12,000.00	7,225.81	7,276.75	7,235.48	143.70	36.60	-90.53	-3,502.19	-9,619.05	5,358.70	5,244.78	113.92	47.039		
12,100.00	7,225.42	7,277.27	7,236.00	146.49	36.60	-90.54	-3,502.19	-9,619.06	5,275.29	5,158.79	116.50	45.283		
12,200.00	7,225.02	7,277.80	7,236.53	149.28	36.60	-90.55	-3,502.18	-9,619.06	5,192.45	5,073.29	119.16	43.576		
12,300.00	7,224.63	7,278.34	7,237.07	152.08	36.60	-90.56	-3,502.17	-9,619.07	5,110.24	4,988.32	121.91	41.916		
12,400.00	7,224.24	7,278.89	7,237.62	154.87	36.60	-90.58	-3,502.16	-9,619.07	5,028.66	4,903.90	124.76	40.306		
12,500.00	7,223.84	7,279.44	7,238.17	157.67	36.61	-90.59	-3,502.15	-9,619.08	4,947.77	4,820.06	127.71	38.743		
12,600.00	7,223.45	7,280.01	7,238.73	160.47	36.61	-90.60	-3,502.14	-9,619.08	4,867.58	4,736.83	130.75	37.228		
12,700.00	7,223.06	7,280.58	7,239.30	163.27	36.61	-90.61	-3,502.13	-9,619.09	4,788.14	4,654.25	133.89	35.760		
12,800.00	7,222.66	7,281.16	7,239.88	166.07	36.61	-90.62	-3,502.12	-9,619.09	4,709.48	4,572.34	137.14	34.340		
12,900.00	7,222.27	7,281.74	7,240.47	168.88	36.61	-90.63	-3,502.11	-9,619.10	4,631.65	4,491.16	140.49	32.967		
13,000.00	7,221.88	7,282.34	7,241.07	171.69	36.62	-90.64	-3,502.10	-9,619.11	4,554.68	4,410.73	143.95	31.640		
13,100.00	7,221.48	7,282.95	7,241.68	174.49	36.62	-90.65	-3,502.08	-9,619.11	4,478.62	4,331.10	147.52	30.359		
13,200.00	7,221.09	7,283.57	7,242.29	177.30	36.62	-90.67	-3,502.07	-9,619.12	4,403.52	4,252.32	151.20	29.124		
13,300.00	7,220.70	7,284.19	7,242.92	180.12	36.62	-90.68	-3,502.06	-9,619.12	4,329.42	4,174.43	154.99	27.933		
13,400.00	7,220.30	7,284.83	7,243.55	182.93	36.63	-90.69	-3,502.05	-9,619.13	4,256.39	4,097.49	158.90	26.787		
13,500.00	7,219.91	7,285.47	7,244.20	185.74	36.63	-90.70	-3,502.04	-9,619.14	4,184.47	4,021.55	162.92	25.685		
13,600.00	7,219.52	7,286.13	7,244.86	188.56	36.63	-90.72	-3,502.03	-9,619.14	4,113.72	3,946.67	167.05	24.625		
13,700.00	7,219.12	7,286.80	7,245.52	191.38	36.63	-90.73	-3,502.01	-9,619.15	4,044.21	3,872.91	171.30	23.609		
13,800.00	7,218.73	7,287.47	7,246.20	194.20	36.64	-90.74	-3,502.00	-9,619.16	3,976.00	3,800.33	175.67	22.634		
13,900.00	7,218.34	7,288.16	7,246.89	197.02	36.64	-90.76	-3,501.99	-9,619.16	3,909.16	3,729.01	180.15	21.700		
14,000.00	7,217.94	7,288.86	7,247.59	199.84	36.64	-90.77	-3,501.98	-9,619.17	3,843.76	3,659.02	184.74	20.806		
14,100.00	7,217.55	7,289.58	7,248.30	202.66	36.64	-90.78	-3,501.96	-9,619.18	3,779.87	3,590.43	189.44	19.953		
14,200.00	7,217.16	7,290.30	7,249.03	205.48	36.65	-90.80	-3,501.95	-9,619.19	3,717.57	3,523.32	194.25	19.138		
14,300.00	7,216.76	7,291.04	7,249.76	208.30	36.65	-90.81	-3,501.94	-9,619.19	3,656.94	3,457.79	199.15	18.363		
14,400.00	7,216.37	7,291.78	7,250.51	211.13	36.65	-90.83	-3,501.92	-9,619.20	3,598.08	3,393.92	204.15	17.624		
14,500.00	7,215.98	7,292.55	7,251.27	213.96	36.65	-90.84	-3,501.91	-9,619.21	3,541.06	3,331.82	209.24	16.923		
14,600.00	7,215.58	7,293.32	7,252.05	216.78	36.66	-90.86	-3,501.89	-9,619.22	3,485.97	3,271.56	214.41	16.258		
14,700.00	7,215.19	7,294.11	7,252.84	219.61	36.66	-90.87	-3,501.88	-9,619.23	3,432.92	3,213.27	219.65	15.629		
14,800.00	7,214.80	7,294.91	7,253.64	222.44	36.66	-90.89	-3,501.86	-9,619.23	3,381.99	3,157.05	224.94	15.035		
14,900.00	7,214.40	7,295.73	7,254.45	225.27	36.66	-90.90	-3,501.85	-9,619.24	3,333.29	3,103.01	230.28	14.475		
15,000.00	7,214.01	7,296.56	7,255.29	228.10	36.67	-90.92	-3,501.83	-9,619.25	3,286.90	3,051.26	235.64	13.949		
15,002.44	7,214.00	7,296.58	7,255.31	228.16	36.67	-90.92	-3,501.83	-9,619.25	3,285.80	3,050.02	235.78	13.936 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	917.73	3.28	3.38	-108.64	-2,985.09	-8,850.43	9,385.25					
100.00	100.00	1,000.96	1,025.89	3.28	5.91	-108.77	-3,002.56	-8,833.07	9,375.28	9,366.12	9.15	1,024.132		
200.00	200.00	1,048.08	1,071.76	3.34	6.16	-108.83	-3,010.44	-8,825.72	9,365.68	9,356.25	9.44	992.499		
300.00	300.00	1,098.00	1,120.48	3.44	6.43	-108.90	-3,018.45	-8,818.33	9,356.66	9,346.87	9.79	955.327		
400.00	400.00	1,130.34	1,152.11	3.60	6.60	-108.93	-3,023.44	-8,813.81	9,348.27	9,338.16	10.11	925.073		
500.00	500.00	1,165.43	1,186.50	3.81	6.79	-108.97	-3,028.64	-8,809.22	9,340.57	9,330.09	10.48	891.412		
600.00	599.98	1,208.52	1,228.84	4.03	7.02	52.95	-3,034.78	-8,803.98	9,332.51	9,321.59	10.92	854.374		
700.00	699.84	1,285.00	1,303.82	4.29	7.42	53.04	-3,046.62	-8,794.67	9,322.78	9,311.21	11.57	805.703		
800.00	799.54	1,354.40	1,371.79	4.57	7.81	53.03	-3,057.83	-8,786.27	9,311.84	9,299.62	12.22	761.974		
900.00	899.23	1,428.79	1,444.82	4.87	8.21	52.97	-3,069.09	-8,777.71	9,301.11	9,288.19	12.91	720.215		
1,000.00	998.92	1,725.30	1,736.75	5.20	9.80	52.79	-3,106.56	-8,742.00	9,288.35	9,273.57	14.78	628.272		
1,100.00	1,098.61	1,757.00	1,767.95	5.54	9.97	52.77	-3,110.58	-8,738.08	9,276.03	9,260.74	15.29	606.659		
1,200.00	1,198.30	1,816.80	1,826.80	5.90	10.30	52.74	-3,118.47	-8,730.93	9,264.28	9,248.32	15.97	580.284		
1,300.00	1,298.00	2,226.00	2,228.30	6.27	12.65	52.45	-3,173.67	-8,675.11	9,250.99	9,232.41	18.59	497.716		
1,400.00	1,397.69	2,296.85	2,297.87	6.66	13.05	52.41	-3,182.08	-8,664.68	9,236.29	9,216.94	19.35	477.434		
1,500.00	1,497.38	2,321.00	2,321.65	7.05	13.19	52.39	-3,184.63	-8,661.30	9,222.08	9,202.22	19.86	464.265		
1,600.00	1,597.07	2,377.47	2,377.28	7.44	13.50	52.37	-3,190.66	-8,653.75	9,208.39	9,187.84	20.56	447.977		
1,700.00	1,696.76	2,416.00	2,415.25	7.85	13.72	52.34	-3,195.07	-8,648.88	9,195.48	9,174.32	21.16	434.562		
1,800.00	1,796.45	2,561.19	2,557.88	8.25	14.55	52.25	-3,214.01	-8,629.51	9,182.39	9,160.03	22.36	410.577		
1,900.00	1,896.15	1,900.00	2,673.34	8.67	10.72	52.17	-3,229.28	-8,613.62	9,169.22	9,150.14	19.08	480.574		
2,000.00	1,995.84	2,814.65	2,806.15	9.08	16.07	52.05	-3,250.00	-8,593.52	9,155.54	9,130.89	24.64	371.529		
2,100.00	2,095.53	2,890.00	2,879.83	9.50	16.53	51.99	-3,261.19	-8,582.47	9,141.94	9,116.43	25.51	358.402		
2,200.00	2,195.22	2,933.55	2,922.56	9.92	16.79	51.96	-3,267.11	-8,576.47	9,128.80	9,102.62	26.18	348.743		
2,300.00	2,294.91	2,984.00	2,972.18	10.35	17.08	51.93	-3,273.60	-8,570.08	9,116.35	9,089.46	26.89	339.073		
2,400.00	2,394.60	3,037.78	3,025.08	10.77	17.39	51.89	-3,280.73	-8,563.50	9,104.42	9,076.81	27.62	329.652		
2,500.00	2,494.30	3,100.98	3,087.10	11.20	17.75	51.84	-3,289.93	-8,555.59	9,092.81	9,064.41	28.40	320.150		
2,600.00	2,593.99	3,147.90	3,133.33	11.63	18.02	51.82	-3,295.97	-8,550.28	9,081.73	9,052.64	29.09	312.172		
2,700.00	2,693.68	3,194.95	3,179.85	12.07	18.27	51.79	-3,301.08	-8,545.58	9,071.22	9,041.45	29.77	304.677		
2,800.00	2,793.37	3,262.00	3,246.28	12.50	18.62	51.76	-3,307.92	-8,539.54	9,061.34	9,030.79	30.55	296.639		
2,900.00	2,893.06	3,299.04	3,282.99	12.93	18.81	51.75	-3,311.73	-8,536.40	9,051.91	9,020.73	31.17	290.387		
3,000.00	2,992.76	3,364.39	3,347.68	13.37	19.14	51.72	-3,319.13	-8,530.82	9,042.93	9,010.99	31.94	283.113		
3,100.00	3,092.45	3,100.00	3,493.09	13.81	17.79	51.65	-3,335.04	-8,518.63	9,034.07	9,003.04	31.03	291.130		
3,200.00	3,192.14	3,596.56	3,577.62	14.25	20.34	51.62	-3,344.27	-8,511.00	9,024.60	8,990.60	34.00	265.451		
3,300.00	3,291.83	4,069.67	4,043.05	14.68	23.04	51.30	-3,407.49	-8,456.62	9,014.26	8,977.24	37.03	243.464		
3,400.00	3,391.52	4,112.00	4,084.51	15.12	23.30	51.26	-3,413.66	-8,450.68	9,001.33	8,963.60	37.73	238.577		
3,500.00	3,491.21	4,168.43	4,139.94	15.56	23.63	51.22	-3,421.24	-8,443.32	8,988.94	8,950.45	38.49	233.513		
3,600.00	3,590.91	4,223.13	4,193.80	16.00	23.95	51.19	-3,428.08	-8,436.68	8,977.06	8,937.81	39.25	228.704		
3,700.00	3,690.60	4,280.49	4,250.16	16.45	24.28	51.15	-3,436.10	-8,429.68	8,965.66	8,925.63	40.03	223.984		
3,800.00	3,790.29	4,330.69	4,299.36	16.89	24.58	51.11	-3,443.95	-8,423.51	8,954.75	8,913.99	40.77	219.655		
3,900.00	3,889.98	4,396.00	4,363.53	17.33	24.96	51.06	-3,453.62	-8,416.17	8,944.48	8,902.88	41.59	215.042		
4,000.00	3,989.67	4,436.54	4,403.44	17.77	25.19	51.03	-3,459.32	-8,411.95	8,934.66	8,892.39	42.27	211.370		
4,100.00	4,089.36	4,491.00	4,457.11	18.22	25.50	50.99	-3,466.78	-8,406.49	8,925.28	8,882.26	43.02	207.456		
4,200.00	4,189.06	4,545.45	4,510.86	18.66	25.80	50.96	-3,473.90	-8,401.45	8,916.41	8,872.65	43.76	203.743		
4,300.00	4,288.75	4,585.00	4,549.97	19.10	26.01	50.94	-3,478.79	-8,398.16	8,908.16	8,863.74	44.42	200.527		
4,400.00	4,388.44	4,628.64	4,593.19	19.55	26.23	50.92	-3,483.85	-8,394.96	8,900.56	8,855.47	45.09	197.396		
4,500.00	4,488.13	4,680.00	4,644.17	19.99	26.49	50.90	-3,489.27	-8,391.87	8,893.67	8,847.87	45.79	194.211		
4,600.00	4,587.82	4,707.58	4,671.58	20.44	26.62	50.89	-3,491.99	-8,390.47	8,887.41	8,841.04	46.37	191.673		
4,700.00	4,687.51	4,748.56	4,712.34	20.89	26.81	50.88	-3,495.91	-8,388.70	8,881.84	8,834.83	47.00	188.962		
4,800.00	4,787.21	4,946.35	4,909.40	21.33	27.69	50.85	-3,510.65	-8,380.67	8,875.49	8,827.15	48.34	183.610		
4,900.00	4,886.90	5,001.25	4,964.17	21.78	27.92	50.84	-3,513.95	-8,378.72	8,869.39	8,820.38	49.02	180.942		
5,000.00	4,986.59	5,059.00	5,021.81	22.22	28.16	50.84	-3,517.14	-8,377.13	8,863.82	8,814.12	49.71	178.325		
5,100.00	5,086.28	5,173.65	5,136.40	22.67	28.58	50.87	-3,519.60	-8,375.56	8,858.35	8,807.77	50.58	175.152		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,249.00	5,211.75	23.12	28.83	50.90	-3,519.53	-8,375.29	8,853.01	8,801.74	51.27	172.671	
5,300.00	5,285.66	5,305.68	5,268.42	23.56	29.02	50.92	-3,519.56	-8,375.29	8,848.04	8,796.14	51.90	170.482	
5,400.00	5,385.36	5,380.96	5,343.70	24.01	29.27	50.95	-3,519.85	-8,375.49	8,843.46	8,790.86	52.59	168.146	
5,500.00	5,485.05	5,472.27	5,435.02	24.46	29.57	50.98	-3,520.32	-8,375.81	8,839.02	8,785.68	53.35	165.694	
5,600.00	5,584.74	5,563.60	5,526.35	24.90	29.87	51.02	-3,520.88	-8,376.20	8,834.69	8,780.59	54.10	163.311	
5,700.00	5,684.43	5,663.37	5,626.11	25.35	30.20	51.05	-3,521.55	-8,376.68	8,830.44	8,775.56	54.88	160.915	
5,800.00	5,784.12	5,778.02	5,740.75	25.80	30.57	51.10	-3,522.06	-8,377.19	8,826.08	8,770.37	55.70	158.450	
5,900.00	5,883.81	5,892.61	5,855.35	26.25	30.94	51.14	-3,522.22	-8,377.63	8,821.55	8,765.02	56.53	156.053	
6,000.00	5,983.51	5,996.96	5,959.70	26.70	31.30	51.18	-3,522.36	-8,377.90	8,816.91	8,759.57	57.34	153.772	
6,100.00	6,083.20	6,100.24	6,062.97	27.14	31.66	51.22	-3,522.97	-8,377.95	8,812.24	8,754.09	58.14	151.557	
6,200.00	6,182.89	6,211.21	6,173.94	27.59	32.05	51.26	-3,524.13	-8,377.74	8,807.52	8,748.53	58.99	149.311	
6,300.00	6,282.58	6,362.23	6,324.94	28.04	32.63	51.30	-3,525.98	-8,376.74	8,802.41	8,742.40	60.01	146.673	
6,400.00	6,382.27	6,513.19	6,475.88	28.49	33.20	51.35	-3,527.89	-8,374.78	8,796.73	8,735.69	61.04	144.117	
6,500.00	6,481.96	6,566.03	6,528.71	28.94	33.42	51.36	-3,528.84	-8,374.14	8,791.18	8,729.47	61.70	142.477	
6,600.00	6,581.66	6,640.76	6,603.41	29.39	33.71	51.38	-3,530.40	-8,373.25	8,785.88	8,723.43	62.45	140.695	
6,700.00	6,681.21	6,715.39	6,678.02	29.83	34.01	12.75	-3,532.29	-8,372.45	8,778.44	8,715.25	63.19	138.924	
6,800.00	6,778.96	6,804.62	6,767.20	30.28	34.36	-5.38	-3,534.86	-8,371.62	8,757.99	8,694.01	63.98	136.890	
6,900.00	6,872.51	6,906.92	6,869.47	30.70	34.76	-12.00	-3,537.41	-8,370.76	8,723.42	8,658.63	64.80	134.629	
7,000.00	6,959.55	7,001.97	6,964.50	31.10	35.14	-16.52	-3,539.30	-8,370.03	8,675.56	8,610.01	65.55	132.356	
7,100.00	7,037.93	7,107.10	7,069.61	31.48	35.56	-21.04	-3,541.01	-8,369.18	8,615.57	8,549.28	66.29	129.969	
7,200.00	7,105.74	7,206.73	7,169.22	31.88	35.96	-26.66	-3,542.59	-8,367.99	8,544.83	8,477.88	66.96	127.620	
7,300.00	7,161.29	7,287.12	7,249.59	32.41	36.28	-34.52	-3,543.85	-8,366.73	8,465.25	8,397.76	67.49	125.425	
7,400.00	7,203.22	7,346.46	7,308.91	33.13	36.51	-46.26	-3,544.78	-8,365.64	8,378.94	8,311.03	67.90	123.397	
7,500.00	7,230.50	7,383.57	7,346.02	34.04	36.66	-63.68	-3,545.36	-8,364.88	8,288.15	8,219.95	68.19	121.538	
7,600.00	7,242.45	7,397.91	7,360.35	35.13	36.72	-86.13	-3,545.59	-8,364.57	8,195.22	8,126.83	68.38	119.844	
7,700.00	7,242.72	7,395.18	7,357.62	36.39	36.71	-92.77	-3,545.55	-8,364.63	8,102.17	8,033.65	68.52	118.252	
7,800.00	7,242.33	7,391.53	7,353.97	37.81	36.69	-92.70	-3,545.49	-8,364.71	8,009.30	7,940.61	68.69	116.602	
7,900.00	7,241.93	7,387.93	7,350.37	39.40	36.68	-92.63	-3,545.43	-8,364.79	7,916.61	7,847.71	68.91	114.887	
8,000.00	7,241.54	7,384.36	7,346.81	41.13	36.67	-92.56	-3,545.38	-8,364.86	7,824.10	7,754.93	69.17	113.107	
8,100.00	7,241.15	7,380.84	7,343.28	42.97	36.65	-92.50	-3,545.32	-8,364.94	7,731.78	7,662.28	69.49	111.263	
8,200.00	7,240.75	7,377.36	7,339.80	44.92	36.64	-92.43	-3,545.27	-8,365.01	7,639.64	7,569.78	69.86	109.358	
8,300.00	7,240.36	7,373.91	7,336.36	46.97	36.62	-92.36	-3,545.21	-8,365.08	7,547.71	7,477.42	70.28	107.394	
8,400.00	7,239.97	7,370.50	7,332.95	49.10	36.61	-92.30	-3,545.16	-8,365.15	7,455.98	7,385.22	70.76	105.373	
8,500.00	7,239.57	7,367.14	7,329.58	51.29	36.60	-92.23	-3,545.11	-8,365.22	7,364.46	7,293.17	71.29	103.299	
8,600.00	7,239.18	7,363.80	7,326.25	53.56	36.58	-92.17	-3,545.06	-8,365.29	7,273.17	7,201.28	71.89	101.177	
8,700.00	7,238.79	7,360.51	7,322.96	55.87	36.57	-92.11	-3,545.00	-8,365.36	7,182.11	7,109.57	72.54	99.011	
8,800.00	7,238.39	7,357.25	7,319.70	58.24	36.56	-92.05	-3,544.95	-8,365.42	7,091.29	7,018.03	73.25	96.805	
8,900.00	7,238.00	7,354.03	7,316.48	60.64	36.54	-91.98	-3,544.90	-8,365.49	7,000.72	6,926.68	74.03	94.565	
9,000.00	7,237.61	7,350.84	7,313.29	63.09	36.53	-91.92	-3,544.85	-8,365.55	6,910.40	6,835.53	74.87	92.297	
9,100.00	7,237.21	7,347.69	7,310.14	65.56	36.52	-91.86	-3,544.80	-8,365.61	6,820.36	6,744.58	75.78	90.005	
9,200.00	7,236.82	7,344.57	7,307.02	68.07	36.51	-91.80	-3,544.75	-8,365.67	6,730.59	6,653.84	76.75	87.695	
9,300.00	7,236.43	7,341.48	7,303.94	70.61	36.49	-91.74	-3,544.71	-8,365.73	6,641.12	6,563.33	77.79	85.374	
9,400.00	7,236.03	7,338.43	7,300.89	73.16	36.48	-91.68	-3,544.66	-8,365.79	6,551.95	6,473.06	78.90	83.046	
9,500.00	7,235.64	7,335.41	7,297.87	75.74	36.47	-91.63	-3,544.61	-8,365.85	6,463.10	6,383.03	80.07	80.718	
9,600.00	7,235.25	7,332.42	7,294.88	78.34	36.46	-91.57	-3,544.56	-8,365.91	6,374.57	6,293.26	81.32	78.393	
9,700.00	7,234.85	7,329.46	7,291.92	80.96	36.45	-91.51	-3,544.52	-8,365.97	6,286.39	6,203.76	82.63	76.078	
9,800.00	7,234.46	7,326.53	7,288.99	83.59	36.43	-91.46	-3,544.47	-8,366.02	6,198.57	6,114.55	84.02	73.777	
9,900.00	7,234.07	7,323.64	7,286.10	86.24	36.42	-91.40	-3,544.43	-8,366.07	6,111.12	6,025.64	85.48	71.494	
10,000.00	7,233.67	7,320.77	7,283.23	88.90	36.41	-91.35	-3,544.38	-8,366.13	6,024.05	5,937.04	87.01	69.234	
10,100.00	7,233.28	7,317.93	7,280.39	91.57	36.40	-91.29	-3,544.34	-8,366.18	5,937.40	5,848.78	88.62	67.000	
10,200.00	7,232.89	7,315.12	7,277.58	94.25	36.39	-91.24	-3,544.29	-8,366.23	5,851.17	5,760.87	90.30	64.796	
10,300.00	7,232.49	7,312.34	7,274.80	96.95	36.38	-91.18	-3,544.25	-8,366.28	5,765.38	5,673.32	92.06	62.626	

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,309.59	7,272.05	99.65	36.37	-91.13	-3,544.21	-8,366.33	5,680.06	5,586.16	93.90	60.492		
10,500.00	7,231.71	7,306.86	7,269.33	102.36	36.36	-91.08	-3,544.16	-8,366.38	5,595.22	5,499.41	95.82	58.396		
10,600.00	7,231.32	7,304.16	7,266.63	105.08	36.34	-91.03	-3,544.12	-8,366.43	5,510.89	5,413.08	97.81	56.341		
10,700.00	7,230.92	7,301.49	7,263.96	107.80	36.33	-90.98	-3,544.08	-8,366.48	5,427.10	5,327.20	99.89	54.330		
10,800.00	7,230.53	7,298.85	7,261.32	110.53	36.32	-90.93	-3,544.04	-8,366.53	5,343.85	5,241.80	102.05	52.363		
10,900.00	7,230.14	7,296.23	7,258.70	113.27	36.31	-90.88	-3,544.00	-8,366.57	5,261.19	5,156.89	104.30	50.442		
11,000.00	7,229.74	7,293.64	7,256.11	116.02	36.30	-90.83	-3,543.96	-8,366.62	5,179.14	5,072.51	106.64	48.568		
11,100.00	7,229.35	7,291.07	7,253.54	118.77	36.29	-90.78	-3,543.92	-8,366.66	5,097.74	4,988.68	109.06	46.743		
11,200.00	7,228.96	7,288.53	7,251.00	121.52	36.28	-90.73	-3,543.88	-8,366.71	5,017.00	4,905.43	111.57	44.967		
11,300.00	7,228.56	7,286.01	7,248.48	124.28	36.27	-90.68	-3,543.84	-8,366.75	4,936.96	4,822.79	114.17	43.241		
11,400.00	7,228.17	7,283.51	7,245.99	127.04	36.26	-90.63	-3,543.80	-8,366.79	4,857.67	4,740.80	116.87	41.565		
11,500.00	7,227.78	7,281.04	7,243.52	129.81	36.25	-90.58	-3,543.76	-8,366.84	4,779.15	4,659.49	119.66	39.939		
11,600.00	7,227.38	7,278.60	7,241.07	132.58	36.24	-90.54	-3,543.72	-8,366.88	4,701.44	4,578.90	122.55	38.364		
11,700.00	7,226.99	7,276.17	7,238.65	135.36	36.23	-90.49	-3,543.68	-8,366.92	4,624.60	4,499.06	125.53	36.840		
11,800.00	7,226.60	7,273.77	7,236.25	138.14	36.22	-90.44	-3,543.64	-8,366.96	4,548.65	4,420.03	128.62	35.366		
11,900.00	7,226.20	7,271.39	7,233.87	140.92	36.21	-90.40	-3,543.61	-8,367.00	4,473.64	4,341.84	131.80	33.943		
12,000.00	7,225.81	7,269.04	7,231.51	143.70	36.20	-90.35	-3,543.57	-8,367.04	4,399.63	4,264.55	135.08	32.570		
12,100.00	7,225.42	7,266.70	7,229.18	146.49	36.20	-90.31	-3,543.53	-8,367.08	4,326.66	4,188.19	138.47	31.246		
12,200.00	7,225.02	7,264.39	7,226.87	149.28	36.19	-90.26	-3,543.50	-8,367.11	4,254.79	4,112.84	141.96	29.972		
12,300.00	7,224.63	7,262.10	7,224.58	152.08	36.18	-90.22	-3,543.46	-8,367.15	4,184.08	4,038.53	145.55	28.747		
12,400.00	7,224.24	7,259.83	7,222.31	154.87	36.17	-90.18	-3,543.42	-8,367.19	4,114.58	3,965.33	149.24	27.570		
12,500.00	7,223.84	7,257.58	7,220.06	157.67	36.16	-90.13	-3,543.39	-8,367.22	4,046.35	3,893.32	153.04	26.440		
12,600.00	7,223.45	7,255.35	7,217.83	160.47	36.15	-90.09	-3,543.35	-8,367.26	3,979.47	3,822.54	156.93	25.358		
12,700.00	7,223.06	7,253.14	7,215.62	163.27	36.14	-90.05	-3,543.32	-8,367.29	3,914.00	3,753.07	160.93	24.321		
12,800.00	7,222.66	7,250.95	7,213.43	166.07	36.13	-90.01	-3,543.28	-8,367.33	3,850.01	3,684.99	165.02	23.331		
12,900.00	7,222.27	7,248.78	7,211.26	168.88	36.12	-89.96	-3,543.25	-8,367.36	3,787.58	3,618.38	169.20	22.385		
13,000.00	7,221.88	7,246.63	7,209.11	171.69	36.12	-89.92	-3,543.22	-8,367.40	3,726.79	3,553.32	173.48	21.483		
13,100.00	7,221.48	7,244.50	7,206.98	174.49	36.11	-89.88	-3,543.18	-8,367.43	3,667.72	3,489.89	177.83	20.625		
13,200.00	7,221.09	7,242.38	7,204.87	177.30	36.10	-89.84	-3,543.15	-8,367.46	3,610.45	3,428.18	182.27	19.809		
13,300.00	7,220.70	7,240.29	7,202.77	180.12	36.09	-89.80	-3,543.12	-8,367.50	3,555.07	3,368.30	186.77	19.034		
13,400.00	7,220.30	7,238.21	7,200.70	182.93	36.08	-89.76	-3,543.08	-8,367.53	3,501.66	3,310.33	191.34	18.301		
13,500.00	7,219.91	7,236.16	7,198.64	185.74	36.07	-89.72	-3,543.05	-8,367.56	3,450.33	3,254.38	195.95	17.608		
13,600.00	7,219.52	7,234.12	7,196.60	188.56	36.07	-89.68	-3,543.02	-8,367.59	3,401.17	3,200.55	200.61	16.954		
13,700.00	7,219.12	7,232.09	7,194.58	191.38	36.06	-89.64	-3,542.99	-8,367.62	3,354.26	3,148.96	205.30	16.338		
13,800.00	7,218.73	7,230.09	7,192.58	194.20	36.05	-89.61	-3,542.96	-8,367.65	3,309.71	3,099.71	210.00	15.760		
13,900.00	7,218.34	7,228.10	7,190.59	197.02	36.04	-89.57	-3,542.92	-8,367.68	3,267.61	3,052.91	214.70	15.219		
14,000.00	7,217.94	7,226.13	7,188.62	199.84	36.03	-89.53	-3,542.89	-8,367.71	3,228.06	3,008.68	219.38	14.714		
14,100.00	7,217.55	7,224.18	7,186.66	202.66	36.03	-89.49	-3,542.86	-8,367.74	3,191.16	2,967.13	224.03	14.244		
14,200.00	7,217.16	7,222.24	7,184.73	205.48	36.02	-89.46	-3,542.83	-8,367.77	3,156.99	2,928.36	228.63	13.809		
14,300.00	7,216.76	7,220.32	7,182.81	208.30	36.01	-89.42	-3,542.80	-8,367.79	3,125.65	2,892.50	233.15	13.406		
14,400.00	7,216.37	7,218.41	7,180.90	211.13	36.00	-89.38	-3,542.77	-8,367.82	3,097.22	2,859.65	237.57	13.037		
14,500.00	7,215.98	7,216.52	7,179.01	213.96	36.00	-89.35	-3,542.74	-8,367.85	3,071.78	2,829.90	241.88	12.700		
14,600.00	7,215.58	7,214.65	7,177.14	216.78	35.99	-89.31	-3,542.71	-8,367.88	3,049.41	2,803.35	246.06	12.393		
14,700.00	7,215.19	7,212.79	7,175.28	219.61	35.98	-89.27	-3,542.68	-8,367.90	3,030.17	2,780.10	250.08	12.117		
14,800.00	7,214.80	7,210.95	7,173.44	222.44	35.97	-89.24	-3,542.65	-8,367.93	3,014.13	2,760.21	253.92	11.870		
14,900.00	7,214.40	7,209.12	7,171.61	225.27	35.97	-89.20	-3,542.62	-8,367.95	3,001.34	2,743.77	257.57	11.653		
15,000.00	7,214.01	7,207.31	7,169.80	228.10	35.96	-89.17	-3,542.60	-8,367.98	2,991.83	2,730.83	261.00	11.463		
15,002.44	7,214.00	7,207.27	7,169.76	228.16	35.96	-89.17	-3,542.59	-8,367.98	2,991.64	2,730.56	261.08	11.459	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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)	Offset Wellbore Centre +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	-133.92	-3,246.10	-3,370.92	4,680.23				
100.00	100.00	35.00	100.00	3.28	3.34	-133.92	-3,246.10	-3,370.92	4,679.77	4,673.15	6.62	706.794	
200.00	200.00	135.00	200.00	3.34	4.42	-133.92	-3,246.10	-3,370.92	4,679.77	4,672.01	7.76	603.056	
300.00	300.00	235.00	300.00	3.44	7.24	-133.92	-3,246.10	-3,370.92	4,679.77	4,669.09	10.69	437.835	
400.00	400.00	335.00	400.00	3.60	10.48	-133.92	-3,246.10	-3,370.92	4,679.77	4,665.70	14.08	332.384	
500.00	500.00	435.00	500.00	3.81	13.83	-133.92	-3,246.10	-3,370.92	4,679.77	4,662.13	17.64	265.281	
600.00	599.98	534.98	599.98	4.03	17.25	27.94	-3,246.10	-3,370.92	4,678.23	4,656.95	21.28	219.840	
700.00	699.84	634.84	699.84	4.29	20.68	28.01	-3,246.10	-3,370.92	4,673.61	4,648.64	24.97	187.203	
800.00	799.54	734.54	799.54	4.57	24.12	28.07	-3,246.10	-3,370.92	4,666.78	4,638.09	28.69	162.665	
900.00	899.23	834.23	899.23	4.87	27.57	28.12	-3,246.10	-3,370.92	4,659.85	4,627.41	32.44	143.625	
1,000.00	998.92	933.92	998.92	5.20	31.03	28.17	-3,246.10	-3,370.92	4,652.93	4,616.70	36.23	128.439	
1,100.00	1,098.61	1,033.61	1,098.61	5.54	34.49	28.21	-3,246.10	-3,370.92	4,646.01	4,605.98	40.03	116.063	
1,200.00	1,198.30	1,133.30	1,198.30	5.90	37.96	28.26	-3,246.10	-3,370.92	4,639.09	4,595.24	43.85	105.793	
1,300.00	1,298.00	1,233.00	1,298.00	6.27	41.43	28.30	-3,246.10	-3,370.92	4,632.17	4,584.49	47.69	97.141	
1,400.00	1,397.69	1,332.69	1,397.69	6.66	44.90	28.35	-3,246.10	-3,370.92	4,625.26	4,573.73	51.53	89.757	
1,500.00	1,497.38	1,432.38	1,497.38	7.05	48.37	28.40	-3,246.10	-3,370.92	4,618.35	4,562.97	55.39	83.384	
1,600.00	1,597.07	1,532.07	1,597.07	7.44	51.84	28.44	-3,246.10	-3,370.92	4,611.45	4,552.20	59.25	77.830	
1,700.00	1,696.76	1,631.76	1,696.76	7.85	55.32	28.49	-3,246.10	-3,370.92	4,604.55	4,541.43	63.12	72.948	
1,800.00	1,796.45	1,731.45	1,796.45	8.25	58.79	28.53	-3,246.10	-3,370.92	4,597.65	4,530.65	67.00	68.625	
1,900.00	1,896.15	1,831.15	1,896.15	8.67	62.27	28.58	-3,246.10	-3,370.92	4,590.75	4,519.87	70.88	64.770	
2,000.00	1,995.84	1,930.84	1,995.84	9.08	65.74	28.63	-3,246.10	-3,370.92	4,583.86	4,509.09	74.76	61.312	
2,100.00	2,095.53	2,030.53	2,095.53	9.50	69.22	28.68	-3,246.10	-3,370.92	4,576.97	4,498.31	78.65	58.192	
2,200.00	2,195.22	2,130.22	2,195.22	9.92	72.69	28.72	-3,246.10	-3,370.92	4,570.08	4,487.53	82.54	55.365	
2,300.00	2,294.91	2,229.91	2,294.91	10.35	76.17	28.77	-3,246.10	-3,370.92	4,563.19	4,476.75	86.44	52.791	
2,400.00	2,394.60	2,329.60	2,394.60	10.77	79.65	28.82	-3,246.10	-3,370.92	4,556.31	4,465.98	90.34	50.437	
2,500.00	2,494.30	2,429.30	2,494.30	11.20	83.13	28.86	-3,246.10	-3,370.92	4,549.44	4,455.20	94.24	48.276	
2,600.00	2,593.99	2,528.99	2,593.99	11.63	86.60	28.91	-3,246.10	-3,370.92	4,542.56	4,444.42	98.14	46.287	
2,700.00	2,693.68	2,628.68	2,693.68	12.07	90.08	28.96	-3,246.10	-3,370.92	4,535.69	4,433.65	102.04	44.449	
2,800.00	2,793.37	2,728.37	2,793.37	12.50	93.56	29.01	-3,246.10	-3,370.92	4,528.82	4,422.87	105.95	42.746	
2,900.00	2,893.06	2,828.06	2,893.06	12.93	97.04	29.06	-3,246.10	-3,370.92	4,521.96	4,412.10	109.85	41.163	
3,000.00	2,992.76	2,927.76	2,992.76	13.37	100.52	29.10	-3,246.10	-3,370.92	4,515.09	4,401.33	113.76	39.689	
3,100.00	3,092.45	3,027.45	3,092.45	13.81	103.99	29.15	-3,246.10	-3,370.92	4,508.23	4,390.56	117.67	38.312	
3,200.00	3,192.14	3,127.14	3,192.14	14.25	107.47	29.20	-3,246.10	-3,370.92	4,501.38	4,379.80	121.58	37.024	
3,300.00	3,291.83	3,226.83	3,291.83	14.68	110.95	29.25	-3,246.10	-3,370.92	4,494.53	4,369.03	125.49	35.815	
3,400.00	3,391.52	3,326.52	3,391.52	15.12	114.43	29.30	-3,246.10	-3,370.92	4,487.68	4,358.27	129.40	34.680	
3,500.00	3,491.21	3,426.21	3,491.21	15.56	117.91	29.35	-3,246.10	-3,370.92	4,480.83	4,347.51	133.32	33.611	
3,600.00	3,590.91	3,525.91	3,590.91	16.00	121.39	29.40	-3,246.10	-3,370.92	4,473.99	4,336.76	137.23	32.602	
3,700.00	3,690.60	3,625.60	3,690.60	16.45	124.87	29.45	-3,246.10	-3,370.92	4,467.15	4,326.01	141.14	31.650	
3,800.00	3,790.29	3,725.29	3,790.29	16.89	128.35	29.50	-3,246.10	-3,370.92	4,460.31	4,315.25	145.06	30.748	
3,900.00	3,889.98	3,824.98	3,889.98	17.33	131.83	29.55	-3,246.10	-3,370.92	4,453.48	4,304.51	148.97	29.894	
4,000.00	3,989.67	3,924.67	3,989.67	17.77	135.30	29.60	-3,246.10	-3,370.92	4,446.65	4,293.76	152.89	29.084	
4,100.00	4,089.36	4,024.36	4,089.36	18.22	138.78	29.65	-3,246.10	-3,370.92	4,439.82	4,283.02	156.81	28.314	
4,200.00	4,189.06	4,124.06	4,189.06	18.66	142.26	29.70	-3,246.10	-3,370.92	4,433.00	4,272.28	160.72	27.582	
4,300.00	4,288.75	4,223.75	4,288.75	19.10	145.74	29.75	-3,246.10	-3,370.92	4,426.18	4,261.54	164.64	26.884	
4,400.00	4,388.44	4,323.44	4,388.44	19.55	149.22	29.80	-3,246.10	-3,370.92	4,419.37	4,250.81	168.56	26.219	
4,500.00	4,488.13	4,423.13	4,488.13	19.99	152.70	29.85	-3,246.10	-3,370.92	4,412.56	4,240.08	172.48	25.584	
4,600.00	4,587.82	4,522.82	4,587.82	20.44	156.18	29.90	-3,246.10	-3,370.92	4,405.75	4,229.35	176.39	24.977	
4,700.00	4,687.51	4,622.51	4,687.51	20.89	159.66	29.95	-3,246.10	-3,370.92	4,398.94	4,218.63	180.31	24.396	
4,800.00	4,787.21	4,722.21	4,787.21	21.33	163.14	30.00	-3,246.10	-3,370.92	4,392.14	4,207.91	184.23	23.840	
4,900.00	4,886.90	4,821.90	4,886.90	21.78	166.62	30.05	-3,246.10	-3,370.92	4,385.34	4,197.19	188.15	23.308	
5,000.00	4,986.59	4,921.59	4,986.59	22.22	170.10	30.10	-3,246.10	-3,370.92	4,378.55	4,186.47	192.07	22.797	
5,100.00	5,086.28	5,021.28	5,086.28	22.67	173.58	30.15	-3,246.10	-3,370.92	4,371.75	4,175.76	195.99	22.306	

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,120.97	5,185.97	23.12	177.06	30.21	-3,246.10	-3,370.92	4,364.97	4,165.06	199.91	21.835		
5,300.00	5,285.66	5,220.66	5,285.66	23.56	180.54	30.26	-3,246.10	-3,370.92	4,358.18	4,154.35	203.83	21.381		
5,400.00	5,385.36	5,320.36	5,385.36	24.01	184.02	30.31	-3,246.10	-3,370.92	4,351.40	4,143.65	207.75	20.945		
5,500.00	5,485.05	5,420.05	5,485.05	24.46	187.50	30.36	-3,246.10	-3,370.92	4,344.62	4,132.95	211.67	20.525		
5,600.00	5,584.74	5,519.74	5,584.74	24.90	190.98	30.41	-3,246.10	-3,370.92	4,337.85	4,122.26	215.59	20.121		
5,700.00	5,684.43	5,619.43	5,684.43	25.35	194.46	30.47	-3,246.10	-3,370.92	4,331.08	4,111.56	219.51	19.730		
5,800.00	5,784.12	5,719.12	5,784.12	25.80	197.94	30.52	-3,246.10	-3,370.92	4,324.31	4,100.88	223.44	19.354		
5,900.00	5,883.81	5,818.81	5,883.81	26.25	201.42	30.57	-3,246.10	-3,370.92	4,317.55	4,090.19	227.36	18.990		
6,000.00	5,983.51	5,918.51	5,983.51	26.70	204.90	30.63	-3,246.10	-3,370.92	4,310.79	4,079.51	231.28	18.639		
6,100.00	6,083.20	6,018.20	6,083.20	27.14	208.38	30.68	-3,246.10	-3,370.92	4,304.04	4,068.83	235.20	18.299		
6,200.00	6,182.89	6,117.89	6,182.89	27.59	211.86	30.73	-3,246.10	-3,370.92	4,297.28	4,058.16	239.12	17.971		
6,300.00	6,282.58	6,217.58	6,282.58	28.04	215.34	30.79	-3,246.10	-3,370.92	4,290.54	4,047.49	243.05	17.653		
6,400.00	6,382.27	6,317.27	6,382.27	28.49	218.82	30.84	-3,246.10	-3,370.92	4,283.79	4,036.82	246.97	17.346		
6,500.00	6,481.96	6,416.96	6,481.96	28.94	222.30	30.89	-3,246.10	-3,370.92	4,277.05	4,026.16	250.89	17.047		
6,600.00	6,581.66	6,516.66	6,581.66	29.39	225.78	30.95	-3,246.10	-3,370.92	4,270.32	4,015.50	254.81	16.759		
6,700.00	6,681.21	6,616.21	6,681.21	29.83	229.25	-7.84	-3,246.10	-3,370.92	4,263.62	4,004.89	258.73	16.471		
6,800.00	6,778.96	6,713.96	6,778.96	30.28	232.66	-26.57	-3,246.10	-3,370.92	4,242.25	3,979.68	262.57	16.157		
6,900.00	6,872.51	6,807.51	6,872.51	30.70	235.93	-34.13	-3,246.10	-3,370.92	4,211.66	3,945.43	266.23	15.820		
7,000.00	6,959.55	6,905.45	6,959.55	31.10	239.35	-39.90	-3,246.10	-3,370.92	4,170.71	3,900.70	270.02	15.446		
7,100.00	7,037.93	6,972.93	7,037.93	31.48	241.70	-45.80	-3,246.10	-3,370.92	4,120.61	3,847.90	272.71	15.110		
7,200.00	7,105.74	7,040.74	7,105.74	31.88	244.07	-52.52	-3,246.10	-3,370.92	4,062.83	3,787.43	275.40	14.753		
7,300.00	7,161.29	7,103.71	7,161.29	32.41	246.27	-60.32	-3,246.10	-3,370.92	3,999.05	3,721.13	277.93	14.389		
7,400.00	7,203.22	7,138.22	7,203.22	33.13	247.47	-69.13	-3,246.10	-3,370.92	3,931.16	3,651.65	279.50	14.065		
7,500.00	7,230.50	7,165.50	7,230.50	34.04	248.42	-78.48	-3,246.10	-3,370.92	3,861.09	3,580.19	280.91	13.745		
7,600.00	7,242.45	7,177.45	7,242.45	35.13	248.84	-87.68	-3,246.10	-3,370.92	3,790.84	3,508.96	281.88	13.448		
7,700.00	7,242.72	7,177.72	7,242.72	36.39	248.85	-90.21	-3,246.10	-3,370.92	3,721.98	3,439.41	282.58	13.172		
7,800.00	7,242.33	7,177.33	7,242.33	37.81	248.84	-90.20	-3,246.10	-3,370.92	3,654.60	3,371.17	283.43	12.894		
7,900.00	7,241.93	7,176.93	7,241.93	39.40	248.82	-90.19	-3,246.10	-3,370.92	3,588.74	3,304.28	284.45	12.616		
8,000.00	7,241.54	7,176.54	7,241.54	41.13	248.81	-90.18	-3,246.10	-3,370.92	3,524.48	3,238.82	285.66	12.338		
8,100.00	7,241.15	7,176.15	7,241.15	42.97	248.80	-90.18	-3,246.10	-3,370.92	3,461.92	3,174.87	287.05	12.060		
8,200.00	7,240.75	7,175.75	7,240.75	44.92	248.78	-90.17	-3,246.10	-3,370.92	3,401.15	3,112.53	288.62	11.784		
8,300.00	7,240.36	7,175.36	7,240.36	46.97	248.77	-90.16	-3,246.10	-3,370.92	3,342.27	3,051.91	290.36	11.511		
8,400.00	7,239.97	7,174.97	7,239.97	49.10	248.75	-90.15	-3,246.10	-3,370.92	3,285.37	2,993.11	292.26	11.241		
8,500.00	7,239.57	7,174.57	7,239.57	51.29	248.74	-90.14	-3,246.10	-3,370.92	3,230.57	2,936.24	294.33	10.976		
8,600.00	7,239.18	7,174.18	7,239.18	53.56	248.73	-90.14	-3,246.10	-3,370.92	3,177.97	2,881.42	296.56	10.716		
8,700.00	7,238.79	7,173.79	7,238.79	55.87	248.71	-90.13	-3,246.10	-3,370.92	3,127.69	2,828.76	298.93	10.463		
8,800.00	7,238.39	7,173.39	7,238.39	58.24	248.70	-90.12	-3,246.10	-3,370.92	3,079.83	2,778.40	301.43	10.218		
8,900.00	7,238.00	7,173.00	7,238.00	60.64	248.69	-90.11	-3,246.10	-3,370.92	3,034.52	2,730.46	304.05	9.980		
9,000.00	7,237.61	7,172.61	7,237.61	63.09	248.67	-90.10	-3,246.10	-3,370.92	2,991.86	2,685.07	306.79	9.752		
9,100.00	7,237.21	7,172.21	7,237.21	65.56	248.66	-90.09	-3,246.10	-3,370.92	2,951.97	2,642.35	309.62	9.534		
9,200.00	7,236.82	7,171.82	7,236.82	68.07	248.64	-90.09	-3,246.10	-3,370.92	2,914.97	2,602.44	312.53	9.327		
9,300.00	7,236.43	7,171.43	7,236.43	70.61	248.63	-90.08	-3,246.10	-3,370.92	2,880.97	2,565.45	315.52	9.131		
9,400.00	7,236.03	7,171.03	7,236.03	73.16	248.62	-90.07	-3,246.10	-3,370.92	2,850.07	2,531.52	318.56	8.947		
9,500.00	7,235.64	7,170.64	7,235.64	75.74	248.60	-90.06	-3,246.10	-3,370.92	2,822.38	2,500.75	321.63	8.775		
9,600.00	7,235.25	7,170.25	7,235.25	78.34	248.59	-90.05	-3,246.10	-3,370.92	2,797.99	2,473.27	324.72	8.617		
9,700.00	7,234.85	7,169.85	7,234.85	80.96	248.58	-90.04	-3,246.10	-3,370.92	2,776.99	2,449.18	327.82	8.471		
9,800.00	7,234.46	7,169.46	7,234.46	83.59	248.56	-90.04	-3,246.10	-3,370.92	2,759.46	2,428.56	330.89	8.339		
9,900.00	7,234.07	7,169.07	7,234.07	86.24	248.55	-90.03	-3,246.10	-3,370.92	2,745.45	2,411.52	333.94	8.221		
10,000.00	7,233.67	7,168.67	7,233.67	88.90	248.54	-90.02	-3,246.10	-3,370.92	2,735.04	2,398.11	336.93	8.118		
10,100.00	7,233.28	7,168.28	7,233.28	91.57	248.52	-90.01	-3,246.10	-3,370.92	2,728.25	2,388.40	339.85	8.028		
10,200.00	7,232.89	7,167.89	7,232.89	94.25	248.51	-90.00	-3,246.10	-3,370.92	2,725.12	2,382.42	342.70	7.952		
10,235.40	7,232.75	7,167.75	7,232.75	95.21	248.50	-90.00	-3,246.10	-3,370.92	2,724.89	2,381.21	343.68	7.929 CC		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	7,167.49	7,232.49	96.95	248.49	-89.99	-3,246.10	-3,370.92	2,725.66	2,380.22	345.44	7.890	ES	
10,400.00	7,232.10	7,167.10	7,232.10	99.65	248.48	-89.99	-3,246.10	-3,370.92	2,729.86	2,381.79	348.07	7.843		
10,500.00	7,231.71	7,166.71	7,231.71	102.36	248.47	-89.98	-3,246.10	-3,370.92	2,737.71	2,387.13	350.58	7.809		
10,600.00	7,231.32	7,166.32	7,231.32	105.08	248.45	-89.97	-3,246.10	-3,370.92	2,749.18	2,396.22	352.96	7.789		
10,700.00	7,230.92	7,165.92	7,230.92	107.80	248.44	-89.96	-3,246.10	-3,370.92	2,764.21	2,409.02	355.20	7.782	SF	
10,800.00	7,230.53	7,165.53	7,230.53	110.53	248.43	-89.95	-3,246.10	-3,370.92	2,782.77	2,425.48	357.29	7.789		
10,900.00	7,230.14	7,165.14	7,230.14	113.27	248.41	-89.95	-3,246.10	-3,370.92	2,804.77	2,445.53	359.23	7.808		
11,000.00	7,229.74	7,164.74	7,229.74	116.02	248.40	-89.94	-3,246.10	-3,370.92	2,830.13	2,469.10	361.03	7.839		
11,100.00	7,229.35	7,164.35	7,229.35	118.77	248.38	-89.93	-3,246.10	-3,370.92	2,858.77	2,496.09	362.68	7.882		
11,200.00	7,228.96	7,163.96	7,228.96	121.52	248.37	-89.92	-3,246.10	-3,370.92	2,890.58	2,526.41	364.17	7.937		
11,300.00	7,228.56	7,163.56	7,228.56	124.28	248.36	-89.91	-3,246.10	-3,370.92	2,925.47	2,559.95	365.53	8.003		
11,400.00	7,228.17	7,163.17	7,228.17	127.04	248.34	-89.90	-3,246.10	-3,370.92	2,963.33	2,596.59	366.74	8.080		
11,500.00	7,227.78	7,162.78	7,227.78	129.81	248.33	-89.90	-3,246.10	-3,370.92	3,004.04	2,636.22	367.82	8.167		
11,600.00	7,227.38	7,162.38	7,227.38	132.58	248.32	-89.89	-3,246.10	-3,370.92	3,047.48	2,678.71	368.77	8.264		
11,700.00	7,226.99	7,161.99	7,226.99	135.36	248.30	-89.88	-3,246.10	-3,370.92	3,093.55	2,723.95	369.60	8.370		
11,800.00	7,226.60	7,161.60	7,226.60	138.14	248.29	-89.87	-3,246.10	-3,370.92	3,142.13	2,771.82	370.31	8.485		
11,900.00	7,226.20	7,161.20	7,226.20	140.92	248.27	-89.86	-3,246.10	-3,370.92	3,193.10	2,822.18	370.92	8.609		
12,000.00	7,225.81	7,160.81	7,225.81	143.70	248.26	-89.85	-3,246.10	-3,370.92	3,246.35	2,874.92	371.43	8.740		
12,100.00	7,225.42	7,160.42	7,225.42	146.49	248.25	-89.85	-3,246.10	-3,370.92	3,301.78	2,929.93	371.85	8.879		
12,200.00	7,225.02	7,160.02	7,225.02	149.28	248.23	-89.84	-3,246.10	-3,370.92	3,359.26	2,987.08	372.18	9.026		
12,300.00	7,224.63	7,159.63	7,224.63	152.08	248.22	-89.83	-3,246.10	-3,370.92	3,418.71	3,046.27	372.44	9.179		
12,400.00	7,224.24	7,159.24	7,224.24	154.87	248.21	-89.82	-3,246.10	-3,370.92	3,480.01	3,107.38	372.63	9.339		
12,500.00	7,223.84	7,158.84	7,223.84	157.67	248.19	-89.81	-3,246.10	-3,370.92	3,543.07	3,170.32	372.75	9.505		
12,600.00	7,223.45	7,158.45	7,223.45	160.47	248.18	-89.80	-3,246.10	-3,370.92	3,607.81	3,234.99	372.82	9.677		
12,700.00	7,223.06	7,158.06	7,223.06	163.27	248.16	-89.80	-3,246.10	-3,370.92	3,674.13	3,301.30	372.83	9.855		
12,800.00	7,222.66	7,157.66	7,222.66	166.07	248.15	-89.79	-3,246.10	-3,370.92	3,741.94	3,369.14	372.80	10.037		
12,900.00	7,222.27	7,157.27	7,222.27	168.88	248.14	-89.78	-3,246.10	-3,370.92	3,811.17	3,438.45	372.73	10.225		
13,000.00	7,221.88	7,156.88	7,221.88	171.69	248.12	-89.77	-3,246.10	-3,370.92	3,881.74	3,509.13	372.62	10.418		
13,100.00	7,221.48	7,156.48	7,221.48	174.49	248.11	-89.76	-3,246.10	-3,370.92	3,953.59	3,581.12	372.47	10.614		
13,200.00	7,221.09	7,156.09	7,221.09	177.30	248.10	-89.75	-3,246.10	-3,370.92	4,026.63	3,654.33	372.30	10.816		
13,300.00	7,220.70	7,155.70	7,220.70	180.12	248.08	-89.75	-3,246.10	-3,370.92	4,100.81	3,728.71	372.10	11.021		
13,400.00	7,220.30	7,155.30	7,220.30	182.93	248.07	-89.74	-3,246.10	-3,370.92	4,176.07	3,804.19	371.89	11.229		
13,500.00	7,219.91	7,154.91	7,219.91	185.74	248.05	-89.73	-3,246.10	-3,370.92	4,252.35	3,880.70	371.65	11.442		
13,600.00	7,219.52	7,154.52	7,219.52	188.56	248.04	-89.72	-3,246.10	-3,370.92	4,329.60	3,958.20	371.39	11.658		
13,700.00	7,219.12	7,154.12	7,219.12	191.38	248.03	-89.71	-3,246.10	-3,370.92	4,407.76	4,036.63	371.13	11.877		
13,800.00	7,218.73	7,153.73	7,218.73	194.20	248.01	-89.71	-3,246.10	-3,370.92	4,486.78	4,115.94	370.85	12.099		
13,900.00	7,218.34	7,153.34	7,218.34	197.02	248.00	-89.70	-3,246.10	-3,370.92	4,566.63	4,196.08	370.56	12.324		
14,000.00	7,217.94	7,152.94	7,217.94	199.84	247.99	-89.69	-3,246.10	-3,370.92	4,647.26	4,277.00	370.26	12.551		
14,100.00	7,217.55	7,152.55	7,217.55	202.66	247.97	-89.68	-3,246.10	-3,370.92	4,728.63	4,358.68	369.95	12.782		
14,200.00	7,217.16	7,152.16	7,217.16	205.48	247.96	-89.67	-3,246.10	-3,370.92	4,810.70	4,441.06	369.64	13.014		
14,300.00	7,216.76	7,151.76	7,216.76	208.30	247.94	-89.66	-3,246.10	-3,370.92	4,893.44	4,524.11	369.33	13.250		
14,400.00	7,216.37	7,151.37	7,216.37	211.13	247.93	-89.66	-3,246.10	-3,370.92	4,976.81	4,607.80	369.01	13.487		
14,500.00	7,215.98	7,150.98	7,215.98	213.96	247.92	-89.65	-3,246.10	-3,370.92	5,060.79	4,692.10	368.69	13.726		
14,600.00	7,215.58	7,150.58	7,215.58	216.78	247.90	-89.64	-3,246.10	-3,370.92	5,145.34	4,776.96	368.37	13.968		
14,700.00	7,215.19	7,150.19	7,215.19	219.61	247.89	-89.63	-3,246.10	-3,370.92	5,230.43	4,862.38	368.05	14.211		
14,800.00	7,214.80	7,149.80	7,214.80	222.44	247.88	-89.62	-3,246.10	-3,370.92	5,316.04	4,948.31	367.73	14.456		
14,900.00	7,214.40	7,149.40	7,214.40	225.27	247.86	-89.61	-3,246.10	-3,370.92	5,402.15	5,034.73	367.41	14.703		
15,000.00	7,214.01	7,149.01	7,214.01	228.10	247.85	-89.61	-3,246.10	-3,370.92	5,488.73	5,121.63	367.10	14.952		
15,002.44	7,214.00	7,149.00	7,214.00	228.16	247.85	-89.61	-3,246.10	-3,370.92	5,490.84	5,123.75	367.09	14.958		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	11.00	3.28	3.28	26.16	997.83	490.06	1,111.73				
100.00	100.00	86.52	97.52	3.28	3.29	26.16	997.91	490.12	1,111.77	1,105.20	6.57	169.221	
200.00	200.00	186.63	197.63	3.34	3.33	26.16	998.07	490.32	1,112.01	1,105.34	6.67	166.744	
300.00	300.00	289.48	300.48	3.44	3.44	26.17	998.09	490.52	1,112.11	1,105.23	6.88	161.613	
321.31	321.31	311.47	322.47	3.47	3.47	26.17	998.06	490.53	1,112.09	1,105.15	6.94	160.239	
400.00	400.00	382.81	393.81	3.60	3.58	26.19	998.09	490.96	1,112.32	1,105.14	7.18	154.936 ES	
500.00	500.00	485.65	496.64	3.81	3.77	26.24	998.18	491.97	1,112.84	1,105.26	7.58	146.832	
600.00	599.98	581.08	592.06	4.03	3.99	-171.89	998.19	492.90	1,115.01	1,106.99	8.03	138.916	
700.00	699.84	684.73	695.70	4.29	4.26	-171.84	998.15	494.44	1,120.82	1,112.27	8.55	131.107	
800.00	799.54	786.17	797.14	4.57	4.55	-171.83	997.81	495.74	1,128.74	1,119.62	9.12	123.761	
900.00	899.23	882.57	893.53	4.87	4.85	-171.82	997.59	496.91	1,136.84	1,127.12	9.72	116.978	
1,000.00	998.92	985.29	996.24	5.20	5.18	-171.81	997.33	498.41	1,145.03	1,134.65	10.37	110.380	
1,100.00	1,098.61	1,079.42	1,090.37	5.54	5.50	-171.81	997.22	499.49	1,153.21	1,142.18	11.03	104.550	
1,200.00	1,198.30	1,180.24	1,191.18	5.90	5.85	-171.80	997.34	500.95	1,161.72	1,149.98	11.74	98.993	
1,300.00	1,298.00	1,288.25	1,299.17	6.27	6.24	-171.79	996.94	502.45	1,169.78	1,157.29	12.49	93.665	
1,400.00	1,397.69	1,388.27	1,399.18	6.66	6.61	-171.79	996.34	503.32	1,177.39	1,164.16	13.23	88.992	
1,500.00	1,497.38	1,489.09	1,500.00	7.05	6.99	-171.80	995.76	504.13	1,184.99	1,171.00	13.99	84.705	
1,600.00	1,597.07	1,587.89	1,598.79	7.44	7.37	-171.78	994.98	505.27	1,192.56	1,177.81	14.75	80.830	
1,700.00	1,696.76	1,686.46	1,696.35	7.85	7.74	-171.78	994.43	506.25	1,200.27	1,184.75	15.52	77.319	
1,800.00	1,796.45	1,787.21	1,798.10	8.25	8.14	-171.80	994.02	507.02	1,208.01	1,191.69	16.32	74.023	
1,900.00	1,896.15	1,896.09	1,906.97	8.67	8.57	-171.82	993.21	507.47	1,215.30	1,198.15	17.15	70.851	
2,000.00	1,995.84	1,990.34	2,001.22	9.08	8.94	-171.86	992.60	507.23	1,222.38	1,204.45	17.93	68.169	
2,100.00	2,095.53	2,093.59	2,104.47	9.50	9.35	-171.92	992.14	506.89	1,229.61	1,210.85	18.75	65.563	
2,200.00	2,195.22	2,185.64	2,196.51	9.92	9.72	-171.97	991.80	506.66	1,236.93	1,217.40	19.53	63.321	
2,300.00	2,294.91	2,282.86	2,293.74	10.35	10.11	-172.03	991.90	506.52	1,244.73	1,224.39	20.34	61.193	
2,400.00	2,394.60	2,380.97	2,391.84	10.77	10.51	-172.07	991.96	506.75	1,252.66	1,231.51	21.16	59.212	
2,500.00	2,494.30	2,485.82	2,496.70	11.20	10.93	-172.13	992.06	506.69	1,260.50	1,238.50	22.00	57.284	
2,600.00	2,593.99	2,581.37	2,592.25	11.63	11.32	-172.19	992.19	506.25	1,268.19	1,245.38	22.81	55.588	
2,700.00	2,693.68	2,679.79	2,690.66	12.07	11.72	-172.27	992.63	505.84	1,276.19	1,252.55	23.64	53.985	
2,800.00	2,793.37	2,782.92	2,793.80	12.50	12.14	-172.35	993.06	505.25	1,284.09	1,259.60	24.49	52.434	
2,900.00	2,893.06	2,891.81	2,902.68	12.93	12.59	-172.44	993.11	504.25	1,291.51	1,266.14	25.37	50.909	
3,000.00	2,992.76	2,987.48	2,998.34	13.37	12.98	-172.52	992.96	503.17	1,298.66	1,272.48	26.19	49.588	
3,100.00	3,092.45	3,093.38	3,104.23	13.81	13.42	-172.64	993.06	501.45	1,305.84	1,278.78	27.06	48.259	
3,200.00	3,192.14	3,187.90	3,198.74	14.25	13.81	-172.75	993.13	499.69	1,312.89	1,285.01	27.88	47.094	
3,300.00	3,291.83	3,293.69	3,304.51	14.68	14.25	-172.86	993.05	498.18	1,320.01	1,291.25	28.75	45.912	
3,400.00	3,391.52	3,394.82	3,405.62	15.12	14.67	-172.95	992.58	496.75	1,326.77	1,297.16	29.60	44.818	
3,500.00	3,491.21	3,492.68	3,503.47	15.56	15.08	-173.04	992.19	495.29	1,333.56	1,303.12	30.44	43.807	
3,600.00	3,590.91	3,586.39	3,597.18	16.00	15.47	-173.11	991.93	494.30	1,340.65	1,309.39	31.26	42.885	
3,700.00	3,690.60	3,675.62	3,686.41	16.45	15.84	-173.16	991.98	493.96	1,348.34	1,316.28	32.06	42.058	
3,800.00	3,790.29	3,774.34	3,785.13	16.89	16.26	-173.21	992.51	493.88	1,356.58	1,323.67	32.90	41.229	
3,900.00	3,889.98	3,877.66	3,888.45	17.33	16.69	-173.27	992.96	493.53	1,364.62	1,330.85	33.77	40.406	
4,000.00	3,989.67	3,977.11	3,987.90	17.77	17.10	-173.34	993.35	492.89	1,372.50	1,337.88	34.62	39.641	
4,100.00	4,089.36	4,078.09	4,088.87	18.22	17.53	-173.41	993.76	492.27	1,380.40	1,344.92	35.48	38.904	
4,200.00	4,189.06	4,179.86	4,190.64	18.66	17.96	-173.47	993.95	491.76	1,388.16	1,351.81	36.35	38.193	
4,300.00	4,288.75	4,277.75	4,288.52	19.10	18.37	-173.53	994.14	491.14	1,395.88	1,358.69	37.19	37.532	
4,400.00	4,388.44	4,376.91	4,387.68	19.55	18.78	-173.59	994.42	490.68	1,403.73	1,365.68	38.04	36.898	
4,500.00	4,488.13	4,474.60	4,485.38	19.99	19.19	-173.65	994.72	490.27	1,411.63	1,372.74	38.89	36.300	
4,600.00	4,587.82	4,569.86	4,580.63	20.44	19.60	-173.69	995.13	490.14	1,419.77	1,380.04	39.72	35.744	
4,700.00	4,687.51	4,669.99	4,680.76	20.89	20.02	-173.73	995.69	490.22	1,428.11	1,387.53	40.58	35.193	
4,800.00	4,787.21	4,764.95	4,775.72	21.33	20.42	-173.77	996.23	490.31	1,436.47	1,395.06	41.41	34.688	
4,900.00	4,886.90	4,855.52	4,866.29	21.78	20.80	-173.79	997.06	490.88	1,445.36	1,403.15	42.22	34.236	
5,000.00	4,986.59	4,952.92	4,963.67	22.22	21.21	-173.82	998.41	491.76	1,454.79	1,411.73	43.06	33.783	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,086.28	5,062.44	5,073.18	22.67	21.67	-173.86	999.81	492.13	1,463.89	1,419.92	43.98	33.288		
5,200.00	5,185.97	5,174.73	5,185.47	23.12	22.15	-173.91	1,000.37	492.13	1,472.14	1,427.24	44.90	32.785		
5,300.00	5,285.66	5,275.67	5,286.41	23.56	22.57	-173.96	1,000.54	491.53	1,479.86	1,434.09	45.77	32.334		
5,400.00	5,385.36	5,384.87	5,395.60	24.01	23.04	-174.04	1,000.66	490.50	1,487.39	1,440.71	46.68	31.865		
5,500.00	5,485.05	5,489.76	5,500.48	24.46	23.48	-174.11	1,000.26	489.09	1,494.30	1,446.73	47.56	31.417		
5,600.00	5,584.74	5,585.64	5,596.35	24.90	23.89	-174.19	999.97	487.55	1,501.18	1,452.77	48.40	31.013		
5,700.00	5,684.43	5,685.60	5,696.30	25.35	24.31	-174.26	999.69	486.32	1,508.23	1,458.96	49.27	30.614		
5,800.00	5,784.12	5,787.20	5,797.89	25.80	24.74	-174.35	999.48	484.66	1,515.19	1,465.06	50.14	30.221		
5,900.00	5,883.81	5,883.60	5,894.26	26.25	25.15	-174.44	999.46	482.75	1,522.19	1,471.20	50.98	29.858		
6,000.00	5,983.51	5,981.68	5,992.34	26.70	25.56	-174.53	999.58	480.98	1,529.38	1,477.54	51.84	29.505		
6,100.00	6,083.20	6,083.07	6,093.70	27.14	25.99	-174.63	999.79	478.94	1,536.58	1,483.87	52.71	29.154		
6,200.00	6,182.89	6,189.88	6,200.49	27.59	26.45	-174.74	999.78	476.57	1,543.51	1,489.90	53.60	28.794		
6,300.00	6,282.58	6,284.97	6,295.55	28.04	26.85	-174.84	999.63	474.47	1,550.30	1,495.85	54.44	28.475		
6,400.00	6,382.27	6,391.93	6,402.47	28.49	27.31	-174.96	999.71	471.55	1,557.12	1,501.77	55.34	28.135		
6,500.00	6,481.96	6,483.60	6,494.10	28.94	27.70	-175.08	999.84	468.71	1,563.86	1,507.69	56.17	27.843		
6,600.00	6,581.66	6,583.00	6,593.44	29.39	28.12	-175.23	1,000.49	465.39	1,570.97	1,513.94	57.03	27.547		
6,700.00	6,681.21	6,687.17	6,697.52	29.83	28.56	145.79	1,001.26	461.21	1,578.93	1,521.02	57.92	27.263		
6,800.00	6,778.96	6,788.26	6,798.53	30.28	28.99	127.64	1,001.72	457.18	1,592.17	1,533.40	58.78	27.088		
6,900.00	6,872.51	6,883.31	6,893.50	30.70	29.40	121.53	1,002.09	453.34	1,611.39	1,551.80	59.59	27.040 SF		
7,000.00	6,959.55	6,971.94	6,982.03	31.10	29.78	118.08	1,002.73	449.11	1,636.82	1,576.45	60.37	27.114		
7,100.00	7,037.93	7,057.32	7,067.29	31.48	30.14	115.45	1,003.45	444.73	1,668.57	1,607.44	61.13	27.295		
7,200.00	7,105.74	7,134.78	7,144.63	31.88	30.48	112.88	1,003.92	440.53	1,706.62	1,644.74	61.87	27.582		
7,300.00	7,161.29	7,201.59	7,211.29	32.41	30.76	109.86	1,004.55	436.06	1,750.98	1,688.37	62.61	27.968		
7,400.00	7,203.22	7,252.60	7,262.17	33.13	30.98	105.97	1,005.01	432.41	1,801.44	1,738.12	63.31	28.453		
7,500.00	7,230.50	7,286.83	7,296.32	34.04	31.13	100.93	1,005.23	430.04	1,857.47	1,793.49	63.99	29.029		
7,600.00	7,242.45	7,305.62	7,315.06	35.13	31.21	94.70	1,005.36	428.74	1,918.10	1,853.48	64.62	29.684		
7,700.00	7,242.72	7,312.81	7,322.23	36.39	31.24	92.85	1,005.40	428.24	1,982.08	1,916.87	65.21	30.396		
7,800.00	7,242.33	7,319.34	7,328.75	37.81	31.27	93.09	1,005.44	427.79	2,048.91	1,983.08	65.83	31.125		
7,900.00	7,241.93	7,325.87	7,335.26	39.40	31.30	93.34	1,005.49	427.33	2,118.34	2,051.88	66.46	31.873		
8,000.00	7,241.54	7,332.40	7,341.78	41.13	31.33	93.59	1,005.53	426.88	2,190.11	2,123.01	67.10	32.640		
8,100.00	7,241.15	7,338.93	7,348.29	42.97	31.36	93.84	1,005.57	426.43	2,264.01	2,196.28	67.73	33.426		
8,200.00	7,240.75	7,345.46	7,354.81	44.92	31.38	94.09	1,005.61	425.98	2,339.83	2,271.48	68.35	34.233		
8,300.00	7,240.36	7,351.99	7,361.32	46.97	31.41	94.34	1,005.65	425.52	2,417.39	2,348.44	68.95	35.059		
8,400.00	7,239.97	7,358.52	7,367.84	49.10	31.44	94.58	1,005.70	425.07	2,496.53	2,427.00	69.53	35.904		
8,500.00	7,239.57	7,365.05	7,374.35	51.29	31.47	94.83	1,005.74	424.62	2,577.10	2,507.01	70.09	36.766		
8,600.00	7,239.18	7,371.59	7,380.87	53.56	31.50	95.08	1,005.78	424.17	2,658.98	2,588.35	70.63	37.646		
8,700.00	7,238.79	7,378.12	7,387.38	55.87	31.53	95.33	1,005.82	423.71	2,742.05	2,670.90	71.15	38.540		
8,800.00	7,238.39	7,384.65	7,393.90	58.24	31.56	95.57	1,005.87	423.26	2,826.19	2,754.55	71.64	39.450		
8,900.00	7,238.00	7,391.18	7,400.41	60.64	31.58	95.82	1,005.91	422.81	2,911.33	2,839.22	72.11	40.372		
9,000.00	7,237.61	7,397.71	7,406.93	63.09	31.61	96.07	1,005.95	422.36	2,997.37	2,924.81	72.56	41.307		
9,100.00	7,237.21	7,404.24	7,413.44	65.56	31.64	96.31	1,005.99	421.90	3,084.24	3,011.24	72.99	42.254		
9,200.00	7,236.82	7,410.77	7,419.96	68.07	31.67	96.56	1,006.03	421.45	3,171.86	3,098.46	73.40	43.211		
9,300.00	7,236.43	7,417.30	7,426.47	70.61	31.70	96.80	1,006.08	421.00	3,260.19	3,186.39	73.80	44.177		
9,400.00	7,236.03	7,423.83	7,432.99	73.16	31.73	97.05	1,006.12	420.55	3,349.16	3,274.99	74.17	45.153		
9,500.00	7,235.64	7,430.36	7,439.50	75.74	31.76	97.29	1,006.16	420.09	3,438.73	3,364.19	74.53	46.136		
9,600.00	7,235.25	7,436.89	7,446.02	78.34	31.78	97.54	1,006.20	419.64	3,528.84	3,453.96	74.88	47.127		
9,700.00	7,234.85	7,443.42	7,452.53	80.96	31.81	97.78	1,006.24	419.19	3,619.46	3,544.25	75.21	48.124		
9,800.00	7,234.46	7,449.95	7,459.05	83.59	31.84	98.03	1,006.29	418.74	3,710.55	3,635.02	75.53	49.127		
9,900.00	7,234.07	7,456.48	7,465.56	86.24	31.87	98.27	1,006.33	418.28	3,802.08	3,726.24	75.84	50.136		
10,000.00	7,233.67	7,443.00	7,452.11	88.90	31.81	97.77	1,006.24	419.22	3,894.06	3,818.04	76.03	51.220		
10,100.00	7,233.28	7,443.00	7,452.11	91.57	31.81	97.77	1,006.24	419.22	3,986.41	3,910.14	76.28	52.263		
10,200.00	7,232.89	7,443.00	7,452.11	94.25	31.81	97.77	1,006.24	419.22	4,079.12	4,002.61	76.51	53.312		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	7,443.00	7,452.11	96.95	31.81	97.77	1,006.24	419.22	4,172.16	4,095.42	76.74	54.365		
10,400.00	7,232.10	7,443.00	7,452.11	99.65	31.81	97.77	1,006.24	419.22	4,265.53	4,188.56	76.96	55.422		
10,500.00	7,231.71	7,443.00	7,452.11	102.36	31.81	97.77	1,006.24	419.22	4,359.18	4,282.00	77.18	56.483		
10,600.00	7,231.32	7,443.00	7,452.11	105.08	31.81	97.77	1,006.24	419.22	4,453.11	4,375.73	77.38	57.548		
10,700.00	7,230.92	7,443.00	7,452.11	107.80	31.81	97.77	1,006.24	419.22	4,547.30	4,469.72	77.58	58.616		
10,800.00	7,230.53	7,443.00	7,452.11	110.53	31.81	97.77	1,006.24	419.22	4,641.73	4,563.96	77.77	59.687		
10,900.00	7,230.14	7,443.00	7,452.11	113.27	31.81	97.77	1,006.24	419.22	4,736.39	4,658.44	77.95	60.760		
11,000.00	7,229.74	7,443.00	7,452.11	116.02	31.81	97.77	1,006.24	419.22	4,831.27	4,753.14	78.13	61.836		
11,100.00	7,229.35	7,443.00	7,452.11	118.77	31.81	97.77	1,006.24	419.22	4,926.35	4,848.05	78.30	62.914		
11,200.00	7,228.96	7,443.00	7,452.11	121.52	31.81	97.77	1,006.24	419.22	5,021.62	4,943.15	78.47	63.994		
11,300.00	7,228.56	7,443.00	7,452.11	124.28	31.81	97.77	1,006.24	419.22	5,117.07	5,038.44	78.63	65.076		
11,400.00	7,228.17	7,443.00	7,452.11	127.04	31.81	97.77	1,006.24	419.22	5,212.69	5,133.90	78.79	66.159		
11,500.00	7,227.78	7,443.00	7,452.11	129.81	31.81	97.77	1,006.24	419.22	5,308.47	5,229.53	78.94	67.244		
11,600.00	7,227.38	7,443.00	7,452.11	132.58	31.81	97.77	1,006.24	419.22	5,404.41	5,325.32	79.09	68.330		
11,700.00	7,226.99	7,443.00	7,452.11	135.36	31.81	97.77	1,006.24	419.22	5,500.49	5,421.25	79.24	69.417		
11,800.00	7,226.60	7,443.00	7,452.11	138.14	31.81	97.77	1,006.24	419.22	5,596.71	5,517.33	79.38	70.504		
11,900.00	7,226.20	7,443.00	7,452.11	140.92	31.81	97.77	1,006.24	419.22	5,693.06	5,613.54	79.52	71.593		
12,000.00	7,225.81	7,443.00	7,452.11	143.70	31.81	97.77	1,006.24	419.22	5,789.53	5,709.87	79.66	72.682		
12,100.00	7,225.42	7,443.00	7,452.11	146.49	31.81	97.77	1,006.24	419.22	5,886.12	5,806.33	79.79	73.772		
12,200.00	7,225.02	7,443.00	7,452.11	149.28	31.81	97.77	1,006.24	419.22	5,982.82	5,902.90	79.92	74.862		
12,300.00	7,224.63	7,443.00	7,452.11	152.08	31.81	97.77	1,006.24	419.22	6,079.63	5,999.58	80.05	75.952		
12,400.00	7,224.24	7,443.00	7,452.11	154.87	31.81	97.77	1,006.24	419.22	6,176.54	6,096.37	80.17	77.042		
12,500.00	7,223.84	7,443.00	7,452.11	157.67	31.81	97.77	1,006.24	419.22	6,273.54	6,193.25	80.29	78.132		
12,600.00	7,223.45	7,443.00	7,452.11	160.47	31.81	97.77	1,006.24	419.22	6,370.64	6,290.23	80.41	79.222		
12,700.00	7,223.06	7,443.00	7,452.11	163.27	31.81	97.77	1,006.24	419.22	6,467.83	6,387.30	80.53	80.312		
12,800.00	7,222.66	7,443.00	7,452.11	166.07	31.81	97.77	1,006.24	419.22	6,565.10	6,484.45	80.65	81.402		
12,900.00	7,222.27	7,443.00	7,452.11	168.88	31.81	97.77	1,006.24	419.22	6,662.46	6,581.69	80.77	82.492		
13,000.00	7,221.88	7,443.00	7,452.11	171.69	31.81	97.77	1,006.24	419.22	6,759.89	6,679.01	80.88	83.580		
13,100.00	7,221.48	7,443.00	7,452.11	174.49	31.81	97.77	1,006.24	419.22	6,857.39	6,776.40	80.99	84.669		
13,200.00	7,221.09	7,443.00	7,452.11	177.30	31.81	97.77	1,006.24	419.22	6,954.97	6,873.87	81.10	85.757		
13,300.00	7,220.70	7,443.00	7,452.11	180.12	31.81	97.77	1,006.24	419.22	7,052.61	6,971.40	81.21	86.844		
13,400.00	7,220.30	7,443.00	7,452.11	182.93	31.81	97.77	1,006.24	419.22	7,150.32	7,069.00	81.32	87.930		
13,500.00	7,219.91	7,443.00	7,452.11	185.74	31.81	97.77	1,006.24	419.22	7,248.09	7,166.67	81.42	89.016		
13,600.00	7,219.52	7,443.00	7,452.11	188.56	31.81	97.77	1,006.24	419.22	7,345.92	7,264.39	81.53	90.101		
13,700.00	7,219.12	7,443.00	7,452.11	191.38	31.81	97.77	1,006.24	419.22	7,443.81	7,362.17	81.63	91.185		
13,800.00	7,218.73	7,443.00	7,452.11	194.20	31.81	97.77	1,006.24	419.22	7,541.75	7,460.02	81.74	92.267		
13,900.00	7,218.34	7,443.00	7,452.11	197.02	31.81	97.77	1,006.24	419.22	7,639.75	7,557.91	81.84	93.349		
14,000.00	7,217.94	7,443.00	7,452.11	199.84	31.81	97.77	1,006.24	419.22	7,737.80	7,655.86	81.94	94.430		
14,100.00	7,217.55	7,443.00	7,452.11	202.66	31.81	97.77	1,006.24	419.22	7,835.90	7,753.85	82.04	95.509		
14,200.00	7,217.16	7,443.00	7,452.11	205.48	31.81	97.77	1,006.24	419.22	7,934.04	7,851.90	82.14	96.588		
14,300.00	7,216.76	7,443.00	7,452.11	208.30	31.81	97.77	1,006.24	419.22	8,032.23	7,949.99	82.24	97.665		
14,400.00	7,216.37	7,443.00	7,452.11	211.13	31.81	97.77	1,006.24	419.22	8,130.47	8,048.13	82.34	98.741		
14,500.00	7,215.98	7,443.00	7,452.11	213.96	31.81	97.77	1,006.24	419.22	8,228.75	8,146.31	82.44	99.815		
14,600.00	7,215.58	7,443.00	7,452.11	216.78	31.81	97.77	1,006.24	419.22	8,327.06	8,244.53	82.54	100.888		
14,700.00	7,215.19	7,443.00	7,452.11	219.61	31.81	97.77	1,006.24	419.22	8,425.42	8,342.79	82.63	101.960		
14,800.00	7,214.80	7,443.00	7,452.11	222.44	31.81	97.77	1,006.24	419.22	8,523.82	8,441.09	82.73	103.030		
14,900.00	7,214.40	7,443.00	7,452.11	225.27	31.81	97.77	1,006.24	419.22	8,622.25	8,539.43	82.83	104.099		
15,000.00	7,214.01	7,443.00	7,452.11	228.10	31.81	97.77	1,006.24	419.22	8,720.72	8,637.80	82.92	105.166		
15,002.44	7,214.00	7,443.00	7,452.11	228.16	31.81	97.77	1,006.24	419.22	8,723.12	8,640.20	82.93	105.192		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	21.00	3.28	3.28	96.03	-55.01	520.68	523.99					
100.00	100.00	79.20	100.19	3.28	3.28	95.97	-54.47	520.72	523.56	516.99	6.57	79.694		
200.00	200.00	181.58	202.57	3.34	3.33	95.80	-52.86	520.66	523.34	516.67	6.67	78.482		
300.00	300.00	282.29	303.26	3.44	3.43	95.66	-51.56	520.18	522.74	515.86	6.88	76.009		
400.00	400.00	379.93	400.90	3.60	3.58	95.54	-50.42	519.86	522.30	515.12	7.18	72.742		
436.18	436.18	415.22	436.18	3.67	3.64	95.49	-49.99	519.87	522.27	514.96	7.31	71.433	CC	
500.00	500.00	477.80	498.76	3.81	3.76	95.41	-49.25	520.02	522.35	514.78	7.57	69.013	ES	
600.00	599.98	577.27	598.22	4.03	3.99	-103.07	-47.93	520.46	523.06	515.03	8.02	65.196		
700.00	699.84	676.33	697.27	4.29	4.24	-103.77	-46.37	520.98	524.67	516.14	8.53	61.519		
800.00	799.54	775.41	796.33	4.57	4.53	-104.72	-44.98	521.63	527.14	518.05	9.09	57.991		
900.00	899.23	873.87	894.78	4.87	4.83	-105.71	-43.32	522.41	529.92	520.22	9.70	54.652		
1,000.00	998.92	973.58	994.47	5.20	5.15	-106.69	-41.83	523.33	532.99	522.64	10.34	51.525		
1,100.00	1,098.61	1,073.52	1,094.40	5.54	5.48	-107.65	-40.38	524.16	536.11	525.09	11.02	48.628		
1,200.00	1,198.30	1,173.94	1,194.80	5.90	5.84	-108.61	-38.85	524.89	539.30	527.56	11.73	45.963		
1,300.00	1,298.00	1,274.94	1,295.80	6.27	6.20	-109.55	-37.42	525.41	542.41	529.94	12.47	43.511		
1,400.00	1,397.69	1,373.79	1,394.63	6.66	6.56	-110.49	-35.80	525.78	545.53	532.32	13.21	41.302		
1,500.00	1,497.38	1,475.46	1,496.29	7.05	6.94	-111.42	-34.38	526.18	548.81	534.84	13.98	39.266		
1,600.00	1,597.07	1,576.30	1,597.12	7.44	7.33	-112.31	-33.16	526.15	551.79	537.04	14.75	37.398		
1,700.00	1,696.76	1,678.54	1,699.35	7.85	7.72	-113.21	-31.85	525.85	554.64	539.09	15.55	35.672		
1,800.00	1,796.45	1,776.83	1,797.63	8.25	8.11	-114.03	-30.99	525.34	557.37	541.03	16.34	34.120		
1,900.00	1,896.15	1,875.72	1,896.52	8.67	8.49	-114.84	-30.16	525.15	560.52	543.39	17.13	32.716		
2,000.00	1,995.84	1,977.76	1,998.56	9.08	8.90	-115.68	-29.23	524.81	563.66	545.71	17.95	31.401		
2,100.00	2,095.53	2,079.51	2,100.30	9.50	9.31	-116.46	-28.81	524.05	566.43	547.66	18.77	30.175		
2,200.00	2,195.22	2,178.36	2,199.15	9.92	9.70	-117.17	-28.82	523.23	569.17	549.58	19.59	29.059		
2,300.00	2,294.91	2,278.27	2,299.06	10.35	10.10	-117.87	-28.87	522.56	572.13	551.72	20.41	28.031		
2,400.00	2,394.60	2,379.51	2,400.29	10.77	10.51	-118.55	-29.29	521.77	575.00	553.76	21.24	27.067		
2,500.00	2,494.30	2,478.52	2,499.30	11.20	10.91	-119.18	-29.87	520.90	577.83	555.75	22.07	26.180		
2,600.00	2,593.99	2,577.93	2,598.71	11.63	11.32	-119.78	-30.81	520.26	580.87	557.97	22.90	25.361		
2,700.00	2,693.68	2,675.19	2,695.96	12.07	11.71	-120.34	-31.81	519.83	584.17	560.43	23.73	24.617		
2,800.00	2,793.37	2,776.11	2,796.87	12.50	12.12	-120.91	-32.86	519.65	587.77	563.20	24.58	23.917		
2,900.00	2,893.06	2,876.59	2,897.34	12.93	12.54	-121.47	-33.94	519.18	591.15	565.73	25.42	23.254		
3,000.00	2,992.76	2,976.01	2,996.76	13.37	12.95	-122.07	-34.60	518.61	594.58	568.32	26.26	22.639		
3,100.00	3,092.45	3,076.27	3,097.02	13.81	13.36	-122.68	-35.04	518.00	598.09	570.98	27.11	22.061		
3,200.00	3,192.14	3,176.69	3,197.44	14.25	13.78	-123.32	-35.19	517.18	601.54	573.58	27.96	21.513		
3,300.00	3,291.83	3,276.41	3,297.15	14.68	14.19	-123.94	-35.38	516.31	605.00	576.19	28.81	21.000		
3,400.00	3,391.52	3,372.87	3,393.61	15.12	14.59	-124.53	-35.58	515.70	608.76	579.11	29.64	20.535		
3,500.00	3,491.21	3,472.15	3,492.89	15.56	15.01	-125.11	-35.87	515.56	613.03	582.53	30.49	20.103		
3,600.00	3,590.91	3,572.94	3,593.68	16.00	15.43	-125.68	-36.26	515.30	617.22	585.87	31.35	19.687		
3,700.00	3,690.60	3,673.76	3,694.49	16.45	15.85	-126.24	-36.76	514.89	621.30	589.09	32.21	19.289		
3,800.00	3,790.29	3,774.59	3,795.32	16.89	16.27	-126.79	-37.36	514.33	625.26	592.19	33.07	18.907		
3,900.00	3,889.98	3,875.44	3,896.17	17.33	16.70	-127.33	-38.06	513.62	629.10	595.17	33.93	18.540		
4,000.00	3,989.67	3,976.31	3,997.03	17.77	17.12	-127.86	-38.87	512.75	632.83	598.03	34.79	18.188		
4,100.00	4,089.36	4,077.20	4,097.91	18.22	17.54	-128.37	-39.78	511.74	636.42	600.77	35.66	17.849		
4,200.00	4,189.06	4,178.11	4,198.81	18.66	17.97	-128.88	-40.79	510.57	639.90	603.38	36.52	17.522		
4,300.00	4,288.75	4,276.82	4,297.51	19.10	18.38	-129.37	-41.83	509.41	643.37	606.00	37.37	17.215		
4,400.00	4,388.44	4,373.81	4,394.49	19.55	18.79	-129.84	-42.78	508.56	647.22	609.00	38.22	16.935		
4,500.00	4,488.13	4,472.57	4,493.24	19.99	19.21	-130.33	-43.44	507.96	651.46	612.39	39.07	16.673		
4,600.00	4,587.82	4,572.65	4,593.32	20.44	19.63	-130.86	-43.65	507.18	655.78	615.84	39.93	16.422		
4,700.00	4,687.51	4,670.99	4,691.66	20.89	20.04	-131.38	-43.84	506.43	660.17	619.38	40.79	16.186		
4,800.00	4,787.21	4,769.49	4,790.16	21.33	20.46	-131.88	-44.02	505.96	664.88	623.24	41.64	15.967		
4,900.00	4,886.90	4,867.33	4,887.99	21.78	20.87	-132.36	-44.26	505.71	669.82	627.33	42.49	15.764		
5,000.00	4,986.59	4,967.31	4,987.97	22.22	21.29	-132.87	-44.08	505.51	675.02	631.67	43.35	15.571		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,086.28	5,067.88	5,088.54	22.67	21.72	-133.40	-43.82	505.06	680.11	635.89	44.22	15.381		
5,200.00	5,185.97	5,167.49	5,188.15	23.12	22.14	-133.90	-43.65	504.61	685.19	640.12	45.08	15.200		
5,300.00	5,285.66	5,269.56	5,290.22	23.56	22.57	-134.42	-43.43	504.02	690.25	644.29	45.95	15.021		
5,400.00	5,385.36	5,371.55	5,392.21	24.01	23.01	-134.93	-43.35	503.00	694.92	648.09	46.83	14.840		
5,500.00	5,485.05	5,470.16	5,490.81	24.46	23.42	-135.41	-43.44	501.99	699.53	651.85	47.68	14.670		
5,600.00	5,584.74	5,568.20	5,588.85	24.90	23.84	-135.88	-43.47	501.24	704.46	655.92	48.54	14.514		
5,700.00	5,684.43	5,668.62	5,689.26	25.35	24.26	-136.33	-43.67	500.68	709.54	660.13	49.40	14.362		
5,800.00	5,784.12	5,769.05	5,789.69	25.80	24.69	-136.75	-44.21	500.11	714.49	664.22	50.27	14.213		
5,900.00	5,883.81	5,866.32	5,886.95	26.25	25.10	-137.15	-44.64	499.61	719.56	668.44	51.12	14.076		
6,000.00	5,983.51	5,966.11	5,986.75	26.70	25.53	-137.59	-44.69	499.24	724.99	673.01	51.98	13.946		
6,100.00	6,083.20	6,067.99	6,088.63	27.14	25.96	-138.03	-44.73	498.56	730.22	677.36	52.86	13.814		
6,200.00	6,182.89	6,167.45	6,188.08	27.59	26.38	-138.45	-44.96	497.80	735.31	681.58	53.72	13.687		
6,300.00	6,282.58	6,264.80	6,285.43	28.04	26.80	-138.86	-45.11	497.25	740.64	686.06	54.57	13.571		
6,400.00	6,382.27	6,363.38	6,384.01	28.49	27.21	-139.26	-45.13	496.96	746.31	690.87	55.43	13.464		
6,500.00	6,481.96	6,462.94	6,483.57	28.94	27.64	-139.66	-45.14	496.70	752.05	695.76	56.29	13.359		
6,600.00	6,581.66	6,562.49	6,583.12	29.39	28.06	-140.05	-45.15	496.47	757.86	700.70	57.16	13.259		
6,700.00	6,681.21	6,661.91	6,682.54	29.83	28.48	-179.08	-45.16	496.26	765.91	707.89	58.02	13.201 SF		
6,800.00	6,778.96	6,759.56	6,780.19	30.28	28.90	162.77	-45.16	496.07	785.95	727.09	58.87	13.352		
6,900.00	6,872.51	6,853.03	6,873.66	30.70	29.30	156.59	-45.17	495.91	818.83	759.16	59.67	13.722		
7,000.00	6,959.55	6,940.01	6,960.63	31.10	29.67	152.93	-45.18	495.78	864.03	803.61	60.42	14.300		
7,100.00	7,037.93	7,018.34	7,038.97	31.48	30.00	149.73	-45.18	495.68	920.87	859.77	61.09	15.073		
7,200.00	7,105.74	7,086.11	7,106.73	31.88	30.29	145.94	-45.18	495.60	988.32	926.65	61.67	16.026		
7,300.00	7,161.29	7,141.63	7,162.26	32.41	30.53	140.57	-45.19	495.54	1,065.05	1,002.90	62.15	17.137		
7,400.00	7,203.22	7,183.56	7,204.18	33.13	30.71	132.15	-45.19	495.50	1,149.38	1,086.86	62.51	18.386		
7,500.00	7,230.50	7,210.85	7,231.48	34.04	30.82	118.32	-45.19	495.47	1,239.31	1,176.54	62.77	19.744		
7,600.00	7,242.45	7,222.86	7,243.49	35.13	30.87	96.89	-45.19	495.46	1,332.66	1,269.74	62.91	21.182		
7,700.00	7,242.72	7,223.21	7,243.83	36.39	30.88	89.46	-45.19	495.46	1,427.30	1,364.31	62.98	22.661		
7,800.00	7,242.33	7,222.90	7,243.52	37.81	30.87	89.42	-45.19	495.46	1,522.62	1,459.57	63.05	24.149		
7,900.00	7,241.93	7,222.59	7,243.21	39.40	30.87	89.38	-45.19	495.46	1,618.50	1,555.38	63.12	25.643		
8,000.00	7,241.54	7,222.27	7,242.90	41.13	30.87	89.34	-45.19	495.47	1,714.86	1,651.67	63.18	27.141		
8,100.00	7,241.15	7,221.96	7,242.59	42.97	30.87	89.30	-45.19	495.47	1,811.61	1,748.36	63.25	28.643		
8,200.00	7,240.75	7,221.65	7,242.28	44.92	30.87	89.26	-45.19	495.47	1,908.69	1,845.38	63.31	30.147		
8,300.00	7,240.36	7,221.34	7,241.97	46.97	30.87	89.22	-45.19	495.47	2,006.06	1,942.69	63.37	31.654		
8,400.00	7,239.97	7,221.03	7,241.66	49.10	30.87	89.18	-45.19	495.47	2,103.68	2,040.25	63.43	33.163		
8,500.00	7,239.57	7,220.72	7,241.35	51.29	30.86	89.14	-45.19	495.47	2,201.51	2,138.02	63.49	34.673		
8,600.00	7,239.18	7,220.41	7,241.04	53.56	30.86	89.10	-45.19	495.47	2,299.53	2,235.98	63.55	36.184		
8,700.00	7,238.79	7,220.10	7,240.73	55.87	30.86	89.06	-45.19	495.47	2,397.71	2,334.10	63.61	37.696		
8,800.00	7,238.39	7,219.79	7,240.42	58.24	30.86	89.02	-45.19	495.47	2,496.04	2,432.38	63.66	39.207		
8,900.00	7,238.00	7,219.48	7,240.11	60.64	30.86	88.98	-45.19	495.47	2,594.49	2,530.77	63.72	40.719		
9,000.00	7,237.61	7,219.17	7,239.80	63.09	30.86	88.94	-45.19	495.47	2,693.06	2,629.29	63.77	42.231		
9,100.00	7,237.21	7,218.87	7,239.49	65.56	30.86	88.90	-45.19	495.47	2,791.73	2,727.91	63.82	43.742		
9,200.00	7,236.82	7,218.56	7,239.18	68.07	30.86	88.86	-45.19	495.47	2,890.49	2,826.61	63.88	45.252		
9,300.00	7,236.43	7,218.25	7,238.87	70.61	30.85	88.82	-45.19	495.47	2,989.33	2,925.41	63.93	46.761		
9,400.00	7,236.03	7,217.94	7,238.57	73.16	30.85	88.78	-45.19	495.47	3,088.25	3,024.27	63.98	48.270		
9,500.00	7,235.64	7,217.63	7,238.26	75.74	30.85	88.74	-45.19	495.47	3,187.24	3,123.21	64.03	49.777		
9,600.00	7,235.25	7,217.32	7,237.95	78.34	30.85	88.70	-45.19	495.47	3,286.28	3,222.20	64.08	51.283		
9,700.00	7,234.85	7,217.01	7,237.64	80.96	30.85	88.66	-45.19	495.47	3,385.39	3,321.25	64.13	52.787		
9,800.00	7,234.46	7,216.70	7,237.33	83.59	30.85	88.62	-45.19	495.47	3,484.54	3,420.36	64.18	54.290		
9,900.00	7,234.07	7,216.40	7,237.02	86.24	30.85	88.58	-45.19	495.47	3,583.74	3,519.51	64.23	55.791		
10,000.00	7,233.67	7,216.09	7,236.72	88.90	30.84	88.54	-45.19	495.47	3,682.99	3,618.70	64.29	57.291		
10,100.00	7,233.28	7,215.78	7,236.41	91.57	30.84	88.50	-45.19	495.47	3,782.27	3,717.93	64.34	58.788		
10,200.00	7,232.89	7,215.47	7,236.10	94.25	30.84	88.46	-45.19	495.47	3,881.59	3,817.20	64.39	60.284		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,215.16	7,235.79	96.95	30.84	88.42	-45.19	495.47	3,980.95	3,916.50	64.44	61.777		
10,400.00	7,232.10	7,214.86	7,235.48	99.65	30.84	88.38	-45.19	495.47	4,080.33	4,015.84	64.49	63.268		
10,500.00	7,231.71	7,214.55	7,235.18	102.36	30.84	88.35	-45.19	495.47	4,179.75	4,115.20	64.55	64.756		
10,600.00	7,231.32	7,214.24	7,234.87	105.08	30.84	88.31	-45.19	495.47	4,279.19	4,214.59	64.60	66.243		
10,700.00	7,230.92	7,213.93	7,234.56	107.80	30.84	88.27	-45.19	495.47	4,378.66	4,314.01	64.65	67.727		
10,800.00	7,230.53	7,213.63	7,234.26	110.53	30.83	88.23	-45.19	495.47	4,478.15	4,413.44	64.71	69.208		
10,900.00	7,230.14	7,213.32	7,233.95	113.27	30.83	88.19	-45.19	495.47	4,577.66	4,512.90	64.76	70.686		
11,000.00	7,229.74	7,213.01	7,233.64	116.02	30.83	88.15	-45.19	495.47	4,677.20	4,612.38	64.82	72.162		
11,100.00	7,229.35	7,212.71	7,233.34	118.77	30.83	88.11	-45.19	495.47	4,776.75	4,711.88	64.87	73.635		
11,200.00	7,228.96	7,212.40	7,233.03	121.52	30.83	88.07	-45.19	495.47	4,876.32	4,811.40	64.93	75.105		
11,300.00	7,228.56	7,212.09	7,232.72	124.28	30.83	88.03	-45.19	495.47	4,975.91	4,910.93	64.98	76.573		
11,400.00	7,228.17	7,211.79	7,232.42	127.04	30.83	87.99	-45.19	495.47	5,075.52	5,010.48	65.04	78.037		
11,500.00	7,227.78	7,211.48	7,232.11	129.81	30.83	87.95	-45.19	495.47	5,175.14	5,110.04	65.10	79.498		
11,600.00	7,227.38	7,211.18	7,231.80	132.58	30.82	87.91	-45.19	495.47	5,274.78	5,209.62	65.16	80.956		
11,700.00	7,226.99	7,210.87	7,231.50	135.36	30.82	87.87	-45.19	495.47	5,374.42	5,309.21	65.22	82.411		
11,800.00	7,226.60	7,210.56	7,231.19	138.14	30.82	87.83	-45.19	495.47	5,474.08	5,408.81	65.27	83.862		
11,900.00	7,226.20	7,210.26	7,230.89	140.92	30.82	87.79	-45.19	495.48	5,573.76	5,508.42	65.34	85.310		
12,000.00	7,225.81	7,209.95	7,230.58	143.70	30.82	87.75	-45.19	495.48	5,673.44	5,608.05	65.40	86.755		
12,100.00	7,225.42	7,209.65	7,230.28	146.49	30.82	87.72	-45.19	495.48	5,773.14	5,707.68	65.46	88.196		
12,200.00	7,225.02	7,209.34	7,229.97	149.28	30.82	87.68	-45.19	495.48	5,872.85	5,807.33	65.52	89.634		
12,300.00	7,224.63	7,209.04	7,229.67	152.08	30.81	87.64	-45.19	495.48	5,972.56	5,906.98	65.58	91.069		
12,400.00	7,224.24	7,208.73	7,229.36	154.87	30.81	87.60	-45.19	495.48	6,072.29	6,006.64	65.65	92.499		
12,500.00	7,223.84	7,208.43	7,229.06	157.67	30.81	87.56	-45.19	495.48	6,172.02	6,106.31	65.71	93.926		
12,600.00	7,223.45	7,208.12	7,228.75	160.47	30.81	87.52	-45.19	495.48	6,271.76	6,205.99	65.78	95.350		
12,700.00	7,223.06	7,207.82	7,228.45	163.27	30.81	87.48	-45.19	495.48	6,371.51	6,305.67	65.84	96.769		
12,800.00	7,222.66	7,207.51	7,228.14	166.07	30.81	87.44	-45.19	495.48	6,471.27	6,405.36	65.91	98.185		
12,900.00	7,222.27	7,207.21	7,227.84	168.88	30.81	87.40	-45.19	495.48	6,571.04	6,505.06	65.98	99.597		
13,000.00	7,221.88	7,206.91	7,227.53	171.69	30.81	87.36	-45.19	495.48	6,670.81	6,604.77	66.04	101.005		
13,100.00	7,221.48	7,206.60	7,227.23	174.49	30.80	87.32	-45.19	495.48	6,770.59	6,704.48	66.11	102.409		
13,200.00	7,221.09	7,206.30	7,226.93	177.30	30.80	87.29	-45.19	495.48	6,870.38	6,804.19	66.18	103.809		
13,300.00	7,220.70	7,205.99	7,226.62	180.12	30.80	87.25	-45.19	495.48	6,970.17	6,903.91	66.25	105.205		
13,400.00	7,220.30	7,205.69	7,226.32	182.93	30.80	87.21	-45.19	495.48	7,069.97	7,003.64	66.32	106.597		
13,500.00	7,219.91	7,205.39	7,226.01	185.74	30.80	87.17	-45.19	495.48	7,169.77	7,103.37	66.40	107.985		
13,600.00	7,219.52	7,205.08	7,225.71	188.56	30.80	87.13	-45.19	495.48	7,269.58	7,203.11	66.47	109.369		
13,700.00	7,219.12	7,204.78	7,225.41	191.38	30.80	87.09	-45.19	495.48	7,369.39	7,302.85	66.54	110.748		
13,800.00	7,218.73	7,204.48	7,225.10	194.20	30.80	87.05	-45.19	495.48	7,469.21	7,402.60	66.62	112.124		
13,900.00	7,218.34	7,204.17	7,224.80	197.02	30.79	87.01	-45.19	495.48	7,569.03	7,502.34	66.69	113.495		
14,000.00	7,217.94	7,203.87	7,224.50	199.84	30.79	86.97	-45.19	495.48	7,668.86	7,602.10	66.77	114.862		
14,100.00	7,217.55	7,203.57	7,224.20	202.66	30.79	86.94	-45.19	495.48	7,768.70	7,701.85	66.84	116.224		
14,200.00	7,217.16	7,203.27	7,223.89	205.48	30.79	86.90	-45.19	495.48	7,868.53	7,801.61	66.92	117.583		
14,300.00	7,216.76	7,202.96	7,223.59	208.30	30.79	86.86	-45.19	495.48	7,968.37	7,901.38	67.00	118.937		
14,400.00	7,216.37	7,202.66	7,223.29	211.13	30.79	86.82	-45.19	495.48	8,068.22	8,001.14	67.08	120.286		
14,500.00	7,215.98	7,202.36	7,222.99	213.96	30.79	86.78	-45.19	495.48	8,168.07	8,100.91	67.15	121.631		
14,600.00	7,215.58	7,202.06	7,222.68	216.78	30.78	86.74	-45.19	495.48	8,267.92	8,200.69	67.23	122.972		
14,700.00	7,215.19	7,201.75	7,222.38	219.61	30.78	86.70	-45.19	495.48	8,367.78	8,300.46	67.31	124.308		
14,800.00	7,214.80	7,201.45	7,222.08	222.44	30.78	86.66	-45.19	495.48	8,467.63	8,400.24	67.40	125.639		
14,900.00	7,214.40	7,201.15	7,221.78	225.27	30.78	86.63	-45.19	495.48	8,567.50	8,500.02	67.48	126.967		
15,000.00	7,214.01	7,200.85	7,221.48	228.10	30.78	86.59	-45.19	495.48	8,667.36	8,599.80	67.56	128.289		
15,002.44	7,214.00	7,200.84	7,221.47	228.16	30.78	86.59	-45.19	495.48	8,669.80	8,602.23	67.56	128.321		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	200.00	1.67	200.01					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	200.00	1.67	200.01	193.44	6.57	30.444		
200.00	200.00	201.00	200.00	3.34	3.34	0.48	200.00	1.67	200.01	193.33	6.67	29.964	CC, ES	
300.00	300.00	294.41	293.39	3.44	3.44	0.43	201.55	1.51	201.66	194.77	6.89	29.257		
400.00	400.00	387.69	386.55	3.60	3.59	0.29	206.11	1.05	206.56	199.33	7.22	28.604		
500.00	500.00	480.56	479.12	3.81	3.77	0.08	213.66	0.30	214.68	207.04	7.64	28.096		
600.00	599.98	572.64	570.59	4.03	4.00	161.69	224.08	-0.75	227.64	219.52	8.13	28.017		
700.00	699.84	663.28	660.26	4.29	4.24	161.62	237.19	-2.07	247.01	238.35	8.66	28.526		
800.00	799.54	752.17	747.75	4.57	4.51	161.72	252.78	-3.63	271.75	262.52	9.23	29.439		
900.00	899.23	839.56	833.26	4.87	4.80	161.78	270.74	-5.43	299.54	289.72	9.82	30.515		
1,000.00	998.92	925.37	916.64	5.20	5.10	161.78	290.89	-7.46	330.20	319.78	10.42	31.678		
1,100.00	1,098.61	1,009.48	997.75	5.54	5.41	161.75	313.04	-9.68	363.66	352.62	11.04	32.938		
1,200.00	1,198.30	1,101.87	1,082.63	5.90	5.79	161.68	338.49	-12.24	399.42	387.72	11.70	34.148		
1,300.00	1,298.00	1,208.58	1,171.88	6.27	6.24	161.61	365.51	-14.95	435.44	423.00	12.43	35.024		
1,400.00	1,397.69	1,284.71	1,261.13	6.66	6.58	161.56	392.53	-17.66	471.46	458.39	13.07	36.072		
1,500.00	1,497.38	1,377.99	1,350.37	7.05	7.00	161.51	419.55	-20.37	507.48	493.68	13.80	36.779		
1,600.00	1,597.07	1,471.28	1,439.62	7.44	7.44	161.47	446.56	-23.09	543.50	528.95	14.54	37.370		
1,700.00	1,696.76	1,564.57	1,528.87	7.85	7.88	161.43	473.58	-25.80	579.52	564.21	15.31	37.864		
1,800.00	1,796.45	1,657.85	1,618.11	8.25	8.33	161.40	500.60	-28.51	615.54	599.46	16.08	38.280		
1,900.00	1,896.15	1,751.14	1,707.36	8.67	8.78	161.37	527.62	-31.22	651.56	634.70	16.87	38.632		
2,000.00	1,995.84	1,844.43	1,796.61	9.08	9.24	161.35	554.64	-33.94	687.58	669.92	17.66	38.931		
2,100.00	2,095.53	1,937.71	1,885.85	9.50	9.71	161.32	581.66	-36.65	723.60	705.14	18.47	39.186		
2,200.00	2,195.22	2,031.00	1,975.10	9.92	10.17	161.30	608.68	-39.36	759.63	740.35	19.28	39.404		
2,300.00	2,294.91	2,124.29	2,064.35	10.35	10.64	161.29	635.70	-42.07	795.65	775.55	20.10	39.591		
2,400.00	2,394.60	2,217.57	2,153.60	10.77	11.12	161.27	662.72	-44.79	831.67	810.75	20.92	39.753		
2,500.00	2,494.30	2,310.86	2,242.84	11.20	11.59	161.25	689.73	-47.50	867.69	845.94	21.75	39.893		
2,600.00	2,593.99	2,404.14	2,332.09	11.63	12.07	161.24	716.75	-50.21	903.71	881.13	22.58	40.014		
2,700.00	2,693.68	2,497.43	2,421.34	12.07	12.55	161.23	743.77	-52.92	939.74	916.31	23.42	40.120		
2,800.00	2,793.37	2,590.72	2,510.58	12.50	13.03	161.21	770.79	-55.64	975.76	951.49	24.27	40.212		
2,900.00	2,893.06	2,684.00	2,599.83	12.93	13.51	161.20	797.81	-58.35	1,011.78	986.67	25.11	40.293		
3,000.00	2,992.76	2,777.29	2,689.08	13.37	14.00	161.19	824.83	-61.06	1,047.80	1,021.84	25.96	40.364		
3,100.00	3,092.45	2,870.58	2,778.32	13.81	14.48	161.18	851.85	-63.77	1,083.82	1,057.01	26.81	40.427		
3,200.00	3,192.14	2,963.86	2,867.57	14.25	14.97	161.17	878.87	-66.49	1,119.85	1,092.18	27.66	40.481		
3,300.00	3,291.83	3,057.15	2,956.82	14.68	15.46	161.16	905.88	-69.20	1,155.87	1,127.35	28.52	40.530		
3,400.00	3,391.52	3,150.44	3,046.06	15.12	15.95	161.15	932.90	-71.91	1,191.89	1,162.51	29.38	40.573		
3,500.00	3,491.21	3,243.72	3,135.31	15.56	16.43	161.15	959.92	-74.62	1,227.91	1,197.68	30.24	40.611		
3,600.00	3,590.91	3,337.01	3,224.56	16.00	16.92	161.14	986.94	-77.34	1,263.94	1,232.84	31.10	40.644		
3,700.00	3,690.60	3,430.30	3,313.80	16.45	17.42	161.13	1,013.96	-80.05	1,299.96	1,268.00	31.96	40.674		
3,800.00	3,790.29	3,523.58	3,403.05	16.89	17.91	161.13	1,040.98	-82.76	1,335.98	1,303.15	32.83	40.700		
3,900.00	3,889.98	3,616.87	3,492.30	17.33	18.40	161.12	1,068.00	-85.47	1,372.00	1,338.31	33.69	40.723		
4,000.00	3,989.67	3,710.16	3,581.54	17.77	18.89	161.11	1,095.02	-88.19	1,408.02	1,373.47	34.56	40.744		
4,100.00	4,089.36	3,803.44	3,670.79	18.22	19.38	161.11	1,122.03	-90.90	1,444.05	1,408.62	35.43	40.762		
4,200.00	4,189.06	3,903.27	3,760.04	18.66	19.91	161.10	1,149.05	-93.61	1,480.07	1,443.74	36.33	40.742		
4,300.00	4,288.75	4,009.98	3,849.29	19.10	20.48	161.10	1,176.07	-96.32	1,516.09	1,478.83	37.27	40.684		
4,400.00	4,388.44	4,083.30	3,938.53	19.55	20.87	161.09	1,203.09	-99.04	1,552.11	1,514.08	38.04	40.805		
4,500.00	4,488.13	4,176.59	4,027.78	19.99	21.36	161.09	1,230.11	-101.75	1,588.14	1,549.23	38.91	40.816		
4,600.00	4,587.82	4,269.87	4,117.03	20.44	21.85	161.08	1,257.13	-104.46	1,624.16	1,584.38	39.78	40.826		
4,700.00	4,687.51	4,363.16	4,206.27	20.89	22.35	161.08	1,284.15	-107.18	1,660.18	1,619.52	40.66	40.834		
4,800.00	4,787.21	4,456.45	4,295.52	21.33	22.85	161.08	1,311.17	-109.89	1,696.20	1,654.67	41.53	40.841		
4,900.00	4,886.90	4,549.73	4,384.77	21.78	23.34	161.07	1,338.18	-112.60	1,732.23	1,689.82	42.41	40.848		
5,000.00	4,986.59	4,643.02	4,474.01	22.22	23.84	161.07	1,365.20	-115.31	1,768.25	1,724.97	43.28	40.853		
5,100.00	5,086.28	4,736.31	4,563.26	22.67	24.33	161.07	1,392.22	-118.03	1,804.27	1,760.11	44.16	40.858		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	4,829.59	4,652.51	23.12	24.83	161.06	1,419.24	-120.74	1,840.29	1,795.26	45.04	40.862		
5,300.00	5,285.66	4,922.88	4,741.75	23.56	25.33	161.06	1,446.26	-123.45	1,876.32	1,830.40	45.91	40.865		
5,400.00	5,385.36	5,016.17	4,831.00	24.01	25.82	161.06	1,473.28	-126.16	1,912.34	1,865.54	46.79	40.868		
5,500.00	5,485.05	5,109.45	4,920.25	24.46	26.32	161.05	1,500.30	-128.88	1,948.36	1,900.69	47.67	40.870		
5,600.00	5,584.74	5,202.74	5,009.49	24.90	26.82	161.05	1,527.32	-131.59	1,984.38	1,935.83	48.55	40.871		
5,700.00	5,684.43	5,303.97	5,098.74	25.35	27.36	161.05	1,554.34	-134.30	2,020.41	1,970.93	49.47	40.840		
5,800.00	5,784.12	5,389.31	5,187.99	25.80	27.81	161.04	1,581.35	-137.01	2,056.43	2,006.12	50.31	40.873		
5,900.00	5,883.81	5,900.00	5,460.93	26.25	30.33	161.07	1,649.40	-143.84	2,086.94	2,033.11	53.83	38.769		
6,000.00	5,983.51	6,088.16	5,874.59	26.70	31.02	161.24	1,701.39	-149.07	2,105.94	2,050.75	55.19	38.157		
6,100.00	6,083.20	6,303.16	6,083.20	27.14	31.81	161.37	1,705.24	-149.45	2,114.41	2,058.16	56.25	37.591		
6,200.00	6,182.89	6,403.47	6,182.89	27.59	32.16	161.44	1,705.24	-149.45	2,121.84	2,064.77	57.07	37.180		
6,300.00	6,282.58	6,503.78	6,282.58	28.04	32.52	161.50	1,705.24	-149.45	2,129.29	2,071.39	57.89	36.779		
6,400.00	6,382.27	6,604.09	6,382.27	28.49	32.88	161.57	1,705.24	-149.45	2,136.73	2,078.01	58.72	36.388		
6,500.00	6,481.96	6,704.39	6,481.96	28.94	33.25	161.64	1,705.24	-149.45	2,144.18	2,084.63	59.55	36.008		
6,600.00	6,581.66	6,795.30	6,581.66	29.39	33.58	161.70	1,705.24	-149.45	2,151.63	2,091.29	60.34	35.658		
6,700.00	6,681.21	6,896.45	6,682.72	29.83	33.94	122.90	1,705.22	-152.22	2,159.07	2,097.91	61.16	35.301		
6,800.00	6,778.96	6,998.94	6,783.56	30.28	34.30	104.84	1,705.08	-169.93	2,166.38	2,104.41	61.98	34.955		
6,900.00	6,872.51	7,101.77	6,880.57	30.70	34.66	98.92	1,704.82	-203.71	2,173.39	2,110.60	62.79	34.614		
7,000.00	6,969.55	7,204.89	6,971.12	31.10	34.99	95.88	1,704.43	-252.81	2,179.90	2,116.29	63.62	34.265		
7,100.00	7,037.93	7,308.22	7,052.72	31.48	35.29	93.98	1,703.94	-316.01	2,185.77	2,121.27	64.51	33.883		
7,200.00	7,105.74	7,411.68	7,123.12	31.88	35.57	92.68	1,703.35	-391.67	2,190.86	2,125.32	65.54	33.429		
7,300.00	7,161.29	7,515.17	7,180.36	32.41	35.85	91.75	1,702.67	-477.75	2,195.02	2,128.22	66.79	32.862		
7,400.00	7,203.22	7,618.59	7,222.89	33.13	36.27	91.10	1,701.94	-571.89	2,198.16	2,129.81	68.36	32.157		
7,500.00	7,230.50	7,721.84	7,249.61	34.04	36.98	90.68	1,701.16	-671.50	2,200.21	2,129.95	70.27	31.312		
7,600.00	7,242.45	7,824.80	7,259.88	35.13	37.99	90.46	1,700.36	-773.83	2,201.12	2,128.62	72.49	30.363		
7,700.00	7,242.72	7,925.19	7,259.67	36.39	39.19	90.44	1,699.57	-874.22	2,201.16	2,126.16	75.00	29.347		
7,800.00	7,242.33	8,025.19	7,259.29	37.81	40.56	90.44	1,698.79	-974.21	2,201.16	2,123.33	77.84	28.279		
7,900.00	7,241.93	8,125.19	7,258.91	39.40	42.08	90.44	1,698.01	-1,074.21	2,201.16	2,120.19	80.97	27.184		
8,000.00	7,241.54	8,225.19	7,258.53	41.13	43.74	90.44	1,697.23	-1,174.21	2,201.16	2,116.78	84.38	26.086		
8,100.00	7,241.15	8,325.19	7,258.15	42.97	45.52	90.44	1,696.44	-1,274.20	2,201.16	2,113.13	88.03	25.005		
8,200.00	7,240.75	8,425.19	7,257.77	44.92	47.41	90.44	1,695.66	-1,374.20	2,201.17	2,109.28	91.89	23.954		
8,300.00	7,240.36	8,525.19	7,257.39	46.97	49.39	90.44	1,694.88	-1,474.19	2,201.17	2,105.23	95.93	22.944		
8,400.00	7,239.97	8,625.19	7,257.01	49.10	51.45	90.44	1,694.10	-1,574.19	2,201.17	2,101.02	100.14	21.980		
8,500.00	7,239.57	8,725.19	7,256.63	51.29	53.59	90.44	1,693.32	-1,674.19	2,201.17	2,096.67	104.49	21.065		
8,600.00	7,239.18	8,825.19	7,256.25	53.56	55.79	90.44	1,692.53	-1,774.18	2,201.17	2,092.19	108.97	20.200		
8,700.00	7,238.79	8,925.19	7,255.87	55.87	58.05	90.44	1,691.75	-1,874.18	2,201.17	2,087.61	113.56	19.383		
8,800.00	7,238.39	9,025.19	7,255.50	58.24	60.36	90.45	1,690.97	-1,974.18	2,201.17	2,082.92	118.25	18.615		
8,900.00	7,238.00	9,125.19	7,255.12	60.64	62.72	90.45	1,690.19	-2,074.17	2,201.17	2,078.15	123.02	17.893		
9,000.00	7,237.61	9,225.19	7,254.74	63.09	65.11	90.45	1,689.41	-2,174.17	2,201.17	2,073.30	127.87	17.214		
9,100.00	7,237.21	9,325.19	7,254.36	65.56	67.54	90.45	1,688.62	-2,274.16	2,201.17	2,068.38	132.79	16.576		
9,200.00	7,236.82	9,425.19	7,253.98	68.07	70.01	90.45	1,687.84	-2,374.16	2,201.17	2,063.39	137.77	15.977		
9,300.00	7,236.43	9,525.19	7,253.60	70.61	72.50	90.45	1,687.06	-2,474.16	2,201.17	2,058.36	142.81	15.413		
9,400.00	7,236.03	9,625.19	7,253.22	73.16	75.02	90.45	1,686.28	-2,574.15	2,201.17	2,053.27	147.90	14.883		
9,500.00	7,235.64	9,725.19	7,252.84	75.74	77.56	90.45	1,685.50	-2,674.15	2,201.17	2,048.14	153.03	14.384		
9,600.00	7,235.25	9,825.19	7,252.46	78.34	80.13	90.45	1,684.71	-2,774.14	2,201.17	2,042.97	158.20	13.914		
9,700.00	7,234.85	9,925.19	7,252.08	80.96	82.71	90.45	1,683.93	-2,874.14	2,201.17	2,037.77	163.40	13.471		
9,800.00	7,234.46	10,025.19	7,251.70	83.59	85.31	90.45	1,683.15	-2,974.14	2,201.17	2,032.53	168.64	13.052		
9,900.00	7,234.07	10,125.19	7,251.32	86.24	87.93	90.45	1,682.37	-3,074.13	2,201.17	2,027.26	173.91	12.657		
10,000.00	7,233.67	10,225.19	7,250.94	88.90	90.56	90.45	1,681.59	-3,174.13	2,201.17	2,021.96	179.21	12.283		
10,100.00	7,233.28	10,325.19	7,250.56	91.57	93.20	90.45	1,680.80	-3,274.13	2,201.17	2,016.64	184.53	11.928		
10,200.00	7,232.89	10,425.19	7,250.18	94.25	95.86	90.45	1,680.02	-3,374.12	2,201.17	2,011.29	189.88	11.593		
10,300.00	7,232.49	10,525.19	7,249.80	96.95	98.53	90.45	1,679.24	-3,474.12	2,201.17	2,005.93	195.24	11.274		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	10,625.19	7,249.42	99.65	101.21	90.45	1,678.46	-3,574.11	2,201.17	2,000.54	200.63	10.971		
10,500.00	7,231.71	10,725.19	7,249.04	102.36	103.90	90.45	1,677.68	-3,674.11	2,201.17	1,995.14	206.03	10.684		
10,600.00	7,231.32	10,825.19	7,248.66	105.08	106.59	90.45	1,676.89	-3,774.11	2,201.17	1,989.72	211.45	10.410		
10,700.00	7,230.92	10,925.19	7,248.28	107.80	109.30	90.45	1,676.11	-3,874.10	2,201.17	1,984.28	216.89	10.149		
10,800.00	7,230.53	11,025.19	7,247.90	110.53	112.01	90.45	1,675.33	-3,974.10	2,201.17	1,978.84	222.34	9.900		
10,900.00	7,230.14	11,125.19	7,247.53	113.27	114.73	90.45	1,674.55	-4,074.10	2,201.17	1,973.37	227.80	9.663		
11,000.00	7,229.74	11,225.19	7,247.15	116.02	117.46	90.45	1,673.76	-4,174.09	2,201.17	1,967.90	233.27	9.436		
11,100.00	7,229.35	11,325.19	7,246.77	118.77	120.19	90.45	1,672.98	-4,274.09	2,201.17	1,962.41	238.76	9.219		
11,200.00	7,228.96	11,425.19	7,246.39	121.52	122.93	90.45	1,672.20	-4,374.08	2,201.17	1,956.92	244.26	9.012		
11,300.00	7,228.56	11,525.19	7,246.01	124.28	125.67	90.45	1,671.42	-4,474.08	2,201.17	1,951.41	249.76	8.813		
11,400.00	7,228.17	11,625.19	7,245.63	127.04	128.42	90.45	1,670.64	-4,574.08	2,201.17	1,945.90	255.28	8.623		
11,500.00	7,227.78	11,725.19	7,245.25	129.81	131.17	90.45	1,669.85	-4,674.07	2,201.18	1,940.37	260.80	8.440		
11,600.00	7,227.38	11,825.19	7,244.87	132.58	133.93	90.46	1,669.07	-4,774.07	2,201.18	1,934.84	266.33	8.265		
11,700.00	7,226.99	11,925.19	7,244.49	135.36	136.69	90.46	1,668.29	-4,874.07	2,201.18	1,929.30	271.87	8.096		
11,800.00	7,226.60	12,025.19	7,244.11	138.14	139.46	90.46	1,667.51	-4,974.06	2,201.18	1,923.76	277.42	7.934		
11,900.00	7,226.20	12,125.19	7,243.73	140.92	142.23	90.46	1,666.73	-5,074.06	2,201.18	1,918.20	282.97	7.779		
12,000.00	7,225.81	12,225.19	7,243.35	143.70	145.00	90.46	1,665.94	-5,174.05	2,201.18	1,912.64	288.53	7.629		
12,100.00	7,225.42	12,325.19	7,242.97	146.49	147.78	90.46	1,665.16	-5,274.05	2,201.18	1,907.08	294.10	7.484		
12,200.00	7,225.02	12,425.19	7,242.59	149.28	150.56	90.46	1,664.38	-5,374.05	2,201.18	1,901.51	299.67	7.345		
12,300.00	7,224.63	12,525.19	7,242.21	152.08	153.34	90.46	1,663.60	-5,474.04	2,201.18	1,895.93	305.25	7.211		
12,400.00	7,224.24	12,625.19	7,241.83	154.87	156.12	90.46	1,662.82	-5,574.04	2,201.18	1,890.35	310.83	7.082		
12,500.00	7,223.84	12,725.19	7,241.45	157.67	158.91	90.46	1,662.03	-5,674.04	2,201.18	1,884.76	316.42	6.957		
12,600.00	7,223.45	12,825.19	7,241.07	160.47	161.70	90.46	1,661.25	-5,774.03	2,201.18	1,879.17	322.01	6.836		
12,700.00	7,223.06	12,925.19	7,240.69	163.27	164.49	90.46	1,660.47	-5,874.03	2,201.18	1,873.58	327.60	6.719		
12,800.00	7,222.66	13,025.19	7,240.31	166.07	167.29	90.46	1,659.69	-5,974.02	2,201.18	1,867.98	333.20	6.606		
12,900.00	7,222.27	13,125.19	7,239.94	168.88	170.08	90.46	1,658.91	-6,074.02	2,201.18	1,862.37	338.81	6.497		
13,000.00	7,221.88	13,225.19	7,239.56	171.69	172.88	90.46	1,658.12	-6,174.02	2,201.18	1,856.77	344.41	6.391		
13,100.00	7,221.48	13,325.19	7,239.18	174.49	175.68	90.46	1,657.34	-6,274.01	2,201.18	1,851.16	350.02	6.289		
13,200.00	7,221.09	13,425.19	7,238.80	177.30	178.49	90.46	1,656.56	-6,374.01	2,201.18	1,845.54	355.64	6.189		
13,300.00	7,220.70	13,525.19	7,238.42	180.12	181.29	90.46	1,655.78	-6,474.01	2,201.18	1,839.93	361.26	6.093		
13,400.00	7,220.30	13,625.19	7,238.04	182.93	184.10	90.46	1,655.00	-6,574.00	2,201.18	1,834.31	366.88	6.000		
13,500.00	7,219.91	13,725.19	7,237.66	185.74	186.90	90.46	1,654.21	-6,674.00	2,201.18	1,828.68	372.50	5.909		
13,600.00	7,219.52	13,825.19	7,237.28	188.56	189.71	90.46	1,653.43	-6,773.99	2,201.18	1,823.06	378.12	5.821		
13,700.00	7,219.12	13,925.19	7,236.90	191.38	192.52	90.46	1,652.65	-6,873.99	2,201.18	1,817.43	383.75	5.736		
13,800.00	7,218.73	14,025.19	7,236.52	194.20	195.33	90.46	1,651.87	-6,973.99	2,201.18	1,811.80	389.39	5.653		
13,900.00	7,218.34	14,125.19	7,236.14	197.02	198.15	90.46	1,651.09	-7,073.98	2,201.18	1,806.16	395.02	5.572		
14,000.00	7,217.94	14,225.19	7,235.76	199.84	200.96	90.46	1,650.30	-7,173.98	2,201.18	1,800.53	400.65	5.494		
14,100.00	7,217.55	14,325.19	7,235.38	202.66	203.78	90.46	1,649.52	-7,273.97	2,201.18	1,794.89	406.29	5.418		
14,200.00	7,217.16	14,425.19	7,235.00	205.48	206.59	90.46	1,648.74	-7,373.97	2,201.18	1,789.25	411.93	5.344		
14,300.00	7,216.76	14,525.19	7,234.62	208.30	209.41	90.46	1,647.96	-7,473.97	2,201.18	1,783.61	417.58	5.271		
14,400.00	7,216.37	14,625.19	7,234.24	211.13	212.23	90.47	1,647.18	-7,573.96	2,201.18	1,777.96	423.22	5.201		
14,500.00	7,215.98	14,725.19	7,233.86	213.96	215.05	90.47	1,646.39	-7,673.96	2,201.18	1,772.32	428.87	5.133		
14,600.00	7,215.58	14,825.19	7,233.48	216.78	217.87	90.47	1,645.61	-7,773.96	2,201.18	1,766.67	434.52	5.066		
14,700.00	7,215.19	14,925.19	7,233.10	219.61	220.69	90.47	1,644.83	-7,873.95	2,201.18	1,761.02	440.16	5.001		
14,800.00	7,214.80	15,025.19	7,232.72	222.44	223.52	90.47	1,644.05	-7,973.95	2,201.19	1,755.37	445.82	4.937		
14,900.00	7,214.40	15,125.19	7,232.34	225.27	226.34	90.47	1,643.27	-8,073.94	2,201.19	1,749.72	451.47	4.876		
14,907.70	7,214.37	15,132.89	7,232.32	225.48	226.56	90.47	1,643.21	-8,081.64	2,201.19	1,749.28	451.91	4.871		
15,000.00	7,214.01	15,216.01	7,232.00	228.10	228.91	90.47	1,642.56	-8,164.76	2,201.20	1,744.33	456.87	4.818		
15,002.44	7,214.00	15,216.01	7,232.00	228.16	228.91	90.47	1,642.56	-8,164.76	2,201.22	1,744.27	456.95	4.817 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.53	180.33	1.67	180.34					
100.00	100.00	101.00	100.00	3.28	3.28	0.53	180.33	1.67	180.34	173.77	6.57	27.450		
200.00	200.00	201.00	200.00	3.34	3.34	0.53	180.33	1.67	180.34	173.66	6.67	27.018		
300.00	300.00	301.00	300.00	3.44	3.45	0.53	180.33	1.67	180.34	173.45	6.89	26.170 CC, ES		
400.00	400.00	395.04	394.02	3.60	3.59	0.46	181.89	1.47	182.00	174.79	7.21	25.254		
500.00	500.00	488.93	487.79	3.81	3.79	0.27	186.51	0.88	186.91	179.29	7.62	24.532		
600.00	599.98	582.25	580.79	4.03	4.01	161.90	194.11	-0.10	196.71	188.61	8.10	24.290		
700.00	699.84	674.38	672.32	4.29	4.26	161.83	204.56	-1.44	212.98	204.35	8.63	24.676		
800.00	799.54	764.98	761.94	4.57	4.53	161.92	217.68	-3.12	234.70	225.49	9.20	25.498		
900.00	899.23	854.22	849.77	4.87	4.82	161.94	233.34	-5.12	259.54	249.74	9.80	26.488		
1,000.00	998.92	948.87	942.54	5.20	5.15	161.91	251.92	-7.51	286.43	276.02	10.41	27.516		
1,100.00	1,098.61	1,045.17	1,036.92	5.54	5.49	161.87	270.89	-9.94	313.38	302.31	11.07	28.313		
1,200.00	1,198.30	1,141.47	1,131.31	5.90	5.86	161.85	289.86	-12.37	340.32	328.57	11.75	28.959		
1,300.00	1,298.00	1,237.77	1,225.69	6.27	6.24	161.82	308.82	-14.80	367.27	354.81	12.46	29.475		
1,400.00	1,397.69	1,334.07	1,320.07	6.66	6.63	161.80	327.79	-17.23	394.22	381.03	13.19	29.887		
1,500.00	1,497.38	1,430.37	1,414.46	7.05	7.03	161.79	346.75	-19.66	421.17	407.23	13.94	30.217		
1,600.00	1,597.07	1,526.67	1,508.84	7.44	7.44	161.77	365.72	-22.09	448.12	433.42	14.70	30.482		
1,700.00	1,696.76	1,622.97	1,603.22	7.85	7.86	161.76	384.69	-24.52	475.07	459.59	15.48	30.696		
1,800.00	1,796.45	1,719.27	1,697.60	8.25	8.28	161.74	403.65	-26.95	502.02	485.76	16.26	30.868		
1,900.00	1,896.15	1,815.57	1,791.99	8.67	8.70	161.73	422.62	-29.38	528.97	511.91	17.06	31.007		
2,000.00	1,995.84	1,911.87	1,886.37	9.08	9.13	161.72	441.58	-31.81	555.92	538.05	17.86	31.119		
2,100.00	2,095.53	2,008.17	1,980.75	9.50	9.57	161.72	460.55	-34.24	582.87	564.19	18.68	31.209		
2,200.00	2,195.22	2,104.47	2,075.13	9.92	10.00	161.71	479.52	-36.67	609.82	590.32	19.49	31.282		
2,300.00	2,294.91	2,200.77	2,169.52	10.35	10.44	161.70	498.48	-39.10	636.77	616.45	20.32	31.341		
2,400.00	2,394.60	2,302.93	2,263.90	10.77	10.91	161.69	517.45	-41.53	663.72	642.54	21.17	31.348		
2,500.00	2,494.30	2,406.63	2,358.28	11.20	11.39	161.69	536.42	-43.96	690.67	668.63	22.04	31.339		
2,600.00	2,593.99	2,489.67	2,452.67	11.63	11.77	161.68	555.38	-46.39	717.62	694.80	22.82	31.453		
2,700.00	2,693.68	2,585.97	2,547.05	12.07	12.22	161.68	574.35	-48.82	744.57	720.91	23.66	31.475		
2,800.00	2,793.37	2,682.27	2,641.43	12.50	12.67	161.67	593.31	-51.25	771.51	747.02	24.50	31.492		
2,900.00	2,893.06	2,778.57	2,735.81	12.93	13.11	161.67	612.28	-53.68	798.46	773.12	25.34	31.504		
3,000.00	2,992.76	2,874.87	2,830.20	13.37	13.56	161.66	631.25	-56.11	825.41	799.22	26.19	31.513		
3,100.00	3,092.45	2,971.17	2,924.58	13.81	14.02	161.66	650.21	-58.54	852.36	825.32	27.04	31.518		
3,200.00	3,192.14	3,067.47	3,018.96	14.25	14.47	161.65	669.18	-60.97	879.31	851.42	27.90	31.520		
3,300.00	3,291.83	3,163.77	3,113.34	14.68	14.92	161.65	688.14	-63.40	906.26	877.51	28.75	31.521		
3,400.00	3,391.52	3,260.07	3,207.73	15.12	15.38	161.65	707.11	-65.83	933.21	903.60	29.61	31.519		
3,500.00	3,491.21	3,356.37	3,302.11	15.56	15.83	161.64	726.08	-68.27	960.16	929.70	30.47	31.516		
3,600.00	3,590.91	3,452.67	3,396.49	16.00	16.29	161.64	745.04	-70.70	987.11	955.79	31.33	31.512		
3,700.00	3,690.60	3,548.97	3,490.88	16.45	16.74	161.64	764.01	-73.13	1,014.06	981.87	32.19	31.506		
3,800.00	3,790.29	3,645.27	3,585.26	16.89	17.20	161.63	782.98	-75.56	1,041.01	1,007.96	33.05	31.500		
3,900.00	3,889.98	3,741.57	3,679.64	17.33	17.66	161.63	801.94	-77.99	1,067.96	1,034.05	33.91	31.493		
4,000.00	3,989.67	3,837.87	3,774.02	17.77	18.11	161.63	820.91	-80.42	1,094.91	1,060.13	34.78	31.485		
4,100.00	4,089.36	3,934.17	3,868.41	18.22	18.57	161.63	839.87	-82.85	1,121.86	1,086.22	35.64	31.477		
4,200.00	4,189.06	4,030.47	3,962.79	18.66	19.03	161.62	858.84	-85.28	1,148.81	1,112.30	36.51	31.468		
4,300.00	4,288.75	4,126.77	4,057.17	19.10	19.49	161.62	877.81	-87.71	1,175.76	1,138.38	37.37	31.459		
4,400.00	4,388.44	4,223.07	4,151.55	19.55	19.95	161.62	896.77	-90.14	1,202.71	1,164.46	38.24	31.450		
4,500.00	4,488.13	4,319.37	4,245.94	19.99	20.41	161.62	915.74	-92.57	1,229.66	1,190.55	39.11	31.440		
4,600.00	4,587.82	4,415.67	4,340.32	20.44	20.87	161.62	934.71	-95.00	1,256.61	1,216.63	39.98	31.431		
4,700.00	4,687.51	4,511.97	4,434.70	20.89	21.33	161.61	953.67	-97.43	1,283.55	1,242.70	40.85	31.421		
4,800.00	4,787.21	4,608.27	4,529.09	21.33	21.79	161.61	972.64	-99.86	1,310.50	1,268.78	41.72	31.411		
4,900.00	4,886.90	4,704.57	4,623.47	21.78	22.25	161.61	991.60	-102.29	1,337.45	1,294.86	42.59	31.402		
5,000.00	4,986.59	4,800.87	4,717.85	22.22	22.71	161.61	1,010.57	-104.72	1,364.40	1,320.94	43.46	31.392		
5,100.00	5,086.28	4,897.17	4,812.23	22.67	23.17	161.61	1,029.54	-107.15	1,391.35	1,347.02	44.34	31.382		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,006.53	4,906.62	23.12	23.69	161.61	1,048.50	-109.58	1,418.30	1,373.03	45.27	31.330		
5,300.00	5,285.66	5,089.77	5,001.00	23.56	24.09	161.60	1,067.47	-112.01	1,445.25	1,399.17	46.08	31.363		
5,400.00	5,385.36	5,186.07	5,095.38	24.01	24.55	161.60	1,086.43	-114.44	1,472.20	1,425.25	46.96	31.353		
5,500.00	5,485.05	5,282.37	5,189.76	24.46	25.01	161.60	1,105.40	-116.87	1,499.15	1,451.32	47.83	31.343		
5,600.00	5,584.74	5,378.67	5,284.15	24.90	25.48	161.60	1,124.37	-119.30	1,526.10	1,477.40	48.70	31.334		
5,700.00	5,684.43	5,474.97	5,378.53	25.35	25.94	161.60	1,143.33	-121.73	1,553.05	1,503.47	49.58	31.324		
5,800.00	5,784.12	5,571.27	5,472.91	25.80	26.40	161.60	1,162.30	-124.16	1,580.00	1,529.54	50.45	31.315		
5,900.00	5,883.81	5,667.57	5,567.30	26.25	26.86	161.60	1,181.27	-126.59	1,606.95	1,555.62	51.33	31.306		
6,000.00	5,983.51	5,763.87	5,661.68	26.70	27.33	161.60	1,200.23	-129.03	1,633.90	1,581.69	52.21	31.297		
6,100.00	6,083.20	5,860.17	5,756.06	27.14	27.79	161.60	1,219.20	-131.46	1,660.85	1,607.76	53.08	31.288		
6,200.00	6,182.89	5,956.47	5,850.44	27.59	28.25	161.59	1,238.16	-133.89	1,687.80	1,633.84	53.96	31.279		
6,300.00	6,282.58	6,052.77	5,944.83	28.04	28.71	161.59	1,257.13	-136.32	1,714.75	1,659.91	54.84	31.270		
6,400.00	6,382.27	6,149.07	6,039.21	28.49	29.18	161.59	1,276.10	-138.75	1,741.70	1,685.98	55.71	31.261		
6,500.00	6,481.96	6,245.37	6,133.59	28.94	29.64	161.59	1,295.06	-141.18	1,768.65	1,712.05	56.59	31.253		
6,600.00	6,581.66	6,341.67	6,227.98	29.39	30.10	161.59	1,314.03	-143.61	1,795.60	1,738.13	57.47	31.244		
6,700.00	6,681.21	6,437.90	6,322.28	29.83	30.57	121.75	1,332.98	-146.04	1,822.53	1,764.19	58.35	31.236		
6,800.00	6,778.96	6,532.72	6,415.22	30.28	31.02	102.33	1,351.66	-148.43	1,849.22	1,790.01	59.21	31.231		
6,900.00	6,872.51	6,628.88	6,509.38	30.70	31.49	95.51	1,370.56	-152.71	1,875.35	1,815.26	60.09	31.209		
7,000.00	6,959.55	6,733.94	6,610.53	31.10	31.99	91.79	1,390.78	-171.93	1,900.32	1,839.26	61.07	31.118		
7,100.00	7,037.93	6,846.54	6,713.96	31.48	32.50	89.37	1,411.30	-211.03	1,923.43	1,861.29	62.14	30.954		
7,200.00	7,105.74	6,967.92	6,816.02	31.88	33.03	87.69	1,431.40	-273.23	1,943.99	1,880.64	63.35	30.687		
7,300.00	7,161.29	7,098.87	6,911.03	32.41	33.60	86.54	1,449.90	-361.08	1,961.30	1,896.53	64.77	30.279		
7,400.00	7,203.22	7,239.26	6,991.05	33.13	34.32	85.78	1,465.20	-475.05	1,974.66	1,908.11	66.55	29.671		
7,500.00	7,230.50	7,387.45	7,046.88	34.04	35.44	85.31	1,475.48	-611.59	1,983.47	1,914.66	68.81	28.825		
7,600.00	7,242.45	7,540.17	7,070.53	35.13	37.01	85.06	1,479.19	-762.05	1,987.28	1,915.70	71.57	27.767		
7,700.00	7,242.72	7,649.48	7,070.77	36.39	38.36	85.04	1,478.48	-871.35	1,987.44	1,913.23	74.22	26.779		
7,800.00	7,242.33	7,749.48	7,070.48	37.81	39.76	85.04	1,477.73	-971.34	1,987.46	1,910.38	77.08	25.784		
7,900.00	7,241.93	7,849.48	7,070.20	39.40	41.32	85.04	1,476.97	-1,071.34	1,987.48	1,907.24	80.25	24.767		
8,000.00	7,241.54	7,949.48	7,069.91	41.13	43.01	85.05	1,476.22	-1,171.34	1,987.50	1,903.82	83.68	23.750		
8,100.00	7,241.15	8,049.48	7,069.63	42.97	44.81	85.05	1,475.47	-1,271.33	1,987.52	1,900.17	87.36	22.752		
8,200.00	7,240.75	8,149.48	7,069.34	44.92	46.73	85.05	1,474.72	-1,371.33	1,987.54	1,896.31	91.24	21.784		
8,300.00	7,240.36	8,249.48	7,069.06	46.97	48.74	85.06	1,473.96	-1,471.33	1,987.56	1,892.26	95.30	20.856		
8,400.00	7,239.97	8,349.48	7,068.77	49.10	50.83	85.06	1,473.21	-1,571.32	1,987.58	1,888.06	99.53	19.970		
8,500.00	7,239.57	8,449.48	7,068.49	51.29	52.99	85.06	1,472.46	-1,671.32	1,987.61	1,883.71	103.89	19.131		
8,600.00	7,239.18	8,549.48	7,068.20	53.56	55.22	85.07	1,471.71	-1,771.32	1,987.63	1,879.24	108.38	18.339		
8,700.00	7,238.79	8,649.48	7,067.92	55.87	57.50	85.07	1,470.95	-1,871.31	1,987.65	1,874.66	112.98	17.593		
8,800.00	7,238.39	8,749.48	7,067.64	58.24	59.83	85.07	1,470.20	-1,971.31	1,987.67	1,869.99	117.68	16.891		
8,900.00	7,238.00	8,849.48	7,067.35	60.64	62.21	85.07	1,469.45	-2,071.31	1,987.69	1,865.23	122.46	16.232		
9,000.00	7,237.61	8,949.48	7,067.07	63.09	64.62	85.08	1,468.70	-2,171.31	1,987.71	1,860.39	127.31	15.613		
9,100.00	7,237.21	9,049.48	7,066.78	65.56	67.07	85.08	1,467.94	-2,271.30	1,987.73	1,855.49	132.24	15.031		
9,200.00	7,236.82	9,149.48	7,066.50	68.07	69.55	85.08	1,467.19	-2,371.30	1,987.75	1,850.53	137.22	14.486		
9,300.00	7,236.43	9,249.48	7,066.21	70.61	72.06	85.09	1,466.44	-2,471.30	1,987.77	1,845.51	142.26	13.973		
9,400.00	7,236.03	9,349.48	7,065.93	73.16	74.60	85.09	1,465.69	-2,571.29	1,987.79	1,840.44	147.35	13.491		
9,500.00	7,235.64	9,449.48	7,065.64	75.74	77.15	85.09	1,464.93	-2,671.29	1,987.81	1,835.33	152.48	13.037		
9,600.00	7,235.25	9,549.48	7,065.36	78.34	79.73	85.10	1,464.18	-2,771.29	1,987.83	1,830.18	157.64	12.610		
9,700.00	7,234.85	9,649.48	7,065.07	80.96	82.33	85.10	1,463.43	-2,871.28	1,987.85	1,825.00	162.85	12.207		
9,800.00	7,234.46	9,749.48	7,064.79	83.59	84.94	85.10	1,462.68	-2,971.28	1,987.87	1,819.78	168.09	11.827		
9,900.00	7,234.07	9,849.48	7,064.50	86.24	87.57	85.11	1,461.93	-3,071.28	1,987.89	1,814.54	173.35	11.467		
10,000.00	7,233.67	9,949.48	7,064.22	88.90	90.21	85.11	1,461.17	-3,171.27	1,987.91	1,809.27	178.64	11.128		
10,100.00	7,233.28	10,049.48	7,063.93	91.57	92.87	85.11	1,460.42	-3,271.27	1,987.93	1,803.97	183.96	10.806		
10,200.00	7,232.89	10,149.48	7,063.65	94.25	95.53	85.12	1,459.67	-3,371.27	1,987.95	1,798.65	189.30	10.502		
10,300.00	7,232.49	10,249.48	7,063.36	96.95	98.21	85.12	1,458.92	-3,471.26	1,987.97	1,793.31	194.66	10.213		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	10,349.48	7,063.08	99.65	100.90	85.12	1,458.16	-3,571.26	1,987.99	1,787.95	200.04	9.938		
10,500.00	7,231.71	10,449.48	7,062.79	102.36	103.60	85.13	1,457.41	-3,671.26	1,988.01	1,782.58	205.43	9.677		
10,600.00	7,231.32	10,549.48	7,062.51	105.08	106.30	85.13	1,456.66	-3,771.25	1,988.03	1,777.19	210.85	9.429		
10,700.00	7,230.92	10,649.48	7,062.22	107.80	109.01	85.13	1,455.91	-3,871.25	1,988.05	1,771.78	216.27	9.192		
10,800.00	7,230.53	10,749.48	7,061.94	110.53	111.73	85.14	1,455.15	-3,971.25	1,988.07	1,766.36	221.71	8.967		
10,900.00	7,230.14	10,849.48	7,061.66	113.27	114.46	85.14	1,454.40	-4,071.24	1,988.09	1,760.93	227.17	8.752		
11,000.00	7,229.74	10,949.48	7,061.37	116.02	117.19	85.14	1,453.65	-4,171.24	1,988.12	1,755.48	232.63	8.546		
11,100.00	7,229.35	11,049.48	7,061.09	118.77	119.93	85.14	1,452.90	-4,271.24	1,988.14	1,750.03	238.11	8.350		
11,200.00	7,228.96	11,149.48	7,060.80	121.52	122.68	85.15	1,452.14	-4,371.23	1,988.16	1,744.56	243.60	8.162		
11,300.00	7,228.56	11,249.48	7,060.52	124.28	125.43	85.15	1,451.39	-4,471.23	1,988.18	1,739.09	249.09	7.982		
11,400.00	7,228.17	11,349.48	7,060.23	127.04	128.18	85.15	1,450.64	-4,571.23	1,988.20	1,733.60	254.60	7.809		
11,500.00	7,227.78	11,449.48	7,059.95	129.81	130.94	85.16	1,449.89	-4,671.22	1,988.22	1,728.11	260.11	7.644		
11,600.00	7,227.38	11,549.48	7,059.66	132.58	133.70	85.16	1,449.13	-4,771.22	1,988.24	1,722.61	265.63	7.485		
11,700.00	7,226.99	11,649.48	7,059.38	135.36	136.47	85.16	1,448.38	-4,871.22	1,988.26	1,717.10	271.16	7.332		
11,800.00	7,226.60	11,749.48	7,059.09	138.14	139.24	85.17	1,447.63	-4,971.21	1,988.28	1,711.58	276.70	7.186		
11,900.00	7,226.20	11,849.48	7,058.81	140.92	142.02	85.17	1,446.88	-5,071.21	1,988.30	1,706.06	282.24	7.045		
12,000.00	7,225.81	11,949.48	7,058.52	143.70	144.79	85.17	1,446.12	-5,171.21	1,988.32	1,700.53	287.79	6.909		
12,100.00	7,225.42	12,049.48	7,058.24	146.49	147.57	85.18	1,445.37	-5,271.20	1,988.34	1,695.00	293.34	6.778		
12,200.00	7,225.02	12,149.48	7,057.95	149.28	150.36	85.18	1,444.62	-5,371.20	1,988.36	1,689.46	298.90	6.652		
12,300.00	7,224.63	12,249.48	7,057.67	152.08	153.14	85.18	1,443.87	-5,471.20	1,988.38	1,683.91	304.47	6.531		
12,400.00	7,224.24	12,349.48	7,057.38	154.87	155.93	85.19	1,443.11	-5,571.19	1,988.40	1,678.36	310.04	6.413		
12,500.00	7,223.84	12,449.48	7,057.10	157.67	158.72	85.19	1,442.36	-5,671.19	1,988.42	1,672.81	315.62	6.300		
12,600.00	7,223.45	12,549.48	7,056.81	160.47	161.52	85.19	1,441.61	-5,771.19	1,988.44	1,667.25	321.20	6.191		
12,700.00	7,223.06	12,649.48	7,056.53	163.27	164.31	85.20	1,440.86	-5,871.18	1,988.46	1,661.68	326.78	6.085		
12,800.00	7,222.66	12,749.48	7,056.24	166.07	167.11	85.20	1,440.10	-5,971.18	1,988.48	1,656.12	332.37	5.983		
12,900.00	7,222.27	12,849.48	7,055.96	168.88	169.91	85.20	1,439.35	-6,071.18	1,988.51	1,650.55	337.96	5.884		
13,000.00	7,221.88	12,949.48	7,055.68	171.69	172.71	85.21	1,438.60	-6,171.17	1,988.53	1,644.97	343.56	5.788		
13,100.00	7,221.48	13,049.48	7,055.39	174.49	175.52	85.21	1,437.85	-6,271.17	1,988.55	1,639.39	349.15	5.695		
13,200.00	7,221.09	13,149.48	7,055.11	177.30	178.32	85.21	1,437.09	-6,371.17	1,988.57	1,633.81	354.76	5.605		
13,300.00	7,220.70	13,249.48	7,054.82	180.12	181.13	85.22	1,436.34	-6,471.16	1,988.59	1,628.23	360.36	5.518		
13,400.00	7,220.30	13,349.48	7,054.54	182.93	183.94	85.22	1,435.59	-6,571.16	1,988.61	1,622.64	365.97	5.434		
13,500.00	7,219.91	13,449.48	7,054.25	185.74	186.75	85.22	1,434.84	-6,671.16	1,988.63	1,617.05	371.58	5.352		
13,600.00	7,219.52	13,549.48	7,053.97	188.56	189.56	85.22	1,434.08	-6,771.15	1,988.65	1,611.45	377.20	5.272		
13,700.00	7,219.12	13,649.48	7,053.68	191.38	192.37	85.23	1,433.33	-6,871.15	1,988.67	1,605.86	382.81	5.195		
13,800.00	7,218.73	13,749.48	7,053.40	194.20	195.19	85.23	1,432.58	-6,971.15	1,988.69	1,600.26	388.43	5.120		
13,900.00	7,218.34	13,849.48	7,053.11	197.02	198.00	85.23	1,431.83	-7,071.14	1,988.71	1,594.66	394.05	5.047		
14,000.00	7,217.94	13,949.48	7,052.83	199.84	200.82	85.24	1,431.07	-7,171.14	1,988.73	1,589.05	399.68	4.976		
14,100.00	7,217.55	14,049.48	7,052.54	202.66	203.64	85.24	1,430.32	-7,271.14	1,988.75	1,583.45	405.30	4.907		
14,200.00	7,217.16	14,149.48	7,052.26	205.48	206.46	85.24	1,429.57	-7,371.13	1,988.77	1,577.84	410.93	4.840		
14,300.00	7,216.76	14,249.48	7,051.97	208.30	209.28	85.25	1,428.82	-7,471.13	1,988.79	1,572.23	416.56	4.774		
14,400.00	7,216.37	14,349.48	7,051.69	211.13	212.10	85.25	1,428.07	-7,571.13	1,988.81	1,566.62	422.19	4.711		
14,500.00	7,215.98	14,449.48	7,051.40	213.96	214.92	85.25	1,427.31	-7,671.12	1,988.84	1,561.01	427.83	4.649		
14,600.00	7,215.58	14,549.48	7,051.12	216.78	217.75	85.26	1,426.56	-7,771.12	1,988.86	1,555.39	433.46	4.588		
14,700.00	7,215.19	14,649.48	7,050.83	219.61	220.57	85.26	1,425.81	-7,871.12	1,988.88	1,549.77	439.10	4.529		
14,800.00	7,214.80	14,749.48	7,050.55	222.44	223.39	85.26	1,425.06	-7,971.11	1,988.90	1,544.16	444.74	4.472		
14,900.00	7,214.40	14,849.48	7,050.26	225.27	226.22	85.27	1,424.30	-8,071.11	1,988.92	1,538.54	450.38	4.416		
14,905.13	7,214.38	14,854.61	7,050.25	225.41	226.36	85.27	1,424.26	-8,076.24	1,988.92	1,538.25	450.67	4.413		
15,000.00	7,214.01	14,942.37	7,050.00	228.10	228.85	85.27	1,423.60	-8,164.00	1,988.95	1,533.12	455.83	4.363		
15,002.44	7,214.00	14,942.37	7,050.00	228.16	228.85	85.27	1,423.60	-8,164.00	1,988.96	1,533.06	455.90	4.363 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.48	100.18	0.83	100.18					
100.00	100.00	100.00	100.00	3.28	3.28	0.48	100.18	0.83	100.18	93.61	6.57	15.250		
200.00	200.00	200.00	200.00	3.34	3.34	0.48	100.18	0.83	100.18	93.51	6.67	15.011		
300.00	300.00	300.00	300.00	3.44	3.44	0.48	100.18	0.83	100.18	93.29	6.89	14.541		
400.00	400.00	400.00	400.00	3.60	3.60	0.48	100.18	0.83	100.18	92.98	7.21	13.902		
500.00	500.00	500.00	500.00	3.81	3.81	0.48	100.18	0.83	100.18	92.57	7.61	13.161	CC, ES	
600.00	599.98	599.98	599.98	4.03	4.05	162.60	100.18	0.83	101.85	93.77	8.08	12.603		
700.00	699.84	696.52	696.51	4.29	4.31	163.02	101.68	0.20	108.39	99.78	8.60	12.600		
800.00	799.54	792.48	792.34	4.57	4.59	163.10	106.13	-1.68	120.36	111.19	9.18	13.114		
900.00	899.23	908.43	891.22	4.87	4.96	162.92	112.12	-4.21	133.83	123.98	9.85	13.593		
1,000.00	998.92	1,009.34	990.09	5.20	5.30	162.78	118.10	-6.74	147.29	136.78	10.50	14.021		
1,100.00	1,098.61	1,089.75	1,088.97	5.54	5.59	162.66	124.09	-9.26	160.75	149.63	11.12	14.453		
1,200.00	1,198.30	1,188.84	1,187.84	5.90	5.94	162.55	130.07	-11.79	174.21	162.38	11.83	14.726		
1,300.00	1,298.00	1,287.93	1,286.72	6.27	6.31	162.47	136.06	-14.32	187.68	175.12	12.56	14.942		
1,400.00	1,397.69	1,387.02	1,385.60	6.66	6.69	162.39	142.05	-16.85	201.14	187.83	13.31	15.114		
1,500.00	1,497.38	1,486.11	1,484.47	7.05	7.07	162.33	148.03	-19.38	214.60	200.53	14.07	15.251		
1,600.00	1,597.07	1,585.20	1,583.35	7.44	7.46	162.27	154.02	-21.91	228.07	213.22	14.85	15.361		
1,700.00	1,696.76	1,684.29	1,682.22	7.85	7.86	162.22	160.00	-24.44	241.53	225.90	15.63	15.448		
1,800.00	1,796.45	1,783.38	1,781.10	8.25	8.26	162.17	165.99	-26.96	255.00	238.57	16.43	15.519		
1,900.00	1,896.15	1,882.47	1,879.97	8.67	8.66	162.13	171.98	-29.49	268.46	251.23	17.24	15.576		
2,000.00	1,995.84	1,981.55	1,978.85	9.08	9.07	162.09	177.96	-32.02	281.93	263.88	18.05	15.621		
2,100.00	2,095.53	2,080.64	2,077.73	9.50	9.48	162.06	183.95	-34.55	295.39	276.53	18.87	15.658		
2,200.00	2,195.22	2,179.73	2,176.60	9.92	9.89	162.03	189.93	-37.08	308.86	289.17	19.69	15.687		
2,300.00	2,294.91	2,278.82	2,275.48	10.35	10.31	162.00	195.92	-39.61	322.32	301.81	20.52	15.710		
2,400.00	2,394.60	2,377.91	2,374.35	10.77	10.72	161.97	201.91	-42.13	335.79	314.44	21.35	15.729		
2,500.00	2,494.30	2,477.00	2,473.23	11.20	11.14	161.95	207.89	-44.66	349.25	327.07	22.18	15.743		
2,600.00	2,593.99	2,576.09	2,572.11	11.63	11.56	161.92	213.88	-47.19	362.72	339.69	23.02	15.754		
2,700.00	2,693.68	2,675.18	2,670.98	12.07	11.98	161.90	219.86	-49.72	376.18	352.32	23.87	15.762		
2,800.00	2,793.37	2,774.27	2,769.86	12.50	12.40	161.88	225.85	-52.25	389.65	364.94	24.71	15.769		
2,900.00	2,893.06	2,873.36	2,868.73	12.93	12.83	161.87	231.84	-54.78	403.12	377.56	25.56	15.773		
3,000.00	2,992.76	2,972.45	2,967.61	13.37	13.25	161.85	237.82	-57.30	416.58	390.17	26.41	15.776		
3,100.00	3,092.45	3,071.54	3,066.49	13.81	13.68	161.83	243.81	-59.83	430.05	402.79	27.26	15.777		
3,200.00	3,192.14	3,170.62	3,165.36	14.25	14.10	161.82	249.79	-62.36	443.51	415.40	28.11	15.777		
3,300.00	3,291.83	3,269.71	3,264.24	14.68	14.53	161.81	255.78	-64.89	456.98	428.01	28.97	15.777		
3,400.00	3,391.52	3,368.80	3,363.11	15.12	14.96	161.79	261.76	-67.42	470.44	440.62	29.82	15.775		
3,500.00	3,491.21	3,467.89	3,461.99	15.56	15.38	161.78	267.75	-69.95	483.91	453.23	30.68	15.774		
3,600.00	3,590.91	3,566.98	3,560.86	16.00	15.81	161.77	273.74	-72.48	497.38	465.84	31.54	15.771		
3,700.00	3,690.60	3,666.07	3,659.74	16.45	16.24	161.76	279.72	-75.00	510.84	478.44	32.40	15.768		
3,800.00	3,790.29	3,765.16	3,758.62	16.89	16.67	161.75	285.71	-77.53	524.31	491.05	33.26	15.765		
3,900.00	3,889.98	3,864.25	3,857.49	17.33	17.10	161.74	291.69	-80.06	537.77	503.65	34.12	15.761		
4,000.00	3,989.67	3,963.34	3,956.37	17.77	17.53	161.73	297.68	-82.59	551.24	516.26	34.98	15.758		
4,100.00	4,089.36	4,062.43	4,055.24	18.22	17.96	161.72	303.67	-85.12	564.70	528.86	35.85	15.754		
4,200.00	4,189.06	4,161.52	4,154.12	18.66	18.40	161.71	309.65	-87.65	578.17	541.46	36.71	15.750		
4,300.00	4,288.75	4,260.61	4,253.00	19.10	18.83	161.70	315.64	-90.17	591.64	554.06	37.58	15.745		
4,400.00	4,388.44	4,359.69	4,351.87	19.55	19.26	161.69	321.62	-92.70	605.10	566.66	38.44	15.741		
4,500.00	4,488.13	4,458.78	4,450.75	19.99	19.69	161.68	327.61	-95.23	618.57	579.26	39.31	15.737		
4,600.00	4,587.82	4,557.87	4,549.62	20.44	20.12	161.68	333.60	-97.76	632.03	591.86	40.17	15.732		
4,700.00	4,687.51	4,656.96	4,648.50	20.89	20.56	161.67	339.58	-100.29	645.50	604.46	41.04	15.728		
4,800.00	4,787.21	4,756.05	4,747.38	21.33	20.99	161.66	345.57	-102.82	658.97	617.06	41.91	15.723		
4,900.00	4,886.90	4,855.14	4,846.25	21.78	21.42	161.66	351.55	-105.34	672.43	629.65	42.78	15.719		
5,000.00	4,986.59	4,954.23	4,945.13	22.22	21.86	161.65	357.54	-107.87	685.90	642.25	43.65	15.715		
5,100.00	5,086.28	5,053.32	5,044.00	22.67	22.29	161.65	363.53	-110.40	699.36	654.85	44.52	15.710		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,152.41	5,142.88	23.12	22.72	161.64	369.51	-112.93	712.83	667.44	45.39	15.706	
5,300.00	5,285.66	5,251.50	5,241.75	23.56	23.16	161.63	375.50	-115.46	726.30	680.04	46.26	15.701	
5,400.00	5,385.36	5,350.59	5,340.63	24.01	23.59	161.63	381.48	-117.99	739.76	692.63	47.13	15.697	
5,500.00	5,485.05	5,449.68	5,439.51	24.46	24.03	161.62	387.47	-120.52	753.23	705.23	48.00	15.693	
5,600.00	5,584.74	5,548.76	5,538.38	24.90	24.46	161.62	393.45	-123.04	766.69	717.82	48.87	15.688	
5,700.00	5,684.43	5,647.85	5,637.26	25.35	24.90	161.61	399.44	-125.57	780.16	730.42	49.74	15.684	
5,800.00	5,784.12	5,746.94	5,736.13	25.80	25.33	161.61	405.43	-128.10	793.63	743.01	50.61	15.680	
5,900.00	5,883.81	5,846.03	5,835.01	26.25	25.77	161.60	411.41	-130.63	807.09	755.61	51.49	15.676	
6,000.00	5,983.51	5,945.12	5,933.89	26.70	26.20	161.60	417.40	-133.16	820.56	768.20	52.36	15.672	
6,100.00	6,083.20	6,044.21	6,032.76	27.14	26.64	161.60	423.38	-135.69	834.02	780.79	53.23	15.668	
6,200.00	6,182.89	6,143.30	6,131.64	27.59	27.07	161.59	429.37	-138.21	847.49	793.39	54.10	15.664	
6,300.00	6,282.58	6,242.39	6,230.51	28.04	27.51	161.59	435.36	-140.74	860.96	805.98	54.98	15.660	
6,400.00	6,382.27	6,341.48	6,329.39	28.49	27.94	161.58	441.34	-143.27	874.42	818.57	55.85	15.656	
6,500.00	6,481.96	6,440.57	6,428.27	28.94	28.38	161.58	447.33	-145.80	887.89	831.16	56.72	15.653	
6,600.00	6,581.66	6,539.66	6,527.14	29.39	28.82	161.58	453.31	-148.33	901.35	843.76	57.60	15.649	
6,700.00	6,681.21	6,638.67	6,625.94	29.83	29.25	122.56	459.30	-150.85	914.82	856.35	58.47	15.646	
6,800.00	6,778.96	6,737.34	6,723.93	30.28	29.69	104.52	465.27	-159.80	928.26	868.93	59.34	15.644	
6,900.00	6,872.51	6,837.61	6,820.88	30.70	30.13	98.63	471.26	-184.25	941.46	881.25	60.21	15.636	
7,000.00	6,969.55	6,939.70	6,914.40	31.10	30.59	95.65	477.15	-224.48	954.10	892.99	61.11	15.613	
7,100.00	7,037.93	7,043.69	7,001.82	31.48	31.07	93.81	482.76	-280.31	965.85	903.79	62.06	15.563	
7,200.00	7,105.74	7,149.61	7,080.33	31.88	31.61	92.56	487.91	-351.04	976.39	913.26	63.13	15.467	
7,300.00	7,161.29	7,257.38	7,147.08	32.41	32.26	91.70	492.44	-435.36	985.45	921.04	64.41	15.300	
7,400.00	7,203.22	7,366.84	7,199.38	33.13	33.09	91.12	496.17	-531.30	992.76	926.74	66.01	15.039	
7,500.00	7,230.50	7,477.70	7,234.84	34.04	34.12	90.75	498.92	-636.15	998.10	930.12	67.98	14.681	
7,600.00	7,242.45	7,589.59	7,251.71	35.13	35.35	90.58	500.59	-746.60	1,001.32	930.99	70.32	14.239	
7,700.00	7,242.72	7,705.69	7,252.77	36.39	36.81	90.57	501.27	-851.29	1,002.80	929.76	73.04	13.729	
7,800.00	7,242.33	7,805.70	7,252.41	37.81	38.25	90.57	501.84	-951.28	1,004.15	928.23	75.92	13.226	
7,900.00	7,241.93	7,905.71	7,252.04	39.40	39.84	90.57	502.41	-1,051.27	1,005.50	926.39	79.10	12.711	
8,000.00	7,241.54	8,005.72	7,251.67	41.13	41.57	90.57	502.97	-1,151.26	1,006.85	924.28	82.56	12.195	
8,100.00	7,241.15	8,105.73	7,251.31	42.97	43.42	90.57	503.54	-1,251.25	1,008.20	921.93	86.26	11.687	
8,200.00	7,240.75	8,205.73	7,250.94	44.92	45.38	90.58	504.11	-1,351.23	1,009.55	919.37	90.18	11.195	
8,300.00	7,240.36	8,305.74	7,250.57	46.97	47.42	90.58	504.68	-1,451.22	1,010.90	916.62	94.27	10.723	
8,400.00	7,239.97	8,405.75	7,250.21	49.10	49.55	90.58	505.24	-1,551.21	1,012.24	913.71	98.53	10.273	
8,500.00	7,239.57	8,505.76	7,249.84	51.29	51.75	90.58	505.81	-1,651.20	1,013.59	910.66	102.93	9.847	
8,600.00	7,239.18	8,605.77	7,249.48	53.56	54.01	90.58	506.38	-1,751.19	1,014.94	907.49	107.46	9.445	
8,700.00	7,238.79	8,705.78	7,249.11	55.87	56.33	90.58	506.94	-1,851.18	1,016.29	904.20	112.09	9.067	
8,800.00	7,238.39	8,805.79	7,248.74	58.24	58.69	90.58	507.51	-1,951.17	1,017.64	900.82	116.82	8.711	
8,900.00	7,238.00	8,905.80	7,248.38	60.64	61.10	90.58	508.08	-2,051.16	1,018.99	897.36	121.63	8.377	
9,000.00	7,237.61	9,005.81	7,248.01	63.09	63.54	90.58	508.64	-2,151.14	1,020.34	893.81	126.53	8.064	
9,100.00	7,237.21	9,105.82	7,247.65	65.56	66.02	90.58	509.21	-2,251.13	1,021.69	890.21	131.48	7.770	
9,200.00	7,236.82	9,205.83	7,247.28	68.07	68.53	90.58	509.78	-2,351.12	1,023.04	886.54	136.50	7.495	
9,300.00	7,236.43	9,305.83	7,246.91	70.61	71.06	90.58	510.34	-2,451.11	1,024.39	882.82	141.57	7.236	
9,400.00	7,236.03	9,405.84	7,246.55	73.16	73.62	90.58	510.91	-2,551.10	1,025.74	879.05	146.69	6.993	
9,500.00	7,235.64	9,505.85	7,246.18	75.74	76.20	90.58	511.48	-2,651.09	1,027.09	875.23	151.85	6.764	
9,600.00	7,235.25	9,605.86	7,245.81	78.34	78.80	90.59	512.04	-2,751.08	1,028.44	871.38	157.05	6.548	
9,700.00	7,234.85	9,705.87	7,245.45	80.96	81.42	90.59	512.61	-2,851.06	1,029.78	867.50	162.29	6.345	
9,800.00	7,234.46	9,805.88	7,245.08	83.59	84.05	90.59	513.18	-2,951.05	1,031.13	863.58	167.55	6.154	
9,900.00	7,234.07	9,905.89	7,244.72	86.24	86.70	90.59	513.74	-3,051.04	1,032.48	859.63	172.85	5.973	
10,000.00	7,233.67	10,005.90	7,244.35	88.90	89.36	90.59	514.31	-3,151.03	1,033.83	855.66	178.17	5.802	
10,100.00	7,233.28	10,105.91	7,243.98	91.57	92.04	90.59	514.88	-3,251.02	1,035.18	851.66	183.52	5.641	
10,200.00	7,232.89	10,205.92	7,243.62	94.25	94.72	90.59	515.44	-3,351.01	1,036.53	847.65	188.89	5.488	
10,300.00	7,232.49	10,305.93	7,243.25	96.95	97.42	90.59	516.01	-3,451.00	1,037.88	843.61	194.27	5.342	

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	10,405.94	7,242.89	99.65	100.12	90.59	516.58	-3,550.98	1,039.23	839.55	199.68	5.204		
10,500.00	7,231.71	10,505.94	7,242.52	102.36	102.83	90.59	517.15	-3,650.97	1,040.58	835.48	205.10	5.073		
10,600.00	7,231.32	10,605.95	7,242.15	105.08	105.55	90.59	517.71	-3,750.96	1,041.93	831.39	210.54	4.949		
10,700.00	7,230.92	10,705.96	7,241.79	107.80	108.28	90.59	518.28	-3,850.95	1,043.28	827.28	216.00	4.830		
10,800.00	7,230.53	10,805.97	7,241.42	110.53	111.02	90.59	518.85	-3,950.94	1,044.63	823.16	221.46	4.717		
10,900.00	7,230.14	10,905.98	7,241.05	113.27	113.76	90.60	519.41	-4,050.93	1,045.98	819.03	226.94	4.609		
11,000.00	7,229.74	11,005.99	7,240.69	116.02	116.50	90.60	519.98	-4,150.92	1,047.33	814.89	232.43	4.506		
11,100.00	7,229.35	11,106.00	7,240.32	118.77	119.26	90.60	520.55	-4,250.90	1,048.67	810.74	237.94	4.407		
11,200.00	7,228.96	11,206.01	7,239.96	121.52	122.01	90.60	521.11	-4,350.89	1,050.02	806.58	243.45	4.313		
11,300.00	7,228.56	11,306.02	7,239.59	124.28	124.78	90.60	521.68	-4,450.88	1,051.37	802.40	248.97	4.223		
11,400.00	7,228.17	11,406.03	7,239.22	127.04	127.54	90.60	522.25	-4,550.87	1,052.72	798.22	254.50	4.136		
11,500.00	7,227.78	11,506.04	7,238.86	129.81	130.31	90.60	522.81	-4,650.86	1,054.07	794.03	260.04	4.054		
11,600.00	7,227.38	11,606.04	7,238.49	132.58	133.09	90.60	523.38	-4,750.85	1,055.42	789.84	265.58	3.974		
11,700.00	7,226.99	11,706.05	7,238.12	135.36	135.87	90.60	523.95	-4,850.84	1,056.77	785.63	271.14	3.898		
11,800.00	7,226.60	11,806.06	7,237.76	138.14	138.65	90.60	524.51	-4,950.83	1,058.12	781.42	276.70	3.824		
11,900.00	7,226.20	11,906.07	7,237.39	140.92	141.43	90.60	525.08	-5,050.81	1,059.47	777.20	282.26	3.753		
12,000.00	7,225.81	12,006.08	7,237.03	143.70	144.22	90.60	525.65	-5,150.80	1,060.82	772.98	287.84	3.685		
12,100.00	7,225.42	12,106.09	7,236.66	146.49	147.01	90.60	526.21	-5,250.79	1,062.17	768.75	293.42	3.620		
12,200.00	7,225.02	12,206.10	7,236.29	149.28	149.81	90.60	526.78	-5,350.78	1,063.52	764.52	299.00	3.557		
12,300.00	7,224.63	12,306.11	7,235.93	152.08	152.60	90.60	527.35	-5,450.77	1,064.87	760.28	304.59	3.496		
12,400.00	7,224.24	12,406.12	7,235.56	154.87	155.40	90.61	527.91	-5,550.76	1,066.21	756.03	310.18	3.437		
12,500.00	7,223.84	12,506.13	7,235.20	157.67	158.20	90.61	528.48	-5,650.75	1,067.56	751.78	315.78	3.381		
12,600.00	7,223.45	12,606.14	7,234.83	160.47	161.00	90.61	529.05	-5,750.73	1,068.91	747.53	321.38	3.326		
12,700.00	7,223.06	12,706.14	7,234.46	163.27	163.81	90.61	529.62	-5,850.72	1,070.26	743.27	326.99	3.273		
12,800.00	7,222.66	12,806.15	7,234.10	166.07	166.62	90.61	530.18	-5,950.71	1,071.61	739.01	332.60	3.222		
12,900.00	7,222.27	12,906.16	7,233.73	168.88	169.43	90.61	530.75	-6,050.70	1,072.96	734.75	338.21	3.172		
13,000.00	7,221.88	13,006.17	7,233.36	171.69	172.24	90.61	531.32	-6,150.69	1,074.31	730.48	343.83	3.125		
13,100.00	7,221.48	13,106.18	7,233.00	174.49	175.05	90.61	531.88	-6,250.68	1,075.66	726.21	349.45	3.078		
13,200.00	7,221.09	13,206.19	7,232.63	177.30	177.86	90.61	532.45	-6,350.67	1,077.01	721.93	355.08	3.033		
13,300.00	7,220.70	13,306.20	7,232.27	180.12	180.68	90.61	533.02	-6,450.65	1,078.36	717.66	360.70	2.990		
13,400.00	7,220.30	13,406.21	7,231.90	182.93	183.50	90.61	533.58	-6,550.64	1,079.71	713.38	366.33	2.947		
13,500.00	7,219.91	13,506.22	7,231.53	185.74	186.31	90.61	534.15	-6,650.63	1,081.06	709.09	371.96	2.906		
13,600.00	7,219.52	13,606.23	7,231.17	188.56	189.13	90.61	534.72	-6,750.62	1,082.41	704.81	377.60	2.867		
13,700.00	7,219.12	13,706.24	7,230.80	191.38	191.95	90.61	535.28	-6,850.61	1,083.76	700.52	383.24	2.828		
13,800.00	7,218.73	13,806.24	7,230.44	194.20	194.78	90.62	535.85	-6,950.60	1,085.10	696.23	388.88	2.790		
13,900.00	7,218.34	13,906.25	7,230.07	197.02	197.60	90.62	536.42	-7,050.59	1,086.45	691.93	394.52	2.754		
14,000.00	7,217.94	14,006.26	7,229.70	199.84	200.42	90.62	536.98	-7,150.57	1,087.80	687.64	400.17	2.718		
14,100.00	7,217.55	14,106.27	7,229.34	202.66	203.25	90.62	537.55	-7,250.56	1,089.15	683.34	405.81	2.684		
14,200.00	7,217.16	14,206.28	7,228.97	205.48	206.08	90.62	538.12	-7,350.55	1,090.50	679.04	411.46	2.650		
14,300.00	7,216.76	14,306.29	7,228.60	208.30	208.90	90.62	538.68	-7,450.54	1,091.85	674.74	417.11	2.618		
14,400.00	7,216.37	14,406.30	7,228.24	211.13	211.73	90.62	539.25	-7,550.53	1,093.20	670.44	422.76	2.586		
14,500.00	7,215.98	14,506.31	7,227.87	213.96	214.56	90.62	539.82	-7,650.52	1,094.55	666.13	428.42	2.555		
14,600.00	7,215.58	14,606.32	7,227.51	216.78	217.39	90.62	540.38	-7,750.51	1,095.90	661.82	434.07	2.525		
14,700.00	7,215.19	14,706.33	7,227.14	219.61	220.22	90.62	540.95	-7,850.50	1,097.25	657.52	439.73	2.495		
14,800.00	7,214.80	14,806.34	7,226.77	222.44	223.06	90.62	541.52	-7,950.48	1,098.60	653.21	445.39	2.467		
14,900.00	7,214.40	14,906.34	7,226.41	225.27	225.89	90.62	542.09	-8,050.47	1,099.95	648.89	451.05	2.439		
15,000.00	7,214.01	14,993.65	7,226.04	228.10	228.36	90.62	542.65	-8,150.46	1,101.30	644.94	456.36	2.413		
15,002.44	7,214.00	14,996.08	7,226.03	228.16	228.43	90.62	542.67	-8,152.90	1,101.33	644.84	456.49	2.413 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.52	-199.65	-1.67	199.65					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-199.65	-1.67	199.65	193.08	6.57	30.391		
200.00	200.00	199.00	200.00	3.34	3.34	-179.52	-199.65	-1.67	199.65	192.98	6.67	29.919	CC, ES	
300.00	300.00	292.53	293.52	3.44	3.43	-179.49	-201.14	-1.79	201.25	194.36	6.89	29.230		
400.00	400.00	385.81	386.68	3.60	3.57	-179.40	-205.65	-2.17	206.09	198.89	7.20	28.610		
500.00	500.00	478.69	479.25	3.81	3.75	-179.25	-213.15	-2.79	214.17	206.56	7.61	28.129		
600.00	599.98	571.17	571.13	4.03	3.96	-17.29	-223.58	-3.66	223.81	215.72	8.08	27.682		
700.00	699.84	663.37	662.36	4.29	4.21	-17.36	-236.91	-4.77	233.33	224.72	8.60	27.116		
800.00	799.54	755.21	752.74	4.57	4.49	-17.58	-253.10	-6.11	243.65	234.48	9.18	26.550		
900.00	899.23	846.37	841.90	4.87	4.80	-17.75	-272.01	-7.69	257.05	247.26	9.79	26.262		
1,000.00	998.92	936.66	929.57	5.20	5.14	-17.86	-293.52	-9.48	273.56	263.13	10.43	26.230		
1,100.00	1,098.61	1,029.42	1,018.95	5.54	5.52	-17.91	-318.23	-11.53	292.92	281.83	11.09	26.409		
1,200.00	1,198.30	1,127.41	1,113.22	5.90	5.94	-17.94	-344.88	-13.75	312.87	301.08	11.79	26.535		
1,300.00	1,298.00	1,225.40	1,207.49	6.27	6.38	-17.98	-371.52	-15.96	332.81	320.29	12.52	26.586		
1,400.00	1,397.69	1,323.39	1,301.76	6.66	6.84	-18.01	-398.17	-18.18	352.75	339.48	13.27	26.581		
1,500.00	1,497.38	1,421.38	1,396.04	7.05	7.30	-18.03	-424.82	-20.39	372.69	358.65	14.04	26.538		
1,600.00	1,597.07	1,519.37	1,490.31	7.44	7.78	-18.06	-451.46	-22.61	392.64	377.80	14.83	26.468		
1,700.00	1,696.76	1,617.36	1,584.58	7.85	8.27	-18.08	-478.11	-24.83	412.58	396.94	15.64	26.379		
1,800.00	1,796.45	1,715.36	1,678.85	8.25	8.76	-18.10	-504.76	-27.04	432.52	416.06	16.46	26.280		
1,900.00	1,896.15	1,813.35	1,773.13	8.67	9.26	-18.12	-531.40	-29.26	452.46	435.18	17.29	26.173		
2,000.00	1,995.84	1,911.34	1,867.40	9.08	9.76	-18.13	-558.05	-31.47	472.41	454.28	18.13	26.063		
2,100.00	2,095.53	2,009.33	1,961.67	9.50	10.26	-18.15	-584.70	-33.69	492.35	473.38	18.97	25.951		
2,200.00	2,195.22	2,107.32	2,055.95	9.92	10.77	-18.16	-611.34	-35.91	512.29	492.47	19.83	25.840		
2,300.00	2,294.91	2,205.31	2,150.22	10.35	11.29	-18.17	-637.99	-38.12	532.23	511.55	20.69	25.730		
2,400.00	2,394.60	2,303.30	2,244.49	10.77	11.80	-18.18	-664.64	-40.34	552.18	530.63	21.55	25.623		
2,500.00	2,494.30	2,401.29	2,338.76	11.20	12.32	-18.20	-691.28	-42.55	572.12	549.70	22.42	25.518		
2,600.00	2,593.99	2,500.72	2,433.04	11.63	12.85	-18.21	-717.93	-44.77	592.06	568.76	23.30	25.409		
2,700.00	2,693.68	2,602.72	2,527.31	12.07	13.39	-18.22	-744.58	-46.99	612.01	587.81	24.20	25.291		
2,800.00	2,793.37	2,704.73	2,621.58	12.50	13.93	-18.22	-771.22	-49.20	631.95	606.85	25.10	25.178		
2,900.00	2,893.06	2,806.74	2,715.85	12.93	14.48	-18.23	-797.87	-51.42	651.89	625.89	26.00	25.070		
3,000.00	2,992.76	2,891.25	2,810.13	13.37	14.93	-18.24	-824.52	-53.63	671.83	645.01	26.83	25.044		
3,100.00	3,092.45	2,989.24	2,904.40	13.81	15.46	-18.25	-851.16	-55.85	691.78	664.06	27.72	24.960		
3,200.00	3,192.14	3,087.23	2,998.67	14.25	15.99	-18.26	-877.81	-58.07	711.72	683.11	28.61	24.878		
3,300.00	3,291.83	3,185.22	3,092.94	14.68	16.52	-18.26	-904.46	-60.28	731.66	702.16	29.50	24.800		
3,400.00	3,391.52	3,283.21	3,187.22	15.12	17.05	-18.27	-931.10	-62.50	751.61	721.21	30.40	24.725		
3,500.00	3,491.21	3,381.21	3,281.49	15.56	17.58	-18.27	-957.75	-64.71	771.55	740.25	31.30	24.653		
3,600.00	3,590.91	3,479.20	3,375.76	16.00	18.11	-18.28	-984.40	-66.93	791.49	759.30	32.20	24.584		
3,700.00	3,690.60	3,577.19	3,470.03	16.45	18.64	-18.29	-1,011.04	-69.15	811.43	778.34	33.10	24.518		
3,800.00	3,790.29	3,675.18	3,564.31	16.89	19.17	-18.29	-1,037.69	-71.36	831.38	797.38	34.00	24.454		
3,900.00	3,889.98	3,773.17	3,658.58	17.33	19.70	-18.30	-1,064.34	-73.58	851.32	816.42	34.90	24.392		
4,000.00	3,989.67	3,871.16	3,752.85	17.77	20.24	-18.30	-1,090.98	-75.79	871.26	835.46	35.81	24.333		
4,100.00	4,089.36	3,969.15	3,847.12	18.22	20.77	-18.31	-1,117.63	-78.01	891.21	854.49	36.71	24.276		
4,200.00	4,189.06	4,067.14	3,941.40	18.66	21.30	-18.31	-1,144.27	-80.23	911.15	873.53	37.62	24.221		
4,300.00	4,288.75	4,165.13	4,035.67	19.10	21.84	-18.31	-1,170.92	-82.44	931.09	892.57	38.53	24.168		
4,400.00	4,388.44	4,263.13	4,129.94	19.55	22.37	-18.32	-1,197.57	-84.66	951.04	911.60	39.43	24.117		
4,500.00	4,488.13	4,361.12	4,224.21	19.99	22.91	-18.32	-1,224.21	-86.87	970.98	930.64	40.34	24.068		
4,600.00	4,587.82	4,459.11	4,318.49	20.44	23.44	-18.32	-1,250.86	-89.09	990.92	949.67	41.25	24.021		
4,700.00	4,687.51	4,557.10	4,412.76	20.89	23.98	-18.33	-1,277.51	-91.31	1,010.86	968.70	42.16	23.975		
4,800.00	4,787.21	4,655.09	4,507.03	21.33	24.52	-18.33	-1,304.15	-93.52	1,030.81	987.73	43.07	23.931		
4,900.00	4,886.90	4,753.08	4,601.31	21.78	25.05	-18.33	-1,330.80	-95.74	1,050.75	1,006.76	43.99	23.888		
5,000.00	4,986.59	4,851.07	4,695.58	22.22	25.59	-18.34	-1,357.45	-97.95	1,070.69	1,025.79	44.90	23.847		
5,100.00	5,086.28	4,949.06	4,789.85	22.67	26.13	-18.34	-1,384.09	-100.17	1,090.64	1,044.82	45.81	23.807		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,047.06	4,884.12	23.12	26.66	-18.34	-1,410.74	-102.39	1,110.58	1,063.85	46.73	23.768		
5,300.00	5,285.66	5,145.05	4,978.40	23.56	27.20	-18.35	-1,437.39	-104.60	1,130.52	1,082.88	47.64	23.731		
5,400.00	5,385.36	5,243.04	5,072.67	24.01	27.74	-18.35	-1,464.03	-106.82	1,150.47	1,101.91	48.55	23.695		
5,500.00	5,485.05	5,341.03	5,166.94	24.46	28.27	-18.35	-1,490.68	-109.03	1,170.41	1,120.94	49.47	23.660		
5,600.00	5,584.74	5,439.02	5,261.21	24.90	28.81	-18.35	-1,517.33	-111.25	1,190.35	1,139.97	50.38	23.626		
5,700.00	5,684.43	5,537.01	5,355.49	25.35	29.35	-18.36	-1,543.97	-113.47	1,210.29	1,158.99	51.30	23.593		
5,800.00	5,784.12	5,635.00	5,449.76	25.80	29.89	-18.36	-1,570.62	-115.68	1,230.24	1,178.02	52.22	23.561		
5,900.00	5,883.81	5,732.99	5,544.03	26.25	30.43	-18.36	-1,597.27	-117.90	1,250.18	1,197.05	53.13	23.530		
6,000.00	5,983.51	5,830.99	5,638.30	26.70	30.96	-18.36	-1,623.91	-120.11	1,270.12	1,216.07	54.05	23.499		
6,100.00	6,083.20	5,928.98	5,732.58	27.14	31.50	-18.37	-1,650.56	-122.33	1,290.07	1,235.10	54.97	23.470		
6,200.00	6,182.89	6,026.97	5,826.85	27.59	32.04	-18.37	-1,677.21	-124.55	1,310.01	1,254.13	55.88	23.442		
6,300.00	6,282.58	6,124.96	5,921.12	28.04	32.58	-18.37	-1,703.85	-126.76	1,329.95	1,273.15	56.80	23.414		
6,400.00	6,382.27	6,222.95	6,015.39	28.49	33.12	-18.37	-1,730.50	-128.98	1,349.90	1,292.18	57.72	23.387		
6,500.00	6,481.96	6,320.94	6,109.67	28.94	33.66	-18.37	-1,757.15	-131.19	1,369.84	1,311.20	58.64	23.361		
6,600.00	6,581.66	6,418.93	6,203.94	29.39	34.20	-18.38	-1,783.79	-133.41	1,389.78	1,330.23	59.56	23.335		
6,700.00	6,681.21	6,516.85	6,298.14	29.83	34.74	-55.91	-1,810.42	-135.62	1,409.70	1,349.23	60.48	23.310		
6,800.00	6,778.96	6,613.35	6,390.98	30.28	35.27	-72.23	-1,836.66	-137.81	1,429.41	1,368.02	61.39	23.283		
6,900.00	6,872.51	6,706.10	6,480.21	30.70	35.78	-76.99	-1,861.88	-139.90	1,448.96	1,386.67	62.30	23.260		
7,000.00	6,959.55	6,792.80	6,563.62	31.10	36.25	-79.26	-1,885.46	-141.86	1,468.80	1,405.61	63.19	23.245		
7,100.00	7,037.93	6,871.33	6,639.17	31.48	36.69	-80.57	-1,906.81	-143.64	1,489.67	1,425.58	64.09	23.244		
7,200.00	7,105.74	6,970.61	6,734.30	31.88	37.23	-81.99	-1,933.75	-151.61	1,511.88	1,446.57	65.31	23.150		
7,300.00	7,161.29	7,096.43	6,851.19	32.41	37.87	-83.64	-1,967.00	-183.37	1,534.23	1,467.41	66.81	22.963		
7,400.00	7,203.22	7,257.99	6,988.48	33.13	38.58	-85.69	-2,006.35	-257.97	1,555.37	1,486.93	68.44	22.727		
7,500.00	7,230.50	7,475.68	7,136.50	34.04	39.34	-88.14	-2,049.30	-410.20	1,572.83	1,502.76	70.07	22.448		
7,600.00	7,242.45	7,600.00	7,236.35	35.13	39.74	-89.92	-2,079.29	-647.30	1,582.48	1,511.43	71.05	22.274		
7,700.00	7,242.72	7,938.10	7,249.61	36.39	41.13	-90.25	-2,084.55	-847.74	1,583.13	1,507.82	75.31	21.021		
7,800.00	7,242.33	8,038.10	7,249.02	37.81	42.00	-90.24	-2,085.13	-947.73	1,582.93	1,504.88	78.05	20.281		
7,900.00	7,241.93	8,138.10	7,248.42	39.40	43.14	-90.24	-2,085.71	-1,047.73	1,582.73	1,501.63	81.10	19.517		
8,000.00	7,241.54	8,238.10	7,247.83	41.13	44.52	-90.23	-2,086.30	-1,147.73	1,582.53	1,498.11	84.42	18.746		
8,100.00	7,241.15	8,338.10	7,247.23	42.97	46.09	-90.22	-2,086.88	-1,247.72	1,582.33	1,494.34	87.99	17.982		
8,200.00	7,240.75	8,438.10	7,246.63	44.92	47.81	-90.21	-2,087.46	-1,347.72	1,582.13	1,490.35	91.78	17.238		
8,300.00	7,240.36	8,538.10	7,246.04	46.97	49.65	-90.21	-2,088.05	-1,447.71	1,581.93	1,486.17	95.76	16.519		
8,400.00	7,239.97	8,638.10	7,245.44	49.10	51.60	-90.20	-2,088.63	-1,547.71	1,581.73	1,481.82	99.91	15.832		
8,500.00	7,239.57	8,738.10	7,244.85	51.29	53.64	-90.19	-2,089.22	-1,647.71	1,581.53	1,477.33	104.21	15.177		
8,600.00	7,239.18	8,838.10	7,244.25	53.56	55.76	-90.18	-2,089.80	-1,747.70	1,581.34	1,472.70	108.64	14.556		
8,700.00	7,238.79	8,938.10	7,243.65	55.87	57.94	-90.18	-2,090.38	-1,847.70	1,581.14	1,467.96	113.18	13.970		
8,800.00	7,238.39	9,038.10	7,243.06	58.24	60.19	-90.17	-2,090.97	-1,947.70	1,580.94	1,463.11	117.83	13.418		
8,900.00	7,238.00	9,138.10	7,242.46	60.64	62.48	-90.16	-2,091.55	-2,047.69	1,580.74	1,458.18	122.56	12.897		
9,000.00	7,237.61	9,238.10	7,241.87	63.09	64.83	-90.15	-2,092.13	-2,147.69	1,580.54	1,453.16	127.38	12.408		
9,100.00	7,237.21	9,338.10	7,241.27	65.56	67.21	-90.15	-2,092.72	-2,247.68	1,580.34	1,448.07	132.27	11.948		
9,200.00	7,236.82	9,438.10	7,240.68	68.07	69.63	-90.14	-2,093.30	-2,347.68	1,580.14	1,442.92	137.22	11.515		
9,300.00	7,236.43	9,538.10	7,240.08	70.61	72.08	-90.13	-2,093.89	-2,447.68	1,579.94	1,437.71	142.23	11.108		
9,400.00	7,236.03	9,638.10	7,239.48	73.16	74.57	-90.13	-2,094.47	-2,547.67	1,579.74	1,432.45	147.29	10.725		
9,500.00	7,235.64	9,738.10	7,238.89	75.74	77.08	-90.12	-2,095.05	-2,647.67	1,579.54	1,427.14	152.40	10.364		
9,600.00	7,235.25	9,838.10	7,238.29	78.34	79.61	-90.11	-2,095.64	-2,747.66	1,579.35	1,421.80	157.55	10.024		
9,700.00	7,234.85	9,938.10	7,237.70	80.96	82.16	-90.10	-2,096.22	-2,847.66	1,579.15	1,416.41	162.74	9.704		
9,800.00	7,234.46	10,038.10	7,237.10	83.59	84.74	-90.10	-2,096.80	-2,947.66	1,578.95	1,410.99	167.96	9.401		
9,900.00	7,234.07	10,138.10	7,236.50	86.24	87.33	-90.09	-2,097.39	-3,047.65	1,578.75	1,405.54	173.21	9.114		
10,000.00	7,233.67	10,238.10	7,235.91	88.90	89.94	-90.08	-2,097.97	-3,147.65	1,578.55	1,400.05	178.50	8.844		
10,100.00	7,233.28	10,338.09	7,235.31	91.57	92.56	-90.07	-2,098.56	-3,247.65	1,578.35	1,394.55	183.80	8.587		
10,200.00	7,232.89	10,438.09	7,234.72	94.25	95.20	-90.07	-2,099.14	-3,347.64	1,578.15	1,389.02	189.14	8.344		
10,300.00	7,232.49	10,538.09	7,234.12	96.95	97.85	-90.06	-2,099.72	-3,447.64	1,577.95	1,383.46	194.49	8.113		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,638.09	7,233.53	99.65	100.51	-90.05	-2,100.31	-3,547.63	1,577.76	1,377.89	199.86	7.894		
10,500.00	7,231.71	10,738.09	7,232.93	102.36	103.19	-90.04	-2,100.89	-3,647.63	1,577.56	1,372.30	205.26	7.686		
10,600.00	7,231.32	10,838.09	7,232.33	105.08	105.87	-90.04	-2,101.47	-3,747.63	1,577.36	1,366.69	210.67	7.487		
10,700.00	7,230.92	10,938.09	7,231.74	107.80	108.56	-90.03	-2,102.06	-3,847.62	1,577.16	1,361.07	216.09	7.299		
10,800.00	7,230.53	11,038.09	7,231.14	110.53	111.26	-90.02	-2,102.64	-3,947.62	1,576.96	1,355.43	221.53	7.118		
10,900.00	7,230.14	11,138.09	7,230.55	113.27	113.97	-90.02	-2,103.23	-4,047.61	1,576.76	1,349.78	226.99	6.946		
11,000.00	7,229.74	11,238.09	7,229.95	116.02	116.68	-90.01	-2,103.81	-4,147.61	1,576.57	1,344.11	232.45	6.782		
11,100.00	7,229.35	11,338.09	7,229.35	118.77	119.40	-90.00	-2,104.39	-4,247.61	1,576.37	1,338.43	237.93	6.625		
11,200.00	7,228.96	11,438.09	7,228.76	121.52	122.13	-89.99	-2,104.98	-4,347.60	1,576.17	1,332.75	243.42	6.475		
11,300.00	7,228.56	11,538.09	7,228.16	124.28	124.87	-89.99	-2,105.56	-4,447.60	1,575.97	1,327.05	248.92	6.331		
11,400.00	7,228.17	11,638.09	7,227.57	127.04	127.60	-89.98	-2,106.15	-4,547.59	1,575.77	1,321.34	254.43	6.193		
11,500.00	7,227.78	11,738.09	7,226.97	129.81	130.35	-89.97	-2,106.73	-4,647.59	1,575.57	1,315.62	259.95	6.061		
11,600.00	7,227.38	11,838.09	7,226.37	132.58	133.10	-89.96	-2,107.31	-4,747.59	1,575.37	1,309.90	265.48	5.934		
11,700.00	7,226.99	11,938.09	7,225.78	135.36	135.85	-89.96	-2,107.90	-4,847.58	1,575.18	1,304.17	271.01	5.812		
11,800.00	7,226.60	12,038.09	7,225.18	138.14	138.61	-89.95	-2,108.48	-4,947.58	1,574.98	1,298.42	276.55	5.695		
11,900.00	7,226.20	12,138.09	7,224.59	140.92	141.37	-89.94	-2,109.06	-5,047.58	1,574.78	1,292.68	282.10	5.582		
12,000.00	7,225.81	12,238.09	7,223.99	143.70	144.14	-89.93	-2,109.65	-5,147.57	1,574.58	1,286.92	287.66	5.474		
12,100.00	7,225.42	12,338.09	7,223.40	146.49	146.91	-89.93	-2,110.23	-5,247.57	1,574.38	1,281.16	293.22	5.369		
12,200.00	7,225.02	12,438.09	7,222.80	149.28	149.68	-89.92	-2,110.82	-5,347.56	1,574.19	1,275.40	298.79	5.269		
12,300.00	7,224.63	12,538.09	7,222.20	152.08	152.46	-89.91	-2,111.40	-5,447.56	1,573.99	1,269.63	304.36	5.171		
12,400.00	7,224.24	12,638.09	7,221.61	154.87	155.24	-89.90	-2,111.98	-5,547.56	1,573.79	1,263.85	309.94	5.078		
12,500.00	7,223.84	12,738.09	7,221.01	157.67	158.02	-89.90	-2,112.57	-5,647.55	1,573.59	1,258.07	315.52	4.987		
12,600.00	7,223.45	12,838.08	7,220.42	160.47	160.80	-89.89	-2,113.15	-5,747.55	1,573.39	1,252.28	321.11	4.900		
12,700.00	7,223.06	12,938.08	7,219.82	163.27	163.59	-89.88	-2,113.73	-5,847.54	1,573.19	1,246.49	326.71	4.815		
12,800.00	7,222.66	13,038.08	7,219.22	166.07	166.38	-89.88	-2,114.32	-5,947.54	1,573.00	1,240.69	332.30	4.734		
12,900.00	7,222.27	13,138.08	7,218.63	168.88	169.17	-89.87	-2,114.90	-6,047.54	1,572.80	1,234.90	337.90	4.655		
13,000.00	7,221.88	13,238.08	7,218.03	171.69	171.96	-89.86	-2,115.49	-6,147.53	1,572.60	1,229.09	343.51	4.578		
13,100.00	7,221.48	13,338.08	7,217.44	174.49	174.76	-89.85	-2,116.07	-6,247.53	1,572.40	1,223.29	349.12	4.504		
13,200.00	7,221.09	13,438.08	7,216.84	177.30	177.56	-89.85	-2,116.65	-6,347.52	1,572.21	1,217.48	354.73	4.432		
13,300.00	7,220.70	13,538.08	7,216.25	180.12	180.36	-89.84	-2,117.24	-6,447.52	1,572.01	1,211.66	360.34	4.363		
13,400.00	7,220.30	13,638.08	7,215.65	182.93	183.16	-89.83	-2,117.82	-6,547.52	1,571.81	1,205.85	365.96	4.295		
13,500.00	7,219.91	13,738.08	7,215.05	185.74	185.96	-89.82	-2,118.40	-6,647.51	1,571.61	1,200.03	371.58	4.229		
13,600.00	7,219.52	13,838.08	7,214.46	188.56	188.77	-89.82	-2,118.99	-6,747.51	1,571.41	1,194.21	377.21	4.166		
13,700.00	7,219.12	13,938.08	7,213.86	191.38	191.58	-89.81	-2,119.57	-6,847.51	1,571.22	1,188.38	382.84	4.104		
13,800.00	7,218.73	14,038.08	7,213.27	194.20	194.39	-89.80	-2,120.16	-6,947.50	1,571.02	1,182.55	388.47	4.044		
13,900.00	7,218.34	14,138.08	7,212.67	197.02	197.20	-89.79	-2,120.74	-7,047.50	1,570.82	1,176.72	394.10	3.986		
14,000.00	7,217.94	14,238.08	7,212.07	199.84	200.01	-89.79	-2,121.32	-7,147.49	1,570.62	1,170.89	399.73	3.929		
14,100.00	7,217.55	14,338.08	7,211.48	202.66	202.82	-89.78	-2,121.91	-7,247.49	1,570.43	1,165.06	405.37	3.874		
14,200.00	7,217.16	14,438.08	7,210.88	205.48	205.63	-89.77	-2,122.49	-7,347.49	1,570.23	1,159.22	411.01	3.820		
14,300.00	7,216.76	14,538.08	7,210.29	208.30	208.45	-89.76	-2,123.07	-7,447.48	1,570.03	1,153.38	416.65	3.768		
14,400.00	7,216.37	14,638.08	7,209.69	211.13	211.26	-89.76	-2,123.66	-7,547.48	1,569.83	1,147.54	422.29	3.717		
14,500.00	7,215.98	14,738.08	7,209.09	213.96	214.08	-89.75	-2,124.24	-7,647.47	1,569.63	1,141.70	427.94	3.668		
14,600.00	7,215.58	14,838.08	7,208.50	216.78	216.90	-89.74	-2,124.83	-7,747.47	1,569.44	1,135.85	433.59	3.620		
14,700.00	7,215.19	14,938.08	7,207.90	219.61	219.72	-89.73	-2,125.41	-7,847.47	1,569.24	1,130.00	439.23	3.573		
14,800.00	7,214.80	15,038.08	7,207.31	222.44	222.54	-89.73	-2,125.99	-7,947.46	1,569.04	1,124.16	444.89	3.527		
14,900.00	7,214.40	15,138.08	7,206.71	225.27	225.36	-89.72	-2,126.58	-8,047.46	1,568.84	1,118.31	450.54	3.482		
15,000.00	7,214.01	15,238.08	7,206.12	228.10	228.18	-89.71	-2,127.16	-8,147.46	1,568.65	1,112.46	456.19	3.439		
15,002.44	7,214.00	15,240.51	7,206.10	228.16	228.25	-89.71	-2,127.18	-8,149.89	1,568.64	1,112.31	456.33	3.438 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-179.55	-319.86	-2.50	319.87					
100.00	100.00	102.00	100.00	3.28	3.29	-179.55	-319.86	-2.50	319.87	313.30	6.57	48.687		
200.00	200.00	198.00	200.00	3.34	3.34	-179.55	-319.86	-2.50	319.87	313.20	6.67	47.939 CC, ES		
300.00	300.00	288.14	290.12	3.44	3.42	-179.54	-321.21	-2.57	321.38	314.50	6.88	46.719		
400.00	400.00	377.90	379.78	3.60	3.55	-179.51	-325.38	-2.76	326.02	318.83	7.19	45.356		
500.00	500.00	467.31	468.92	3.81	3.72	-179.47	-332.31	-3.08	333.77	326.19	7.59	44.000		
600.00	599.98	556.37	557.45	4.03	3.92	-17.60	-341.97	-3.53	342.98	334.93	8.04	42.645		
700.00	699.84	645.20	645.41	4.29	4.16	-17.70	-354.35	-4.10	351.96	343.41	8.55	41.179		
800.00	799.54	733.70	732.62	4.57	4.42	-17.92	-369.38	-4.79	361.64	352.54	9.10	39.727		
900.00	899.23	821.61	818.75	4.87	4.71	-18.13	-386.96	-5.61	374.28	364.58	9.70	38.584		
1,000.00	998.92	908.76	903.56	5.20	5.03	-18.31	-407.00	-6.53	389.96	379.63	10.32	37.770		
1,100.00	1,098.61	995.00	986.84	5.54	5.38	-18.45	-429.35	-7.57	408.61	397.64	10.97	37.251		
1,200.00	1,198.30	1,080.20	1,068.41	5.90	5.74	-18.56	-453.88	-8.70	430.19	418.56	11.63	37.003		
1,300.00	1,298.00	1,164.21	1,148.11	6.27	6.13	-18.64	-480.43	-9.93	454.64	442.35	12.29	36.995		
1,400.00	1,397.69	1,246.93	1,225.78	6.66	6.53	-18.69	-508.84	-11.24	481.90	468.95	12.95	37.200		
1,500.00	1,497.38	1,328.25	1,301.31	7.05	6.94	-18.72	-538.94	-12.64	511.90	498.28	13.62	37.593		
1,600.00	1,597.07	1,408.08	1,374.59	7.44	7.37	-18.73	-570.56	-14.10	544.56	530.29	14.27	38.151		
1,700.00	1,696.76	1,486.33	1,445.54	7.85	7.82	-18.73	-603.53	-15.62	579.81	564.89	14.92	38.853		
1,800.00	1,796.45	1,562.95	1,514.11	8.25	8.27	-18.71	-637.67	-17.20	617.58	602.02	15.56	39.682		
1,900.00	1,896.15	1,637.87	1,580.25	8.67	8.74	-18.69	-672.81	-18.83	657.78	641.59	16.19	40.626		
2,000.00	1,995.84	1,711.05	1,643.96	9.08	9.20	-18.65	-708.80	-20.49	700.32	683.52	16.80	41.674		
2,100.00	2,095.53	1,782.47	1,705.21	9.50	9.68	-18.62	-745.47	-22.19	745.14	727.73	17.41	42.811		
2,200.00	2,195.22	1,858.17	1,769.19	9.92	10.20	-18.57	-785.88	-24.06	792.03	773.96	18.06	43.851		
2,300.00	2,294.91	1,946.23	1,843.38	10.35	10.82	-18.52	-833.27	-26.25	839.41	820.53	18.88	44.465		
2,400.00	2,394.60	2,034.28	1,917.56	10.77	11.45	-18.48	-880.67	-28.44	886.80	867.09	19.71	44.998		
2,500.00	2,494.30	2,122.34	1,991.74	11.20	12.09	-18.44	-928.06	-30.63	934.19	913.64	20.55	45.463		
2,600.00	2,593.99	2,210.40	2,065.93	11.63	12.73	-18.40	-975.45	-32.82	981.57	960.17	21.40	45.869		
2,700.00	2,693.68	2,301.54	2,140.11	12.07	13.41	-18.37	-1,022.85	-35.02	1,028.96	1,006.68	22.28	46.188		
2,800.00	2,793.37	2,386.51	2,214.30	12.50	14.04	-18.34	-1,070.24	-37.21	1,076.35	1,053.22	23.13	46.538		
2,900.00	2,893.06	2,474.57	2,288.48	12.93	14.70	-18.32	-1,117.64	-39.40	1,123.74	1,099.73	24.00	46.815		
3,000.00	2,992.76	2,562.63	2,362.66	13.37	15.36	-18.29	-1,165.03	-41.59	1,171.12	1,146.24	24.89	47.061		
3,100.00	3,092.45	2,650.69	2,436.85	13.81	16.03	-18.27	-1,212.42	-43.78	1,218.51	1,192.74	25.77	47.279		
3,200.00	3,192.14	2,738.75	2,511.03	14.25	16.70	-18.25	-1,259.82	-45.98	1,265.90	1,239.24	26.66	47.474		
3,300.00	3,291.83	2,826.80	2,585.21	14.68	17.37	-18.23	-1,307.21	-48.17	1,313.29	1,285.73	27.56	47.649		
3,400.00	3,391.52	2,914.86	2,659.40	15.12	18.05	-18.21	-1,354.61	-50.36	1,360.68	1,332.22	28.46	47.805		
3,500.00	3,491.21	3,002.92	2,733.58	15.56	18.73	-18.19	-1,402.00	-52.55	1,408.07	1,378.70	29.37	47.946		
3,600.00	3,590.91	3,090.98	2,807.76	16.00	19.40	-18.18	-1,449.39	-54.74	1,455.46	1,425.18	30.28	48.073		
3,700.00	3,690.60	3,179.03	2,881.95	16.45	20.08	-18.16	-1,496.79	-56.94	1,502.85	1,471.66	31.19	48.187		
3,800.00	3,790.29	3,267.09	2,956.13	16.89	20.77	-18.15	-1,544.18	-59.13	1,550.23	1,518.13	32.10	48.291		
3,900.00	3,889.98	3,355.15	3,030.31	17.33	21.45	-18.14	-1,591.58	-61.32	1,597.62	1,564.60	33.02	48.385		
4,000.00	3,989.67	3,443.21	3,104.50	17.77	22.13	-18.12	-1,638.97	-63.51	1,645.01	1,611.07	33.94	48.470		
4,100.00	4,089.36	3,531.27	3,178.68	18.22	22.82	-18.11	-1,686.36	-65.70	1,692.40	1,657.54	34.86	48.548		
4,200.00	4,189.06	3,619.32	3,252.86	18.66	23.51	-18.10	-1,733.76	-67.90	1,739.79	1,704.01	35.78	48.619		
4,300.00	4,288.75	3,707.38	3,327.05	19.10	24.19	-18.09	-1,781.15	-70.09	1,787.18	1,750.47	36.71	48.684		
4,400.00	4,388.44	3,804.56	3,401.23	19.55	24.95	-18.08	-1,828.55	-72.28	1,834.57	1,796.88	37.69	48.670		
4,500.00	4,488.13	3,883.50	3,475.41	19.99	25.57	-18.07	-1,875.94	-74.47	1,881.96	1,843.39	38.57	48.798		
4,600.00	4,587.82	3,971.55	3,549.60	20.44	26.26	-18.06	-1,923.33	-76.66	1,929.35	1,889.85	39.50	48.848		
4,700.00	4,687.51	4,059.61	3,623.78	20.89	26.95	-18.05	-1,970.73	-78.86	1,976.74	1,936.31	40.43	48.893		
4,800.00	4,787.21	4,147.67	3,697.96	21.33	27.64	-18.04	-2,018.12	-81.05	2,024.13	1,982.76	41.36	48.935		
4,900.00	4,886.90	4,235.73	3,772.15	21.78	28.33	-18.04	-2,065.51	-83.24	2,071.52	2,029.22	42.30	48.974		
5,000.00	4,986.59	4,323.79	3,846.33	22.22	29.02	-18.03	-2,112.91	-85.43	2,118.91	2,075.67	43.23	49.010		
5,100.00	5,086.28	4,411.84	3,920.51	22.67	29.72	-18.02	-2,160.30	-87.62	2,166.30	2,122.13	44.17	49.043		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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	5,185.97	4,500.10	3,994.70	23.12	30.41	-18.02	-2,207.70	-89.82	2,213.69	2,168.58	45.11	49.072		
5,300.00	5,285.66	4,587.96	4,068.88	23.56	31.10	-18.01	-2,255.09	-92.01	2,261.08	2,215.03	46.05	49.101		
5,400.00	5,385.36	4,676.02	4,143.06	24.01	31.80	-18.00	-2,302.48	-94.20	2,308.47	2,261.48	46.99	49.126		
5,500.00	5,485.05	4,764.07	4,217.25	24.46	32.49	-18.00	-2,349.88	-96.39	2,355.86	2,307.92	47.93	49.150		
5,600.00	5,584.74	4,852.13	4,291.43	24.90	33.18	-17.99	-2,397.27	-98.58	2,403.25	2,354.37	48.87	49.172		
5,700.00	5,684.43	4,940.19	4,365.61	25.35	33.88	-17.99	-2,444.67	-100.78	2,450.64	2,400.82	49.82	49.192		
5,800.00	5,784.12	5,028.25	4,439.80	25.80	34.57	-17.98	-2,492.06	-102.97	2,498.03	2,447.26	50.76	49.211		
5,900.00	5,883.81	5,116.31	4,513.98	26.25	35.27	-17.98	-2,539.45	-105.16	2,545.41	2,493.71	51.71	49.228		
6,000.00	5,983.51	5,204.36	4,588.16	26.70	35.96	-17.97	-2,586.85	-107.35	2,592.80	2,540.15	52.65	49.244		
6,100.00	6,083.20	5,307.58	4,662.35	27.14	36.78	-17.97	-2,634.24	-109.54	2,640.19	2,586.50	53.69	49.171		
6,200.00	6,182.89	5,380.48	4,736.53	27.59	37.36	-17.96	-2,681.64	-111.74	2,687.58	2,633.04	54.55	49.272		
6,300.00	6,282.58	5,468.54	4,810.72	28.04	38.05	-17.96	-2,729.03	-113.93	2,734.97	2,679.48	55.49	49.284		
6,400.00	6,382.27	5,556.59	4,884.90	28.49	38.75	-17.95	-2,776.42	-116.12	2,782.36	2,725.92	56.44	49.295		
6,500.00	6,481.96	5,644.65	4,959.08	28.94	39.45	-17.95	-2,823.82	-118.31	2,829.75	2,772.36	57.39	49.306		
6,600.00	6,581.66	5,732.71	5,033.27	29.39	40.14	-17.94	-2,871.21	-120.50	2,877.14	2,818.80	58.34	49.315		
6,700.00	6,681.21	5,820.86	5,107.46	29.83	40.83	-17.93	-3,340.41	-146.56	2,886.56	2,820.41	66.15	43.636		
6,800.00	6,778.96	5,909.01	5,181.65	30.28	41.52	-17.92	-3,340.52	-165.36	2,879.23	2,812.35	66.88	43.051		
6,900.00	6,872.51	5,997.16	5,255.84	30.70	42.21	-18.01	-3,340.73	-198.63	2,872.18	2,804.59	67.59	42.495		
7,000.00	6,959.55	6,085.31	5,330.03	31.10	42.90	-84.36	-3,341.01	-245.63	2,865.59	2,797.30	68.29	41.960		
7,100.00	7,037.93	6,173.46	5,404.22	31.48	50.14	-86.31	-3,341.38	-305.35	2,859.62	2,790.58	69.03	41.423		
7,200.00	7,105.74	6,261.61	5,478.41	31.88	50.30	-87.66	-3,341.81	-376.47	2,854.41	2,784.53	69.88	40.846		
7,300.00	7,161.29	6,349.76	5,552.60	32.41	50.43	-88.62	-3,342.31	-457.41	2,850.10	2,779.17	70.93	40.183		
7,400.00	7,203.22	6,437.91	5,626.79	33.13	50.52	-89.30	-3,342.86	-546.32	2,846.78	2,774.53	72.25	39.400		
7,500.00	7,230.50	6,525.97	5,700.95	34.04	50.59	-89.74	-3,343.44	-641.15	2,844.56	2,770.65	73.91	38.487		
7,600.00	7,242.45	6,614.21	5,775.17	35.13	50.63	-89.95	-3,344.04	-739.64	2,843.47	2,767.57	75.89	37.467		
7,700.00	7,242.72	6,702.36	5,849.36	36.39	50.67	-89.98	-3,344.65	-839.52	2,843.25	2,765.04	78.21	36.354		
7,800.00	7,242.33	6,790.51	5,923.55	37.81	50.72	-89.98	-3,345.26	-939.52	2,843.08	2,762.23	80.85	35.165		
7,900.00	7,241.93	6,878.66	6,000.96	39.40	50.80	-89.98	-3,345.88	-1,039.52	2,842.91	2,759.11	83.80	33.926		
8,000.00	7,241.54	6,966.81	6,076.55	41.13	50.93	-89.98	-3,346.49	-1,139.51	2,842.74	2,755.72	87.02	32.667		
8,100.00	7,241.15	7,054.96	6,152.15	42.97	51.17	-89.98	-3,347.10	-1,239.51	2,842.57	2,752.08	90.49	31.413		
8,200.00	7,240.75	7,143.11	6,228.74	44.92	51.63	-89.98	-3,347.71	-1,339.51	2,842.40	2,748.22	94.18	30.181		
8,300.00	7,240.36	7,231.26	6,304.33	46.97	52.55	-89.98	-3,348.33	-1,439.50	2,842.23	2,744.17	98.06	28.985		
8,400.00	7,239.97	7,319.41	6,380.93	49.10	53.98	-89.98	-3,348.94	-1,539.50	2,842.06	2,739.95	102.11	27.833		
8,500.00	7,239.57	7,407.56	6,457.52	51.29	55.73	-89.98	-3,349.55	-1,639.50	2,841.89	2,735.57	106.32	26.730		
8,600.00	7,239.18	7,495.71	6,533.12	53.56	57.67	-89.98	-3,350.16	-1,739.50	2,841.72	2,731.06	110.66	25.680		
8,700.00	7,238.79	7,583.86	6,609.71	55.87	59.73	-89.98	-3,350.78	-1,839.49	2,841.55	2,726.43	115.12	24.684		
8,800.00	7,238.39	7,672.01	6,685.31	58.24	61.87	-89.98	-3,351.39	-1,939.49	2,841.38	2,721.69	119.69	23.740		
8,900.00	7,238.00	7,760.16	6,761.90	60.64	64.08	-89.98	-3,352.00	-2,039.49	2,841.21	2,716.86	124.35	22.849		
9,000.00	7,237.61	7,848.31	6,838.09	63.09	66.35	-89.98	-3,352.61	-2,139.48	2,841.04	2,711.95	129.09	22.008		
9,100.00	7,237.21	7,936.46	6,914.09	65.56	68.66	-89.98	-3,353.23	-2,239.48	2,840.87	2,706.95	133.91	21.214		
9,200.00	7,236.82	8,024.61	6,990.68	68.07	71.02	-89.98	-3,353.84	-2,339.48	2,840.70	2,701.90	138.80	20.466		
9,300.00	7,236.43	8,112.76	7,066.28	70.61	73.42	-89.98	-3,354.45	-2,439.48	2,840.53	2,696.78	143.75	19.760		
9,400.00	7,236.03	8,200.91	7,142.87	73.16	75.85	-89.98	-3,355.06	-2,539.47	2,840.36	2,691.60	148.76	19.094		
9,500.00	7,235.64	8,289.06	7,224.47	75.74	78.31	-89.98	-3,355.68	-2,639.47	2,840.19	2,686.38	153.81	18.465		
9,600.00	7,235.25	8,377.21	7,304.06	78.34	80.80	-89.98	-3,356.29	-2,739.47	2,840.02	2,681.11	158.91	17.872		
9,700.00	7,234.85	8,465.36	7,383.65	80.96	83.31	-89.98	-3,356.90	-2,839.46	2,839.85	2,675.80	164.05	17.311		
9,800.00	7,234.46	8,553.51	7,463.25	83.59	85.84	-89.98	-3,357.51	-2,939.46	2,839.68	2,670.45	169.23	16.780		
9,900.00	7,234.07	8,641.66	7,543.84	86.24	88.40	-89.98	-3,358.13	-3,039.46	2,839.51	2,665.07	174.44	16.278		
10,000.00	7,233.67	8,729.81	7,632.44	88.90	90.97	-89.98	-3,358.74	-3,139.46	2,839.34	2,659.66	179.68	15.802		
10,100.00	7,233.28	8,817.96	7,722.03	91.57	93.56	-89.98	-3,359.35	-3,239.45	2,839.17	2,654.22	184.95	15.351		
10,200.00	7,232.89	8,906.11	7,813.63	94.25	96.17	-89.97	-3,359.96	-3,339.45	2,839.00	2,648.76	190.25	14.923		
10,300.00	7,232.49	9,000.00	7,910.00	96.95	98.79	-89.97	-3,360.58	-3,439.45	2,838.83	2,643.27	195.56	14.516		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	11,157.44	7,230.81	99.65	101.42	-89.97	-3,361.19	-3,539.44	2,838.66	2,637.76	200.90	14.129		
10,500.00	7,231.71	11,257.44	7,230.41	102.36	104.06	-89.97	-3,361.80	-3,639.44	2,838.49	2,632.23	206.27	13.761		
10,600.00	7,231.32	11,357.44	7,230.00	105.08	106.72	-89.97	-3,362.41	-3,739.44	2,838.32	2,626.68	211.64	13.411		
10,700.00	7,230.92	11,457.44	7,229.60	107.80	109.39	-89.97	-3,363.03	-3,839.44	2,838.15	2,621.11	217.04	13.077		
10,800.00	7,230.53	11,557.44	7,229.19	110.53	112.06	-89.97	-3,363.64	-3,939.43	2,837.98	2,615.53	222.45	12.758		
10,900.00	7,230.14	11,657.44	7,228.79	113.27	114.75	-89.97	-3,364.25	-4,039.43	2,837.81	2,609.93	227.88	12.453		
11,000.00	7,229.74	11,757.44	7,228.38	116.02	117.44	-89.97	-3,364.86	-4,139.43	2,837.64	2,604.32	233.32	12.162		
11,100.00	7,229.35	11,857.44	7,227.97	118.77	120.14	-89.97	-3,365.47	-4,239.42	2,837.47	2,598.70	238.78	11.883		
11,200.00	7,228.96	11,957.44	7,227.57	121.52	122.85	-89.97	-3,366.09	-4,339.42	2,837.30	2,593.06	244.24	11.617		
11,300.00	7,228.56	12,057.44	7,227.16	124.28	125.56	-89.97	-3,366.70	-4,439.42	2,837.13	2,587.42	249.72	11.361		
11,400.00	7,228.17	12,157.44	7,226.76	127.04	128.28	-89.97	-3,367.31	-4,539.42	2,836.97	2,581.76	255.21	11.116		
11,500.00	7,227.78	12,257.44	7,226.35	129.81	131.01	-89.97	-3,367.92	-4,639.41	2,836.80	2,576.09	260.70	10.881		
11,600.00	7,227.38	12,357.44	7,225.94	132.58	133.74	-89.97	-3,368.54	-4,739.41	2,836.63	2,570.41	266.21	10.656		
11,700.00	7,226.99	12,457.44	7,225.54	135.36	136.48	-89.97	-3,369.15	-4,839.41	2,836.46	2,564.73	271.73	10.439		
11,800.00	7,226.60	12,557.44	7,225.13	138.14	139.22	-89.97	-3,369.76	-4,939.40	2,836.29	2,559.04	277.25	10.230		
11,900.00	7,226.20	12,657.44	7,224.73	140.92	141.97	-89.97	-3,370.37	-5,039.40	2,836.12	2,553.33	282.78	10.029		
12,000.00	7,225.81	12,757.44	7,224.32	143.70	144.72	-89.97	-3,370.99	-5,139.40	2,835.95	2,547.63	288.32	9.836		
12,100.00	7,225.42	12,857.43	7,223.92	146.49	147.48	-89.97	-3,371.60	-5,239.40	2,835.78	2,541.91	293.87	9.650		
12,200.00	7,225.02	12,957.43	7,223.51	149.28	150.24	-89.97	-3,372.21	-5,339.39	2,835.61	2,536.19	299.42	9.470		
12,300.00	7,224.63	13,057.43	7,223.10	152.08	153.00	-89.97	-3,372.82	-5,439.39	2,835.44	2,530.46	304.98	9.297		
12,400.00	7,224.24	13,157.43	7,222.70	154.87	155.77	-89.97	-3,373.44	-5,539.39	2,835.27	2,524.73	310.54	9.130		
12,500.00	7,223.84	13,257.43	7,222.29	157.67	158.54	-89.97	-3,374.05	-5,639.38	2,835.10	2,518.99	316.11	8.969		
12,600.00	7,223.45	13,357.43	7,221.89	160.47	161.31	-89.97	-3,374.66	-5,739.38	2,834.93	2,513.24	321.68	8.813		
12,700.00	7,223.06	13,457.43	7,221.48	163.27	164.08	-89.97	-3,375.27	-5,839.38	2,834.76	2,507.50	327.26	8.662		
12,800.00	7,222.66	13,557.43	7,221.08	166.07	166.86	-89.97	-3,375.89	-5,939.38	2,834.59	2,501.74	332.85	8.516		
12,900.00	7,222.27	13,657.43	7,220.67	168.88	169.64	-89.97	-3,376.50	-6,039.37	2,834.42	2,495.98	338.43	8.375		
13,000.00	7,221.88	13,757.43	7,220.26	171.69	172.43	-89.97	-3,377.11	-6,139.37	2,834.25	2,490.22	344.03	8.238		
13,100.00	7,221.48	13,857.43	7,219.86	174.49	175.21	-89.97	-3,377.72	-6,239.37	2,834.08	2,484.46	349.62	8.106		
13,200.00	7,221.09	13,957.43	7,219.45	177.30	178.00	-89.97	-3,378.34	-6,339.36	2,833.91	2,478.69	355.22	7.978		
13,300.00	7,220.70	14,057.43	7,219.05	180.12	180.79	-89.97	-3,378.95	-6,439.36	2,833.74	2,472.91	360.83	7.853		
13,400.00	7,220.30	14,157.43	7,218.64	182.93	183.59	-89.97	-3,379.56	-6,539.36	2,833.57	2,467.13	366.44	7.733		
13,500.00	7,219.91	14,257.43	7,218.24	185.74	186.38	-89.97	-3,380.17	-6,639.36	2,833.40	2,461.35	372.05	7.616		
13,600.00	7,219.52	14,357.43	7,217.83	188.56	189.18	-89.97	-3,380.79	-6,739.35	2,833.23	2,455.57	377.66	7.502		
13,700.00	7,219.12	14,457.43	7,217.42	191.38	191.98	-89.97	-3,381.40	-6,839.35	2,833.06	2,449.78	383.28	7.392		
13,800.00	7,218.73	14,557.43	7,217.02	194.20	194.78	-89.97	-3,382.01	-6,939.35	2,832.89	2,443.99	388.90	7.284		
13,900.00	7,218.34	14,657.43	7,216.61	197.02	197.58	-89.97	-3,382.62	-7,039.35	2,832.72	2,438.20	394.52	7.180		
14,000.00	7,217.94	14,757.43	7,216.21	199.84	200.38	-89.97	-3,383.24	-7,139.34	2,832.55	2,432.40	400.15	7.079		
14,100.00	7,217.55	14,857.43	7,215.80	202.66	203.19	-89.97	-3,383.85	-7,239.34	2,832.38	2,426.61	405.78	6.980		
14,200.00	7,217.16	14,957.43	7,215.40	205.48	205.99	-89.96	-3,384.46	-7,339.34	2,832.21	2,420.81	411.41	6.884		
14,300.00	7,216.76	15,057.43	7,214.99	208.30	208.80	-89.96	-3,385.07	-7,439.33	2,832.04	2,415.00	417.04	6.791		
14,400.00	7,216.37	15,157.43	7,214.58	211.13	211.61	-89.96	-3,385.69	-7,539.33	2,831.87	2,409.20	422.67	6.700		
14,500.00	7,215.98	15,257.43	7,214.18	213.96	214.42	-89.96	-3,386.30	-7,639.33	2,831.70	2,403.39	428.31	6.611		
14,600.00	7,215.58	15,357.43	7,213.77	216.78	217.24	-89.96	-3,386.91	-7,739.33	2,831.53	2,397.58	433.95	6.525		
14,700.00	7,215.19	15,457.43	7,213.37	219.61	220.05	-89.96	-3,387.52	-7,839.32	2,831.36	2,391.77	439.59	6.441		
14,800.00	7,214.80	15,557.43	7,212.96	222.44	222.86	-89.96	-3,388.14	-7,939.32	2,831.19	2,385.96	445.23	6.359		
14,900.00	7,214.40	15,657.43	7,212.56	225.27	225.68	-89.96	-3,388.75	-8,039.32	2,831.02	2,380.14	450.88	6.279		
15,000.00	7,214.01	15,757.43	7,212.15	228.10	228.49	-89.96	-3,389.36	-8,139.31	2,830.85	2,374.33	456.53	6.201		
15,002.44	7,214.00	15,759.87	7,212.14	228.16	228.56	-89.96	-3,389.38	-8,141.75	2,830.85	2,374.19	456.66	6.199 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.53	60.11	0.56	60.11					
100.00	100.00	100.00	100.00	3.28	3.28	0.53	60.11	0.56	60.11	53.54	6.57	9.150		
200.00	200.00	200.00	200.00	3.34	3.34	0.53	60.11	0.56	60.11	53.43	6.67	9.006		
300.00	300.00	300.00	300.00	3.44	3.44	0.53	60.11	0.56	60.11	53.22	6.89	8.724		
400.00	400.00	400.00	400.00	3.60	3.60	0.53	60.11	0.56	60.11	52.90	7.21	8.341		
500.00	500.00	500.00	500.00	3.81	3.81	0.53	60.11	0.56	60.11	52.50	7.61	7.897 CC, ES		
600.00	599.98	599.98	599.98	4.03	4.05	162.85	60.11	0.56	61.77	53.69	8.08	7.644		
700.00	699.84	698.83	698.81	4.29	4.31	162.89	60.99	-0.86	67.64	59.04	8.60	7.864		
800.00	799.54	801.57	798.36	4.57	4.61	162.68	62.56	-3.37	76.56	67.38	9.18	8.336		
900.00	899.23	901.98	897.91	4.87	4.93	162.54	64.12	-5.87	85.58	75.78	9.80	8.731		
1,000.00	998.92	1,002.39	997.46	5.20	5.26	162.43	65.69	-8.38	94.60	84.14	10.46	9.045		
1,100.00	1,098.61	1,102.80	1,097.01	5.54	5.61	162.34	67.26	-10.88	103.62	92.47	11.15	9.296		
1,200.00	1,198.30	1,203.20	1,196.56	5.90	5.97	162.26	68.82	-13.39	112.64	100.78	11.86	9.496		
1,300.00	1,298.00	1,303.61	1,296.11	6.27	6.35	162.20	70.39	-15.90	121.66	109.07	12.60	9.657		
1,400.00	1,397.69	1,404.02	1,395.65	6.66	6.73	162.14	71.95	-18.40	130.69	117.33	13.35	9.788		
1,500.00	1,497.38	1,504.43	1,495.20	7.05	7.11	162.09	73.52	-20.91	139.71	125.59	14.12	9.893		
1,600.00	1,597.07	1,604.84	1,594.75	7.44	7.51	162.05	75.08	-23.41	148.73	133.83	14.90	9.979		
1,700.00	1,696.76	1,705.24	1,694.30	7.85	7.90	162.01	76.65	-25.92	157.75	142.05	15.70	10.050		
1,800.00	1,796.45	1,805.65	1,793.85	8.25	8.31	161.98	78.22	-28.43	166.77	150.27	16.50	10.108		
1,900.00	1,896.15	1,906.06	1,893.40	8.67	8.71	161.95	79.78	-30.93	175.80	158.49	17.31	10.156		
2,000.00	1,995.84	2,006.47	1,992.94	9.08	9.12	161.92	81.35	-33.44	184.82	166.69	18.13	10.196		
2,100.00	2,095.53	2,106.88	2,092.49	9.50	9.54	161.89	82.91	-35.94	193.84	174.89	18.95	10.229		
2,200.00	2,195.22	2,207.28	2,192.04	9.92	9.95	161.87	84.48	-38.45	202.86	183.08	19.78	10.256		
2,300.00	2,294.91	2,292.31	2,291.59	10.35	10.31	161.85	86.05	-40.96	211.88	191.33	20.55	10.311		
2,400.00	2,394.60	2,408.10	2,391.14	10.77	10.79	161.83	87.61	-43.46	220.91	199.45	21.45	10.298		
2,500.00	2,494.30	2,508.51	2,490.69	11.20	11.21	161.81	89.18	-45.97	229.93	207.64	22.29	10.314		
2,600.00	2,593.99	2,608.91	2,590.23	11.63	11.63	161.80	90.74	-48.47	238.95	215.81	23.14	10.328		
2,700.00	2,693.68	2,709.32	2,688.78	12.07	12.06	161.78	92.31	-50.98	247.97	223.99	23.98	10.339		
2,800.00	2,793.37	2,790.27	2,789.33	12.50	12.40	161.77	93.87	-53.48	256.99	232.24	24.75	10.383		
2,900.00	2,893.06	2,889.86	2,888.88	12.93	12.82	161.75	95.44	-55.99	266.02	240.42	25.60	10.391		
3,000.00	2,992.76	2,989.45	2,988.43	13.37	13.25	161.74	97.01	-58.50	275.04	248.59	26.45	10.398		
3,100.00	3,092.45	3,089.05	3,087.98	13.81	13.67	161.73	98.57	-61.00	284.06	256.76	27.30	10.404		
3,200.00	3,192.14	3,188.64	3,187.52	14.25	14.10	161.72	100.14	-63.51	293.08	264.93	28.16	10.409		
3,300.00	3,291.83	3,288.23	3,287.07	14.68	14.52	161.71	101.70	-66.01	302.11	273.09	29.01	10.412		
3,400.00	3,391.52	3,387.82	3,386.62	15.12	14.95	161.70	103.27	-68.52	311.13	281.26	29.87	10.415		
3,500.00	3,491.21	3,487.41	3,486.17	15.56	15.38	161.69	104.84	-71.03	320.15	289.42	30.73	10.418		
3,600.00	3,590.91	3,587.01	3,585.72	16.00	15.81	161.68	106.40	-73.53	329.17	297.58	31.59	10.420		
3,700.00	3,690.60	3,686.60	3,685.27	16.45	16.23	161.67	107.97	-76.04	338.19	305.74	32.45	10.421		
3,800.00	3,790.29	3,786.19	3,784.81	16.89	16.66	161.67	109.53	-78.54	347.22	313.90	33.31	10.422		
3,900.00	3,889.98	3,885.78	3,884.36	17.33	17.09	161.66	111.10	-81.05	356.24	322.06	34.18	10.423		
4,000.00	3,989.67	3,985.38	3,983.91	17.77	17.52	161.65	112.66	-83.55	365.26	330.22	35.04	10.424		
4,100.00	4,089.36	4,084.97	4,083.46	18.22	17.95	161.65	114.23	-86.06	374.28	338.38	35.91	10.424		
4,200.00	4,189.06	4,184.56	4,183.01	18.66	18.38	161.64	115.80	-88.57	383.31	346.53	36.77	10.424		
4,300.00	4,288.75	4,284.15	4,282.55	19.10	18.82	161.63	117.36	-91.07	392.33	354.69	37.64	10.423		
4,400.00	4,388.44	4,383.74	4,382.10	19.55	19.25	161.63	118.93	-93.58	401.35	362.84	38.51	10.423		
4,500.00	4,488.13	4,483.34	4,481.65	19.99	19.68	161.62	120.49	-96.08	410.37	371.00	39.37	10.422		
4,600.00	4,587.82	4,582.93	4,581.20	20.44	20.11	161.62	122.06	-98.59	419.40	379.15	40.24	10.422		
4,700.00	4,687.51	4,682.52	4,680.75	20.89	20.54	161.61	123.63	-101.10	428.42	387.31	41.11	10.421		
4,800.00	4,787.21	4,782.11	4,780.30	21.33	20.98	161.61	125.19	-103.60	437.44	395.46	41.98	10.420		
4,900.00	4,886.90	4,881.70	4,879.84	21.78	21.41	161.60	126.76	-106.11	446.46	403.61	42.85	10.419		
5,000.00	4,986.59	4,981.30	4,979.39	22.22	21.84	161.60	128.32	-108.61	455.49	411.76	43.72	10.418		
5,100.00	5,086.28	5,080.89	5,078.94	22.67	22.28	161.59	129.89	-111.12	464.51	419.92	44.59	10.417		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,180.48	5,178.49	23.12	22.71	161.59	131.45	-113.63	473.53	428.07	45.46	10.416		
5,300.00	5,285.66	5,280.07	5,278.04	23.56	23.14	161.59	133.02	-116.13	482.55	436.22	46.34	10.414		
5,400.00	5,385.36	5,379.67	5,377.59	24.01	23.58	161.58	134.59	-118.64	491.58	444.37	47.21	10.413		
5,500.00	5,485.05	5,479.26	5,477.13	24.46	24.01	161.58	136.15	-121.14	500.60	452.52	48.08	10.412		
5,600.00	5,584.74	5,578.85	5,576.68	24.90	24.44	161.57	137.72	-123.65	509.62	460.67	48.95	10.410		
5,700.00	5,684.43	5,678.44	5,676.23	25.35	24.88	161.57	139.28	-126.15	518.64	468.82	49.83	10.409		
5,800.00	5,784.12	5,778.03	5,775.78	25.80	25.31	161.57	140.85	-128.66	527.66	476.97	50.70	10.408		
5,900.00	5,883.81	5,877.63	5,875.33	26.25	25.75	161.56	142.42	-131.17	536.69	485.11	51.57	10.406		
6,000.00	5,983.51	5,977.22	5,974.88	26.70	26.18	161.56	143.98	-133.67	545.71	493.26	52.45	10.405		
6,100.00	6,083.20	6,076.81	6,074.42	27.14	26.62	161.56	145.55	-136.18	554.73	501.41	53.32	10.404		
6,200.00	6,182.89	6,176.40	6,173.97	27.59	27.05	161.56	147.11	-138.68	563.75	509.56	54.19	10.402		
6,300.00	6,282.58	6,275.99	6,273.52	28.04	27.49	161.55	148.68	-141.19	572.78	517.71	55.07	10.401		
6,400.00	6,382.27	6,375.59	6,373.07	28.49	27.92	161.55	150.25	-143.70	581.80	525.85	55.94	10.400		
6,500.00	6,481.96	6,475.18	6,472.62	28.94	28.36	161.55	151.81	-146.20	590.82	534.00	56.82	10.398		
6,600.00	6,581.66	6,574.77	6,572.17	29.39	28.79	161.55	153.38	-148.71	599.84	542.15	57.69	10.397		
6,700.00	6,681.21	6,674.56	6,671.83	29.83	29.23	122.68	154.93	-152.92	608.86	550.29	58.57	10.395		
6,800.00	6,778.96	6,774.80	6,770.39	30.28	29.68	104.59	156.37	-170.55	617.73	558.28	59.45	10.391		
6,900.00	6,872.51	6,875.36	6,865.26	30.70	30.13	98.64	157.63	-203.54	626.22	565.90	60.33	10.381		
7,000.00	6,959.55	6,976.24	6,954.03	31.10	30.59	95.59	158.67	-251.22	634.14	572.93	61.21	10.360		
7,100.00	7,037.93	7,077.44	7,034.41	31.48	31.08	93.69	159.49	-312.54	641.29	579.13	62.16	10.318		
7,200.00	7,105.74	7,178.95	7,104.27	31.88	31.65	92.40	160.04	-386.03	647.48	584.26	63.23	10.241		
7,300.00	7,161.29	7,280.72	7,161.70	32.41	32.32	91.49	160.31	-469.92	652.57	588.05	64.52	10.115		
7,400.00	7,203.22	7,382.71	7,205.13	33.13	33.14	90.86	160.30	-562.08	656.42	590.31	66.11	9.929		
7,500.00	7,230.50	7,484.83	7,233.32	34.04	34.13	90.46	160.00	-660.11	658.94	590.90	68.05	9.684		
7,600.00	7,242.45	7,587.00	7,245.51	35.13	35.28	90.28	159.42	-761.45	660.07	589.77	70.31	9.388		
7,700.00	7,242.72	7,687.58	7,245.77	36.39	36.56	90.26	158.66	-862.02	660.15	587.30	72.85	9.062		
7,800.00	7,242.33	7,787.58	7,245.46	37.81	38.00	90.27	157.89	-962.01	660.16	584.43	75.73	8.717		
7,900.00	7,241.93	7,887.58	7,245.14	39.40	39.60	90.28	157.13	-1,062.01	660.18	581.26	78.92	8.365		
8,000.00	7,241.54	7,987.58	7,244.83	41.13	41.33	90.29	156.36	-1,162.01	660.19	577.81	82.38	8.014		
8,100.00	7,241.15	8,087.58	7,244.52	42.97	43.18	90.29	155.59	-1,262.00	660.21	574.13	86.08	7.670		
8,200.00	7,240.75	8,187.58	7,244.21	44.92	45.13	90.30	154.82	-1,362.00	660.22	570.23	89.99	7.336		
8,300.00	7,240.36	8,287.58	7,243.90	46.97	47.18	90.31	154.06	-1,462.00	660.24	566.15	94.09	7.017		
8,400.00	7,239.97	8,387.58	7,243.58	49.10	49.31	90.31	153.29	-1,561.99	660.25	561.90	98.35	6.713		
8,500.00	7,239.57	8,487.58	7,243.27	51.29	51.51	90.32	152.52	-1,661.99	660.27	557.52	102.75	6.426		
8,600.00	7,239.18	8,587.58	7,242.96	53.56	53.77	90.33	151.75	-1,761.98	660.28	553.00	107.28	6.155		
8,700.00	7,238.79	8,687.58	7,242.65	55.87	56.09	90.33	150.99	-1,861.98	660.30	548.39	111.91	5.900		
8,800.00	7,238.39	8,787.58	7,242.34	58.24	58.45	90.34	150.22	-1,961.98	660.31	543.67	116.64	5.661		
8,900.00	7,238.00	8,887.58	7,242.02	60.64	60.86	90.35	149.45	-2,061.97	660.33	538.87	121.46	5.437		
9,000.00	7,237.61	8,987.58	7,241.71	63.09	63.30	90.36	148.68	-2,161.97	660.34	533.99	126.35	5.226		
9,100.00	7,237.21	9,087.58	7,241.40	65.56	65.78	90.36	147.92	-2,261.97	660.36	529.05	131.31	5.029		
9,200.00	7,236.82	9,187.58	7,241.09	68.07	68.29	90.37	147.15	-2,361.96	660.37	524.05	136.32	4.844		
9,300.00	7,236.43	9,287.58	7,240.78	70.61	70.82	90.38	146.38	-2,461.96	660.39	519.00	141.39	4.671		
9,400.00	7,236.03	9,387.58	7,240.46	73.16	73.38	90.38	145.61	-2,561.96	660.40	513.89	146.51	4.508		
9,500.00	7,235.64	9,487.58	7,240.15	75.74	75.96	90.39	144.85	-2,661.95	660.42	508.75	151.67	4.354		
9,600.00	7,235.25	9,587.58	7,239.84	78.34	78.56	90.40	144.08	-2,761.95	660.43	503.57	156.87	4.210		
9,700.00	7,234.85	9,687.58	7,239.53	80.96	81.17	90.41	143.31	-2,861.95	660.45	498.35	162.10	4.074		
9,800.00	7,234.46	9,787.58	7,239.22	83.59	83.80	90.41	142.54	-2,961.94	660.46	493.10	167.37	3.946		
9,900.00	7,234.07	9,887.58	7,238.91	86.24	86.45	90.42	141.77	-3,061.94	660.48	487.82	172.66	3.825		
10,000.00	7,233.67	9,987.58	7,238.59	88.90	89.11	90.43	141.01	-3,161.94	660.49	482.51	177.98	3.711		
10,100.00	7,233.28	10,087.58	7,238.28	91.57	91.78	90.43	140.24	-3,261.93	660.51	477.19	183.32	3.603		
10,200.00	7,232.89	10,187.58	7,237.97	94.25	94.46	90.44	139.47	-3,361.93	660.53	471.84	188.69	3.501		
10,300.00	7,232.49	10,287.58	7,237.66	96.95	97.15	90.45	138.70	-3,461.93	660.54	466.47	194.07	3.404		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	10,387.58	7,237.35	99.65	99.86	90.45	137.94	-3,561.92	660.56	461.08	199.48	3.311		
10,500.00	7,231.71	10,487.58	7,237.03	102.36	102.57	90.46	137.17	-3,661.92	660.57	455.67	204.90	3.224		
10,600.00	7,231.32	10,587.58	7,236.72	105.08	105.28	90.47	136.40	-3,761.92	660.59	450.25	210.34	3.141		
10,700.00	7,230.92	10,687.58	7,236.41	107.80	108.01	90.48	135.63	-3,861.91	660.60	444.81	215.79	3.061		
10,800.00	7,230.53	10,787.58	7,236.10	110.53	110.74	90.48	134.87	-3,961.91	660.62	439.37	221.25	2.986		
10,900.00	7,230.14	10,887.58	7,235.79	113.27	113.48	90.49	134.10	-4,061.90	660.63	433.90	226.73	2.914		
11,000.00	7,229.74	10,987.58	7,235.47	116.02	116.22	90.50	133.33	-4,161.90	660.65	428.43	232.22	2.845		
11,100.00	7,229.35	11,087.58	7,235.16	118.77	118.97	90.50	132.56	-4,261.90	660.66	422.95	237.72	2.779		
11,200.00	7,228.96	11,187.58	7,234.85	121.52	121.73	90.51	131.80	-4,361.89	660.68	417.45	243.22	2.716		
11,300.00	7,228.56	11,287.58	7,234.54	124.28	124.48	90.52	131.03	-4,461.89	660.69	411.95	248.74	2.656		
11,400.00	7,228.17	11,387.58	7,234.23	127.04	127.25	90.53	130.26	-4,561.89	660.71	406.44	254.27	2.598		
11,500.00	7,227.78	11,487.58	7,233.91	129.81	130.02	90.53	129.49	-4,661.88	660.72	400.92	259.80	2.543		
11,600.00	7,227.38	11,587.58	7,233.60	132.58	132.79	90.54	128.73	-4,761.88	660.74	395.39	265.35	2.490		
11,700.00	7,226.99	11,687.58	7,233.29	135.36	135.56	90.55	127.96	-4,861.88	660.76	389.86	270.90	2.439		
11,800.00	7,226.60	11,787.58	7,232.98	138.14	138.34	90.55	127.19	-4,961.87	660.77	384.32	276.45	2.390		
11,900.00	7,226.20	11,887.58	7,232.67	140.92	141.12	90.56	126.42	-5,061.87	660.79	378.77	282.02	2.343		
12,000.00	7,225.81	11,987.58	7,232.35	143.70	143.91	90.57	125.66	-5,161.87	660.80	373.22	287.59	2.298		
12,100.00	7,225.42	12,087.58	7,232.04	146.49	146.69	90.57	124.89	-5,261.86	660.82	367.66	293.16	2.254		
12,200.00	7,225.02	12,187.58	7,231.73	149.28	149.48	90.58	124.12	-5,361.86	660.83	362.09	298.74	2.212		
12,300.00	7,224.63	12,287.58	7,231.42	152.08	152.28	90.59	123.35	-5,461.86	660.85	356.52	304.33	2.172		
12,400.00	7,224.24	12,387.58	7,231.11	154.87	155.07	90.60	122.59	-5,561.85	660.86	350.95	309.92	2.132		
12,500.00	7,223.84	12,487.58	7,230.80	157.67	157.87	90.60	121.82	-5,661.85	660.88	345.37	315.51	2.095		
12,600.00	7,223.45	12,587.58	7,230.48	160.47	160.67	90.61	121.05	-5,761.85	660.89	339.79	321.11	2.058		
12,700.00	7,223.06	12,687.58	7,230.17	163.27	163.47	90.62	120.28	-5,861.84	660.91	334.20	326.71	2.023		
12,800.00	7,222.66	12,787.58	7,229.86	166.07	166.27	90.62	119.51	-5,961.84	660.93	328.61	332.32	1.989		
12,900.00	7,222.27	12,887.58	7,229.55	168.88	169.08	90.63	118.75	-6,061.84	660.94	323.01	337.93	1.956		
13,000.00	7,221.88	12,987.58	7,229.24	171.69	171.88	90.64	117.98	-6,161.83	660.96	317.42	343.54	1.924		
13,100.00	7,221.48	13,087.58	7,228.92	174.49	174.69	90.65	117.21	-6,261.83	660.97	311.81	349.16	1.893		
13,200.00	7,221.09	13,187.58	7,228.61	177.30	177.50	90.65	116.44	-6,361.83	660.99	306.21	354.78	1.863		
13,300.00	7,220.70	13,287.58	7,228.30	180.12	180.31	90.66	115.68	-6,461.82	661.00	300.60	360.40	1.834		
13,400.00	7,220.30	13,387.58	7,227.99	182.93	183.13	90.67	114.91	-6,561.82	661.02	294.99	366.03	1.806		
13,500.00	7,219.91	13,487.58	7,227.68	185.74	185.94	90.67	114.14	-6,661.81	661.03	289.38	371.65	1.779		
13,600.00	7,219.52	13,587.58	7,227.36	188.56	188.76	90.68	113.37	-6,761.81	661.05	283.76	377.29	1.752		
13,700.00	7,219.12	13,687.58	7,227.05	191.38	191.57	90.69	112.61	-6,861.81	661.07	278.15	382.92	1.726		
13,800.00	7,218.73	13,787.58	7,226.74	194.20	194.39	90.69	111.84	-6,961.80	661.08	272.53	388.55	1.701		
13,900.00	7,218.34	13,887.58	7,226.43	197.02	197.21	90.70	111.07	-7,061.80	661.10	266.90	394.19	1.677		
14,000.00	7,217.94	13,987.58	7,226.12	199.84	200.03	90.71	110.30	-7,161.80	661.11	261.28	399.83	1.653		
14,100.00	7,217.55	14,087.58	7,225.80	202.66	202.85	90.72	109.54	-7,261.79	661.13	255.65	405.48	1.631		
14,200.00	7,217.16	14,187.58	7,225.49	205.48	205.68	90.72	108.77	-7,361.79	661.14	250.02	411.12	1.608		
14,300.00	7,216.76	14,287.58	7,225.18	208.30	208.50	90.73	108.00	-7,461.79	661.16	244.39	416.77	1.586		
14,400.00	7,216.37	14,387.58	7,224.87	211.13	211.33	90.74	107.23	-7,561.78	661.17	238.76	422.41	1.565		
14,500.00	7,215.98	14,487.58	7,224.56	213.96	214.15	90.74	106.47	-7,661.78	661.19	233.13	428.06	1.545		
14,600.00	7,215.58	14,587.58	7,224.24	216.78	216.98	90.75	105.70	-7,761.78	661.21	227.49	433.72	1.525		
14,700.00	7,215.19	14,687.58	7,223.93	219.61	219.80	90.76	104.93	-7,861.77	661.22	221.85	439.37	1.505		
14,800.00	7,214.80	14,787.58	7,223.62	222.44	222.63	90.76	104.16	-7,961.77	661.24	216.21	445.02	1.486 Level 3		
14,900.00	7,214.40	14,887.58	7,223.31	225.27	225.46	90.77	103.40	-8,061.77	661.25	210.57	450.68	1.467 Level 3		
15,000.00	7,214.01	14,987.58	7,223.00	228.10	228.29	90.78	102.63	-8,161.76	661.27	204.93	456.34	1.449 Level 3		
15,002.44	7,214.00	14,990.01	7,222.99	228.16	228.36	90.78	102.61	-8,164.20	661.27	204.79	456.48	1.449 Level 3, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.50	-159.94	-1.39	159.94					
100.00	100.00	101.00	100.00	3.28	3.28	-179.50	-159.94	-1.39	159.94	153.37	6.57	24.346		
200.00	200.00	199.00	200.00	3.34	3.34	-179.50	-159.94	-1.39	159.94	153.27	6.67	23.968	CC, ES	
300.00	300.00	293.76	294.74	3.44	3.43	-179.45	-161.46	-1.55	161.56	154.67	6.89	23.459		
400.00	400.00	388.25	389.12	3.60	3.57	-179.29	-166.09	-2.05	166.46	159.25	7.21	23.093		
500.00	500.00	482.34	482.89	3.81	3.75	-179.06	-173.76	-2.86	174.63	167.00	7.62	22.908		
600.00	599.98	576.02	575.94	4.03	3.97	-17.01	-184.44	-4.00	184.39	176.29	8.10	22.767		
700.00	699.84	669.40	668.30	4.29	4.22	-17.03	-198.09	-5.46	194.07	185.44	8.62	22.503		
800.00	799.54	762.40	759.80	4.57	4.51	-17.20	-214.66	-7.23	204.59	195.38	9.20	22.234		
900.00	899.23	855.08	850.39	4.87	4.83	-17.30	-234.08	-9.30	218.20	208.38	9.82	22.226		
1,000.00	998.92	953.95	946.72	5.20	5.20	-17.36	-256.19	-11.65	233.22	222.76	10.46	22.305		
1,100.00	1,098.61	1,052.81	1,043.06	5.54	5.60	-17.41	-278.29	-14.01	248.24	237.11	11.14	22.293		
1,200.00	1,198.30	1,151.68	1,139.39	5.90	6.01	-17.46	-300.39	-16.37	263.27	251.42	11.85	22.225		
1,300.00	1,298.00	1,250.54	1,235.72	6.27	6.44	-17.50	-322.49	-18.72	278.29	265.71	12.58	22.117		
1,400.00	1,397.69	1,349.40	1,332.06	6.66	6.88	-17.54	-344.59	-21.08	293.32	279.98	13.34	21.985		
1,500.00	1,497.38	1,448.27	1,428.39	7.05	7.33	-17.57	-366.69	-23.44	308.34	294.22	14.12	21.839		
1,600.00	1,597.07	1,547.13	1,524.73	7.44	7.78	-17.60	-388.79	-25.80	323.37	308.46	14.91	21.685		
1,700.00	1,696.76	1,646.00	1,621.06	7.85	8.25	-17.63	-410.89	-28.15	338.39	322.67	15.72	21.529		
1,800.00	1,796.45	1,744.86	1,717.39	8.25	8.72	-17.66	-432.99	-30.51	353.42	336.88	16.54	21.373		
1,900.00	1,896.15	1,843.73	1,813.73	8.67	9.19	-17.68	-455.09	-32.87	368.44	351.08	17.36	21.219		
2,000.00	1,995.84	1,942.59	1,910.06	9.08	9.67	-17.70	-477.19	-35.22	383.47	365.27	18.20	21.071		
2,100.00	2,095.53	2,041.46	2,006.39	9.50	10.15	-17.72	-499.30	-37.58	398.49	379.45	19.04	20.927		
2,200.00	2,195.22	2,140.32	2,102.73	9.92	10.64	-17.74	-521.40	-39.94	413.52	393.63	19.89	20.788		
2,300.00	2,294.91	2,239.19	2,199.06	10.35	11.12	-17.76	-543.50	-42.29	428.54	407.80	20.75	20.656		
2,400.00	2,394.60	2,338.05	2,295.40	10.77	11.61	-17.78	-565.60	-44.65	443.57	421.96	21.61	20.529		
2,500.00	2,494.30	2,436.92	2,391.73	11.20	12.10	-17.79	-587.70	-47.01	458.60	436.12	22.47	20.408		
2,600.00	2,593.99	2,535.78	2,488.06	11.63	12.60	-17.81	-609.80	-49.36	473.62	450.28	23.34	20.292		
2,700.00	2,693.68	2,634.65	2,584.40	12.07	13.09	-17.82	-631.90	-51.72	488.65	464.43	24.21	20.182		
2,800.00	2,793.37	2,733.51	2,680.73	12.50	13.59	-17.83	-654.00	-54.08	503.67	478.59	25.09	20.078		
2,900.00	2,893.06	2,832.37	2,777.07	12.93	14.09	-17.84	-676.10	-56.43	518.70	492.73	25.96	19.978		
3,000.00	2,992.76	2,931.24	2,873.40	13.37	14.59	-17.86	-698.20	-58.79	533.72	506.88	26.84	19.882		
3,100.00	3,092.45	3,030.10	2,969.73	13.81	15.09	-17.87	-720.31	-61.15	548.75	521.02	27.73	19.791		
3,200.00	3,192.14	3,128.97	3,066.07	14.25	15.59	-17.88	-742.41	-63.50	563.77	535.16	28.61	19.705		
3,300.00	3,291.83	3,227.83	3,162.40	14.68	16.09	-17.89	-764.51	-65.86	578.80	549.30	29.50	19.622		
3,400.00	3,391.52	3,326.70	3,258.74	15.12	16.59	-17.90	-786.61	-68.22	593.83	563.44	30.39	19.543		
3,500.00	3,491.21	3,425.56	3,355.07	15.56	17.10	-17.90	-808.71	-70.58	608.85	577.58	31.28	19.468		
3,600.00	3,590.91	3,524.43	3,451.40	16.00	17.60	-17.91	-830.81	-72.93	623.88	591.71	32.17	19.395		
3,700.00	3,690.60	3,623.29	3,547.74	16.45	18.11	-17.92	-852.91	-75.29	638.90	605.84	33.06	19.326		
3,800.00	3,790.29	3,722.16	3,644.07	16.89	18.61	-17.93	-875.01	-77.65	653.93	619.98	33.95	19.260		
3,900.00	3,889.98	3,821.02	3,740.40	17.33	19.12	-17.93	-897.11	-80.00	668.95	634.11	34.85	19.197		
4,000.00	3,989.67	3,919.89	3,836.74	17.77	19.62	-17.94	-919.21	-82.36	683.98	648.24	35.74	19.136		
4,100.00	4,089.36	4,018.75	3,933.07	18.22	20.13	-17.95	-941.31	-84.72	699.01	662.37	36.64	19.078		
4,200.00	4,189.06	4,117.62	4,029.41	18.66	20.64	-17.95	-963.42	-87.07	714.03	676.49	37.54	19.022		
4,300.00	4,288.75	4,216.48	4,125.74	19.10	21.14	-17.96	-985.52	-89.43	729.06	690.62	38.44	18.968		
4,400.00	4,388.44	4,315.34	4,222.07	19.55	21.65	-17.97	-1,007.62	-91.79	744.08	704.75	39.34	18.917		
4,500.00	4,488.13	4,414.21	4,318.41	19.99	22.16	-17.97	-1,029.72	-94.14	759.11	718.87	40.24	18.867		
4,600.00	4,587.82	4,513.07	4,414.74	20.44	22.67	-17.98	-1,051.82	-96.50	774.13	733.00	41.14	18.819		
4,700.00	4,687.51	4,611.94	4,511.08	20.89	23.18	-17.98	-1,073.92	-98.86	789.16	747.12	42.04	18.773		
4,800.00	4,787.21	4,710.80	4,607.41	21.33	23.68	-17.99	-1,096.02	-101.21	804.19	761.25	42.94	18.729		
4,900.00	4,886.90	4,809.67	4,703.74	21.78	24.19	-17.99	-1,118.12	-103.57	819.21	775.37	43.84	18.686		
5,000.00	4,986.59	4,908.53	4,800.08	22.22	24.70	-18.00	-1,140.22	-105.93	834.24	789.49	44.74	18.644		
5,100.00	5,086.28	5,007.40	4,896.41	22.67	25.21	-18.00	-1,162.32	-108.28	849.26	803.62	45.65	18.605		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,106.26	4,992.74	23.12	25.72	-18.00	-1,184.43	-110.64	864.29	817.74	46.55	18.566		
5,300.00	5,285.66	5,205.13	5,089.08	23.56	26.23	-18.01	-1,206.53	-113.00	879.31	831.86	47.46	18.529		
5,400.00	5,385.36	5,303.99	5,185.41	24.01	26.74	-18.01	-1,228.63	-115.36	894.34	845.98	48.36	18.493		
5,500.00	5,485.05	5,402.86	5,281.75	24.46	27.25	-18.02	-1,250.73	-117.71	909.37	860.10	49.27	18.458		
5,600.00	5,584.74	5,501.72	5,378.08	24.90	27.76	-18.02	-1,272.83	-120.07	924.39	874.22	50.17	18.424		
5,700.00	5,684.43	5,600.58	5,474.41	25.35	28.27	-18.02	-1,294.93	-122.43	939.42	888.34	51.08	18.392		
5,800.00	5,784.12	5,700.55	5,570.75	25.80	28.79	-18.03	-1,317.03	-124.78	954.44	902.45	51.99	18.358		
5,900.00	5,883.81	5,801.69	5,667.08	26.25	29.31	-18.03	-1,339.13	-127.14	969.47	916.56	52.91	18.324		
6,000.00	5,983.51	5,902.82	5,763.42	26.70	29.83	-18.03	-1,361.23	-129.50	984.50	930.67	53.83	18.290		
6,100.00	6,083.20	6,003.96	5,859.75	27.14	30.36	-18.04	-1,383.33	-131.85	999.52	944.78	54.74	18.258		
6,200.00	6,182.89	6,105.09	5,956.08	27.59	30.88	-18.04	-1,405.43	-134.21	1,014.55	958.89	55.66	18.227		
6,300.00	6,282.58	6,206.23	6,052.42	28.04	31.40	-18.04	-1,427.54	-136.57	1,029.57	972.99	56.58	18.196		
6,400.00	6,382.27	6,307.36	6,148.75	28.49	31.92	-18.05	-1,449.64	-138.92	1,044.60	987.10	57.50	18.167		
6,500.00	6,481.96	6,408.50	6,245.09	28.94	32.45	-18.05	-1,471.74	-141.28	1,059.63	1,001.21	58.42	18.138		
6,600.00	6,581.66	6,509.63	6,341.42	29.39	32.97	-18.05	-1,493.84	-143.64	1,074.65	1,015.31	59.34	18.110		
6,700.00	6,681.21	6,589.16	6,437.68	29.83	33.38	-55.89	-1,515.92	-145.99	1,089.64	1,029.49	60.16	18.113		
6,800.00	6,778.96	6,688.00	6,533.71	30.28	33.89	-72.65	-1,537.98	-152.72	1,104.41	1,043.33	61.07	18.083		
6,900.00	6,872.51	6,788.93	6,629.58	30.70	34.39	-77.38	-1,560.11	-174.77	1,118.66	1,056.66	62.01	18.041		
7,000.00	6,969.55	6,892.20	6,722.87	31.10	34.85	-79.32	-1,581.74	-213.12	1,132.06	1,069.11	62.95	17.984		
7,100.00	7,037.93	6,997.94	6,810.83	31.48	35.28	-80.24	-1,602.27	-267.88	1,144.24	1,080.31	63.93	17.899		
7,200.00	7,105.74	7,106.17	6,890.42	31.88	35.68	-80.72	-1,620.97	-338.59	1,154.87	1,089.88	65.00	17.769		
7,300.00	7,161.29	7,216.75	6,958.48	32.41	36.04	-80.98	-1,637.13	-424.06	1,163.66	1,097.41	66.25	17.566		
7,400.00	7,203.22	7,329.44	7,011.94	33.13	36.40	-81.14	-1,650.03	-522.25	1,170.33	1,102.55	67.78	17.267		
7,500.00	7,230.50	7,443.80	7,048.09	34.04	36.84	-81.25	-1,659.02	-630.21	1,174.67	1,105.00	69.66	16.862		
7,600.00	7,242.45	7,559.27	7,064.91	35.13	37.52	-81.33	-1,663.62	-744.20	1,176.54	1,104.62	71.91	16.361		
7,700.00	7,242.72	7,664.67	7,065.85	36.39	38.45	-81.35	-1,664.52	-849.57	1,176.46	1,102.03	74.43	15.806		
7,800.00	7,242.33	7,764.67	7,065.62	37.81	39.61	-81.36	-1,665.12	-949.56	1,176.25	1,099.04	77.21	15.234		
7,900.00	7,241.93	7,864.67	7,065.39	39.40	40.99	-81.37	-1,665.72	-1,049.56	1,176.05	1,095.75	80.30	14.646		
8,000.00	7,241.54	7,964.67	7,065.16	41.13	42.56	-81.37	-1,666.32	-1,149.56	1,175.84	1,092.19	83.66	14.056		
8,100.00	7,241.15	8,064.67	7,064.93	42.97	44.27	-81.38	-1,666.92	-1,249.56	1,175.64	1,088.39	87.25	13.474		
8,200.00	7,240.75	8,164.67	7,064.70	44.92	46.11	-81.39	-1,667.52	-1,349.55	1,175.43	1,084.38	91.05	12.909		
8,300.00	7,240.36	8,264.67	7,064.47	46.97	48.06	-81.39	-1,668.12	-1,449.55	1,175.22	1,080.18	95.04	12.365		
8,400.00	7,239.97	8,364.67	7,064.24	49.10	50.10	-81.40	-1,668.71	-1,549.55	1,175.02	1,075.83	99.19	11.846		
8,500.00	7,239.57	8,464.67	7,064.01	51.29	52.21	-81.41	-1,669.31	-1,649.55	1,174.81	1,071.33	103.49	11.352		
8,600.00	7,239.18	8,564.67	7,063.78	53.56	54.40	-81.41	-1,669.91	-1,749.55	1,174.61	1,066.70	107.91	10.885		
8,700.00	7,238.79	8,664.67	7,063.55	55.87	56.65	-81.42	-1,670.51	-1,849.54	1,174.40	1,061.96	112.44	10.445		
8,800.00	7,238.39	8,764.67	7,063.32	58.24	58.96	-81.43	-1,671.11	-1,949.54	1,174.20	1,057.13	117.07	10.030		
8,900.00	7,238.00	8,864.67	7,063.09	60.64	61.31	-81.43	-1,671.71	-2,049.54	1,173.99	1,052.21	121.78	9.640		
9,000.00	7,237.61	8,964.67	7,062.86	63.09	63.70	-81.44	-1,672.31	-2,149.54	1,173.78	1,047.21	126.58	9.273		
9,100.00	7,237.21	9,064.67	7,062.63	65.56	66.13	-81.44	-1,672.91	-2,249.53	1,173.58	1,042.14	131.44	8.928		
9,200.00	7,236.82	9,164.67	7,062.40	68.07	68.60	-81.45	-1,673.51	-2,349.53	1,173.37	1,037.01	136.37	8.605		
9,300.00	7,236.43	9,264.67	7,062.17	70.61	71.09	-81.46	-1,674.10	-2,449.53	1,173.17	1,031.82	141.35	8.300		
9,400.00	7,236.03	9,364.67	7,061.94	73.16	73.61	-81.46	-1,674.70	-2,549.53	1,172.96	1,026.59	146.38	8.013		
9,500.00	7,235.64	9,464.67	7,061.70	75.74	76.16	-81.47	-1,675.30	-2,649.52	1,172.76	1,021.31	151.45	7.744		
9,600.00	7,235.25	9,564.66	7,061.47	78.34	78.73	-81.48	-1,675.90	-2,749.52	1,172.55	1,015.99	156.56	7.489		
9,700.00	7,234.85	9,664.66	7,061.24	80.96	81.31	-81.48	-1,676.50	-2,849.52	1,172.35	1,010.63	161.71	7.249		
9,800.00	7,234.46	9,764.66	7,061.01	83.59	83.92	-81.49	-1,677.10	-2,949.52	1,172.14	1,005.24	166.90	7.023		
9,900.00	7,234.07	9,864.66	7,060.78	86.24	86.54	-81.50	-1,677.70	-3,049.51	1,171.93	999.82	172.11	6.809		
10,000.00	7,233.67	9,964.66	7,060.55	88.90	89.17	-81.50	-1,678.30	-3,149.51	1,171.73	994.37	177.35	6.607		
10,100.00	7,233.28	10,064.66	7,060.32	91.57	91.82	-81.51	-1,678.89	-3,249.51	1,171.52	988.90	182.62	6.415		
10,200.00	7,232.89	10,164.66	7,060.09	94.25	94.48	-81.52	-1,679.49	-3,349.51	1,171.32	983.41	187.91	6.233		
10,300.00	7,232.49	10,264.66	7,059.86	96.95	97.16	-81.52	-1,680.09	-3,449.51	1,171.11	977.89	193.22	6.061		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,364.66	7,059.63	99.65	99.84	-81.53	-1,680.69	-3,549.50	1,170.91	972.35	198.55	5.897		
10,500.00	7,231.71	10,464.66	7,059.40	102.36	102.53	-81.54	-1,681.29	-3,649.50	1,170.70	966.80	203.90	5.742		
10,600.00	7,231.32	10,564.66	7,059.17	105.08	105.23	-81.54	-1,681.89	-3,749.50	1,170.50	961.23	209.27	5.593		
10,700.00	7,230.92	10,664.66	7,058.94	107.80	107.94	-81.55	-1,682.49	-3,849.50	1,170.29	955.64	214.65	5.452		
10,800.00	7,230.53	10,764.66	7,058.71	110.53	110.66	-81.56	-1,683.09	-3,949.49	1,170.09	950.04	220.04	5.318		
10,900.00	7,230.14	10,864.66	7,058.48	113.27	113.38	-81.56	-1,683.69	-4,049.49	1,169.88	944.43	225.45	5.189		
11,000.00	7,229.74	10,964.66	7,058.25	116.02	116.11	-81.57	-1,684.28	-4,149.49	1,169.68	938.80	230.87	5.066		
11,100.00	7,229.35	11,064.66	7,058.02	118.77	118.85	-81.58	-1,684.88	-4,249.49	1,169.47	933.17	236.30	4.949		
11,200.00	7,228.96	11,164.66	7,057.79	121.52	121.59	-81.58	-1,685.48	-4,349.48	1,169.27	927.52	241.75	4.837		
11,300.00	7,228.56	11,264.66	7,057.56	124.28	124.34	-81.59	-1,686.08	-4,449.48	1,169.06	921.86	247.20	4.729		
11,400.00	7,228.17	11,364.66	7,057.33	127.04	127.09	-81.60	-1,686.68	-4,549.48	1,168.85	916.19	252.66	4.626		
11,500.00	7,227.78	11,464.66	7,057.10	129.81	129.85	-81.60	-1,687.28	-4,649.48	1,168.65	910.52	258.13	4.527		
11,600.00	7,227.38	11,564.66	7,056.87	132.58	132.61	-81.61	-1,687.88	-4,749.47	1,168.44	904.83	263.61	4.432		
11,700.00	7,226.99	11,664.66	7,056.64	135.36	135.37	-81.62	-1,688.48	-4,849.47	1,168.24	899.14	269.10	4.341		
11,800.00	7,226.60	11,764.66	7,056.41	138.14	138.14	-81.62	-1,689.07	-4,949.47	1,168.03	893.44	274.59	4.254		
11,900.00	7,226.20	11,864.66	7,056.18	140.92	140.92	-81.63	-1,689.67	-5,049.47	1,167.83	887.73	280.09	4.169		
12,000.00	7,225.81	11,964.66	7,055.95	143.70	143.69	-81.64	-1,690.27	-5,149.47	1,167.62	882.02	285.60	4.088		
12,100.00	7,225.42	12,064.66	7,055.71	146.49	146.47	-81.64	-1,690.87	-5,249.46	1,167.42	876.30	291.12	4.010		
12,200.00	7,225.02	12,164.66	7,055.48	149.28	149.25	-81.65	-1,691.47	-5,349.46	1,167.21	870.58	296.64	3.935		
12,300.00	7,224.63	12,264.66	7,055.25	152.08	152.04	-81.66	-1,692.07	-5,449.46	1,167.01	864.85	302.16	3.862		
12,400.00	7,224.24	12,364.66	7,055.02	154.87	154.83	-81.66	-1,692.67	-5,549.46	1,166.80	859.11	307.69	3.792		
12,500.00	7,223.84	12,464.66	7,054.79	157.67	157.62	-81.67	-1,693.27	-5,649.45	1,166.60	853.37	313.23	3.724		
12,600.00	7,223.45	12,564.66	7,054.56	160.47	160.41	-81.68	-1,693.87	-5,749.45	1,166.39	847.62	318.77	3.659		
12,700.00	7,223.06	12,664.66	7,054.33	163.27	163.21	-81.68	-1,694.46	-5,849.45	1,166.19	841.87	324.31	3.596		
12,800.00	7,222.66	12,764.66	7,054.10	166.07	166.00	-81.69	-1,695.06	-5,949.45	1,165.98	836.12	329.86	3.535		
12,900.00	7,222.27	12,864.66	7,053.87	168.88	168.80	-81.69	-1,695.66	-6,049.44	1,165.78	830.36	335.42	3.476		
13,000.00	7,221.88	12,964.65	7,053.64	171.69	171.60	-81.70	-1,696.26	-6,149.44	1,165.57	824.60	340.97	3.418		
13,100.00	7,221.48	13,064.65	7,053.41	174.49	174.41	-81.71	-1,696.86	-6,249.44	1,165.37	818.83	346.53	3.363		
13,200.00	7,221.09	13,164.65	7,053.18	177.30	177.21	-81.71	-1,697.46	-6,349.44	1,165.16	813.07	352.10	3.309		
13,300.00	7,220.70	13,264.65	7,052.95	180.12	180.02	-81.72	-1,698.06	-6,449.43	1,164.96	807.29	357.67	3.257		
13,400.00	7,220.30	13,364.65	7,052.72	182.93	182.83	-81.73	-1,698.66	-6,549.43	1,164.75	801.52	363.24	3.207		
13,500.00	7,219.91	13,464.65	7,052.49	185.74	185.64	-81.73	-1,699.26	-6,649.43	1,164.55	795.74	368.81	3.158		
13,600.00	7,219.52	13,564.65	7,052.26	188.56	188.45	-81.74	-1,699.85	-6,749.43	1,164.34	789.96	374.39	3.110		
13,700.00	7,219.12	13,664.65	7,052.03	191.38	191.26	-81.75	-1,700.45	-6,849.43	1,164.14	784.17	379.97	3.064		
13,800.00	7,218.73	13,764.65	7,051.80	194.20	194.07	-81.75	-1,701.05	-6,949.42	1,163.93	778.38	385.55	3.019		
13,900.00	7,218.34	13,864.65	7,051.57	197.02	196.89	-81.76	-1,701.65	-7,049.42	1,163.73	772.59	391.13	2.975		
14,000.00	7,217.94	13,964.65	7,051.34	199.84	199.71	-81.77	-1,702.25	-7,149.42	1,163.52	766.80	396.72	2.933		
14,100.00	7,217.55	14,064.65	7,051.11	202.66	202.52	-81.77	-1,702.85	-7,249.42	1,163.32	761.01	402.31	2.892		
14,200.00	7,217.16	14,164.65	7,050.88	205.48	205.34	-81.78	-1,703.45	-7,349.41	1,163.11	755.21	407.90	2.851		
14,300.00	7,216.76	14,264.65	7,050.65	208.30	208.16	-81.79	-1,704.05	-7,449.41	1,162.91	749.41	413.50	2.812		
14,400.00	7,216.37	14,364.65	7,050.42	211.13	210.98	-81.79	-1,704.64	-7,549.41	1,162.70	743.61	419.09	2.774		
14,500.00	7,215.98	14,464.65	7,050.19	213.96	213.81	-81.80	-1,705.24	-7,649.41	1,162.50	737.81	424.69	2.737		
14,600.00	7,215.58	14,564.65	7,049.96	216.78	216.63	-81.81	-1,705.84	-7,749.40	1,162.30	732.00	430.29	2.701		
14,700.00	7,215.19	14,664.65	7,049.72	219.61	219.45	-81.81	-1,706.44	-7,849.40	1,162.09	726.19	435.90	2.666		
14,800.00	7,214.80	14,764.65	7,049.49	222.44	222.28	-81.82	-1,707.04	-7,949.40	1,161.89	720.39	441.50	2.632		
14,900.00	7,214.40	14,864.65	7,049.26	225.27	225.10	-81.83	-1,707.64	-8,049.40	1,161.68	714.57	447.11	2.598		
15,000.00	7,214.01	14,964.65	7,049.03	228.10	227.93	-81.83	-1,708.24	-8,149.39	1,161.48	708.76	452.71	2.566		
15,002.44	7,214.00	14,967.09	7,049.03	228.16	228.00	-81.83	-1,708.25	-8,151.83	1,161.47	708.62	452.85	2.565 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-179.51	-259.76	-2.23	259.77					
100.00	100.00	102.00	100.00	3.28	3.29	-179.51	-259.76	-2.23	259.77	253.20	6.57	39.539		
200.00	200.00	198.00	200.00	3.34	3.34	-179.51	-259.76	-2.23	259.77	253.09	6.67	38.931	CC, ES	
300.00	300.00	289.83	291.82	3.44	3.43	-179.49	-261.16	-2.31	261.30	254.42	6.88	37.973		
400.00	400.00	381.32	383.20	3.60	3.56	-179.44	-265.48	-2.59	266.03	258.83	7.19	36.976		
500.00	500.00	472.44	474.02	3.81	3.73	-179.36	-272.68	-3.05	273.93	266.33	7.60	36.051		
600.00	599.98	563.18	564.21	4.03	3.94	-17.46	-282.70	-3.68	283.33	275.27	8.06	35.144		
700.00	699.84	653.66	653.77	4.29	4.18	-17.55	-295.53	-4.50	292.56	283.99	8.57	34.122		
800.00	799.54	743.81	742.55	4.57	4.45	-17.78	-311.11	-5.49	302.55	293.41	9.14	33.110		
900.00	899.23	833.32	830.18	4.87	4.76	-17.98	-329.34	-6.65	315.55	305.81	9.74	32.390		
1,000.00	998.92	922.02	916.40	5.20	5.08	-18.13	-350.08	-7.97	331.62	321.25	10.37	31.967		
1,100.00	1,098.61	1,009.76	1,001.02	5.54	5.44	-18.23	-373.21	-9.44	350.72	339.70	11.03	31.809		
1,200.00	1,198.30	1,096.38	1,083.83	5.90	5.81	-18.30	-398.57	-11.05	372.80	361.11	11.69	31.893		
1,300.00	1,298.00	1,181.76	1,164.66	6.27	6.21	-18.33	-426.01	-12.79	397.78	385.42	12.36	32.186		
1,400.00	1,397.69	1,270.88	1,248.21	6.66	6.64	-18.33	-456.94	-14.76	425.38	412.32	13.06	32.582		
1,500.00	1,497.38	1,366.85	1,338.03	7.05	7.13	-18.33	-490.68	-16.90	453.45	439.65	13.81	32.838		
1,600.00	1,597.07	1,462.83	1,427.86	7.44	7.64	-18.34	-524.42	-19.05	481.53	466.95	14.58	33.017		
1,700.00	1,696.76	1,558.81	1,517.68	7.85	8.15	-18.34	-558.16	-21.19	509.61	494.23	15.38	33.138		
1,800.00	1,796.45	1,654.78	1,607.51	8.25	8.68	-18.34	-591.90	-23.34	537.69	521.50	16.19	33.214		
1,900.00	1,896.15	1,750.76	1,697.33	8.67	9.21	-18.34	-625.64	-25.48	565.77	548.76	17.01	33.256		
2,000.00	1,995.84	1,846.74	1,787.16	9.08	9.75	-18.34	-659.38	-27.62	593.85	576.00	17.85	33.272		
2,100.00	2,095.53	1,942.72	1,876.98	9.50	10.30	-18.34	-693.13	-29.77	621.93	603.23	18.69	33.269		
2,200.00	2,195.22	2,038.69	1,966.81	9.92	10.85	-18.34	-726.87	-31.91	650.01	630.46	19.55	33.251		
2,300.00	2,294.91	2,134.67	2,056.63	10.35	11.40	-18.34	-760.61	-34.06	678.08	657.67	20.41	33.222		
2,400.00	2,394.60	2,230.65	2,146.46	10.77	11.96	-18.34	-794.35	-36.20	706.16	684.88	21.28	33.185		
2,500.00	2,494.30	2,326.62	2,236.28	11.20	12.52	-18.34	-828.09	-38.35	734.24	712.09	22.15	33.142		
2,600.00	2,593.99	2,422.60	2,326.11	11.63	13.09	-18.34	-861.83	-40.49	762.32	739.29	23.03	33.094		
2,700.00	2,693.68	2,518.58	2,415.93	12.07	13.65	-18.34	-895.58	-42.64	790.40	766.48	23.92	33.044		
2,800.00	2,793.37	2,614.55	2,505.76	12.50	14.22	-18.34	-929.32	-44.78	818.48	793.67	24.81	32.991		
2,900.00	2,893.06	2,710.53	2,595.58	12.93	14.79	-18.34	-963.06	-46.93	846.56	820.85	25.70	32.938		
3,000.00	2,992.76	2,806.51	2,685.41	13.37	15.36	-18.34	-996.80	-49.07	874.64	848.04	26.60	32.883		
3,100.00	3,092.45	2,902.49	2,775.23	13.81	15.94	-18.34	-1,030.54	-51.21	902.71	875.22	27.50	32.829		
3,200.00	3,192.14	2,998.46	2,865.06	14.25	16.51	-18.34	-1,064.28	-53.36	930.79	902.39	28.40	32.775		
3,300.00	3,291.83	3,105.56	2,954.88	14.68	17.15	-18.34	-1,098.02	-55.50	958.87	929.51	29.36	32.657		
3,400.00	3,391.52	3,209.58	3,044.70	15.12	17.78	-18.34	-1,131.77	-57.65	986.95	956.64	30.31	32.562		
3,500.00	3,491.21	3,286.39	3,134.53	15.56	18.24	-18.34	-1,165.51	-59.79	1,015.03	983.91	31.12	32.617		
3,600.00	3,590.91	3,382.37	3,224.35	16.00	18.82	-18.34	-1,199.25	-61.94	1,043.11	1,011.08	32.03	32.566		
3,700.00	3,690.60	3,478.35	3,314.18	16.45	19.40	-18.34	-1,232.99	-64.08	1,071.19	1,038.24	32.94	32.516		
3,800.00	3,790.29	3,574.32	3,404.00	16.89	19.98	-18.34	-1,266.73	-66.23	1,099.27	1,065.41	33.86	32.467		
3,900.00	3,889.98	3,670.30	3,493.83	17.33	20.56	-18.34	-1,300.47	-68.37	1,127.34	1,092.57	34.77	32.420		
4,000.00	3,989.67	3,766.28	3,583.65	17.77	21.14	-18.34	-1,334.22	-70.52	1,155.42	1,119.73	35.69	32.374		
4,100.00	4,089.36	3,862.26	3,673.48	18.22	21.72	-18.34	-1,367.96	-72.66	1,183.50	1,146.89	36.61	32.328		
4,200.00	4,189.06	3,958.23	3,763.30	18.66	22.30	-18.34	-1,401.70	-74.80	1,211.58	1,174.05	37.53	32.284		
4,300.00	4,288.75	4,054.21	3,853.13	19.10	22.89	-18.34	-1,435.44	-76.95	1,239.66	1,201.21	38.45	32.242		
4,400.00	4,388.44	4,150.19	3,942.95	19.55	23.47	-18.34	-1,469.18	-79.09	1,267.74	1,228.37	39.37	32.200		
4,500.00	4,488.13	4,246.16	4,032.78	19.99	24.05	-18.34	-1,502.92	-81.24	1,295.82	1,255.52	40.29	32.160		
4,600.00	4,587.82	4,342.14	4,122.60	20.44	24.64	-18.34	-1,536.66	-83.38	1,323.89	1,282.68	41.22	32.120		
4,700.00	4,687.51	4,438.12	4,212.43	20.89	25.22	-18.34	-1,570.41	-85.53	1,351.97	1,309.83	42.14	32.082		
4,800.00	4,787.21	4,534.09	4,302.25	21.33	25.81	-18.34	-1,604.15	-87.67	1,380.05	1,336.99	43.07	32.045		
4,900.00	4,886.90	4,630.07	4,392.08	21.78	26.39	-18.34	-1,637.89	-89.82	1,408.13	1,364.14	43.99	32.009		
5,000.00	4,986.59	4,726.05	4,481.90	22.22	26.98	-18.34	-1,671.63	-91.96	1,436.21	1,391.29	44.92	31.973		
5,100.00	5,086.28	4,822.03	4,571.73	22.67	27.56	-18.34	-1,705.37	-94.11	1,464.29	1,418.44	45.85	31.939		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	4,918.00	4,661.55	23.12	28.15	-18.34	-1,739.11	-96.25	1,492.37	1,445.59	46.77	31.906		
5,300.00	5,285.66	5,013.98	4,751.38	23.56	28.73	-18.34	-1,772.86	-98.39	1,520.45	1,472.74	47.70	31.873		
5,400.00	5,385.36	5,109.96	4,841.20	24.01	29.32	-18.34	-1,806.60	-100.54	1,548.52	1,499.89	48.63	31.842		
5,500.00	5,485.05	5,205.93	4,931.03	24.46	29.91	-18.34	-1,840.34	-102.68	1,576.60	1,527.04	49.56	31.811		
5,600.00	5,584.74	5,301.91	5,020.85	24.90	30.49	-18.34	-1,874.08	-104.83	1,604.68	1,554.19	50.49	31.781		
5,700.00	5,684.43	5,397.89	5,110.67	25.35	31.08	-18.34	-1,907.82	-106.97	1,632.76	1,581.34	51.42	31.752		
5,800.00	5,784.12	5,493.86	5,200.50	25.80	31.67	-18.34	-1,941.56	-109.12	1,660.84	1,608.49	52.35	31.724		
5,900.00	5,883.81	5,589.84	5,290.32	26.25	32.25	-18.34	-1,975.30	-111.26	1,688.92	1,635.63	53.29	31.696		
6,000.00	5,983.51	5,685.82	5,380.15	26.70	32.84	-18.34	-2,009.05	-113.41	1,717.00	1,662.78	54.22	31.669		
6,100.00	6,083.20	5,781.80	5,469.97	27.14	33.43	-18.34	-2,042.79	-115.55	1,745.08	1,689.93	55.15	31.643		
6,200.00	6,182.89	5,877.77	5,559.80	27.59	34.02	-18.34	-2,076.53	-117.70	1,773.15	1,717.07	56.08	31.617		
6,300.00	6,282.58	5,973.75	5,649.62	28.04	34.60	-18.34	-2,110.27	-119.84	1,801.23	1,744.22	57.02	31.592		
6,400.00	6,382.27	6,069.73	5,739.45	28.49	35.19	-18.34	-2,144.01	-121.98	1,829.31	1,771.36	57.95	31.567		
6,500.00	6,481.96	6,165.70	5,829.27	28.94	35.78	-18.34	-2,177.75	-124.13	1,857.39	1,798.51	58.88	31.544		
6,600.00	6,581.66	6,261.68	5,919.10	29.39	36.37	-18.34	-2,211.50	-126.27	1,885.47	1,825.65	59.82	31.520		
6,700.00	6,681.21	6,357.59	6,008.86	29.83	36.96	-55.39	-2,245.21	-128.42	1,913.52	1,852.77	60.75	31.497		
6,800.00	6,778.96	6,452.12	6,097.33	30.28	37.54	-70.76	-2,278.45	-130.53	1,941.20	1,879.52	61.68	31.471		
6,900.00	6,872.51	6,542.99	6,182.37	30.70	38.09	-74.48	-2,310.39	-132.56	1,968.22	1,905.62	62.60	31.442		
7,000.00	6,959.55	6,627.95	6,261.89	31.10	38.61	-75.71	-2,340.26	-134.46	1,994.61	1,931.11	63.50	31.412		
7,100.00	7,037.93	6,704.92	6,333.93	31.48	39.09	-76.06	-2,367.32	-136.18	2,020.61	1,956.21	64.40	31.375		
7,200.00	7,105.74	6,772.00	6,396.71	31.88	39.50	-75.91	-2,390.90	-137.68	2,046.63	1,981.29	65.34	31.325		
7,300.00	7,161.29	6,827.54	6,448.68	32.41	39.84	-75.33	-2,410.43	-138.92	2,073.06	2,006.72	66.34	31.250		
7,400.00	7,203.22	6,870.16	6,488.58	33.13	40.10	-74.26	-2,425.41	-139.87	2,100.20	2,032.77	67.43	31.146		
7,500.00	7,230.50	6,901.17	6,515.40	34.04	40.29	-72.67	-2,435.49	-140.51	2,128.19	2,059.56	68.63	31.010		
7,600.00	7,242.45	6,912.83	6,528.51	35.13	40.36	-70.52	-2,440.41	-140.82	2,156.87	2,087.01	69.86	30.874		
7,700.00	7,242.72	6,915.61	6,531.11	36.39	40.38	-69.84	-2,441.39	-140.88	2,186.88	2,115.74	71.14	30.739		
7,800.00	7,242.33	6,908.85	6,524.19	37.81	40.38	-90.10	-2,441.39	-140.88	2,216.10	2,143.93	72.46	30.604		
7,900.00	7,241.93	6,908.85	6,524.69	39.40	40.38	-90.10	-2,441.39	-140.88	2,241.39	2,169.16	73.81	30.469		
8,000.00	7,241.54	6,908.85	6,525.19	41.13	40.38	-90.09	-2,441.39	-140.88	2,266.41	2,194.39	75.16	30.334		
8,100.00	7,241.15	6,908.85	6,525.69	42.97	40.38	-90.09	-2,441.39	-140.88	2,291.43	2,219.61	76.51	30.199		
8,200.00	7,240.75	6,908.85	6,526.19	44.82	40.38	-90.09	-2,441.39	-140.88	2,316.45	2,244.83	77.86	30.064		
8,300.00	7,240.36	6,908.85	6,526.69	46.67	40.38	-90.09	-2,441.39	-140.88	2,341.47	2,269.85	79.21	29.929		
8,400.00	7,239.97	6,908.85	6,527.19	48.52	40.38	-90.08	-2,441.39	-140.88	2,366.49	2,294.87	80.56	29.794		
8,500.00	7,239.57	6,908.85	6,527.69	50.37	40.38	-90.08	-2,441.39	-140.88	2,391.51	2,319.89	81.91	29.659		
8,600.00	7,239.18	6,908.85	6,528.19	52.22	40.38	-90.08	-2,441.39	-140.88	2,416.53	2,344.91	83.26	29.524		
8,700.00	7,238.79	6,908.85	6,528.69	54.07	40.38	-90.08	-2,441.39	-140.88	2,441.55	2,369.93	84.61	29.389		
8,800.00	7,238.39	6,908.85	6,529.19	55.92	40.38	-90.07	-2,441.39	-140.88	2,466.57	2,394.95	85.96	29.254		
8,900.00	7,237.99	6,908.85	6,529.69	57.77	40.38	-90.07	-2,441.39	-140.88	2,491.59	2,419.97	87.31	29.119		
9,000.00	7,237.60	6,908.85	6,530.19	59.62	40.38	-90.07	-2,441.39	-140.88	2,516.61	2,444.99	88.66	28.984		
9,100.00	7,237.21	6,908.85	6,530.69	61.47	40.38	-90.06	-2,441.39	-140.88	2,541.63	2,469.99	89.99	28.849		
9,200.00	7,236.82	6,908.85	6,531.19	63.32	40.38	-90.06	-2,441.39	-140.88	2,566.65	2,494.99	91.34	28.714		
9,300.00	7,236.43	6,908.85	6,531.69	65.17	40.38	-90.06	-2,441.39	-140.88	2,591.67	2,519.99	92.69	28.579		
9,400.00	7,236.03	6,908.85	6,532.19	67.02	40.38	-90.06	-2,441.39	-140.88	2,616.69	2,544.99	94.04	28.444		
9,500.00	7,235.64	6,908.85	6,532.69	68.87	40.38	-90.05	-2,441.39	-140.88	2,641.71	2,569.99	95.39	28.309		
9,600.00	7,235.25	6,908.85	6,533.19	70.72	40.38	-90.05	-2,441.39	-140.88	2,666.73	2,594.99	96.74	28.174		
9,700.00	7,234.85	6,908.85	6,533.69	72.57	40.38	-90.05	-2,441.39	-140.88	2,691.75	2,619.99	98.09	28.039		
9,800.00	7,234.46	6,908.85	6,534.19	74.42	40.38	-90.04	-2,441.39	-140.88	2,716.77	2,644.99	99.44	27.904		
9,900.00	7,234.07	6,908.85	6,534.69	76.27	40.38	-90.04	-2,441.39	-140.88	2,741.79	2,669.99	100.79	27.769		
10,000.00	7,233.67	6,908.85	6,535.19	78.12	40.38	-90.04	-2,441.39	-140.88	2,766.81	2,694.99	102.14	27.634		
10,100.00	7,233.28	6,908.85	6,535.69	79.97	40.38	-90.04	-2,441.39	-140.88	2,791.83	2,719.99	103.49	27.499		
10,200.00	7,232.89	6,908.85	6,536.19	81.82	40.38	-90.03	-2,441.39	-140.88	2,816.85	2,744.99	104.84	27.364		
10,300.00	7,232.49	6,908.85	6,536.69	83.67	40.38	-90.03	-2,441.39	-140.88	2,841.87	2,769.99	106.19	27.229		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,808.84	7,233.17	99.65	101.13	-90.03	-2,731.39	-3,543.85	2,208.85	2,008.50	200.35	11.025		
10,500.00	7,231.71	10,908.84	7,232.67	102.36	103.77	-90.03	-2,731.98	-3,643.85	2,208.66	2,002.94	205.72	10.736		
10,600.00	7,231.32	11,008.84	7,232.17	105.08	106.43	-90.02	-2,732.57	-3,743.84	2,208.46	1,997.35	211.11	10.461		
10,700.00	7,230.92	11,108.84	7,231.67	107.80	109.10	-90.02	-2,733.16	-3,843.84	2,208.27	1,991.75	216.52	10.199		
10,800.00	7,230.53	11,208.84	7,231.17	110.53	111.78	-90.02	-2,733.75	-3,943.84	2,208.08	1,986.13	221.94	9.949		
10,900.00	7,230.14	11,308.84	7,230.67	113.27	114.47	-90.01	-2,734.33	-4,043.83	2,207.88	1,980.50	227.38	9.710		
11,000.00	7,229.74	11,408.84	7,230.17	116.02	117.16	-90.01	-2,734.92	-4,143.83	2,207.69	1,974.86	232.83	9.482		
11,100.00	7,229.35	11,508.84	7,229.67	118.77	119.87	-90.01	-2,735.51	-4,243.83	2,207.49	1,969.20	238.29	9.264		
11,200.00	7,228.96	11,608.84	7,229.17	121.52	122.58	-90.01	-2,736.10	-4,343.82	2,207.30	1,963.53	243.77	9.055		
11,300.00	7,228.56	11,708.84	7,228.66	124.28	125.29	-90.00	-2,736.69	-4,443.82	2,207.11	1,957.85	249.25	8.855		
11,400.00	7,228.17	11,808.84	7,228.16	127.04	128.02	-90.00	-2,737.27	-4,543.82	2,206.91	1,952.16	254.75	8.663		
11,500.00	7,227.78	11,908.84	7,227.66	129.81	130.75	-90.00	-2,737.86	-4,643.81	2,206.72	1,946.47	260.25	8.479		
11,600.00	7,227.38	12,008.84	7,227.16	132.58	133.48	-89.99	-2,738.45	-4,743.81	2,206.52	1,940.76	265.77	8.302		
11,700.00	7,226.99	12,108.84	7,226.66	135.36	136.22	-89.99	-2,739.04	-4,843.81	2,206.33	1,935.04	271.29	8.133		
11,800.00	7,226.60	12,208.84	7,226.16	138.14	138.97	-89.99	-2,739.63	-4,943.80	2,206.14	1,929.32	276.82	7.970		
11,900.00	7,226.20	12,308.84	7,225.66	140.92	141.72	-89.99	-2,740.22	-5,043.80	2,205.94	1,923.58	282.36	7.813		
12,000.00	7,225.81	12,408.84	7,225.16	143.70	144.47	-89.98	-2,740.80	-5,143.80	2,205.75	1,917.85	287.90	7.661		
12,100.00	7,225.42	12,508.84	7,224.66	146.49	147.23	-89.98	-2,741.39	-5,243.79	2,205.55	1,912.10	293.45	7.516		
12,200.00	7,225.02	12,608.84	7,224.16	149.28	149.99	-89.98	-2,741.98	-5,343.79	2,205.36	1,906.35	299.01	7.375		
12,300.00	7,224.63	12,708.84	7,223.66	152.08	152.75	-89.98	-2,742.57	-5,443.79	2,205.17	1,900.59	304.58	7.240		
12,400.00	7,224.24	12,808.84	7,223.16	154.87	155.52	-89.97	-2,743.16	-5,543.78	2,204.97	1,894.83	310.15	7.109		
12,500.00	7,223.84	12,908.84	7,222.66	157.67	158.29	-89.97	-2,743.74	-5,643.78	2,204.78	1,889.06	315.72	6.983		
12,600.00	7,223.45	13,008.84	7,222.16	160.47	161.07	-89.97	-2,744.33	-5,743.78	2,204.58	1,883.28	321.30	6.861		
12,700.00	7,223.06	13,108.84	7,221.65	163.27	163.85	-89.96	-2,744.92	-5,843.77	2,204.39	1,877.51	326.88	6.744		
12,800.00	7,222.66	13,208.84	7,221.15	166.07	166.63	-89.96	-2,745.51	-5,943.77	2,204.20	1,871.72	332.47	6.630		
12,900.00	7,222.27	13,308.84	7,220.65	168.88	169.41	-89.96	-2,746.10	-6,043.77	2,204.00	1,865.94	338.07	6.519		
13,000.00	7,221.88	13,408.84	7,220.15	171.69	172.20	-89.96	-2,746.69	-6,143.77	2,203.81	1,860.15	343.66	6.413		
13,100.00	7,221.48	13,508.84	7,219.65	174.49	174.98	-89.95	-2,747.27	-6,243.76	2,203.61	1,854.35	349.26	6.309		
13,200.00	7,221.09	13,608.84	7,219.15	177.30	177.77	-89.95	-2,747.86	-6,343.76	2,203.42	1,848.55	354.87	6.209		
13,300.00	7,220.70	13,708.84	7,218.65	180.12	180.57	-89.95	-2,748.45	-6,443.76	2,203.23	1,842.75	360.48	6.112		
13,400.00	7,220.30	13,808.84	7,218.15	182.93	183.36	-89.94	-2,749.04	-6,543.75	2,203.03	1,836.94	366.09	6.018		
13,500.00	7,219.91	13,908.83	7,217.65	185.74	186.16	-89.94	-2,749.63	-6,643.75	2,202.84	1,831.13	371.70	5.926		
13,600.00	7,219.52	14,008.83	7,217.15	188.56	188.96	-89.94	-2,750.21	-6,743.75	2,202.64	1,825.32	377.32	5.838		
13,700.00	7,219.12	14,108.83	7,216.65	191.38	191.76	-89.94	-2,750.80	-6,843.74	2,202.45	1,819.51	382.94	5.751		
13,800.00	7,218.73	14,208.83	7,216.15	194.20	194.56	-89.93	-2,751.39	-6,943.74	2,202.26	1,813.69	388.57	5.668		
13,900.00	7,218.34	14,308.83	7,215.65	197.02	197.36	-89.93	-2,751.98	-7,043.74	2,202.06	1,807.87	394.19	5.586		
14,000.00	7,217.94	14,408.83	7,215.15	199.84	200.17	-89.93	-2,752.57	-7,143.73	2,201.87	1,802.05	399.82	5.507		
14,100.00	7,217.55	14,508.83	7,214.65	202.66	202.97	-89.92	-2,753.16	-7,243.73	2,201.68	1,796.22	405.45	5.430		
14,200.00	7,217.16	14,608.83	7,214.14	205.48	205.78	-89.92	-2,753.74	-7,343.73	2,201.48	1,790.39	411.09	5.355		
14,300.00	7,216.76	14,708.83	7,213.64	208.30	208.59	-89.92	-2,754.33	-7,443.72	2,201.29	1,784.56	416.72	5.282		
14,400.00	7,216.37	14,808.83	7,213.14	211.13	211.40	-89.92	-2,754.92	-7,543.72	2,201.09	1,778.73	422.36	5.211		
14,500.00	7,215.98	14,908.83	7,212.64	213.96	214.21	-89.91	-2,755.51	-7,643.72	2,200.90	1,772.90	428.00	5.142		
14,600.00	7,215.58	15,008.83	7,212.14	216.78	217.03	-89.91	-2,756.10	-7,743.71	2,200.71	1,767.06	433.65	5.075		
14,700.00	7,215.19	15,108.83	7,211.64	219.61	219.84	-89.91	-2,756.68	-7,843.71	2,200.51	1,761.22	439.29	5.009		
14,800.00	7,214.80	15,208.83	7,211.14	222.44	222.66	-89.91	-2,757.27	-7,943.71	2,200.32	1,755.38	444.94	4.945		
14,900.00	7,214.40	15,308.83	7,210.64	225.27	225.47	-89.90	-2,757.86	-8,043.70	2,200.12	1,749.54	450.58	4.883		
15,000.00	7,214.01	15,408.83	7,210.14	228.10	228.29	-89.90	-2,758.45	-8,143.70	2,199.93	1,743.70	456.23	4.822		
15,002.44	7,214.00	15,411.27	7,210.13	228.16	228.36	-89.90	-2,758.46	-8,146.14	2,199.93	1,743.55	456.37	4.820 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-179.53	-239.72	-1.95	239.73					
100.00	100.00	102.00	100.00	3.28	3.29	-179.53	-239.72	-1.95	239.73	233.16	6.57	36.489		
200.00	200.00	198.00	200.00	3.34	3.34	-179.53	-239.72	-1.95	239.73	233.06	6.67	35.928	CC, ES	
300.00	300.00	290.42	292.40	3.44	3.43	-179.51	-241.14	-2.05	241.27	234.39	6.88	35.058		
400.00	400.00	382.49	384.37	3.60	3.56	-179.45	-245.52	-2.35	246.03	238.83	7.20	34.185		
500.00	500.00	474.19	475.77	3.81	3.74	-179.35	-252.80	-2.85	253.98	246.37	7.60	33.406		
600.00	599.98	565.50	566.51	4.03	3.95	-17.44	-262.95	-3.55	263.44	255.38	8.07	32.650		
700.00	699.84	656.56	656.63	4.29	4.19	-17.53	-275.94	-4.45	272.76	264.18	8.58	31.779		
800.00	799.54	747.27	745.94	4.57	4.46	-17.75	-291.71	-5.54	282.85	273.70	9.15	30.914		
900.00	899.23	837.32	834.08	4.87	4.77	-17.95	-310.15	-6.82	295.97	286.22	9.76	30.338		
1,000.00	998.92	926.55	920.79	5.20	5.10	-18.08	-331.14	-8.27	312.19	301.80	10.39	30.044		
1,100.00	1,098.61	1,014.80	1,005.85	5.54	5.46	-18.17	-354.54	-9.89	331.44	320.40	11.05	30.007		
1,200.00	1,198.30	1,101.91	1,089.08	5.90	5.84	-18.22	-380.19	-11.66	353.68	341.97	11.71	30.201		
1,300.00	1,298.00	1,209.34	1,173.07	6.27	6.34	-18.23	-408.80	-13.64	378.75	366.28	12.47	30.375		
1,400.00	1,397.69	1,287.26	1,264.24	6.66	6.72	-18.24	-440.67	-15.85	404.62	391.49	13.13	30.815		
1,500.00	1,497.38	1,383.86	1,355.40	7.05	7.20	-18.24	-472.54	-18.05	430.48	416.59	13.89	30.989		
1,600.00	1,597.07	1,480.46	1,446.56	7.44	7.70	-18.24	-504.41	-20.26	456.34	441.67	14.67	31.101		
1,700.00	1,696.76	1,577.05	1,537.72	7.85	8.21	-18.25	-536.29	-22.46	482.21	466.73	15.47	31.167		
1,800.00	1,796.45	1,673.65	1,628.88	8.25	8.73	-18.25	-568.16	-24.67	508.07	491.78	16.29	31.197		
1,900.00	1,896.15	1,770.25	1,720.04	8.67	9.25	-18.25	-600.03	-26.87	533.93	516.82	17.11	31.202		
2,000.00	1,995.84	1,866.85	1,811.21	9.08	9.78	-18.25	-631.90	-29.07	559.80	541.85	17.95	31.187		
2,100.00	2,095.53	1,963.44	1,902.37	9.50	10.32	-18.25	-663.77	-31.28	585.66	566.86	18.80	31.158		
2,200.00	2,195.22	2,060.04	1,993.53	9.92	10.86	-18.26	-695.64	-33.48	611.52	591.87	19.65	31.118		
2,300.00	2,294.91	2,156.64	2,084.69	10.35	11.40	-18.26	-727.51	-35.69	637.39	616.87	20.51	31.070		
2,400.00	2,394.60	2,253.24	2,175.85	10.77	11.95	-18.26	-759.38	-37.89	663.25	641.87	21.38	31.017		
2,500.00	2,494.30	2,349.83	2,267.02	11.20	12.50	-18.26	-791.25	-40.10	689.12	666.86	22.26	30.961		
2,600.00	2,593.99	2,446.43	2,358.18	11.63	13.05	-18.26	-823.12	-42.30	714.98	691.84	23.14	30.902		
2,700.00	2,693.68	2,543.03	2,449.34	12.07	13.60	-18.26	-854.99	-44.51	740.84	716.82	24.02	30.842		
2,800.00	2,793.37	2,639.63	2,540.50	12.50	14.16	-18.26	-886.86	-46.71	766.71	741.80	24.91	30.781		
2,900.00	2,893.06	2,736.22	2,631.66	12.93	14.72	-18.26	-918.73	-48.92	792.57	766.77	25.80	30.720		
3,000.00	2,992.76	2,832.82	2,722.83	13.37	15.27	-18.26	-950.60	-51.12	818.43	791.74	26.69	30.660		
3,100.00	3,092.45	2,929.42	2,813.99	13.81	15.83	-18.26	-982.47	-53.33	844.30	816.71	27.59	30.600		
3,200.00	3,192.14	3,026.02	2,905.15	14.25	16.40	-18.27	-1,014.34	-55.53	870.16	841.67	28.49	30.542		
3,300.00	3,291.83	3,122.61	2,996.31	14.68	16.96	-18.27	-1,046.21	-57.73	896.02	866.63	29.39	30.484		
3,400.00	3,391.52	3,219.21	3,087.47	15.12	17.52	-18.27	-1,078.09	-59.94	921.89	891.59	30.30	30.428		
3,500.00	3,491.21	3,315.81	3,178.63	15.56	18.09	-18.27	-1,109.96	-62.14	947.75	916.55	31.20	30.373		
3,600.00	3,590.91	3,412.41	3,269.80	16.00	18.65	-18.27	-1,141.83	-64.35	973.61	941.50	32.11	30.319		
3,700.00	3,690.60	3,509.00	3,360.96	16.45	19.22	-18.27	-1,173.70	-66.55	999.48	966.46	33.02	30.267		
3,800.00	3,790.29	3,605.60	3,452.12	16.89	19.79	-18.27	-1,205.57	-68.76	1,025.34	991.41	33.93	30.217		
3,900.00	3,889.98	3,702.20	3,543.28	17.33	20.35	-18.27	-1,237.44	-70.96	1,051.21	1,016.36	34.85	30.167		
4,000.00	3,989.67	3,798.80	3,634.44	17.77	20.92	-18.27	-1,269.31	-73.17	1,077.07	1,041.31	35.76	30.120		
4,100.00	4,089.36	3,904.61	3,725.61	18.22	21.54	-18.27	-1,301.18	-75.37	1,102.93	1,066.21	36.72	30.034		
4,200.00	4,189.06	4,008.01	3,816.77	18.66	22.15	-18.27	-1,333.05	-77.58	1,128.80	1,091.12	37.67	29.962		
4,300.00	4,288.75	4,088.59	3,907.93	19.10	22.63	-18.27	-1,364.92	-79.78	1,154.66	1,116.15	38.51	29.984		
4,400.00	4,388.44	4,185.19	3,999.09	19.55	23.20	-18.27	-1,396.79	-81.98	1,180.52	1,141.10	39.43	29.942		
4,500.00	4,488.13	4,281.78	4,090.25	19.99	23.77	-18.27	-1,428.66	-84.19	1,206.39	1,166.04	40.35	29.901		
4,600.00	4,587.82	4,378.38	4,181.41	20.44	24.34	-18.27	-1,460.53	-86.39	1,232.25	1,190.98	41.27	29.861		
4,700.00	4,687.51	4,474.98	4,272.58	20.89	24.91	-18.27	-1,492.40	-88.60	1,258.11	1,215.93	42.19	29.822		
4,800.00	4,787.21	4,571.58	4,363.74	21.33	25.48	-18.27	-1,524.27	-90.80	1,283.98	1,240.87	43.11	29.784		
4,900.00	4,886.90	4,668.17	4,454.90	21.78	26.05	-18.27	-1,556.14	-93.01	1,309.84	1,265.81	44.03	29.748		
5,000.00	4,986.59	4,764.77	4,546.06	22.22	26.63	-18.27	-1,588.01	-95.21	1,335.71	1,290.75	44.95	29.712		
5,100.00	5,086.28	4,861.37	4,637.22	22.67	27.20	-18.27	-1,619.89	-97.42	1,361.57	1,315.69	45.88	29.678		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	4,957.97	4,728.39	23.12	27.77	-18.27	-1,651.76	-99.62	1,387.43	1,340.63	46.80	29.644		
5,300.00	5,285.66	5,054.56	4,819.55	23.56	28.34	-18.27	-1,683.63	-101.83	1,413.30	1,365.57	47.73	29.612		
5,400.00	5,385.36	5,151.16	4,910.71	24.01	28.92	-18.28	-1,715.50	-104.03	1,439.16	1,390.51	48.65	29.580		
5,500.00	5,485.05	5,247.76	5,001.87	24.46	29.49	-18.28	-1,747.37	-106.24	1,465.02	1,415.44	49.58	29.549		
5,600.00	5,584.74	5,344.36	5,093.03	24.90	30.06	-18.28	-1,779.24	-108.44	1,490.89	1,440.38	50.51	29.519		
5,700.00	5,684.43	5,440.95	5,184.19	25.35	30.63	-18.28	-1,811.11	-110.64	1,516.75	1,465.32	51.43	29.490		
5,800.00	5,784.12	5,537.55	5,275.36	25.80	31.21	-18.28	-1,842.98	-112.85	1,542.61	1,490.25	52.36	29.462		
5,900.00	5,883.81	5,634.15	5,366.52	26.25	31.78	-18.28	-1,874.85	-115.05	1,568.48	1,515.19	53.29	29.434		
6,000.00	5,983.51	5,730.75	5,457.68	26.70	32.36	-18.28	-1,906.72	-117.26	1,594.34	1,540.13	54.22	29.407		
6,100.00	6,083.20	5,827.34	5,548.84	27.14	32.93	-18.28	-1,938.59	-119.46	1,620.20	1,565.06	55.14	29.381		
6,200.00	6,182.89	5,923.94	5,640.00	27.59	33.50	-18.28	-1,970.46	-121.67	1,646.07	1,590.00	56.07	29.356		
6,300.00	6,282.58	6,020.54	5,731.17	28.04	34.08	-18.28	-2,002.33	-123.87	1,671.93	1,614.93	57.00	29.331		
6,400.00	6,382.27	6,117.14	5,822.33	28.49	34.65	-18.28	-2,034.20	-126.08	1,697.80	1,639.86	57.93	29.307		
6,500.00	6,481.96	6,213.73	5,913.49	28.94	35.23	-18.28	-2,066.07	-128.28	1,723.66	1,664.80	58.86	29.283		
6,600.00	6,581.66	6,310.33	6,004.65	29.39	35.80	-18.28	-2,097.94	-130.49	1,749.52	1,689.73	59.79	29.260		
6,700.00	6,681.21	6,406.86	6,095.75	29.83	36.38	-55.46	-2,129.79	-132.69	1,775.35	1,714.63	60.72	29.237		
6,800.00	6,778.96	6,502.00	6,185.54	30.28	36.94	-71.09	-2,161.18	-134.86	1,800.84	1,739.19	61.65	29.211		
6,900.00	6,872.51	6,606.54	6,271.85	30.70	37.56	-75.08	-2,191.36	-136.95	1,825.78	1,763.15	62.63	29.152		
7,000.00	6,969.55	6,678.99	6,352.56	31.10	37.99	-76.58	-2,219.58	-138.90	1,850.29	1,786.83	63.46	29.157		
7,100.00	7,037.93	6,756.46	6,425.68	31.48	38.46	-77.18	-2,245.14	-140.67	1,874.75	1,810.39	64.36	29.128		
7,200.00	7,105.74	6,823.98	6,489.40	31.88	38.86	-77.25	-2,267.41	-142.21	1,899.66	1,834.37	65.30	29.092		
7,300.00	7,161.29	6,879.89	6,542.16	32.41	39.19	-76.81	-2,285.86	-143.48	1,925.54	1,859.23	66.30	29.041		
7,400.00	7,203.22	7,400.00	6,597.75	33.13	42.27	-76.25	-2,305.31	-146.41	1,952.50	1,882.49	70.01	27.889		
7,500.00	7,230.50	7,129.86	6,772.33	34.04	40.60	-78.98	-2,366.67	-190.41	1,979.09	1,909.02	70.06	28.246		
7,600.00	7,242.45	7,557.31	7,069.10	35.13	42.24	-85.31	-2,472.60	-467.29	2,000.66	1,927.76	72.90	27.444		
7,700.00	7,242.72	7,948.39	7,145.65	36.39	43.46	-87.22	-2,502.41	-844.12	2,003.34	1,926.58	76.76	26.098		
7,800.00	7,242.33	8,048.39	7,145.08	37.81	44.03	-87.22	-2,503.02	-944.12	2,003.18	1,923.72	79.46	25.209		
7,900.00	7,241.93	8,148.39	7,144.51	39.40	44.86	-87.21	-2,503.64	-1,044.11	2,003.02	1,920.55	82.47	24.287		
8,000.00	7,241.54	8,248.39	7,143.94	41.13	45.96	-87.21	-2,504.25	-1,144.11	2,002.86	1,917.11	85.75	23.356		
8,100.00	7,241.15	8,348.39	7,143.37	42.97	47.32	-87.20	-2,504.86	-1,244.11	2,002.70	1,913.42	89.28	22.431		
8,200.00	7,240.75	8,448.39	7,142.80	44.92	48.88	-87.20	-2,505.47	-1,344.10	2,002.54	1,909.52	93.03	21.527		
8,300.00	7,240.36	8,548.39	7,142.24	46.97	50.60	-87.19	-2,506.09	-1,444.10	2,002.38	1,905.42	96.96	20.651		
8,400.00	7,239.97	8,648.39	7,141.67	49.10	52.45	-87.19	-2,506.70	-1,544.10	2,002.22	1,901.16	101.07	19.811		
8,500.00	7,239.57	8,748.39	7,141.10	51.29	54.41	-87.18	-2,507.31	-1,644.09	2,002.06	1,896.74	105.32	19.009		
8,600.00	7,239.18	8,848.39	7,140.53	53.56	56.46	-87.18	-2,507.93	-1,744.09	2,001.90	1,892.19	109.71	18.248		
8,700.00	7,238.79	8,948.38	7,139.96	55.87	58.59	-87.17	-2,508.54	-1,844.08	2,001.74	1,887.53	114.21	17.527		
8,800.00	7,238.39	9,048.38	7,139.39	58.24	60.79	-87.17	-2,509.15	-1,944.08	2,001.58	1,882.77	118.81	16.846		
8,900.00	7,238.00	9,148.38	7,138.82	60.64	63.04	-87.16	-2,509.76	-2,044.08	2,001.42	1,877.91	123.51	16.204		
9,000.00	7,237.61	9,248.38	7,138.26	63.09	65.35	-87.15	-2,510.38	-2,144.07	2,001.26	1,872.97	128.29	15.599		
9,100.00	7,237.21	9,348.38	7,137.69	65.56	67.70	-87.15	-2,510.99	-2,244.07	2,001.10	1,867.95	133.15	15.029		
9,200.00	7,236.82	9,448.38	7,137.12	68.07	70.08	-87.14	-2,511.60	-2,344.06	2,000.94	1,862.87	138.07	14.493		
9,300.00	7,236.43	9,548.38	7,136.55	70.61	72.51	-87.14	-2,512.22	-2,444.06	2,000.78	1,857.74	143.04	13.987		
9,400.00	7,236.03	9,648.38	7,135.98	73.16	74.97	-87.13	-2,512.83	-2,544.06	2,000.62	1,852.54	148.07	13.511		
9,500.00	7,235.64	9,748.38	7,135.41	75.74	77.45	-87.13	-2,513.44	-2,644.05	2,000.46	1,847.31	153.15	13.062		
9,600.00	7,235.25	9,848.38	7,134.85	78.34	79.96	-87.12	-2,514.06	-2,744.05	2,000.30	1,842.03	158.27	12.638		
9,700.00	7,234.85	9,948.38	7,134.28	80.96	82.50	-87.12	-2,514.67	-2,844.05	2,000.14	1,836.71	163.43	12.238		
9,800.00	7,234.46	10,048.38	7,133.71	83.59	85.05	-87.11	-2,515.28	-2,944.04	1,999.98	1,831.35	168.63	11.860		
9,900.00	7,234.07	10,148.38	7,133.14	86.24	87.63	-87.11	-2,515.89	-3,044.04	1,999.82	1,825.96	173.85	11.503		
10,000.00	7,233.67	10,248.38	7,132.57	88.90	90.22	-87.10	-2,516.51	-3,144.03	1,999.66	1,820.55	179.11	11.164		
10,100.00	7,233.28	10,348.38	7,132.00	91.57	92.83	-87.10	-2,517.12	-3,244.03	1,999.50	1,815.10	184.39	10.844		
10,200.00	7,232.89	10,448.38	7,131.43	94.25	95.45	-87.09	-2,517.73	-3,344.03	1,999.34	1,809.63	189.70	10.539		
10,300.00	7,232.49	10,548.38	7,130.87	96.95	98.09	-87.09	-2,518.35	-3,444.02	1,999.18	1,804.14	195.03	10.250		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,648.38	7,130.30	99.65	100.73	-87.08	-2,518.96	-3,544.02	1,999.02	1,798.63	200.38	9.976		
10,500.00	7,231.71	10,748.38	7,129.73	102.36	103.39	-87.08	-2,519.57	-3,644.02	1,998.86	1,793.10	205.75	9.715		
10,600.00	7,231.32	10,848.38	7,129.16	105.08	106.06	-87.07	-2,520.19	-3,744.01	1,998.70	1,787.55	211.14	9.466		
10,700.00	7,230.92	10,948.38	7,128.59	107.80	108.75	-87.07	-2,520.80	-3,844.01	1,998.54	1,781.99	216.55	9.229		
10,800.00	7,230.53	11,048.38	7,128.02	110.53	111.43	-87.06	-2,521.41	-3,944.00	1,998.38	1,776.41	221.97	9.003		
10,900.00	7,230.14	11,148.38	7,127.46	113.27	114.13	-87.05	-2,522.02	-4,044.00	1,998.22	1,770.81	227.40	8.787		
11,000.00	7,229.74	11,248.38	7,126.89	116.02	116.84	-87.05	-2,522.64	-4,144.00	1,998.06	1,765.21	232.85	8.581		
11,100.00	7,229.35	11,348.38	7,126.32	118.77	119.55	-87.04	-2,523.25	-4,243.99	1,997.90	1,759.59	238.31	8.384		
11,200.00	7,228.96	11,448.38	7,125.75	121.52	122.27	-87.04	-2,523.86	-4,343.99	1,997.74	1,753.96	243.78	8.195		
11,300.00	7,228.56	11,548.38	7,125.18	124.28	124.99	-87.03	-2,524.48	-4,443.99	1,997.58	1,748.31	249.26	8.014		
11,400.00	7,228.17	11,648.38	7,124.61	127.04	127.73	-87.03	-2,525.09	-4,543.98	1,997.42	1,742.66	254.75	7.841		
11,500.00	7,227.78	11,748.38	7,124.04	129.81	130.46	-87.02	-2,525.70	-4,643.98	1,997.26	1,737.00	260.25	7.674		
11,600.00	7,227.38	11,848.38	7,123.48	132.58	133.20	-87.02	-2,526.32	-4,743.97	1,997.10	1,731.33	265.76	7.515		
11,700.00	7,226.99	11,948.38	7,122.91	135.36	135.95	-87.01	-2,526.93	-4,843.97	1,996.94	1,725.66	271.28	7.361		
11,800.00	7,226.60	12,048.38	7,122.34	138.14	138.70	-87.01	-2,527.54	-4,943.97	1,996.78	1,719.97	276.81	7.214		
11,900.00	7,226.20	12,148.38	7,121.77	140.92	141.46	-87.00	-2,528.15	-5,043.96	1,996.62	1,714.28	282.34	7.072		
12,000.00	7,225.81	12,248.38	7,121.20	143.70	144.22	-87.00	-2,528.77	-5,143.96	1,996.46	1,708.58	287.88	6.935		
12,100.00	7,225.42	12,348.37	7,120.63	146.49	146.98	-86.99	-2,529.38	-5,243.95	1,996.30	1,702.87	293.42	6.803		
12,200.00	7,225.02	12,448.37	7,120.07	149.28	149.75	-86.99	-2,529.99	-5,343.95	1,996.14	1,697.16	298.98	6.677		
12,300.00	7,224.63	12,548.37	7,119.50	152.08	152.52	-86.98	-2,530.61	-5,443.95	1,995.98	1,691.44	304.53	6.554		
12,400.00	7,224.24	12,648.37	7,118.93	154.87	155.29	-86.98	-2,531.22	-5,543.94	1,995.82	1,685.72	310.10	6.436		
12,500.00	7,223.84	12,748.37	7,118.36	157.67	158.07	-86.97	-2,531.83	-5,643.94	1,995.66	1,679.99	315.66	6.322		
12,600.00	7,223.45	12,848.37	7,117.79	160.47	160.85	-86.97	-2,532.44	-5,743.94	1,995.50	1,674.26	321.24	6.212		
12,700.00	7,223.06	12,948.37	7,117.22	163.27	163.63	-86.96	-2,533.06	-5,843.93	1,995.34	1,668.52	326.82	6.105		
12,800.00	7,222.66	13,048.37	7,116.65	166.07	166.42	-86.95	-2,533.67	-5,943.93	1,995.18	1,662.78	332.40	6.002		
12,900.00	7,222.27	13,148.37	7,116.09	168.88	169.20	-86.95	-2,534.28	-6,043.92	1,995.02	1,657.03	337.98	5.903		
13,000.00	7,221.88	13,248.37	7,115.52	171.69	171.99	-86.94	-2,534.90	-6,143.92	1,994.86	1,651.29	343.57	5.806		
13,100.00	7,221.48	13,348.37	7,114.95	174.49	174.79	-86.94	-2,535.51	-6,243.92	1,994.70	1,645.53	349.17	5.713		
13,200.00	7,221.09	13,448.37	7,114.38	177.30	177.58	-86.93	-2,536.12	-6,343.91	1,994.54	1,639.77	354.77	5.622		
13,300.00	7,220.70	13,548.37	7,113.81	180.12	180.38	-86.93	-2,536.74	-6,443.91	1,994.38	1,634.01	360.37	5.534		
13,400.00	7,220.30	13,648.37	7,113.24	182.93	183.18	-86.92	-2,537.35	-6,543.91	1,994.22	1,628.25	365.97	5.449		
13,500.00	7,219.91	13,748.37	7,112.68	185.74	185.98	-86.92	-2,537.96	-6,643.90	1,994.06	1,622.48	371.58	5.366		
13,600.00	7,219.52	13,848.37	7,112.11	188.56	188.78	-86.91	-2,538.57	-6,743.90	1,993.90	1,616.71	377.19	5.286		
13,700.00	7,219.12	13,948.37	7,111.54	191.38	191.58	-86.91	-2,539.19	-6,843.89	1,993.74	1,610.94	382.80	5.208		
13,800.00	7,218.73	14,048.37	7,110.97	194.20	194.39	-86.90	-2,539.80	-6,943.89	1,993.58	1,605.17	388.42	5.133		
13,900.00	7,218.34	14,148.37	7,110.40	197.02	197.19	-86.90	-2,540.41	-7,043.89	1,993.42	1,599.39	394.04	5.059		
14,000.00	7,217.94	14,248.37	7,109.83	199.84	200.00	-86.89	-2,541.03	-7,143.88	1,993.26	1,593.61	399.66	4.987		
14,100.00	7,217.55	14,348.37	7,109.27	202.66	202.81	-86.89	-2,541.64	-7,243.88	1,993.10	1,587.82	405.28	4.918		
14,200.00	7,217.16	14,448.37	7,108.70	205.48	205.62	-86.88	-2,542.25	-7,343.88	1,992.94	1,582.04	410.91	4.850		
14,300.00	7,216.76	14,548.37	7,108.13	208.30	208.43	-86.88	-2,542.87	-7,443.87	1,992.78	1,576.25	416.53	4.784		
14,400.00	7,216.37	14,648.37	7,107.56	211.13	211.25	-86.87	-2,543.48	-7,543.87	1,992.63	1,570.46	422.16	4.720		
14,500.00	7,215.98	14,748.37	7,106.99	213.96	214.06	-86.86	-2,544.09	-7,643.86	1,992.47	1,564.67	427.79	4.658		
14,600.00	7,215.58	14,848.37	7,106.42	216.78	216.88	-86.86	-2,544.70	-7,743.86	1,992.31	1,558.88	433.43	4.597		
14,700.00	7,215.19	14,948.37	7,105.85	219.61	219.70	-86.85	-2,545.32	-7,843.86	1,992.15	1,553.08	439.06	4.537		
14,800.00	7,214.80	15,048.37	7,105.29	222.44	222.51	-86.85	-2,545.93	-7,943.85	1,991.99	1,547.29	444.70	4.479		
14,900.00	7,214.40	15,148.37	7,104.72	225.27	225.33	-86.84	-2,546.54	-8,043.85	1,991.83	1,541.49	450.34	4.423		
15,000.00	7,214.01	15,248.37	7,104.15	228.10	228.15	-86.84	-2,547.16	-8,143.85	1,991.67	1,535.69	455.98	4.368		
15,002.44	7,214.00	15,250.80	7,104.14	228.16	228.22	-86.84	-2,547.17	-8,146.28	1,991.67	1,535.55	456.12	4.367 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	0.00	0.50	160.29	1.39	160.30					
100.00	100.00	101.00	100.00	3.28	0.18	0.50	160.29	1.39	160.30	156.84	3.46	46.268		
200.00	200.00	201.00	200.00	3.34	0.62	0.50	160.29	1.39	160.30	156.34	3.96	40.524		
300.00	300.00	301.00	300.00	3.44	1.06	0.50	160.29	1.39	160.30	155.80	4.50	35.604		
400.00	400.00	401.00	400.00	3.60	1.50	0.50	160.29	1.39	160.30	155.20	5.10	31.434		
500.00	500.00	501.00	500.00	3.81	1.93	0.50	160.29	1.39	160.30	154.56	5.74	27.922 CC, ES		
600.00	599.98	595.60	594.58	4.03	2.35	162.41	161.87	1.18	163.63	157.23	6.40	25.580		
700.00	699.84	689.63	688.49	4.29	2.77	162.62	166.51	0.54	173.53	166.45	7.09	24.478		
800.00	799.54	782.61	781.15	4.57	3.18	162.91	174.10	-0.49	189.02	181.21	7.81	24.210		
900.00	899.23	874.55	872.49	4.87	3.59	163.04	184.52	-1.91	207.75	199.22	8.53	24.343		
1,000.00	998.92	965.31	962.26	5.20	4.00	163.04	197.66	-3.69	229.57	220.30	9.27	24.769		
1,100.00	1,098.61	1,056.67	1,052.19	5.54	4.41	162.93	213.62	-5.86	254.31	244.31	10.00	25.423		
1,200.00	1,198.30	1,153.34	1,147.19	5.90	4.84	162.81	231.32	-8.27	279.90	269.14	10.76	26.016		
1,300.00	1,298.00	1,250.01	1,242.20	6.27	5.27	162.71	249.02	-10.68	305.48	293.95	11.53	26.489		
1,400.00	1,397.69	1,346.68	1,337.20	6.66	5.72	162.62	266.72	-13.09	331.07	318.75	12.32	26.874		
1,500.00	1,497.38	1,443.35	1,432.21	7.05	6.16	162.55	284.43	-15.50	356.66	343.54	13.12	27.190		
1,600.00	1,597.07	1,540.02	1,527.21	7.44	6.61	162.49	302.13	-17.90	382.24	368.32	13.93	27.450		
1,700.00	1,696.76	1,636.69	1,622.22	7.85	7.07	162.43	319.83	-20.31	407.83	393.09	14.74	27.666		
1,800.00	1,796.45	1,733.36	1,717.22	8.25	7.52	162.38	337.53	-22.72	433.42	417.86	15.56	27.847		
1,900.00	1,896.15	1,830.03	1,812.23	8.67	7.97	162.34	355.24	-25.13	459.01	442.61	16.39	28.000		
2,000.00	1,995.84	1,926.70	1,907.23	9.08	8.43	162.30	372.94	-27.54	484.60	467.37	17.23	28.129		
2,100.00	2,095.53	2,023.37	2,002.24	9.50	8.88	162.27	390.64	-29.95	510.19	492.12	18.07	28.240		
2,200.00	2,195.22	2,120.04	2,097.24	9.92	9.34	162.23	408.34	-32.35	535.77	516.87	18.91	28.335		
2,300.00	2,294.91	2,216.71	2,192.25	10.35	9.80	162.21	426.05	-34.76	561.36	541.61	19.75	28.417		
2,400.00	2,394.60	2,313.38	2,287.25	10.77	10.25	162.18	443.75	-37.17	586.95	566.35	20.60	28.488		
2,500.00	2,494.30	2,410.05	2,382.26	11.20	10.71	162.16	461.45	-39.58	612.54	591.09	21.45	28.550		
2,600.00	2,593.99	2,506.72	2,477.26	11.63	11.17	162.13	479.15	-41.99	638.13	615.82	22.31	28.604		
2,700.00	2,693.68	2,603.39	2,572.27	12.07	11.63	162.11	496.86	-44.40	663.72	640.56	23.17	28.652		
2,800.00	2,793.37	2,700.06	2,667.27	12.50	12.09	162.09	514.56	-46.80	689.31	665.29	24.02	28.694		
2,900.00	2,893.06	2,803.27	2,762.28	12.93	12.58	162.08	532.26	-49.21	714.90	689.99	24.91	28.696		
3,000.00	2,992.76	2,906.60	2,857.28	13.37	13.07	162.06	549.96	-51.62	740.49	714.69	25.81	28.695		
3,100.00	3,092.45	3,009.93	2,952.29	13.81	13.56	162.04	567.67	-54.03	766.08	739.38	26.70	28.693		
3,200.00	3,192.14	3,086.74	3,047.29	14.25	13.92	162.03	585.37	-56.44	791.67	764.20	27.47	28.818		
3,300.00	3,291.83	3,183.41	3,142.30	14.68	14.38	162.02	603.07	-58.85	817.26	788.92	28.34	28.842		
3,400.00	3,391.52	3,280.08	3,237.30	15.12	14.84	162.00	620.77	-61.25	842.85	813.65	29.20	28.862		
3,500.00	3,491.21	3,376.75	3,332.31	15.56	15.30	161.99	638.48	-63.66	868.44	838.37	30.07	28.881		
3,600.00	3,590.91	3,473.42	3,427.31	16.00	15.76	161.98	656.18	-66.07	894.03	863.09	30.94	28.898		
3,700.00	3,690.60	3,570.09	3,522.32	16.45	16.22	161.97	673.88	-68.48	919.62	887.81	31.81	28.913		
3,800.00	3,790.29	3,666.76	3,617.32	16.89	16.68	161.96	691.58	-70.89	945.21	912.53	32.68	28.926		
3,900.00	3,889.98	3,763.43	3,712.33	17.33	17.14	161.95	709.29	-73.29	970.80	937.25	33.55	28.939		
4,000.00	3,989.67	3,860.10	3,807.33	17.77	17.60	161.94	726.99	-75.70	996.39	961.97	34.42	28.950		
4,100.00	4,089.36	3,956.77	3,902.34	18.22	18.06	161.93	744.69	-78.11	1,021.98	986.69	35.29	28.960		
4,200.00	4,189.06	4,053.44	3,997.34	18.66	18.52	161.93	762.39	-80.52	1,047.57	1,011.41	36.16	28.969		
4,300.00	4,288.75	4,150.11	4,092.35	19.10	18.99	161.92	780.10	-82.93	1,073.16	1,036.13	37.03	28.977		
4,400.00	4,388.44	4,246.78	4,187.35	19.55	19.45	161.91	797.80	-85.34	1,098.75	1,060.84	37.91	28.985		
4,500.00	4,488.13	4,343.45	4,282.36	19.99	19.91	161.90	815.50	-87.74	1,124.34	1,085.56	38.78	28.991		
4,600.00	4,587.82	4,440.12	4,377.36	20.44	20.37	161.90	833.20	-90.15	1,149.93	1,110.28	39.66	28.998		
4,700.00	4,687.51	4,536.79	4,472.37	20.89	20.83	161.89	850.91	-92.56	1,175.52	1,134.99	40.53	29.003		
4,800.00	4,787.21	4,633.46	4,567.37	21.33	21.29	161.89	868.61	-94.97	1,201.11	1,159.71	41.41	29.008		
4,900.00	4,886.90	4,730.13	4,662.38	21.78	21.75	161.88	886.31	-97.38	1,226.70	1,184.42	42.28	29.013		
5,000.00	4,986.59	4,826.80	4,757.38	22.22	22.21	161.87	904.01	-99.79	1,252.29	1,209.14	43.16	29.017		
5,100.00	5,086.28	4,923.47	4,852.39	22.67	22.67	161.87	921.72	-102.19	1,277.88	1,233.85	44.03	29.021		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,020.14	4,947.39	23.12	23.13	161.86	939.42	-104.60	1,303.47	1,258.57	44.91	29.025		
5,300.00	5,285.66	5,116.81	5,042.40	23.56	23.59	161.86	957.12	-107.01	1,329.07	1,283.28	45.79	29.028		
5,400.00	5,385.36	5,213.48	5,137.40	24.01	24.06	161.85	974.82	-109.42	1,354.66	1,307.99	46.66	29.031		
5,500.00	5,485.05	5,310.15	5,232.41	24.46	24.52	161.85	992.53	-111.83	1,380.25	1,332.71	47.54	29.033		
5,600.00	5,584.74	5,406.82	5,327.41	24.90	24.98	161.84	1,010.23	-114.23	1,405.84	1,357.42	48.42	29.035		
5,700.00	5,684.43	5,503.50	5,422.42	25.35	25.44	161.84	1,027.93	-116.64	1,431.43	1,382.13	49.30	29.038		
5,800.00	5,784.12	5,600.17	5,517.42	25.80	25.90	161.84	1,045.63	-119.05	1,457.02	1,406.84	50.17	29.039		
5,900.00	5,883.81	5,703.16	5,612.43	26.25	26.39	161.83	1,063.34	-121.46	1,482.61	1,431.53	51.08	29.024		
6,000.00	5,983.51	5,793.51	5,707.43	26.70	26.82	161.83	1,081.04	-123.87	1,508.20	1,456.27	51.93	29.043		
6,100.00	6,083.20	5,909.82	5,802.44	27.14	27.38	161.82	1,098.74	-126.28	1,533.79	1,480.89	52.90	28.993		
6,200.00	6,182.89	5,986.85	5,897.44	27.59	27.74	161.82	1,116.44	-128.68	1,559.38	1,505.69	53.69	29.045		
6,300.00	6,282.58	6,083.52	5,992.45	28.04	28.21	161.82	1,134.15	-131.09	1,584.97	1,530.40	54.57	29.046		
6,400.00	6,382.27	6,180.19	6,087.45	28.49	28.67	161.81	1,151.85	-133.50	1,610.56	1,555.11	55.45	29.047		
6,500.00	6,481.96	6,276.86	6,182.46	28.94	29.13	161.81	1,169.55	-135.91	1,636.15	1,579.82	56.33	29.048		
6,600.00	6,581.66	6,373.53	6,277.46	29.39	29.59	161.81	1,187.25	-138.32	1,661.74	1,604.53	57.21	29.048		
6,700.00	6,681.21	6,470.12	6,372.39	29.83	30.05	122.05	1,204.94	-140.72	1,687.33	1,629.24	58.09	29.049		
6,800.00	6,778.96	6,565.30	6,465.94	30.28	30.51	102.80	1,222.37	-143.10	1,712.74	1,653.79	58.95	29.054		
6,900.00	6,872.51	6,656.77	6,555.82	30.70	30.94	96.15	1,239.12	-145.37	1,737.81	1,678.03	59.78	29.068		
7,000.00	6,959.55	6,742.25	6,639.84	31.10	31.35	92.71	1,254.77	-147.50	1,762.70	1,702.11	60.58	29.095		
7,100.00	7,037.93	6,848.61	6,743.84	31.48	31.86	90.98	1,274.04	-157.52	1,787.24	1,725.62	61.63	29.001		
7,200.00	7,105.74	6,974.26	6,862.57	31.88	32.44	90.14	1,295.67	-159.71	1,810.31	1,747.42	62.89	28.786		
7,300.00	7,161.29	7,123.05	6,991.43	32.41	33.08	89.95	1,318.62	-261.78	1,830.83	1,766.46	64.38	28.439		
7,400.00	7,203.22	7,301.36	7,119.78	33.13	33.86	90.21	1,340.68	-382.72	1,847.38	1,781.20	66.18	27.915		
7,500.00	7,230.50	7,500.00	7,214.31	34.04	35.09	90.46	1,355.76	-545.28	1,858.17	1,789.64	68.53	27.114		
7,600.00	7,242.45	7,738.55	7,261.01	35.13	37.48	90.56	1,360.66	-786.94	1,861.62	1,789.61	72.01	25.851		
7,700.00	7,242.72	7,839.50	7,260.59	36.39	38.76	90.55	1,358.99	-887.88	1,860.79	1,786.21	74.58	24.949		
7,800.00	7,242.33	7,939.50	7,260.17	37.81	40.18	90.55	1,357.33	-987.86	1,859.91	1,782.45	77.46	24.010		
7,900.00	7,241.93	8,039.50	7,259.74	39.40	41.75	90.55	1,355.67	-1,087.84	1,859.04	1,778.39	80.65	23.052		
8,000.00	7,241.54	8,139.49	7,259.32	41.13	43.45	90.55	1,354.01	-1,187.82	1,858.16	1,774.06	84.10	22.096		
8,100.00	7,241.15	8,239.49	7,258.90	42.97	45.27	90.55	1,352.35	-1,287.80	1,857.28	1,769.50	87.78	21.158		
8,200.00	7,240.75	8,339.48	7,258.48	44.92	47.19	90.55	1,350.69	-1,387.78	1,856.41	1,764.73	91.68	20.249		
8,300.00	7,240.36	8,439.48	7,258.06	46.97	49.20	90.55	1,349.04	-1,487.77	1,855.53	1,759.77	95.76	19.378		
8,400.00	7,239.97	8,539.48	7,257.64	49.10	51.30	90.55	1,347.38	-1,587.75	1,854.65	1,754.66	99.99	18.548		
8,500.00	7,239.57	8,639.47	7,257.22	51.29	53.46	90.55	1,345.72	-1,687.73	1,853.78	1,749.40	104.37	17.761		
8,600.00	7,239.18	8,739.47	7,256.80	53.56	55.68	90.55	1,344.06	-1,787.71	1,852.90	1,744.02	108.87	17.019		
8,700.00	7,238.79	8,839.47	7,256.38	55.87	57.96	90.55	1,342.40	-1,887.69	1,852.02	1,738.54	113.49	16.319		
8,800.00	7,238.39	8,939.46	7,255.96	58.24	60.30	90.55	1,340.74	-1,987.67	1,851.15	1,732.95	118.19	15.662		
8,900.00	7,238.00	9,039.46	7,255.54	60.64	62.67	90.55	1,339.08	-2,087.65	1,850.27	1,727.28	122.99	15.044		
9,000.00	7,237.61	9,139.45	7,255.12	63.09	65.08	90.54	1,337.43	-2,187.64	1,849.39	1,721.54	127.86	14.465		
9,100.00	7,237.21	9,239.45	7,254.70	65.56	67.53	90.54	1,335.77	-2,287.62	1,848.52	1,715.72	132.79	13.920		
9,200.00	7,236.82	9,339.45	7,254.28	68.07	70.01	90.54	1,334.11	-2,387.60	1,847.64	1,709.85	137.79	13.409		
9,300.00	7,236.43	9,439.44	7,253.86	70.61	72.51	90.54	1,332.45	-2,487.58	1,846.76	1,703.92	142.84	12.929		
9,400.00	7,236.03	9,539.44	7,253.44	73.16	75.04	90.54	1,330.79	-2,587.56	1,845.89	1,697.95	147.94	12.478		
9,500.00	7,235.64	9,639.43	7,253.02	75.74	77.60	90.54	1,329.13	-2,687.54	1,845.01	1,691.93	153.08	12.053		
9,600.00	7,235.25	9,739.43	7,252.60	78.34	80.17	90.54	1,327.47	-2,787.53	1,844.13	1,685.87	158.26	11.653		
9,700.00	7,234.85	9,839.43	7,252.18	80.96	82.76	90.54	1,325.82	-2,887.51	1,843.26	1,679.78	163.48	11.275		
9,800.00	7,234.46	9,939.42	7,251.76	83.59	85.37	90.54	1,324.16	-2,987.49	1,842.38	1,673.66	168.72	10.920		
9,900.00	7,234.07	10,039.42	7,251.34	86.24	88.00	90.54	1,322.50	-3,087.47	1,841.50	1,667.50	174.00	10.583		
10,000.00	7,233.67	10,139.42	7,250.92	88.90	90.63	90.54	1,320.84	-3,187.45	1,840.63	1,661.32	179.31	10.265		
10,100.00	7,233.28	10,239.41	7,250.50	91.57	93.29	90.54	1,319.18	-3,287.43	1,839.75	1,655.11	184.63	9.964		
10,200.00	7,232.89	10,339.41	7,250.08	94.25	95.95	90.54	1,317.52	-3,387.41	1,838.87	1,648.89	189.99	9.679		
10,300.00	7,232.49	10,439.40	7,249.66	96.95	98.62	90.54	1,315.86	-3,487.40	1,838.00	1,642.64	195.36	9.408		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
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	7,232.10	10,539.40	7,249.24	99.65	101.31	90.54	1,314.21	-3,587.38	1,837.12	1,636.37	200.75	9.151		
10,500.00	7,231.71	10,639.40	7,248.82	102.36	104.00	90.54	1,312.55	-3,687.36	1,836.24	1,630.09	206.16	8.907		
10,600.00	7,231.32	10,739.39	7,248.40	105.08	106.70	90.54	1,310.89	-3,787.34	1,835.37	1,623.79	211.58	8.675		
10,700.00	7,230.92	10,839.39	7,247.98	107.80	109.41	90.53	1,309.23	-3,887.32	1,834.49	1,617.47	217.02	8.453		
10,800.00	7,230.53	10,939.38	7,247.56	110.53	112.12	90.53	1,307.57	-3,987.30	1,833.61	1,611.14	222.47	8.242		
10,900.00	7,230.14	11,039.38	7,247.14	113.27	114.85	90.53	1,305.91	-4,087.29	1,832.74	1,604.80	227.94	8.041		
11,000.00	7,229.74	11,139.38	7,246.72	116.02	117.58	90.53	1,304.25	-4,187.27	1,831.86	1,598.45	233.41	7.848		
11,100.00	7,229.35	11,239.37	7,246.30	118.77	120.31	90.53	1,302.60	-4,287.25	1,830.98	1,592.08	238.90	7.664		
11,200.00	7,228.96	11,339.37	7,245.87	121.52	123.05	90.53	1,300.94	-4,387.23	1,830.11	1,585.71	244.40	7.488		
11,300.00	7,228.56	11,439.37	7,245.45	124.28	125.80	90.53	1,299.28	-4,487.21	1,829.23	1,579.32	249.91	7.320		
11,400.00	7,228.17	11,539.36	7,245.03	127.04	128.55	90.53	1,297.62	-4,587.19	1,828.35	1,572.93	255.42	7.158		
11,500.00	7,227.78	11,639.36	7,244.61	129.81	131.30	90.53	1,295.96	-4,687.17	1,827.48	1,566.53	260.95	7.003		
11,600.00	7,227.38	11,739.35	7,244.19	132.58	134.06	90.53	1,294.30	-4,787.16	1,826.60	1,560.12	266.48	6.854		
11,700.00	7,226.99	11,839.35	7,243.77	135.36	136.83	90.53	1,292.64	-4,887.14	1,825.72	1,553.70	272.02	6.712		
11,800.00	7,226.60	11,939.35	7,243.35	138.14	139.59	90.53	1,290.99	-4,987.12	1,824.85	1,547.27	277.57	6.574		
11,900.00	7,226.20	12,039.34	7,242.93	140.92	142.36	90.53	1,289.33	-5,087.10	1,823.97	1,540.84	283.13	6.442		
12,000.00	7,225.81	12,139.34	7,242.51	143.70	145.14	90.53	1,287.67	-5,187.08	1,823.09	1,534.41	288.69	6.315		
12,100.00	7,225.42	12,239.33	7,242.09	146.49	147.91	90.53	1,286.01	-5,287.06	1,822.22	1,527.96	294.25	6.193		
12,200.00	7,225.02	12,339.33	7,241.67	149.28	150.69	90.53	1,284.35	-5,387.05	1,821.34	1,521.51	299.82	6.075		
12,300.00	7,224.63	12,439.33	7,241.25	152.08	153.47	90.53	1,282.69	-5,487.03	1,820.46	1,515.06	305.40	5.961		
12,400.00	7,224.24	12,539.32	7,240.83	154.87	156.26	90.52	1,281.03	-5,587.01	1,819.59	1,508.60	310.98	5.851		
12,500.00	7,223.84	12,639.32	7,240.41	157.67	159.05	90.52	1,279.38	-5,686.99	1,818.71	1,502.14	316.57	5.745		
12,600.00	7,223.45	12,739.32	7,239.99	160.47	161.84	90.52	1,277.72	-5,786.97	1,817.83	1,495.67	322.16	5.643		
12,700.00	7,223.06	12,839.31	7,239.57	163.27	164.63	90.52	1,276.06	-5,886.95	1,816.95	1,489.20	327.76	5.544		
12,800.00	7,222.66	12,939.31	7,239.15	166.07	167.42	90.52	1,274.40	-5,986.93	1,816.08	1,482.72	333.36	5.448		
12,900.00	7,222.27	13,039.30	7,238.73	168.88	170.22	90.52	1,272.74	-6,086.92	1,815.20	1,476.24	338.96	5.355		
13,000.00	7,221.88	13,139.30	7,238.31	171.69	173.02	90.52	1,271.08	-6,186.90	1,814.32	1,469.76	344.57	5.266		
13,100.00	7,221.48	13,239.30	7,237.89	174.49	175.82	90.52	1,269.43	-6,286.88	1,813.45	1,463.27	350.18	5.179		
13,200.00	7,221.09	13,339.29	7,237.47	177.30	178.62	90.52	1,267.77	-6,386.86	1,812.57	1,456.78	355.79	5.094		
13,300.00	7,220.70	13,439.29	7,237.05	180.12	181.42	90.52	1,266.11	-6,486.84	1,811.69	1,450.29	361.41	5.013		
13,400.00	7,220.30	13,539.28	7,236.63	182.93	184.23	90.52	1,264.45	-6,586.82	1,810.82	1,443.79	367.03	4.934		
13,500.00	7,219.91	13,639.28	7,236.21	185.74	187.03	90.52	1,262.79	-6,686.80	1,809.94	1,437.29	372.65	4.857		
13,600.00	7,219.52	13,739.28	7,235.79	188.56	189.84	90.52	1,261.13	-6,786.79	1,809.06	1,430.79	378.27	4.782		
13,700.00	7,219.12	13,839.27	7,235.37	191.38	192.65	90.52	1,259.47	-6,886.77	1,808.19	1,424.29	383.90	4.710		
13,800.00	7,218.73	13,939.27	7,234.95	194.20	195.46	90.52	1,257.82	-6,986.75	1,807.31	1,417.78	389.53	4.640		
13,900.00	7,218.34	14,039.27	7,234.53	197.02	198.27	90.52	1,256.16	-7,086.73	1,806.43	1,411.27	395.16	4.571		
14,000.00	7,217.94	14,139.26	7,234.11	199.84	201.09	90.51	1,254.50	-7,186.71	1,805.56	1,404.76	400.80	4.505		
14,100.00	7,217.55	14,239.26	7,233.69	202.66	203.90	90.51	1,252.84	-7,286.69	1,804.68	1,398.25	406.44	4.440		
14,200.00	7,217.16	14,339.25	7,233.27	205.48	206.72	90.51	1,251.18	-7,386.68	1,803.80	1,391.73	412.07	4.377		
14,300.00	7,216.76	14,439.25	7,232.85	208.30	209.53	90.51	1,249.52	-7,486.66	1,802.93	1,385.21	417.72	4.316		
14,400.00	7,216.37	14,539.25	7,232.43	211.13	212.35	90.51	1,247.86	-7,586.64	1,802.05	1,378.69	423.36	4.257		
14,500.00	7,215.98	14,639.24	7,232.00	213.96	215.17	90.51	1,246.21	-7,686.62	1,801.17	1,372.17	429.00	4.199		
14,600.00	7,215.58	14,739.24	7,231.58	216.78	217.99	90.51	1,244.55	-7,786.60	1,800.30	1,365.65	434.65	4.142		
14,700.00	7,215.19	14,839.23	7,231.16	219.61	220.81	90.51	1,242.89	-7,886.58	1,799.42	1,359.12	440.30	4.087		
14,800.00	7,214.80	14,939.23	7,230.74	222.44	223.63	90.51	1,241.23	-7,986.56	1,798.54	1,352.60	445.95	4.033		
14,900.00	7,214.40	15,039.23	7,230.32	225.27	226.45	90.51	1,239.57	-8,086.55	1,797.67	1,346.07	451.60	3.981		
14,992.74	7,214.04	15,116.21	7,230.00	227.89	228.63	90.51	1,238.29	-8,163.52	1,796.92	1,340.50	456.43	3.937		
15,000.00	7,214.01	15,116.21	7,230.00	228.10	228.63	90.51	1,238.29	-8,163.52	1,796.94	1,340.31	456.63	3.935		
15,002.44	7,214.00	15,116.21	7,230.00	228.16	228.63	90.51	1,238.29	-8,163.52	1,796.95	1,340.25	456.70	3.935 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	1.00	3.28	3.28	9.46	1,470.70	245.03	1,490.97					
100.00	100.00	108.07	109.07	3.28	3.29	9.46	1,470.35	245.09	1,490.67	1,484.10	6.57	226.772		
200.00	200.00	213.71	214.71	3.34	3.34	9.47	1,469.45	245.17	1,489.83	1,483.15	6.68	223.188		
300.00	300.00	316.66	317.65	3.44	3.45	9.48	1,468.32	245.08	1,488.74	1,481.84	6.90	215.899		
400.00	400.00	409.32	410.30	3.60	3.60	9.48	1,467.42	244.91	1,487.75	1,480.56	7.20	206.652		
500.00	500.00	504.99	505.97	3.81	3.79	9.46	1,466.98	244.51	1,487.23	1,479.64	7.59	195.916		
511.59	511.59	516.56	517.54	3.83	3.81	171.30	1,466.94	244.46	1,487.21	1,479.56	7.64	194.625		
600.00	599.98	612.41	613.39	4.03	4.04	171.30	1,466.36	244.14	1,488.33	1,480.26	8.07	184.327		
700.00	699.84	708.64	709.61	4.29	4.30	171.29	1,465.74	243.51	1,492.76	1,484.17	8.59	173.872		
800.00	799.54	808.06	809.03	4.57	4.59	171.29	1,465.32	242.44	1,499.82	1,490.66	9.16	163.787		
900.00	899.23	911.69	912.64	4.87	4.92	171.30	1,464.61	241.26	1,506.71	1,496.92	9.79	153.967		
1,000.00	998.92	999.54	1,000.49	5.20	5.21	171.30	1,464.25	240.04	1,513.85	1,503.45	10.40	145.582		
1,100.00	1,098.61	1,078.45	1,079.36	5.54	5.47	171.24	1,465.11	237.81	1,522.21	1,511.20	11.00	138.339		
1,200.00	1,198.30	1,159.82	1,160.62	5.90	5.76	171.13	1,467.25	234.05	1,531.80	1,520.17	11.64	131.653		
1,300.00	1,298.00	1,235.43	1,236.00	6.27	6.02	170.96	1,470.51	229.19	1,542.78	1,530.51	12.26	125.798		
1,400.00	1,397.69	1,321.92	1,322.01	6.66	6.34	170.70	1,475.63	221.77	1,555.00	1,542.05	12.95	120.055		
1,500.00	1,497.38	1,404.10	1,403.50	7.05	6.66	170.38	1,481.44	212.83	1,568.10	1,554.45	13.64	114.942		
1,600.00	1,597.07	1,490.41	1,488.86	7.44	7.00	170.00	1,488.63	202.33	1,582.29	1,567.92	14.37	110.131		
1,700.00	1,696.76	1,585.36	1,582.68	7.85	7.40	169.57	1,497.02	190.36	1,597.02	1,581.87	15.15	105.416		
1,800.00	1,796.45	1,697.66	1,693.65	8.25	7.89	169.08	1,506.69	176.09	1,611.64	1,595.61	16.03	100.514		
1,900.00	1,896.15	1,801.29	1,796.14	8.67	8.35	168.63	1,514.68	163.05	1,625.45	1,608.56	16.89	96.223		
2,000.00	1,995.84	1,921.26	1,914.92	9.08	8.90	168.15	1,523.13	148.40	1,638.77	1,620.92	17.85	91.829		
2,100.00	2,095.53	2,023.41	2,016.14	9.50	9.37	167.76	1,529.37	136.22	1,651.23	1,632.51	18.72	88.209		
2,200.00	2,195.22	2,108.40	2,100.36	9.92	9.76	167.44	1,534.85	126.17	1,664.13	1,644.61	19.51	85.292		
2,300.00	2,294.91	2,192.92	2,184.03	10.35	10.16	167.12	1,541.03	115.92	1,677.90	1,657.60	20.30	82.635		
2,400.00	2,394.60	2,297.93	2,287.96	10.77	10.67	166.72	1,548.98	103.22	1,692.01	1,670.80	21.22	79.753		
2,500.00	2,494.30	2,381.54	2,370.74	11.20	11.07	166.42	1,555.48	93.40	1,706.41	1,684.40	22.01	77.526		
2,600.00	2,593.99	2,485.89	2,474.07	11.63	11.57	166.07	1,563.84	81.53	1,721.14	1,698.21	22.92	75.079		
2,700.00	2,693.68	2,571.71	2,559.07	12.07	11.99	165.78	1,570.86	71.96	1,736.10	1,712.36	23.73	73.148		
2,800.00	2,793.37	2,686.03	2,672.30	12.50	12.55	165.41	1,580.12	59.19	1,751.04	1,726.33	24.71	70.857		
2,900.00	2,893.06	2,784.06	2,769.38	12.93	13.03	165.09	1,587.63	47.92	1,765.57	1,739.97	25.60	68.963		
3,000.00	2,992.76	2,877.10	2,861.46	13.37	13.49	164.77	1,594.91	36.69	1,780.30	1,753.84	26.47	67.264		
3,100.00	3,092.45	2,973.60	2,958.89	13.81	13.98	164.44	1,602.75	24.74	1,795.38	1,768.02	27.36	65.627		
3,200.00	3,192.14	3,083.23	3,065.41	14.25	14.53	164.08	1,611.09	11.56	1,810.00	1,781.67	28.33	63.895		
3,300.00	3,291.83	3,176.20	3,157.45	14.68	15.00	163.78	1,618.19	0.54	1,824.71	1,795.52	29.20	62.494		
3,400.00	3,391.52	3,290.73	3,270.75	15.12	15.58	163.40	1,626.90	-13.69	1,839.49	1,809.29	30.20	60.903		
3,500.00	3,491.21	3,408.33	3,387.33	15.56	16.17	163.05	1,634.10	-27.42	1,852.79	1,821.57	31.22	59.339		
3,600.00	3,590.91	3,507.03	3,485.26	16.00	16.65	162.78	1,639.83	-38.23	1,865.58	1,833.75	32.13	58.081		
3,700.00	3,690.60	3,588.17	3,565.86	16.45	17.05	162.59	1,644.85	-46.20	1,879.41	1,846.49	32.92	57.091		
3,800.00	3,790.29	3,670.24	3,647.30	16.89	17.45	162.40	1,650.81	-54.37	1,894.01	1,860.29	33.72	56.176		
3,900.00	3,889.98	3,766.46	3,742.75	17.33	17.93	162.18	1,658.37	-63.88	1,909.22	1,874.62	34.60	55.183		
4,000.00	3,989.67	3,855.86	3,831.46	17.77	18.37	161.98	1,665.31	-72.58	1,924.40	1,888.97	35.44	54.306		
4,100.00	4,089.36	3,939.32	3,914.23	18.22	18.78	161.80	1,672.65	-80.37	1,940.58	1,904.34	36.24	53.555		
4,200.00	4,189.06	4,034.99	4,009.02	18.66	19.26	161.59	1,681.25	-89.98	1,957.01	1,919.90	37.12	52.727		
4,300.00	4,288.75	4,123.82	4,096.93	19.10	19.71	161.37	1,689.60	-99.63	1,973.88	1,935.92	37.96	52.005		
4,400.00	4,388.44	4,231.28	4,203.27	19.55	20.26	161.11	1,699.97	-111.08	1,991.05	1,952.13	38.92	51.156		
4,500.00	4,488.13	4,362.45	4,333.30	19.99	20.92	160.82	1,710.70	-124.69	2,006.73	1,966.69	40.04	50.120		
4,600.00	4,587.82	4,483.20	4,453.12	20.44	21.52	160.56	1,719.17	-136.89	2,021.33	1,980.25	41.08	49.204		
4,700.00	4,687.51	4,635.70	4,604.83	20.89	22.25	160.30	1,726.83	-150.44	2,033.87	1,991.59	42.29	48.094		
4,800.00	4,787.21	4,761.01	4,729.59	21.33	22.84	160.09	1,730.78	-161.29	2,044.63	2,001.30	43.33	47.191		
4,900.00	4,886.90	4,877.85	4,846.08	21.78	23.37	159.93	1,733.22	-170.10	2,054.31	2,010.01	44.30	46.369		
5,000.00	4,986.59	4,981.25	4,949.31	22.22	23.82	159.85	1,735.06	-175.75	2,063.63	2,018.44	45.20	45.658		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,086.28	5,095.58	5,063.57	22.67	24.30	159.84	1,736.62	-179.14	2,072.46	2,026.34	46.13	44.930		
5,200.00	5,185.97	8,992.31	7,204.60	23.12	53.10	153.37	-380.54	-178.32	2,020.08	1,997.30	22.78	88.682		
5,300.00	5,285.66	8,999.37	7,204.47	23.56	53.22	152.88	-387.61	-178.21	1,920.23	1,897.35	22.89	83.905		
5,400.00	5,385.36	9,005.39	7,204.35	24.01	53.32	152.40	-393.62	-178.11	1,820.39	1,797.39	23.00	79.159		
5,500.00	5,485.05	9,011.48	7,204.23	24.46	53.43	151.86	-399.71	-178.01	1,720.54	1,697.42	23.12	74.428		
5,600.00	5,584.74	9,017.48	7,204.11	24.90	53.54	151.25	-405.71	-177.90	1,620.69	1,597.44	23.25	69.721		
5,700.00	5,684.43	9,023.41	7,203.99	25.35	53.64	150.58	-411.64	-177.80	1,520.84	1,497.46	23.38	65.042		
5,800.00	5,784.12	9,029.27	7,203.87	25.80	53.74	149.81	-417.49	-177.68	1,420.99	1,397.46	23.53	60.397		
5,900.00	5,883.81	9,034.20	7,203.76	26.25	53.83	149.07	-422.42	-177.59	1,321.13	1,297.45	23.68	55.795		
6,000.00	5,983.51	9,039.22	7,203.66	26.70	53.92	148.21	-427.44	-177.49	1,221.28	1,197.44	23.84	51.232		
6,100.00	6,083.20	9,044.30	7,203.56	27.14	54.01	147.20	-432.51	-177.39	1,121.44	1,097.43	24.01	46.713		
6,200.00	6,182.89	9,049.42	7,203.46	27.59	54.10	146.01	-437.64	-177.29	1,021.59	997.41	24.18	42.243		
6,300.00	6,282.58	9,054.60	7,203.35	28.04	54.19	144.58	-442.81	-177.18	921.75	897.38	24.37	37.824		
6,400.00	6,382.27	9,059.83	7,203.25	28.49	54.28	142.83	-448.04	-177.07	821.91	797.35	24.56	33.461		
6,500.00	6,481.96	9,065.05	7,203.15	28.94	54.37	140.67	-453.26	-176.97	722.08	697.32	24.77	29.155		
6,600.00	6,581.66	9,070.31	7,203.05	29.39	54.47	137.91	-458.52	-176.87	622.26	597.28	24.98	24.907		
6,700.00	6,681.21	9,075.62	7,202.96	29.83	54.56	173.04	-463.83	-176.79	522.46	497.27	25.19	20.740		
6,800.00	6,778.96	9,080.85	7,202.86	30.28	54.65	-176.95	-469.06	-176.72	424.01	398.58	25.43	16.672		
6,900.00	6,872.51	9,085.96	7,202.77	30.70	54.75	-176.40	-474.16	-176.66	331.52	303.78	27.74	11.951		
7,000.00	6,959.55	9,090.90	7,202.68	31.10	54.83	-176.31	-479.11	-176.62	255.03	216.36	38.66	6.596		
7,100.00	7,037.93	9,095.63	7,202.60	31.48	54.92	-176.15	-483.83	-176.58	215.19	153.33	61.86	3.479		
7,120.45	7,052.72	9,096.56	7,202.58	31.56	54.93	-176.11	-484.76	-176.58	213.89	147.01	66.88	3.198 CC, ES		
7,200.00	7,105.74	9,099.73	7,202.53	31.88	54.99	-175.94	-487.93	-176.56	232.77	151.78	80.99	2.874 SF		
7,300.00	7,161.29	9,103.38	7,202.47	32.41	55.05	-175.54	-491.58	-176.54	297.46	211.04	86.43	3.442		
7,400.00	7,203.22	9,106.37	7,202.42	33.13	55.11	-174.75	-494.57	-176.53	385.20	298.44	86.76	4.440		
7,500.00	7,230.50	9,108.59	7,202.38	34.04	55.15	-172.39	-496.79	-176.52	482.09	395.61	86.48	5.574		
7,600.00	7,242.45	9,109.92	7,202.36	35.13	55.17	-14.14	-498.12	-176.51	581.82	495.39	86.43	6.732		
7,700.00	7,242.72	9,110.52	7,202.35	36.39	55.18	-3.44	-498.72	-176.51	681.63	595.08	86.54	7.876		
7,800.00	7,242.33	9,111.11	7,202.34	37.81	55.19	-4.22	-499.31	-176.51	781.45	694.81	86.64	9.020		
7,900.00	7,241.93	9,111.73	7,202.33	39.40	55.20	-5.04	-499.93	-176.51	881.32	794.60	86.72	10.163		
8,000.00	7,241.54	9,112.39	7,202.32	41.13	55.22	-5.90	-500.59	-176.51	981.21	894.43	86.78	11.307		
8,100.00	7,241.15	9,113.09	7,202.30	42.97	55.23	-6.82	-501.29	-176.51	1,081.12	994.28	86.84	12.450		
8,200.00	7,240.75	9,113.83	7,202.29	44.92	55.24	-7.78	-502.03	-176.50	1,181.05	1,094.15	86.89	13.592		
8,300.00	7,240.36	9,114.62	7,202.28	46.97	55.25	-8.81	-502.82	-176.50	1,280.98	1,194.04	86.95	14.733		
8,400.00	7,239.97	9,115.46	7,202.27	49.10	55.27	-9.89	-503.65	-176.50	1,380.93	1,293.93	87.00	15.873		
8,500.00	7,239.57	9,116.35	7,202.25	51.29	55.29	-11.03	-504.55	-176.50	1,480.88	1,393.84	87.05	17.012		
8,600.00	7,239.18	9,117.31	7,202.24	53.56	55.30	-12.25	-505.51	-176.50	1,580.84	1,493.74	87.10	18.150		
8,700.00	7,238.79	9,118.34	7,202.22	55.87	55.32	-13.54	-506.54	-176.50	1,680.81	1,593.65	87.15	19.286		
8,800.00	7,238.39	9,119.44	7,202.20	58.24	55.34	-14.91	-507.64	-176.49	1,780.77	1,693.57	87.21	20.420		
8,900.00	7,238.00	9,120.63	7,202.18	60.64	55.36	-16.37	-508.83	-176.49	1,880.74	1,793.48	87.26	21.553		
9,000.00	7,237.61	9,121.92	7,202.16	63.09	55.38	-17.92	-510.12	-176.49	1,980.71	1,893.39	87.32	22.683		
9,100.00	7,237.21	9,123.32	7,202.14	65.56	55.41	-19.58	-511.52	-176.49	2,080.69	1,993.31	87.38	23.812		
9,200.00	7,236.82	9,124.84	7,202.12	68.07	55.44	-21.34	-513.04	-176.49	2,180.67	2,093.22	87.45	24.938		
9,300.00	7,236.43	9,126.51	7,202.09	70.61	55.47	-23.21	-514.70	-176.49	2,280.64	2,193.13	87.51	26.061		
9,400.00	7,236.03	9,128.33	7,202.06	73.16	55.50	-25.20	-516.53	-176.49	2,380.62	2,293.04	87.58	27.181		
9,500.00	7,235.64	9,130.35	7,202.03	75.74	55.53	-27.32	-518.54	-176.50	2,480.60	2,392.94	87.66	28.298		
9,600.00	7,235.25	9,600.00	7,202.22	78.34	63.91	-13.80	-506.74	-176.51	2,580.58	2,484.55	96.03	26.871		
9,700.00	7,234.85	9,700.00	7,202.21	80.96	65.69	-14.34	-507.18	-176.51	2,680.57	2,582.71	97.86	27.393		
9,800.00	7,234.46	9,129.13	7,202.05	83.59	55.51	-26.05	-517.33	-176.49	2,780.56	2,682.82	87.74	31.692		
9,900.00	7,234.07	9,129.92	7,202.03	86.24	55.53	-26.88	-518.12	-176.49	2,880.54	2,782.75	87.79	32.812		
10,000.00	7,233.67	9,130.70	7,202.02	88.90	55.54	-27.69	-518.90	-176.49	2,980.53	2,882.69	87.84	33.931		
10,100.00	7,233.28	9,131.49	7,202.01	91.57	55.56	-28.49	-519.68	-176.49	3,080.51	2,982.62	87.90	35.047		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.89	9,132.27	7,202.00	94.25	55.57	-29.28	-520.47	-176.49	3,180.50	3,092.55	87.95	36.162		
10,300.00	7,232.49	9,133.06	7,201.98	96.95	55.58	-30.05	-521.25	-176.49	3,280.49	3,192.48	88.01	37.275		
10,400.00	7,232.10	9,133.84	7,201.97	99.65	55.60	-30.81	-522.04	-176.49	3,380.48	3,292.41	88.07	38.386		
10,500.00	7,231.71	9,134.63	7,201.96	102.36	55.61	-31.57	-522.82	-176.49	3,480.47	3,392.34	88.12	39.495		
10,600.00	7,231.32	9,135.41	7,201.94	105.08	55.63	-32.30	-523.61	-176.49	3,580.46	3,492.27	88.18	40.602		
10,700.00	7,230.92	9,136.20	7,201.93	107.80	55.64	-33.03	-524.39	-176.49	3,680.45	3,592.20	88.24	41.708		
10,800.00	7,230.53	9,136.98	7,201.92	110.53	55.65	-33.74	-525.18	-176.49	3,780.44	3,692.13	88.30	42.811		
10,900.00	7,230.14	9,137.77	7,201.90	113.27	55.67	-34.44	-525.97	-176.49	3,880.43	3,792.06	88.37	43.913		
11,000.00	7,229.74	9,138.56	7,201.89	116.02	55.68	-35.13	-526.75	-176.49	3,980.42	3,891.99	88.43	45.012		
11,100.00	7,229.35	9,139.34	7,201.88	118.77	55.70	-35.81	-527.54	-176.49	4,080.41	3,991.92	88.49	46.109		
11,200.00	7,228.96	9,140.13	7,201.86	121.52	55.71	-36.48	-528.32	-176.49	4,180.40	4,091.84	88.56	47.205		
11,300.00	7,228.56	9,140.91	7,201.85	124.28	55.72	-37.13	-529.11	-176.49	4,280.39	4,191.77	88.63	48.298		
11,400.00	7,228.17	9,141.70	7,201.83	127.04	55.74	-37.77	-529.89	-176.49	4,380.38	4,291.69	88.69	49.388		
11,500.00	7,227.78	9,142.48	7,201.82	129.81	55.75	-38.40	-530.68	-176.49	4,480.38	4,391.62	88.76	50.477		
11,600.00	7,227.38	9,143.27	7,201.81	132.58	55.77	-39.02	-531.46	-176.49	4,580.37	4,491.54	88.83	51.563		
11,700.00	7,226.99	9,144.06	7,201.79	135.36	55.78	-39.63	-532.25	-176.49	4,680.36	4,591.46	88.90	52.648		
11,800.00	7,226.60	9,144.84	7,201.78	138.14	55.79	-40.23	-533.04	-176.49	4,780.35	4,691.38	88.97	53.730		
11,900.00	7,226.20	9,145.63	7,201.76	140.92	55.81	-40.82	-533.82	-176.49	4,880.35	4,791.30	89.04	54.809		
12,000.00	7,225.81	9,146.41	7,201.75	143.70	55.82	-41.39	-534.61	-176.49	4,980.34	4,891.23	89.12	55.886		
12,100.00	7,225.42	9,147.20	7,201.74	146.49	55.84	-41.96	-535.39	-176.49	5,080.33	4,991.14	89.19	56.961		
12,200.00	7,225.02	9,147.99	7,201.72	149.28	55.85	-42.52	-536.18	-176.49	5,180.33	5,091.06	89.26	58.033		
12,300.00	7,224.63	9,148.77	7,201.71	152.08	55.86	-43.06	-536.97	-176.49	5,280.32	5,190.98	89.34	59.103		
12,400.00	7,224.24	9,149.56	7,201.69	154.87	55.88	-43.60	-537.75	-176.49	5,380.31	5,290.90	89.42	60.171		
12,500.00	7,223.84	9,150.35	7,201.68	157.67	55.89	-44.12	-538.54	-176.49	5,480.31	5,390.81	89.49	61.236		
12,600.00	7,223.45	9,151.13	7,201.66	160.47	55.91	-44.64	-539.33	-176.49	5,580.30	5,490.73	89.57	62.299		
12,700.00	7,223.06	9,151.92	7,201.65	163.27	55.92	-45.15	-540.11	-176.49	5,680.30	5,590.64	89.65	63.359		
12,800.00	7,222.66	9,152.71	7,201.63	166.07	55.93	-45.65	-540.90	-176.49	5,780.29	5,690.56	89.73	64.416		
12,900.00	7,222.27	9,153.49	7,201.62	168.88	55.95	-46.14	-541.68	-176.49	5,880.28	5,790.47	89.82	65.471		
13,000.00	7,221.88	9,154.28	7,201.60	171.69	55.96	-46.62	-542.47	-176.49	5,980.28	5,890.38	89.90	66.523		
13,100.00	7,221.48	9,155.07	7,201.59	174.49	55.98	-47.09	-543.26	-176.49	6,080.27	5,990.29	89.98	67.573		
13,200.00	7,221.09	9,155.85	7,201.57	177.30	55.99	-47.55	-544.04	-176.49	6,180.27	6,090.20	90.07	68.620		
13,300.00	7,220.70	9,156.64	7,201.56	180.12	56.01	-48.01	-544.83	-176.49	6,280.26	6,190.11	90.15	69.664		
13,400.00	7,220.30	9,157.43	7,201.54	182.93	56.02	-48.45	-545.62	-176.49	6,380.26	6,290.02	90.24	70.706		
13,500.00	7,219.91	9,158.21	7,201.53	185.74	56.03	-48.89	-546.41	-176.49	6,480.25	6,389.93	90.32	71.745		
13,600.00	7,219.52	9,159.00	7,201.51	188.56	56.05	-49.32	-547.19	-176.49	6,580.25	6,489.83	90.41	72.781		
13,700.00	7,219.12	9,158.78	7,201.52	191.38	56.04	-49.20	-546.97	-176.49	6,680.24	6,589.76	90.48	73.832		
13,800.00	7,218.73	9,159.34	7,201.51	194.20	56.05	-49.51	-547.53	-176.49	6,780.24	6,689.67	90.56	74.867		
13,900.00	7,218.34	9,159.90	7,201.50	197.02	56.06	-49.80	-548.09	-176.49	6,880.23	6,789.58	90.65	75.899		
14,000.00	7,217.94	9,160.46	7,201.48	199.84	56.07	-50.10	-548.65	-176.49	6,980.23	6,889.49	90.74	76.929		
14,100.00	7,217.55	9,161.01	7,201.47	202.66	56.08	-50.38	-549.20	-176.49	7,080.22	6,989.40	90.82	77.956		
14,200.00	7,217.16	9,161.55	7,201.46	205.48	56.09	-50.67	-549.75	-176.49	7,180.22	7,089.31	90.91	78.980		
14,300.00	7,216.76	9,162.10	7,201.45	208.30	56.10	-50.94	-550.29	-176.49	7,280.21	7,189.21	91.00	80.002		
14,400.00	7,216.37	9,162.63	7,201.44	211.13	56.11	-51.21	-550.83	-176.49	7,380.21	7,289.12	91.09	81.021		
14,500.00	7,215.98	9,163.17	7,201.43	213.96	56.12	-51.48	-551.36	-176.49	7,480.20	7,389.02	91.18	82.037		
14,600.00	7,215.58	9,163.70	7,201.42	216.78	56.13	-51.74	-551.89	-176.49	7,580.20	7,488.93	91.27	83.051		
14,700.00	7,215.19	9,164.22	7,201.41	219.61	56.14	-51.99	-552.42	-176.49	7,680.19	7,588.83	91.36	84.062		
14,800.00	7,214.80	9,164.75	7,201.40	222.44	56.15	-52.24	-552.94	-176.49	7,780.19	7,688.73	91.46	85.070		
14,900.00	7,214.40	9,165.26	7,201.39	225.27	56.16	-52.48	-553.46	-176.49	7,880.19	7,788.64	91.55	86.076		
15,000.00	7,214.01	9,165.78	7,201.38	228.10	56.17	-52.72	-553.97	-176.49	7,980.18	7,888.54	91.64	87.078		
15,002.44	7,214.00	9,165.79	7,201.38	228.16	56.17	-52.73	-553.98	-176.49	7,982.62	7,890.97	91.65	87.103		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	1.00	3.28	3.28	10.63	1,472.16	276.17	1,497.84				
100.00	100.00	102.42	103.42	3.28	3.29	10.63	1,472.00	276.37	1,497.72	1,491.15	6.57	227.880	
200.00	200.00	209.86	210.86	3.34	3.33	10.66	1,471.44	276.88	1,497.30	1,490.63	6.67	224.420	
300.00	300.00	313.69	314.68	3.44	3.44	10.66	1,470.51	276.72	1,496.39	1,489.51	6.89	217.229	
400.00	400.00	417.02	418.01	3.60	3.60	10.63	1,469.56	275.75	1,495.31	1,488.10	7.21	207.480	
500.00	500.00	521.25	522.23	3.81	3.82	10.64	1,468.13	275.73	1,493.97	1,486.35	7.62	196.029	
535.96	535.96	553.58	554.55	3.88	3.89	172.48	1,467.68	275.82	1,493.71	1,485.94	7.77	192.153	
600.00	599.98	613.61	614.58	4.03	4.04	172.50	1,466.99	275.96	1,494.52	1,486.45	8.07	185.181	
700.00	699.84	716.55	717.51	4.29	4.32	172.54	1,465.79	276.47	1,498.66	1,490.06	8.60	174.230	
800.00	799.54	819.69	820.64	4.57	4.62	172.61	1,464.23	277.11	1,504.96	1,495.77	9.19	163.765	
900.00	899.23	915.57	916.50	4.87	4.93	172.68	1,462.86	277.84	1,511.49	1,501.69	9.80	154.273	
1,000.00	998.92	1,008.98	1,009.90	5.20	5.24	172.77	1,461.68	278.99	1,518.27	1,507.84	10.43	145.548	
1,100.00	1,098.61	1,101.19	1,102.10	5.54	5.56	172.84	1,461.13	279.90	1,525.65	1,514.57	11.09	137.591	
1,200.00	1,198.30	1,199.92	1,200.82	5.90	5.91	172.91	1,460.82	280.60	1,533.26	1,521.47	11.79	130.021	
1,300.00	1,298.00	1,301.50	1,302.40	6.27	6.28	172.97	1,460.46	281.35	1,540.85	1,528.32	12.53	122.977	
1,400.00	1,397.69	1,398.14	1,399.04	6.66	6.65	173.03	1,460.08	281.89	1,548.36	1,535.09	13.27	116.723	
1,500.00	1,497.38	1,494.00	1,494.90	7.05	7.01	173.09	1,460.05	282.54	1,556.25	1,542.24	14.01	111.087	
1,600.00	1,597.07	1,593.09	1,593.99	7.44	7.39	173.15	1,460.08	283.26	1,564.21	1,549.43	14.78	105.850	
1,700.00	1,696.76	1,694.12	1,695.01	7.85	7.78	173.21	1,460.11	284.05	1,572.19	1,556.62	15.57	101.003	
1,800.00	1,796.45	1,800.59	1,801.48	8.25	8.20	173.27	1,459.90	284.72	1,579.91	1,563.52	16.39	96.399	
1,900.00	1,896.15	1,891.98	1,892.86	8.67	8.56	173.32	1,459.66	285.11	1,587.55	1,570.40	17.15	92.581	
2,000.00	1,995.84	1,977.73	1,978.61	9.08	8.88	173.31	1,460.36	284.36	1,595.97	1,578.09	17.88	89.285	
2,100.00	2,095.53	2,058.86	2,059.70	9.50	9.19	173.28	1,461.99	282.84	1,605.36	1,586.78	18.58	86.386	
2,200.00	2,195.22	2,135.60	2,136.38	9.92	9.48	173.21	1,464.66	280.86	1,616.05	1,596.77	19.28	83.839	
2,300.00	2,294.91	2,210.82	2,211.47	10.35	9.78	173.14	1,468.49	278.69	1,628.23	1,608.27	19.96	81.569	
2,400.00	2,394.60	2,296.00	2,296.44	10.77	10.11	173.04	1,473.79	276.30	1,641.55	1,620.85	20.70	79.315	
2,500.00	2,494.30	2,381.01	2,381.22	11.20	10.45	172.95	1,479.78	274.05	1,655.71	1,634.27	21.43	77.246	
2,600.00	2,593.99	2,470.77	2,470.66	11.63	10.81	172.85	1,486.82	271.38	1,670.58	1,648.38	22.20	75.255	
2,700.00	2,693.68	2,555.96	2,555.48	12.07	11.15	172.72	1,494.14	268.34	1,686.08	1,663.13	22.94	73.490	
2,800.00	2,793.37	2,641.45	2,640.53	12.50	11.51	172.60	1,502.20	265.30	1,702.41	1,678.72	23.69	71.859	
2,900.00	2,893.06	2,724.43	2,723.02	12.93	11.86	172.47	1,510.72	262.14	1,719.52	1,695.10	24.43	70.396	
3,000.00	2,992.76	2,813.67	2,811.59	13.37	12.23	172.31	1,520.82	258.19	1,737.53	1,712.33	25.20	68.950	
3,100.00	3,092.45	2,923.36	2,920.46	13.81	12.71	172.10	1,533.15	252.92	1,755.46	1,729.36	26.10	67.263	
3,200.00	3,192.14	3,029.11	3,025.49	14.25	13.17	171.90	1,544.29	247.60	1,772.65	1,745.67	26.98	65.706	
3,300.00	3,291.83	3,131.06	3,126.71	14.68	13.61	171.69	1,554.96	241.74	1,789.69	1,761.85	27.84	64.283	
3,400.00	3,391.52	3,242.23	3,237.14	15.12	14.10	171.47	1,566.08	235.55	1,806.33	1,777.56	28.76	62.804	
3,500.00	3,491.21	3,334.05	3,328.43	15.56	14.51	171.32	1,574.93	231.08	1,822.74	1,793.17	29.57	61.643	
3,600.00	3,590.91	3,424.69	3,418.52	16.00	14.92	171.17	1,584.02	226.97	1,839.58	1,809.21	30.37	60.569	
3,700.00	3,690.60	3,518.44	3,511.67	16.45	15.34	171.03	1,593.74	222.73	1,856.79	1,825.60	31.19	59.523	
3,800.00	3,790.29	3,618.84	3,611.42	16.89	15.79	170.88	1,604.22	218.33	1,874.09	1,842.03	32.06	58.455	
3,900.00	3,889.98	3,722.63	3,714.53	17.33	16.27	170.71	1,614.90	213.26	1,891.19	1,858.24	32.95	57.395	
4,000.00	3,989.67	3,827.71	3,818.94	17.77	16.75	170.54	1,625.43	207.76	1,907.99	1,874.14	33.85	56.364	
4,100.00	4,089.36	3,905.01	3,895.68	18.22	17.10	170.40	1,633.59	203.29	1,925.23	1,890.65	34.58	55.676	
4,200.00	4,189.06	3,997.51	3,987.39	18.66	17.54	170.21	1,644.05	197.33	1,943.15	1,907.74	35.41	54.882	
4,300.00	4,288.75	4,083.39	4,072.49	19.10	17.94	170.03	1,654.13	191.66	1,961.48	1,925.29	36.19	54.199	
4,400.00	4,388.44	4,181.58	4,169.77	19.55	18.41	169.84	1,666.00	185.53	1,980.24	1,943.19	37.06	53.438	
4,500.00	4,488.13	4,293.59	4,280.85	19.99	18.94	169.66	1,678.99	179.36	1,998.64	1,960.62	38.02	52.573	
4,600.00	4,587.82	4,404.92	4,391.36	20.44	19.46	169.48	1,691.09	173.38	2,016.34	1,977.37	38.97	51.740	
4,700.00	4,687.51	4,496.66	4,482.49	20.89	19.89	169.37	1,700.88	169.47	2,033.99	1,994.20	39.79	51.113	
4,800.00	4,787.21	4,597.52	4,582.70	21.33	20.37	169.26	1,711.61	165.61	2,051.69	2,011.01	40.68	50.438	
4,900.00	4,886.90	4,722.81	4,707.29	21.78	20.95	169.15	1,724.22	161.42	2,068.95	2,027.23	41.72	49.594	
5,000.00	4,986.59	4,866.17	4,850.12	22.22	21.61	169.05	1,735.63	157.10	2,084.09	2,041.23	42.86	48.628	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,086.28	5,015.11	4,998.75	22.67	22.27	168.97	1,744.24	153.09	2,097.18	2,053.17	44.01	47.657	
5,200.00	5,185.97	9,085.85	7,234.87	23.12	53.28	-126.13	-401.66	124.74	2,063.42	2,038.23	25.18	81.938	
5,300.00	5,285.66	9,088.48	7,234.82	23.56	53.32	-125.66	-404.28	124.51	1,964.54	1,939.03	25.52	76.995	
5,400.00	5,385.36	9,091.26	7,234.78	24.01	53.37	-125.17	-407.05	124.27	1,865.78	1,839.89	25.89	72.057	
5,500.00	5,485.05	9,094.20	7,234.73	24.46	53.42	-124.65	-409.98	124.02	1,767.15	1,740.82	26.32	67.133	
5,600.00	5,584.74	9,103.00	7,234.63	24.90	53.57	-123.07	-418.75	123.26	1,668.68	1,641.84	26.84	62.166	
5,700.00	5,684.43	9,103.00	7,234.63	25.35	53.57	-123.07	-418.75	123.26	1,570.36	1,542.98	27.39	57.340	
5,800.00	5,784.12	9,105.14	7,234.62	25.80	53.61	-122.68	-420.88	123.08	1,472.27	1,444.24	28.03	52.529	
5,900.00	5,883.81	9,111.91	7,234.56	26.25	53.73	-121.43	-427.62	122.50	1,374.42	1,345.63	28.79	47.737	
6,000.00	5,983.51	9,118.67	7,234.50	26.70	53.85	-120.16	-434.36	121.92	1,276.88	1,247.19	29.68	43.019	
6,100.00	6,083.20	9,125.44	7,234.44	27.14	53.96	-118.88	-441.10	121.35	1,179.70	1,148.97	30.73	38.387	
6,200.00	6,182.89	9,132.21	7,234.38	27.59	54.08	-117.58	-447.84	120.77	1,083.00	1,051.01	31.99	33.858	
6,300.00	6,282.58	9,140.24	7,234.30	28.04	54.22	-116.02	-455.84	120.09	986.90	953.39	33.52	29.445	
6,400.00	6,382.27	9,148.23	7,234.21	28.49	54.36	-114.45	-463.81	119.42	891.60	856.20	35.41	25.182	
6,500.00	6,481.96	9,155.71	7,234.11	28.94	54.49	-112.96	-471.26	118.81	797.40	759.61	37.78	21.104	
6,600.00	6,581.66	9,162.71	7,234.00	29.39	54.61	-111.55	-478.24	118.25	704.73	663.88	40.84	17.255	
6,700.00	6,681.21	9,169.71	7,233.88	29.83	54.74	-148.38	-485.22	117.70	615.54	570.48	45.07	13.658	
6,800.00	6,778.96	9,177.69	7,233.72	30.28	54.88	-164.46	-493.18	117.08	539.10	487.19	51.91	10.385	
6,900.00	6,872.51	9,186.36	7,233.53	30.70	55.03	-168.69	-501.82	116.41	484.48	422.96	61.52	7.875	
7,000.00	6,959.55	9,195.47	7,233.31	31.10	55.19	-170.09	-510.90	115.71	461.00	388.90	72.10	6.394	
7,014.91	6,971.83	9,196.85	7,233.28	31.15	55.22	-170.17	-512.28	115.60	460.59	387.03	73.56	6.261 CC, ES	
7,100.00	7,037.93	9,204.16	7,233.09	31.48	55.34	-170.33	-519.56	115.04	473.85	393.34	80.52	5.885 SF	
7,200.00	7,105.74	9,213.35	7,232.89	31.88	55.51	-169.62	-528.72	114.33	520.06	434.80	85.26	6.100	
7,300.00	7,161.29	9,223.11	7,232.71	32.41	55.68	-167.75	-538.45	113.59	590.88	503.63	87.25	6.772	
7,400.00	7,203.22	9,233.09	7,232.56	33.13	55.86	-163.70	-548.40	112.82	677.21	589.27	87.93	7.701	
7,500.00	7,230.50	9,240.77	7,232.49	34.04	55.99	-153.97	-556.06	112.25	772.15	684.00	88.15	8.759	
7,600.00	7,242.45	9,248.01	7,232.46	35.13	56.12	-109.86	-563.27	111.72	870.98	782.68	88.30	9.864	
7,700.00	7,242.72	9,254.35	7,232.47	36.39	56.23	-79.48	-569.60	111.27	970.65	882.21	88.44	10.975	
7,800.00	7,242.33	9,260.37	7,232.51	37.81	56.34	-80.27	-575.61	110.85	1,070.35	981.76	88.59	12.082	
7,900.00	7,241.93	9,267.14	7,232.59	39.40	56.46	-81.05	-582.36	110.39	1,170.05	1,081.30	88.75	13.184	
8,000.00	7,241.54	9,274.20	7,232.68	41.13	56.59	-81.75	-589.40	109.91	1,269.76	1,180.84	88.92	14.280	
8,100.00	7,241.15	9,281.18	7,232.77	42.97	56.71	-82.36	-596.36	109.44	1,369.47	1,280.39	89.08	15.373	
8,200.00	7,240.75	9,288.09	7,232.88	44.92	56.84	-82.89	-603.26	108.98	1,469.19	1,379.94	89.25	16.461	
8,300.00	7,240.36	9,294.66	7,232.99	46.97	56.96	-83.35	-609.82	108.55	1,568.91	1,479.49	89.42	17.546	
8,400.00	7,239.97	9,300.46	7,233.10	49.10	57.06	-83.71	-615.60	108.17	1,668.64	1,579.07	89.57	18.630	
8,500.00	7,239.57	9,306.10	7,233.20	51.29	57.16	-84.03	-621.23	107.80	1,768.37	1,678.66	89.71	19.711	
8,600.00	7,239.18	9,311.61	7,233.31	53.56	57.26	-84.32	-626.72	107.45	1,868.11	1,778.25	89.86	20.789	
8,700.00	7,238.79	9,316.98	7,233.41	55.87	57.36	-84.59	-632.08	107.12	1,967.86	1,877.85	90.01	21.864	
8,800.00	7,238.39	9,322.21	7,233.52	58.24	57.45	-84.82	-637.31	106.79	2,067.61	1,977.46	90.15	22.935	
8,900.00	7,238.00	9,325.00	7,233.58	60.64	57.50	-84.95	-640.09	106.62	2,167.38	2,077.13	90.24	24.018	
9,000.00	7,237.61	9,331.19	7,233.71	63.09	57.62	-85.20	-646.27	106.25	2,267.14	2,176.73	90.41	25.077	
9,100.00	7,237.21	9,335.27	7,233.79	65.56	57.69	-85.35	-650.33	106.01	2,366.92	2,276.39	90.53	26.145	
9,200.00	7,236.82	9,339.21	7,233.86	68.07	57.76	-85.49	-654.27	105.78	2,466.70	2,376.05	90.65	27.211	
9,300.00	7,236.43	9,343.03	7,233.94	70.61	57.83	-85.62	-658.08	105.56	2,566.49	2,475.72	90.77	28.274	
9,400.00	7,236.03	9,346.72	7,234.01	73.16	57.90	-85.74	-661.77	105.36	2,666.29	2,575.40	90.89	29.336	
9,500.00	7,235.64	9,350.30	7,234.07	75.74	57.96	-85.85	-665.35	105.16	2,766.09	2,675.09	91.00	30.395	
9,600.00	7,235.25	9,357.00	7,234.19	78.34	58.08	-86.05	-672.03	104.81	2,865.91	2,774.71	91.19	31.426	
9,700.00	7,234.85	9,357.00	7,234.19	80.96	58.08	-86.05	-672.03	104.81	2,965.72	2,874.49	91.23	32.508	
9,800.00	7,234.46	9,357.00	7,234.19	83.59	58.08	-86.05	-672.03	104.81	3,065.54	2,974.28	91.27	33.589	
9,900.00	7,234.07	9,357.00	7,234.19	86.24	58.08	-86.05	-672.03	104.81	3,165.38	3,074.08	91.30	34.669	
10,000.00	7,233.67	9,357.00	7,234.19	88.90	58.08	-86.05	-672.03	104.81	3,265.23	3,173.88	91.34	35.748	
10,100.00	7,233.28	9,357.00	7,234.19	91.57	58.08	-86.05	-672.03	104.81	3,365.08	3,273.70	91.38	36.825	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.89	9,357.00	7,234.19	94.25	58.08	-86.05	-672.03	104.81	3,464.94	3,373.52	91.42	37.902		
10,300.00	7,232.49	9,357.00	7,234.19	96.95	58.08	-86.05	-672.03	104.81	3,564.81	3,473.36	91.46	38.977		
10,400.00	7,232.10	9,368.14	7,234.39	99.65	58.29	-86.34	-683.15	104.27	3,664.63	3,572.86	91.76	39.935		
10,500.00	7,231.71	9,369.47	7,234.42	102.36	58.31	-86.37	-684.48	104.21	3,764.50	3,672.66	91.84	40.991		
10,600.00	7,231.32	9,370.75	7,234.44	105.08	58.33	-86.40	-685.76	104.16	3,864.37	3,772.46	91.91	42.044		
10,700.00	7,230.92	9,371.98	7,234.47	107.80	58.36	-86.43	-686.99	104.11	3,964.25	3,872.26	91.99	43.097		
10,800.00	7,230.53	9,373.17	7,234.49	110.53	58.38	-86.46	-688.18	104.06	4,064.13	3,972.07	92.06	44.147		
10,900.00	7,230.14	9,374.31	7,234.51	113.27	58.40	-86.49	-689.32	104.02	4,164.02	4,071.89	92.13	45.197		
11,000.00	7,229.74	9,375.41	7,234.53	116.02	58.42	-86.52	-690.42	103.97	4,263.91	4,171.71	92.20	46.244		
11,100.00	7,229.35	9,376.47	7,234.55	118.77	58.44	-86.54	-691.48	103.93	4,363.81	4,271.53	92.28	47.290		
11,200.00	7,228.96	9,389.00	7,234.81	121.52	58.67	-86.82	-704.00	103.52	4,463.77	4,371.14	92.63	48.189		
11,300.00	7,228.56	9,389.00	7,234.81	124.28	58.67	-86.82	-704.00	103.52	4,563.66	4,470.98	92.68	49.241		
11,400.00	7,228.17	9,389.00	7,234.81	127.04	58.67	-86.82	-704.00	103.52	4,663.56	4,570.83	92.73	50.292		
11,500.00	7,227.78	9,389.00	7,234.81	129.81	58.67	-86.82	-704.00	103.52	4,763.46	4,670.68	92.78	51.341		
11,600.00	7,227.38	9,389.00	7,234.81	132.58	58.67	-86.82	-704.00	103.52	4,863.36	4,770.53	92.83	52.388		
11,700.00	7,226.99	9,389.00	7,234.81	135.36	58.67	-86.82	-704.00	103.52	4,963.27	4,870.38	92.89	53.434		
11,800.00	7,226.60	9,389.00	7,234.81	138.14	58.67	-86.82	-704.00	103.52	5,063.18	4,970.24	92.94	54.478		
11,900.00	7,226.20	9,389.00	7,234.81	140.92	58.67	-86.82	-704.00	103.52	5,163.10	5,070.10	93.00	55.520		
12,000.00	7,225.81	9,389.00	7,234.81	143.70	58.67	-86.82	-704.00	103.52	5,263.02	5,169.97	93.05	56.561		
12,100.00	7,225.42	9,389.00	7,234.81	146.49	58.67	-86.82	-704.00	103.52	5,362.94	5,269.83	93.11	57.599		
12,200.00	7,225.02	9,389.00	7,234.81	149.28	58.67	-86.82	-704.00	103.52	5,462.86	5,369.70	93.16	58.636		
12,300.00	7,224.63	9,389.00	7,234.81	152.08	58.67	-86.82	-704.00	103.52	5,562.79	5,469.57	93.22	59.672		
12,400.00	7,224.24	9,389.00	7,234.81	154.87	58.67	-86.82	-704.00	103.52	5,662.72	5,569.44	93.28	60.705		
12,500.00	7,223.84	9,389.00	7,234.81	157.67	58.67	-86.82	-704.00	103.52	5,762.65	5,669.31	93.34	61.736		
12,600.00	7,223.45	9,389.00	7,234.81	160.47	58.67	-86.82	-704.00	103.52	5,862.59	5,769.18	93.40	62.766		
12,700.00	7,223.06	9,389.00	7,234.81	163.27	58.67	-86.82	-704.00	103.52	5,962.52	5,869.06	93.47	63.793		
12,800.00	7,222.66	9,389.00	7,234.81	166.07	58.67	-86.82	-704.00	103.52	6,062.46	5,968.93	93.53	64.819		
12,900.00	7,222.27	9,389.00	7,234.81	168.88	58.67	-86.82	-704.00	103.52	6,162.40	6,068.81	93.59	65.843		
13,000.00	7,221.88	9,389.00	7,234.81	171.69	58.67	-86.82	-704.00	103.52	6,262.35	6,168.69	93.66	66.864		
13,100.00	7,221.48	9,389.00	7,234.81	174.49	58.67	-86.82	-704.00	103.52	6,362.29	6,268.57	93.72	67.884		
13,200.00	7,221.09	9,389.00	7,234.81	177.30	58.67	-86.82	-704.00	103.52	6,462.24	6,368.45	93.79	68.901		
13,300.00	7,220.70	9,389.00	7,234.81	180.12	58.67	-86.82	-704.00	103.52	6,562.18	6,468.33	93.86	69.917		
13,400.00	7,220.30	9,389.00	7,234.81	182.93	58.67	-86.82	-704.00	103.52	6,662.13	6,568.21	93.93	70.930		
13,500.00	7,219.91	9,389.00	7,234.81	185.74	58.67	-86.82	-704.00	103.52	6,762.08	6,668.09	93.99	71.941		
13,600.00	7,219.52	9,389.00	7,234.81	188.56	58.67	-86.82	-704.00	103.52	6,862.04	6,767.97	94.06	72.950		
13,700.00	7,219.12	9,389.00	7,234.81	191.38	58.67	-86.82	-704.00	103.52	6,961.99	6,867.85	94.14	73.957		
13,800.00	7,218.73	9,389.00	7,234.81	194.20	58.67	-86.82	-704.00	103.52	7,061.94	6,967.74	94.21	74.962		
13,900.00	7,218.34	9,389.00	7,234.81	197.02	58.67	-86.82	-704.00	103.52	7,161.90	7,067.62	94.28	75.964		
14,000.00	7,217.94	9,389.00	7,234.81	199.84	58.67	-86.82	-704.00	103.52	7,261.86	7,167.51	94.35	76.965		
14,100.00	7,217.55	9,389.00	7,234.81	202.66	58.67	-86.82	-704.00	103.52	7,361.82	7,267.39	94.43	77.963		
14,200.00	7,217.16	9,389.00	7,234.81	205.48	58.67	-86.82	-704.00	103.52	7,461.78	7,367.27	94.50	78.958		
14,300.00	7,216.76	9,389.00	7,234.81	208.30	58.67	-86.82	-704.00	103.52	7,561.74	7,467.16	94.58	79.952		
14,400.00	7,216.37	9,389.00	7,234.81	211.13	58.67	-86.82	-704.00	103.52	7,661.70	7,567.04	94.66	80.943		
14,500.00	7,215.98	9,389.00	7,234.81	213.96	58.67	-86.82	-704.00	103.52	7,761.66	7,666.93	94.73	81.932		
14,600.00	7,215.58	9,389.00	7,234.81	216.78	58.67	-86.82	-704.00	103.52	7,861.63	7,766.81	94.81	82.918		
14,700.00	7,215.19	9,401.48	7,235.08	219.61	58.90	-87.06	-716.47	103.22	7,961.53	7,866.33	95.20	83.630		
14,800.00	7,214.80	9,401.94	7,235.09	222.44	58.91	-87.07	-716.94	103.21	8,061.49	7,966.20	95.29	84.599		
14,900.00	7,214.40	9,402.40	7,235.10	225.27	58.91	-87.08	-717.39	103.21	8,161.46	8,066.07	95.38	85.565		
15,000.00	7,214.01	9,402.85	7,235.11	228.10	58.92	-87.09	-717.84	103.20	8,261.42	8,165.94	95.48	86.529		
15,002.44	7,214.00	9,402.86	7,235.11	228.16	58.92	-87.09	-717.85	103.20	8,263.85	8,168.38	95.48	86.552		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH		Offset Site Error: 0.00 ft	
Survey Program: 146-MWD												Offset Well Error: 3.28 ft			
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
0.00	0.00	0.00	1.00	3.28	3.28	11.69	1,467.78	303.71	1,498.88						
100.00	100.00	78.95	79.95	3.28	3.29	11.71	1,468.19	304.33	1,499.54	1,492.97	6.57	228.236			
200.00	200.00	163.38	164.34	3.34	3.31	11.78	1,469.51	306.34	1,501.53	1,494.88	6.64	225.979			
300.00	300.00	280.80	281.70	3.44	3.41	11.90	1,471.10	309.89	1,503.50	1,496.65	6.85	219.425			
400.00	400.00	374.54	375.39	3.60	3.54	12.00	1,471.38	312.67	1,504.43	1,497.29	7.14	210.593			
500.00	500.00	470.65	471.47	3.81	3.72	12.01	1,473.52	313.55	1,506.78	1,499.25	7.52	200.305			
600.00	599.98	592.69	593.50	4.03	3.99	173.84	1,474.71	313.50	1,509.41	1,501.39	8.02	188.105			
700.00	699.84	682.35	683.16	4.29	4.23	173.85	1,475.26	313.84	1,515.30	1,506.79	8.51	178.000			
800.00	799.54	773.69	774.50	4.57	4.49	173.90	1,476.41	314.56	1,524.39	1,515.33	9.06	168.290			
900.00	899.23	884.99	885.78	4.87	4.83	173.95	1,477.77	315.42	1,533.55	1,523.84	9.71	158.011			
1,000.00	998.92	980.69	981.48	5.20	5.15	173.99	1,478.67	315.94	1,542.39	1,532.04	10.34	149.121			
1,100.00	1,098.61	1,068.52	1,069.30	5.54	5.45	174.03	1,479.95	316.44	1,551.72	1,540.74	10.98	141.279			
1,200.00	1,198.30	1,169.20	1,169.96	5.90	5.81	174.06	1,481.80	316.91	1,561.41	1,549.72	11.69	133.535			
1,300.00	1,298.00	1,276.32	1,277.06	6.27	6.20	174.07	1,483.51	316.54	1,570.69	1,558.25	12.45	126.208			
1,400.00	1,397.69	1,374.13	1,374.86	6.66	6.56	174.06	1,485.11	315.77	1,579.93	1,566.75	13.18	119.877			
1,500.00	1,497.38	1,468.44	1,469.15	7.05	6.91	174.05	1,486.63	315.08	1,589.15	1,575.24	13.92	114.198			
1,600.00	1,597.07	1,545.38	1,546.06	7.44	7.21	174.09	1,488.35	316.10	1,599.42	1,584.83	14.59	109.589			
1,700.00	1,696.76	1,619.90	1,620.49	7.85	7.51	174.19	1,490.80	318.74	1,611.17	1,595.90	15.27	105.502			
1,800.00	1,796.45	1,703.74	1,704.13	8.25	7.84	174.35	1,494.28	323.42	1,624.21	1,608.21	16.00	101.544			
1,900.00	1,896.15	1,781.50	1,781.57	8.67	8.16	174.54	1,497.93	329.31	1,638.26	1,621.56	16.70	98.117			
2,000.00	1,995.84	1,855.67	1,855.33	9.08	8.47	174.75	1,502.31	335.87	1,653.77	1,636.38	17.39	95.125			
2,100.00	2,095.53	1,932.04	1,931.18	9.50	8.80	174.96	1,507.94	342.79	1,670.76	1,652.67	18.09	92.377			
2,200.00	2,195.22	2,022.92	2,021.34	9.92	9.19	175.22	1,515.28	351.39	1,688.57	1,669.71	18.87	89.504			
2,300.00	2,294.91	2,114.59	2,112.34	10.35	9.59	175.43	1,523.32	359.09	1,706.83	1,687.18	19.65	86.843			
2,400.00	2,394.60	2,212.98	2,209.98	10.77	10.03	175.65	1,532.15	367.28	1,725.29	1,704.80	20.48	84.228			
2,500.00	2,494.30	2,321.01	2,317.12	11.20	10.52	175.94	1,541.27	377.71	1,743.60	1,722.23	21.37	81.576			
2,600.00	2,593.99	2,437.33	2,432.61	11.63	11.05	176.24	1,549.70	388.79	1,760.73	1,738.41	22.32	78.900			
2,700.00	2,693.68	2,528.28	2,522.94	12.07	11.46	176.46	1,556.33	396.97	1,777.84	1,754.72	23.12	76.893			
2,800.00	2,793.37	2,613.50	2,607.54	12.50	11.86	176.67	1,562.98	404.88	1,795.54	1,771.64	23.90	75.141			
2,900.00	2,893.06	2,700.74	2,694.04	12.93	12.27	176.89	1,570.44	413.38	1,814.08	1,789.40	24.68	73.492			
3,000.00	2,992.76	2,824.28	2,816.50	13.37	12.85	177.22	1,580.29	426.33	1,832.38	1,806.69	25.69	71.325			
3,100.00	3,092.45	2,940.76	2,932.02	13.81	13.40	177.57	1,587.38	439.44	1,849.04	1,822.39	26.66	69.358			
3,200.00	3,192.14	3,048.60	3,039.16	14.25	13.91	177.84	1,593.90	449.78	1,865.30	1,837.72	27.58	67.641			
3,300.00	3,291.83	3,135.19	3,125.25	14.68	14.31	178.02	1,599.36	457.25	1,881.56	1,853.19	28.37	66.318			
3,400.00	3,391.52	3,218.64	3,208.12	15.12	14.71	178.22	1,605.00	465.41	1,898.59	1,869.44	29.15	65.131			
3,500.00	3,491.21	3,346.75	3,335.38	15.56	15.31	178.50	1,613.74	477.26	1,915.66	1,885.47	30.19	63.448			
3,600.00	3,590.91	3,436.51	3,424.65	16.00	15.73	178.67	1,619.40	484.66	1,931.88	1,900.87	31.01	62.302			
3,700.00	3,690.60	3,530.98	3,518.55	16.45	16.18	178.86	1,625.46	492.96	1,948.39	1,916.53	31.85	61.166			
3,800.00	3,790.29	3,620.12	3,607.13	16.89	16.60	179.03	1,631.48	500.86	1,965.24	1,932.58	32.67	60.158			
3,900.00	3,889.98	3,720.13	3,706.49	17.33	17.08	179.23	1,638.35	510.02	1,982.34	1,948.79	33.55	59.086			
4,000.00	3,989.67	3,822.01	3,807.65	17.77	17.57	179.46	1,644.90	520.25	1,999.30	1,964.85	34.45	58.040			
4,100.00	4,089.36	3,889.44	3,874.49	18.22	17.91	179.63	1,649.51	527.77	2,017.00	1,981.87	35.13	57.412			
4,200.00	4,189.06	3,971.46	3,955.63	18.66	18.32	179.86	1,655.80	538.00	2,035.93	2,000.02	35.91	56.697			
4,300.00	4,288.75	4,056.83	4,040.03	19.10	18.75	-179.91	1,662.78	548.79	2,055.44	2,018.73	36.71	55.997			
4,400.00	4,388.44	4,156.20	4,138.32	19.55	19.25	-179.68	1,671.77	560.32	2,075.47	2,037.88	37.60	55.205			
4,500.00	4,488.13	4,296.87	4,277.85	19.99	19.94	-179.45	1,683.96	573.27	2,094.46	2,055.71	38.75	54.050			
4,600.00	4,587.82	4,389.77	4,370.18	20.44	20.38	-179.34	1,691.69	580.02	2,112.45	2,072.87	39.58	53.365			
4,700.00	4,687.51	4,491.06	4,470.87	20.89	20.87	-179.24	1,700.28	586.91	2,130.46	2,089.99	40.47	52.641			
4,800.00	4,787.21	4,576.35	4,555.61	21.33	21.28	-179.15	1,707.62	593.13	2,148.74	2,107.48	41.26	52.081			
4,900.00	4,886.90	4,688.60	4,667.16	21.78	21.82	-179.04	1,717.29	601.09	2,166.97	2,124.75	42.22	51.327			
5,000.00	4,986.59	4,803.30	4,781.20	22.22	22.36	-178.91	1,726.35	609.39	2,184.61	2,141.41	43.19	50.577			
5,100.00	5,086.28	4,878.42	7,133.81	22.67	51.37	-120.30	-309.41	663.91	2,188.97	2,155.79	33.18	65.970			



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,185.97	8,887.43	7,133.87	23.12	51.53	-119.70	-318.42	664.04	2,097.00	2,062.70	34.31	61.125		
5,300.00	5,285.66	8,902.54	7,133.96	23.56	51.79	-118.68	-333.53	664.22	2,005.77	1,970.18	35.59	56.361		
5,400.00	5,385.36	8,997.62	7,132.90	24.01	53.45	-112.20	-428.58	663.00	1,915.10	1,877.49	37.60	50.929		
5,500.00	5,485.05	9,002.54	7,132.77	24.46	53.54	-111.86	-433.50	662.84	1,825.35	1,786.28	39.07	46.720		
5,600.00	5,584.74	9,007.46	7,132.64	24.90	53.63	-111.52	-438.41	662.68	1,736.70	1,696.01	40.70	42.676		
5,700.00	5,684.43	9,012.38	7,132.51	25.35	53.71	-111.18	-443.33	662.51	1,649.34	1,606.84	42.50	38.809		
5,800.00	5,784.12	9,017.30	7,132.38	25.80	53.80	-110.84	-448.24	662.35	1,563.48	1,518.98	44.50	35.132		
5,900.00	5,883.81	9,025.30	7,132.17	26.25	53.94	-110.29	-456.23	662.08	1,479.38	1,432.62	46.76	31.641		
6,000.00	5,983.51	9,034.29	7,131.91	26.70	54.10	-109.66	-465.21	661.76	1,397.34	1,348.08	49.26	28.365		
6,100.00	6,083.20	9,042.59	7,131.66	27.14	54.24	-109.09	-473.50	661.44	1,317.76	1,265.73	52.03	25.325		
6,200.00	6,182.89	9,050.28	7,131.41	27.59	54.38	-108.55	-481.18	661.13	1,241.11	1,186.02	55.09	22.530		
6,300.00	6,282.58	9,057.42	7,131.17	28.04	54.50	-108.05	-488.31	660.82	1,167.96	1,109.53	58.43	19.988		
6,400.00	6,382.27	9,066.63	7,131.20	28.49	54.49	-108.11	-487.53	660.87	1,099.06	1,037.06	62.00	17.728		
6,500.00	6,481.96	9,059.65	7,131.10	28.94	54.55	-107.90	-490.54	660.75	1,035.22	969.38	65.84	15.723		
6,600.00	6,581.66	9,062.72	7,131.01	29.39	54.60	-107.68	-493.61	660.63	977.45	907.59	69.86	13.992		
6,700.00	6,681.21	9,065.90	7,130.90	29.83	54.66	-145.99	-496.78	660.52	929.21	855.25	73.96	12.564		
6,800.00	6,778.96	9,069.49	7,130.79	30.28	54.72	-163.26	-500.37	660.40	903.32	825.32	78.01	11.580		
6,848.85	6,825.33	9,071.37	7,130.73	30.48	54.75	-166.34	-502.25	660.33	900.13	820.33	79.80	11.280 CC, ES		
6,900.00	6,872.51	9,073.40	7,130.67	30.70	54.79	-168.35	-504.28	660.27	903.63	822.16	81.47	11.091		
7,000.00	6,959.55	9,077.47	7,130.55	31.10	54.86	-170.49	-508.34	660.14	930.09	846.12	83.97	11.077 SF		
7,100.00	7,037.93	9,083.00	7,130.38	31.48	54.96	-171.30	-513.87	659.98	979.98	894.49	85.49	11.463		
7,200.00	7,105.74	9,086.58	7,130.27	31.88	55.02	-171.45	-517.44	659.88	1,048.85	962.60	86.24	12.162		
7,300.00	7,161.29	9,092.01	7,130.11	32.41	55.12	-170.58	-522.87	659.73	1,131.71	1,045.13	86.58	13.072		
7,400.00	7,203.22	9,097.07	7,129.95	33.13	55.21	-168.00	-527.92	659.59	1,223.92	1,137.21	86.71	14.115		
7,500.00	7,230.50	9,101.66	7,129.81	34.04	55.29	-158.26	-532.51	659.46	1,321.51	1,234.73	86.79	15.227		
7,600.00	7,242.45	9,105.69	7,129.68	35.13	55.36	-43.94	-536.53	659.35	1,421.23	1,334.36	86.87	16.360		
7,700.00	7,242.72	9,109.25	7,129.56	36.39	55.43	-22.97	-540.10	659.25	1,520.89	1,433.92	86.98	17.486		
7,800.00	7,242.33	9,112.79	7,129.45	37.81	55.49	-24.38	-543.63	659.15	1,620.55	1,533.47	87.08	18.610		
7,900.00	7,241.93	9,116.33	7,129.33	39.40	55.55	-25.75	-547.17	659.05	1,720.24	1,633.06	87.18	19.732		
8,000.00	7,241.54	9,118.22	7,129.27	41.13	55.59	-26.47	-549.06	659.00	1,819.96	1,732.70	87.25	20.858		
8,100.00	7,241.15	9,120.66	7,129.18	42.97	55.63	-27.38	-551.50	658.93	1,919.70	1,832.36	87.33	21.981		
8,200.00	7,240.75	9,123.03	7,129.10	44.92	55.67	-28.25	-553.86	658.87	2,019.46	1,932.05	87.41	23.103		
8,300.00	7,240.36	9,125.33	7,129.02	46.97	55.71	-29.08	-556.16	658.81	2,119.25	2,031.76	87.49	24.223		
8,400.00	7,239.97	9,127.56	7,128.95	49.10	55.75	-29.88	-558.39	658.76	2,219.05	2,131.48	87.56	25.342		
8,500.00	7,239.57	9,129.73	7,128.87	51.29	55.79	-30.63	-560.55	658.70	2,318.86	2,231.22	87.64	26.460		
8,600.00	7,239.18	9,131.84	7,128.80	53.56	55.83	-31.36	-562.66	658.65	2,418.68	2,330.97	87.71	27.576		
8,700.00	7,238.79	9,133.88	7,128.73	55.87	55.87	-32.05	-564.70	658.60	2,518.52	2,430.74	87.78	28.691		
8,800.00	7,238.39	9,135.87	7,128.66	58.24	55.90	-32.71	-566.69	658.56	2,618.37	2,530.51	87.85	29.804		
8,900.00	7,238.00	9,137.81	7,128.59	60.64	55.94	-33.35	-568.63	658.51	2,718.22	2,630.30	87.92	30.916		
9,000.00	7,237.61	9,139.70	7,128.52	63.09	55.97	-33.95	-570.51	658.47	2,818.09	2,730.09	87.99	32.026		
9,100.00	7,237.21	9,141.53	7,128.45	65.56	56.00	-34.54	-572.35	658.43	2,917.96	2,829.89	88.06	33.134		
9,200.00	7,236.82	9,146.00	7,128.29	68.07	56.09	-35.92	-576.81	658.33	3,017.84	2,929.65	88.18	34.222		
9,300.00	7,236.43	9,146.00	7,128.29	70.61	56.09	-35.92	-576.81	658.33	3,117.72	3,029.50	88.22	35.340		
9,400.00	7,236.03	9,146.00	7,128.29	73.16	56.09	-35.92	-576.81	658.33	3,217.61	3,129.35	88.26	36.456		
9,500.00	7,235.64	9,146.00	7,128.29	75.74	56.09	-35.92	-576.81	658.33	3,317.51	3,229.21	88.30	37.572		
9,600.00	7,235.25	9,146.00	7,128.29	78.34	56.09	-35.92	-576.81	658.33	3,417.41	3,329.07	88.34	38.687		
9,700.00	7,234.85	9,146.00	7,128.29	80.96	56.09	-35.92	-576.81	658.33	3,517.32	3,428.94	88.37	39.800		
9,800.00	7,234.46	9,146.00	7,128.29	83.59	56.09	-35.92	-576.81	658.33	3,617.23	3,528.82	88.41	40.913		
9,900.00	7,234.07	9,146.00	7,128.29	86.24	56.09	-35.92	-576.81	658.33	3,717.15	3,628.69	88.45	42.024		
10,000.00	7,233.67	9,146.00	7,128.29	88.90	56.09	-35.92	-576.81	658.33	3,817.07	3,728.58	88.49	43.133		
10,100.00	7,233.28	9,146.00	7,128.29	91.57	56.09	-35.92	-576.81	658.33	3,917.00	3,828.46	88.54	44.242		
10,200.00	7,232.89	9,146.00	7,128.29	94.25	56.09	-35.92	-576.81	658.33	4,016.93	3,928.35	88.58	45.349		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.49	9,146.00	7,128.29	96.95	56.09	-35.92	-576.81	658.33	4,116.86	4,028.24	88.62	46.454		
10,400.00	7,232.10	9,146.00	7,128.29	99.65	56.09	-35.92	-576.81	658.33	4,216.80	4,128.13	88.67	47.558		
10,500.00	7,231.71	9,146.00	7,128.29	102.36	56.09	-35.92	-576.81	658.33	4,316.74	4,228.03	88.71	48.661		
10,600.00	7,231.32	9,146.00	7,128.29	105.08	56.09	-35.92	-576.81	658.33	4,416.68	4,327.92	88.76	49.762		
10,700.00	7,230.92	9,146.00	7,128.29	107.80	56.09	-35.92	-576.81	658.33	4,516.62	4,427.82	88.80	50.862		
10,800.00	7,230.53	9,146.00	7,128.29	110.53	56.09	-35.92	-576.81	658.33	4,616.57	4,527.72	88.85	51.960		
10,900.00	7,230.14	9,146.00	7,128.29	113.27	56.09	-35.92	-576.81	658.33	4,716.52	4,627.62	88.90	53.056		
11,000.00	7,229.74	9,146.00	7,128.29	116.02	56.09	-35.92	-576.81	658.33	4,816.47	4,727.52	88.95	54.150		
11,100.00	7,229.35	9,146.00	7,128.29	118.77	56.09	-35.92	-576.81	658.33	4,916.42	4,827.43	89.00	55.243		
11,200.00	7,228.96	9,146.00	7,128.29	121.52	56.09	-35.92	-576.81	658.33	5,016.38	4,927.33	89.05	56.334		
11,300.00	7,228.56	9,146.00	7,128.29	124.28	56.09	-35.92	-576.81	658.33	5,116.34	5,027.24	89.10	57.423		
11,400.00	7,228.17	9,146.00	7,128.29	127.04	56.09	-35.92	-576.81	658.33	5,216.29	5,127.14	89.15	58.511		
11,500.00	7,227.78	9,158.42	7,127.89	129.81	56.31	-39.51	-589.22	658.13	5,316.18	5,226.72	89.46	59.426		
11,600.00	7,227.38	9,158.80	7,127.88	132.58	56.32	-39.62	-589.61	658.13	5,416.14	5,326.62	89.52	60.501		
11,700.00	7,226.99	9,159.18	7,127.87	135.36	56.32	-39.72	-589.98	658.12	5,516.10	5,426.51	89.58	61.575		
11,800.00	7,226.60	9,159.54	7,127.86	138.14	56.33	-39.82	-590.34	658.12	5,616.06	5,526.41	89.65	62.646		
11,900.00	7,226.20	9,159.89	7,127.85	140.92	56.34	-39.91	-590.69	658.12	5,716.02	5,626.31	89.71	63.715		
12,000.00	7,225.81	9,160.23	7,127.84	143.70	56.34	-40.01	-591.03	658.11	5,815.98	5,726.20	89.78	64.782		
12,100.00	7,225.42	9,160.56	7,127.83	146.49	56.35	-40.10	-591.36	658.11	5,915.95	5,826.10	89.84	65.847		
12,200.00	7,225.02	9,160.88	7,127.82	149.28	56.35	-40.18	-591.68	658.11	6,015.91	5,926.00	89.91	66.910		
12,300.00	7,224.63	9,161.19	7,127.82	152.08	56.36	-40.27	-591.99	658.10	6,115.88	6,025.90	89.98	67.971		
12,400.00	7,224.24	9,161.49	7,127.81	154.87	56.37	-40.35	-592.29	658.10	6,215.84	6,125.80	90.05	69.029		
12,500.00	7,223.84	9,161.79	7,127.80	157.67	56.37	-40.43	-592.59	658.10	6,315.81	6,225.70	90.12	70.086		
12,600.00	7,223.45	9,162.08	7,127.79	160.47	56.38	-40.51	-592.88	658.10	6,415.78	6,325.60	90.18	71.140		
12,700.00	7,223.06	9,162.36	7,127.79	163.27	56.38	-40.58	-593.16	658.09	6,515.75	6,425.49	90.26	72.193		
12,800.00	7,222.66	9,162.63	7,127.78	166.07	56.39	-40.65	-593.43	658.09	6,615.72	6,525.39	90.33	73.242		
12,900.00	7,222.27	9,162.90	7,127.77	168.88	56.39	-40.73	-593.70	658.09	6,715.69	6,625.29	90.40	74.290		
13,000.00	7,221.88	9,163.16	7,127.77	171.69	56.40	-40.79	-593.96	658.09	6,815.66	6,725.19	90.47	75.336		
13,100.00	7,221.48	9,163.41	7,127.76	174.49	56.40	-40.86	-594.21	658.09	6,915.64	6,825.09	90.54	76.379		
13,200.00	7,221.09	9,163.66	7,127.75	177.30	56.40	-40.93	-594.46	658.08	7,015.61	6,924.99	90.62	77.419		
13,300.00	7,220.70	9,163.90	7,127.75	180.12	56.41	-40.99	-594.70	658.08	7,115.58	7,024.89	90.69	78.458		
13,400.00	7,220.30	9,164.13	7,127.74	182.93	56.41	-41.05	-594.93	658.08	7,215.56	7,124.79	90.77	79.494		
13,500.00	7,219.91	9,164.36	7,127.74	185.74	56.42	-41.11	-595.16	658.08	7,315.54	7,224.69	90.85	80.528		
13,600.00	7,219.52	9,164.59	7,127.73	188.56	56.42	-41.17	-595.39	658.08	7,415.51	7,324.59	90.92	81.559		
13,700.00	7,219.12	9,164.81	7,127.73	191.38	56.43	-41.23	-595.61	658.08	7,515.49	7,424.49	91.00	82.588		
13,800.00	7,218.73	9,178.00	7,127.48	194.20	56.66	-44.52	-608.80	658.05	7,615.54	7,524.19	91.35	83.363		
13,900.00	7,218.34	9,178.00	7,127.48	197.02	56.66	-44.52	-608.80	658.05	7,715.52	7,624.09	91.43	84.388		
14,000.00	7,217.94	9,178.00	7,127.48	199.84	56.66	-44.52	-608.80	658.05	7,815.49	7,723.99	91.51	85.410		
14,100.00	7,217.55	9,178.00	7,127.48	202.66	56.66	-44.52	-608.80	658.05	7,915.47	7,823.89	91.58	86.430		
14,200.00	7,217.16	9,178.00	7,127.48	205.48	56.66	-44.52	-608.80	658.05	8,015.45	7,923.79	91.66	87.448		
14,300.00	7,216.76	9,178.00	7,127.48	208.30	56.66	-44.52	-608.80	658.05	8,115.42	8,023.69	91.74	88.463		
14,400.00	7,216.37	9,178.00	7,127.48	211.13	56.66	-44.52	-608.80	658.05	8,215.40	8,123.58	91.82	89.475		
14,500.00	7,215.98	9,178.00	7,127.48	213.96	56.66	-44.52	-608.80	658.05	8,315.38	8,223.48	91.90	90.485		
14,600.00	7,215.58	9,178.00	7,127.48	216.78	56.66	-44.52	-608.80	658.05	8,415.36	8,323.38	91.98	91.493		
14,700.00	7,215.19	9,178.00	7,127.48	219.61	56.66	-44.52	-608.80	658.05	8,515.34	8,423.28	92.06	92.498		
14,800.00	7,214.80	9,178.00	7,127.48	222.44	56.66	-44.52	-608.80	658.05	8,615.32	8,523.18	92.14	93.500		
14,900.00	7,214.40	9,178.00	7,127.48	225.27	56.66	-44.52	-608.80	658.05	8,715.30	8,623.08	92.23	94.500		
15,000.00	7,214.01	9,178.00	7,127.48	228.10	56.66	-44.52	-608.80	658.05	8,815.28	8,722.97	92.31	95.497		
15,002.44	7,214.00	9,178.00	7,127.48	228.16	56.66	-44.52	-608.80	658.05	8,817.72	8,725.41	92.31	95.521		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	11.79	2.79	3.28	3.28	49.17	1,464.19	1,694.31	2,239.32					
100.00	100.00	142.83	133.82	3.28	3.29	49.15	1,464.09	1,692.98	2,238.50	2,231.92	6.58	340.315		
200.00	200.00	256.79	247.74	3.34	3.37	49.09	1,464.34	1,690.01	2,236.67	2,229.96	6.71	333.360		
300.00	300.00	359.67	350.54	3.44	3.51	49.01	1,465.32	1,685.96	2,234.32	2,227.37	6.95	321.481		
400.00	400.00	448.90	439.66	3.60	3.67	48.91	1,467.11	1,682.11	2,232.37	2,225.11	7.27	307.254		
500.00	500.00	547.78	538.41	3.81	3.88	48.78	1,469.62	1,677.59	2,230.60	2,222.92	7.68	290.296		
554.14	554.14	599.90	590.44	3.93	4.01	-149.47	1,471.23	1,675.02	2,230.13	2,222.20	7.93	281.123		
600.00	599.98	644.57	635.02	4.03	4.13	-149.55	1,472.78	1,672.71	2,230.46	2,222.30	8.16	273.331		
700.00	699.84	738.62	728.86	4.29	4.41	-149.74	1,476.41	1,667.65	2,233.51	2,224.83	8.68	257.226		
800.00	799.54	838.96	828.95	4.57	4.72	-150.01	1,480.96	1,661.99	2,239.02	2,229.74	9.28	241.248		
900.00	899.23	934.27	924.00	4.87	5.05	-150.28	1,485.14	1,656.47	2,244.47	2,234.56	9.91	226.559		
1,000.00	998.92	1,022.26	1,011.72	5.20	5.36	-150.54	1,489.67	1,651.42	2,250.50	2,239.96	10.55	213.395		
1,100.00	1,098.61	1,291.97	1,278.07	5.54	6.50	-151.80	1,510.70	1,615.99	2,252.93	2,240.92	12.01	187.573		
1,200.00	1,198.30	1,404.63	1,388.60	5.90	7.04	-152.41	1,518.59	1,595.65	2,251.55	2,238.66	12.89	174.644		
1,300.00	1,298.00	1,494.38	1,476.57	6.27	7.49	-152.90	1,525.03	1,579.07	2,250.21	2,236.51	13.70	164.294		
1,400.00	1,397.69	1,679.54	1,657.94	6.66	8.46	-153.90	1,535.73	1,543.45	2,247.68	2,232.69	14.99	149.973		
1,500.00	1,497.38	1,791.85	1,767.93	7.05	9.06	-154.47	1,539.29	1,521.08	2,242.96	2,227.02	15.94	140.741		
1,600.00	1,597.07	1,869.98	1,844.52	7.44	9.48	-154.86	1,541.29	1,505.76	2,238.26	2,221.53	16.73	133.777		
1,700.00	1,696.76	1,937.40	1,910.79	7.85	9.84	-155.18	1,543.36	1,493.58	2,235.08	2,217.59	17.48	127.864		
1,800.00	1,796.45	2,011.00	1,983.31	8.25	10.23	-155.51	1,545.93	1,481.26	2,233.25	2,214.99	18.26	122.295		
1,867.35	1,863.60	2,051.49	2,023.27	8.53	10.44	-155.70	1,547.58	1,474.90	2,232.85	2,214.11	18.74	119.127		
1,900.00	1,896.15	2,071.58	2,043.10	8.67	10.54	-155.79	1,548.51	1,471.86	2,232.95	2,213.97	18.98	117.648		
2,000.00	1,995.84	2,147.04	2,117.65	9.08	10.93	-156.13	1,552.60	1,460.93	2,234.27	2,214.49	19.78	112.980		
2,100.00	2,095.53	2,235.77	2,205.25	9.50	11.40	-156.54	1,558.08	1,447.92	2,236.23	2,215.58	20.65	108.307		
2,200.00	2,195.22	2,318.75	2,287.11	9.92	11.83	-156.94	1,563.98	1,435.67	2,238.94	2,217.44	21.50	104.143		
2,300.00	2,294.91	2,405.55	2,372.68	10.35	12.29	-157.37	1,570.94	1,422.82	2,242.45	2,220.07	22.38	100.207		
2,400.00	2,394.60	2,507.50	2,473.31	10.77	12.83	-157.85	1,578.53	1,408.41	2,246.13	2,222.80	23.34	96.248		
2,500.00	2,494.30	2,594.66	2,559.47	11.20	13.28	-158.25	1,584.75	1,396.80	2,250.26	2,226.05	24.21	92.941		
2,600.00	2,593.99	2,696.00	2,659.74	11.63	13.80	-158.69	1,591.73	1,383.87	2,254.68	2,229.52	25.16	89.616		
2,700.00	2,693.68	2,821.22	2,783.58	12.07	14.46	-159.23	1,600.04	1,367.34	2,258.83	2,232.59	26.24	86.081		
2,800.00	2,793.37	2,961.39	2,921.63	12.50	15.22	-159.92	1,609.27	1,344.86	2,261.22	2,233.79	27.43	82.434		
2,900.00	2,893.06	3,053.72	3,012.45	12.93	15.74	-160.38	1,615.11	1,329.33	2,263.14	2,234.77	28.37	79.762		
3,000.00	2,992.76	3,157.38	3,114.58	13.37	16.31	-160.88	1,621.07	1,312.64	2,265.23	2,235.86	29.37	77.126		
3,100.00	3,092.45	3,250.90	3,206.71	13.81	16.83	-161.33	1,626.52	1,297.49	2,267.46	2,237.14	30.32	74.792		
3,200.00	3,192.14	3,344.23	3,298.91	14.25	17.33	-161.73	1,631.15	1,283.80	2,270.07	2,238.83	31.25	72.654		
3,300.00	3,291.83	3,467.25	3,420.73	14.68	17.96	-162.20	1,635.03	1,267.09	2,271.94	2,239.64	32.30	70.339		
3,400.00	3,391.52	3,544.20	3,497.02	15.12	18.35	-162.48	1,637.21	1,257.35	2,274.27	2,241.14	33.12	68.661		
3,500.00	3,491.21	3,620.76	3,572.94	15.56	18.74	-162.76	1,640.15	1,247.85	2,277.65	2,243.70	33.94	67.102		
3,600.00	3,590.91	3,700.36	3,651.78	16.00	19.15	-163.08	1,644.30	1,237.71	2,282.03	2,247.24	34.79	65.600		
3,700.00	3,690.60	3,795.91	3,746.22	16.45	19.66	-163.49	1,650.56	1,224.66	2,287.09	2,251.35	35.73	64.004		
3,800.00	3,790.29	3,901.10	3,849.83	16.89	20.24	-164.00	1,658.60	1,208.33	2,292.13	2,255.37	36.76	62.356		
3,900.00	3,889.98	4,024.81	3,971.42	17.33	20.95	-164.62	1,668.05	1,187.61	2,296.66	2,258.75	37.91	60.582		
4,000.00	3,989.67	4,155.66	4,099.92	17.77	21.70	-165.29	1,676.75	1,164.53	2,300.08	2,260.97	39.11	58.818		
4,100.00	4,089.36	4,254.89	4,197.37	18.22	22.27	-165.79	1,682.46	1,146.67	2,302.74	2,262.63	40.11	57.412		
4,200.00	4,189.06	4,340.92	4,282.09	18.66	22.75	-166.19	1,687.05	1,132.42	2,306.00	2,264.96	41.03	56.198		
4,300.00	4,288.75	4,428.86	4,368.89	19.10	23.24	-166.57	1,691.50	1,119.09	2,309.89	2,267.94	41.96	55.053		
4,400.00	4,388.44	4,518.54	4,457.49	19.55	23.72	-166.95	1,696.15	1,105.99	2,314.31	2,271.43	42.88	53.972		
4,500.00	4,488.13	4,606.43	4,544.37	19.99	24.19	-167.31	1,700.86	1,093.55	2,319.24	2,275.45	43.79	52.965		
4,600.00	4,587.82	4,691.18	4,628.23	20.44	24.64	-167.64	1,705.52	1,082.28	2,324.82	2,280.15	44.67	52.046		
4,700.00	4,687.51	4,775.00	4,711.28	20.89	25.07	-167.95	1,710.22	1,071.94	2,331.10	2,285.56	45.54	51.188		
4,800.00	4,787.21	4,859.97	4,786.64	21.33	25.45	-168.22	1,714.69	1,063.46	2,338.28	2,291.93	46.35	50.449		
4,900.00	4,886.90	4,935.87	4,870.97	21.78	25.87	-168.49	1,719.86	1,055.08	2,346.35	2,299.15	47.20	49.715		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,986.59	5,030.24	4,964.79	22.22	26.32	-168.78	1,725.52	1,046.68	2,354.88	2,306.79	48.09	48.970		
5,100.00	5,086.28	5,121.05	5,055.05	22.67	26.76	-169.05	1,731.23	1,038.48	2,363.67	2,314.71	48.96	48.275		
5,200.00	5,185.97	5,093.42	7,242.36	23.12	53.97	-114.35	-372.19	965.99	2,322.11	2,276.73	45.38	51.175		
5,300.00	5,285.66	9,096.41	7,242.31	23.56	54.02	-114.20	-375.18	966.01	2,235.39	2,188.63	46.76	47.802		
5,400.00	5,385.36	9,100.02	7,242.25	24.01	54.09	-114.02	-378.79	966.04	2,149.82	2,101.56	48.26	44.545		
5,500.00	5,485.05	9,103.70	7,242.20	24.46	54.15	-113.83	-382.46	966.06	2,065.54	2,015.67	49.87	41.418		
5,600.00	5,584.74	9,107.45	7,242.14	24.90	54.21	-113.64	-386.22	966.10	1,982.71	1,931.11	51.60	38.427		
5,700.00	5,684.43	9,111.28	7,242.08	25.35	54.28	-113.45	-390.04	966.14	1,901.51	1,848.07	53.45	35.577		
5,800.00	5,784.12	9,115.19	7,242.03	25.80	54.35	-113.25	-393.95	966.18	1,822.18	1,766.75	55.43	32.874		
5,900.00	5,883.81	9,119.18	7,241.97	26.25	54.41	-113.05	-397.94	966.23	1,744.95	1,687.41	57.54	30.323		
6,000.00	5,983.51	9,124.00	7,241.91	26.70	54.50	-112.81	-402.76	966.29	1,670.14	1,610.33	59.81	27.925		
6,100.00	6,083.20	9,124.00	7,241.91	27.14	54.50	-112.81	-402.76	966.29	1,598.06	1,535.94	62.12	25.724		
6,200.00	6,182.89	9,130.06	7,241.84	27.59	54.60	-112.50	-408.82	966.39	1,529.11	1,464.45	64.66	23.648		
6,300.00	6,282.58	9,133.50	7,241.81	28.04	54.66	-112.33	-412.26	966.45	1,463.74	1,396.48	67.26	21.762		
6,400.00	6,382.27	9,137.02	7,241.77	28.49	54.72	-112.15	-415.78	966.52	1,402.44	1,332.51	69.94	20.053		
6,500.00	6,481.96	9,140.63	7,241.74	28.94	54.78	-111.97	-419.39	966.60	1,345.77	1,273.12	72.65	18.525		
6,600.00	6,581.66	9,144.32	7,241.71	29.39	54.85	-111.78	-423.07	966.69	1,294.34	1,219.00	75.34	17.180		
6,700.00	6,681.21	9,148.06	7,241.68	29.83	54.91	-149.96	-426.82	966.79	1,251.17	1,173.22	77.95	16.050		
6,800.00	6,778.96	9,155.00	7,241.64	30.28	55.03	-166.98	-433.75	967.00	1,228.47	1,147.95	80.52	15.257		
6,846.87	6,823.48	9,155.00	7,241.64	30.47	55.03	-170.06	-433.75	967.00	1,225.85	1,144.32	81.53	15.035 CC, ES		
6,900.00	6,872.51	9,155.00	7,241.64	30.70	55.03	-172.32	-433.75	967.00	1,229.21	1,146.66	82.56	14.889 SF		
7,000.00	6,959.55	9,158.51	7,241.63	31.10	55.09	-174.73	-437.25	967.11	1,253.37	1,169.22	84.15	14.895		
7,100.00	7,037.93	9,161.41	7,241.61	31.48	55.14	-176.17	-440.15	967.21	1,299.05	1,213.88	85.17	15.253		
7,200.00	7,105.74	9,163.50	7,241.60	31.88	55.18	-177.24	-442.25	967.28	1,363.07	1,277.34	85.72	15.901		
7,300.00	7,161.29	9,164.75	7,241.59	32.41	55.20	-178.29	-443.50	967.32	1,441.52	1,355.56	85.96	16.770		
7,400.00	7,203.22	9,165.15	7,241.59	33.13	55.21	-179.75	-443.90	967.33	1,530.43	1,444.42	86.01	17.793		
7,500.00	7,230.50	9,164.74	7,241.59	34.04	55.20	176.91	-443.48	967.32	1,626.09	1,540.09	85.99	18.909		
7,600.00	7,242.45	9,163.55	7,241.60	35.13	55.18	151.21	-442.29	967.28	1,725.22	1,639.25	85.96	20.069		
7,700.00	7,242.72	9,161.85	7,241.61	36.39	55.15	79.91	-440.59	967.22	1,825.18	1,739.23	85.94	21.237		
7,800.00	7,242.33	9,160.17	7,241.62	37.81	55.12	80.27	-438.92	967.17	1,925.14	1,839.22	85.93	22.405		
7,900.00	7,241.93	9,155.00	7,241.64	39.40	55.03	81.22	-433.75	967.00	2,025.12	1,939.29	85.83	23.595		
8,000.00	7,241.54	9,155.00	7,241.64	41.13	55.03	81.22	-433.75	967.00	2,125.08	2,039.23	85.85	24.753		
8,100.00	7,241.15	9,155.00	7,241.64	42.97	55.03	81.22	-433.75	967.00	2,225.05	2,139.17	85.88	25.910		
8,200.00	7,240.75	9,155.00	7,241.64	44.92	55.03	81.22	-433.75	967.00	2,325.02	2,239.12	85.90	27.067		
8,300.00	7,240.36	9,155.00	7,241.64	46.97	55.03	81.22	-433.75	967.00	2,425.00	2,339.07	85.92	28.222		
8,400.00	7,239.97	9,155.00	7,241.64	49.10	55.03	81.22	-433.75	967.00	2,524.97	2,439.02	85.95	29.378		
8,500.00	7,239.57	9,155.00	7,241.64	51.29	55.03	81.22	-433.75	967.00	2,624.95	2,538.98	85.97	30.532		
8,600.00	7,239.18	9,155.00	7,241.64	53.56	55.03	81.22	-433.75	967.00	2,724.93	2,638.93	86.00	31.685		
8,700.00	7,238.79	9,155.00	7,241.64	55.87	55.03	81.22	-433.75	967.00	2,824.91	2,738.88	86.03	32.838		
8,800.00	7,238.39	9,155.00	7,241.64	58.24	55.03	81.22	-433.75	967.00	2,924.89	2,838.84	86.05	33.989		
8,900.00	7,238.00	9,155.00	7,241.64	60.64	55.03	81.22	-433.75	967.00	3,024.88	2,938.79	86.08	35.139		
9,000.00	7,237.61	9,155.00	7,241.64	63.09	55.03	81.22	-433.75	967.00	3,124.86	3,038.75	86.11	36.289		
9,100.00	7,237.21	9,155.00	7,241.64	65.56	55.03	81.22	-433.75	967.00	3,224.85	3,138.71	86.14	37.437		
9,200.00	7,236.82	9,155.00	7,241.64	68.07	55.03	81.22	-433.75	967.00	3,324.83	3,238.66	86.17	38.584		
9,300.00	7,236.43	9,145.59	7,241.70	70.61	54.87	82.57	-424.34	966.73	3,424.78	3,338.78	86.01	39.820		
9,400.00	7,236.03	9,144.97	7,241.71	73.16	54.86	82.65	-423.73	966.71	3,524.77	3,438.74	86.03	40.973		
9,500.00	7,235.64	9,144.38	7,241.71	75.74	54.85	82.72	-423.14	966.70	3,624.75	3,538.70	86.05	42.125		
9,600.00	7,235.25	9,143.81	7,241.72	78.34	54.84	82.79	-422.57	966.68	3,724.73	3,638.66	86.07	43.275		
9,700.00	7,234.85	9,143.26	7,241.72	80.96	54.83	82.85	-422.02	966.67	3,824.72	3,738.62	86.10	44.424		
9,800.00	7,234.46	9,142.73	7,241.72	83.59	54.82	82.91	-421.49	966.65	3,924.70	3,838.58	86.12	45.572		
9,900.00	7,234.07	9,142.22	7,241.73	86.24	54.81	82.97	-420.98	966.64	4,024.69	3,938.54	86.15	46.718		
10,000.00	7,233.67	9,141.73	7,241.73	88.90	54.80	83.02	-420.48	966.63	4,124.68	4,038.50	86.18	47.862		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,100.00	7,233.28	9,141.25	7,241.74	91.57	54.79	83.08	-420.01	966.62	4,224.66	4,138.46	86.21	49.006		
10,200.00	7,232.89	9,140.79	7,241.74	94.25	54.79	83.13	-419.54	966.61	4,324.65	4,238.41	86.24	50.147		
10,300.00	7,232.49	9,140.34	7,241.74	96.95	54.78	83.17	-419.10	966.60	4,424.64	4,338.37	86.27	51.288		
10,400.00	7,232.10	9,139.91	7,241.75	99.65	54.77	83.22	-418.66	966.59	4,524.63	4,438.32	86.30	52.426		
10,500.00	7,231.71	9,139.49	7,241.75	102.36	54.76	83.26	-418.24	966.58	4,624.62	4,538.28	86.34	53.563		
10,600.00	7,231.32	9,139.08	7,241.75	105.08	54.76	83.31	-417.84	966.57	4,724.60	4,638.23	86.38	54.698		
10,700.00	7,230.92	9,138.69	7,241.76	107.80	54.75	83.35	-417.44	966.56	4,824.59	4,738.18	86.41	55.831		
10,800.00	7,230.53	9,138.30	7,241.76	110.53	54.74	83.39	-417.06	966.55	4,924.58	4,838.13	86.45	56.963		
10,900.00	7,230.14	9,137.93	7,241.77	113.27	54.74	83.42	-416.69	966.54	5,024.57	4,938.08	86.49	58.093		
11,000.00	7,229.74	9,137.57	7,241.77	116.02	54.73	83.46	-416.33	966.54	5,124.56	5,038.03	86.53	59.221		
11,100.00	7,229.35	9,137.22	7,241.77	118.77	54.72	83.49	-415.98	966.53	5,224.55	5,137.98	86.58	60.347		
11,200.00	7,228.96	9,136.88	7,241.77	121.52	54.72	83.53	-415.64	966.52	5,324.54	5,237.93	86.62	61.471		
11,300.00	7,228.56	9,136.55	7,241.78	124.28	54.71	83.56	-415.31	966.51	5,424.54	5,337.87	86.66	62.593		
11,400.00	7,228.17	9,136.23	7,241.78	127.04	54.71	83.59	-414.99	966.51	5,524.53	5,437.82	86.71	63.713		
11,500.00	7,227.78	9,135.92	7,241.78	129.81	54.70	83.62	-414.67	966.50	5,624.52	5,537.76	86.76	64.831		
11,600.00	7,227.38	9,135.61	7,241.79	132.58	54.70	83.65	-414.37	966.49	5,724.51	5,637.71	86.80	65.947		
11,700.00	7,226.99	9,135.31	7,241.79	135.36	54.69	83.67	-414.07	966.49	5,824.50	5,737.65	86.85	67.061		
11,800.00	7,226.60	9,124.00	7,241.91	138.14	54.50	84.60	-402.76	966.29	5,924.54	5,837.85	86.69	68.341		
11,900.00	7,226.20	9,124.00	7,241.91	140.92	54.50	84.60	-402.76	966.29	6,024.53	5,937.78	86.75	69.448		
12,000.00	7,225.81	9,124.00	7,241.91	143.70	54.50	84.60	-402.76	966.29	6,124.52	6,037.71	86.81	70.554		
12,100.00	7,225.42	9,124.00	7,241.91	146.49	54.50	84.60	-402.76	966.29	6,224.51	6,137.64	86.87	71.657		
12,200.00	7,225.02	9,124.00	7,241.91	149.28	54.50	84.60	-402.76	966.29	6,324.50	6,237.57	86.93	72.758		
12,300.00	7,224.63	9,124.00	7,241.91	152.08	54.50	84.60	-402.76	966.29	6,424.49	6,337.51	86.99	73.856		
12,400.00	7,224.24	9,124.00	7,241.91	154.87	54.50	84.60	-402.76	966.29	6,524.48	6,437.43	87.05	74.953		
12,500.00	7,223.84	9,124.00	7,241.91	157.67	54.50	84.60	-402.76	966.29	6,624.47	6,537.36	87.11	76.046		
12,600.00	7,223.45	9,124.00	7,241.91	160.47	54.50	84.60	-402.76	966.29	6,724.47	6,637.29	87.17	77.138		
12,700.00	7,223.06	9,124.00	7,241.91	163.27	54.50	84.60	-402.76	966.29	6,824.46	6,737.22	87.24	78.227		
12,800.00	7,222.66	9,124.00	7,241.91	166.07	54.50	84.60	-402.76	966.29	6,924.45	6,837.15	87.30	79.314		
12,900.00	7,222.27	9,124.00	7,241.91	168.88	54.50	84.60	-402.76	966.29	7,024.44	6,937.07	87.37	80.398		
13,000.00	7,221.88	9,124.00	7,241.91	171.69	54.50	84.60	-402.76	966.29	7,124.44	7,037.00	87.44	81.479		
13,100.00	7,221.48	9,124.00	7,241.91	174.49	54.50	84.60	-402.76	966.29	7,224.43	7,136.92	87.51	82.559		
13,200.00	7,221.09	9,124.00	7,241.91	177.30	54.50	84.60	-402.76	966.29	7,324.42	7,236.85	87.58	83.635		
13,300.00	7,220.70	9,124.00	7,241.91	180.12	54.50	84.60	-402.76	966.29	7,424.42	7,336.77	87.65	84.709		
13,400.00	7,220.30	9,124.00	7,241.91	182.93	54.50	84.60	-402.76	966.29	7,524.41	7,436.69	87.72	85.781		
13,500.00	7,219.91	9,124.00	7,241.91	185.74	54.50	84.60	-402.76	966.29	7,624.40	7,536.61	87.79	86.850		
13,600.00	7,219.52	9,124.00	7,241.91	188.56	54.50	84.60	-402.76	966.29	7,724.40	7,636.54	87.86	87.916		
13,700.00	7,219.12	9,124.00	7,241.91	191.38	54.50	84.60	-402.76	966.29	7,824.39	7,736.46	87.93	88.980		
13,800.00	7,218.73	9,124.00	7,241.91	194.20	54.50	84.60	-402.76	966.29	7,924.39	7,836.38	88.01	90.041		
13,900.00	7,218.34	9,124.00	7,241.91	197.02	54.50	84.60	-402.76	966.29	8,024.38	7,936.30	88.08	91.099		
14,000.00	7,217.94	9,124.00	7,241.91	199.84	54.50	84.60	-402.76	966.29	8,124.37	8,036.21	88.16	92.155		
14,100.00	7,217.55	9,124.00	7,241.91	202.66	54.50	84.60	-402.76	966.29	8,224.37	8,136.13	88.24	93.207		
14,200.00	7,217.16	9,124.00	7,241.91	205.48	54.50	84.60	-402.76	966.29	8,324.36	8,236.05	88.32	94.257		
14,300.00	7,216.76	9,124.00	7,241.91	208.30	54.50	84.60	-402.76	966.29	8,424.36	8,335.96	88.39	95.305		
14,400.00	7,216.37	9,124.00	7,241.91	211.13	54.50	84.60	-402.76	966.29	8,524.35	8,435.88	88.47	96.349		
14,500.00	7,215.98	9,124.00	7,241.91	213.96	54.50	84.60	-402.76	966.29	8,624.35	8,535.79	88.55	97.391		
14,600.00	7,215.58	9,124.00	7,241.91	216.78	54.50	84.60	-402.76	966.29	8,724.34	8,635.71	88.63	98.430		
14,700.00	7,215.19	9,124.00	7,241.91	219.61	54.50	84.60	-402.76	966.29	8,824.34	8,735.62	88.72	99.466		
14,800.00	7,214.80	9,124.00	7,241.91	222.44	54.50	84.60	-402.76	966.29	8,924.33	8,835.53	88.80	100.500		
14,900.00	7,214.40	9,124.00	7,241.91	225.27	54.50	84.60	-402.76	966.29	9,024.33	8,935.45	88.88	101.530		
15,000.00	7,214.01	9,124.00	7,241.91	228.10	54.50	84.60	-402.76	966.29	9,124.33	9,035.36	88.97	102.558		
15,002.44	7,214.00	9,124.00	7,241.91	228.16	54.50	84.60	-402.76	966.29	9,126.76	9,037.79	88.97	102.583		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.56	-179.97	-1.39	179.98					
100.00	100.00	101.00	100.00	3.28	3.28	-179.56	-179.97	-1.39	179.98	173.41	6.57	27.395		
200.00	200.00	199.00	200.00	3.34	3.34	-179.56	-179.97	-1.39	179.98	173.30	6.67	26.970	CC, ES	
300.00	300.00	293.14	294.12	3.44	3.43	-179.52	-181.48	-1.53	181.58	174.69	6.89	26.370		
400.00	400.00	387.01	387.88	3.60	3.57	-179.40	-186.05	-1.96	186.45	179.24	7.21	25.875		
500.00	500.00	480.49	481.04	3.81	3.75	-179.21	-193.63	-2.68	194.58	186.96	7.62	25.540		
600.00	599.98	573.56	573.50	4.03	3.97	-17.21	-204.18	-3.67	204.27	196.18	8.09	25.245		
700.00	699.84	666.34	665.29	4.29	4.22	-17.26	-217.68	-4.94	213.87	205.26	8.61	24.828		
800.00	799.54	758.75	756.22	4.57	4.50	-17.46	-234.05	-6.48	224.30	215.11	9.19	24.409		
900.00	899.23	850.47	845.90	4.87	4.82	-17.59	-253.18	-8.29	237.80	228.00	9.80	24.261		
1,000.00	998.92	949.05	933.74	5.20	5.19	-17.66	-274.84	-10.33	254.44	243.96	10.48	24.290		
1,100.00	1,098.61	1,039.29	1,028.75	5.54	5.56	-17.69	-300.01	-12.70	272.76	261.65	11.12	24.539		
1,200.00	1,198.30	1,137.59	1,123.75	5.90	5.98	-17.71	-325.18	-15.07	291.08	279.26	11.82	24.629		
1,300.00	1,298.00	1,235.90	1,218.75	6.27	6.41	-17.73	-350.34	-17.44	309.41	296.86	12.55	24.653		
1,400.00	1,397.69	1,334.21	1,313.75	6.66	6.86	-17.75	-375.51	-19.81	327.73	314.42	13.31	24.630		
1,500.00	1,497.38	1,432.51	1,408.75	7.05	7.33	-17.77	-400.68	-22.18	346.05	331.97	14.08	24.575		
1,600.00	1,597.07	1,530.82	1,503.75	7.44	7.80	-17.79	-425.84	-24.55	364.37	349.50	14.87	24.498		
1,700.00	1,696.76	1,629.13	1,598.76	7.85	8.27	-17.80	-451.01	-26.92	382.69	367.01	15.68	24.407		
1,800.00	1,796.45	1,727.44	1,693.76	8.25	8.76	-17.81	-476.18	-29.29	401.02	384.52	16.50	24.307		
1,900.00	1,896.15	1,825.74	1,788.76	8.67	9.25	-17.83	-501.35	-31.66	419.34	402.01	17.33	24.201		
2,000.00	1,995.84	1,924.05	1,883.76	9.08	9.74	-17.84	-526.51	-34.03	437.66	419.50	18.16	24.094		
2,100.00	2,095.53	2,022.36	1,978.76	9.50	10.24	-17.85	-551.68	-36.41	455.98	436.97	19.01	23.986		
2,200.00	2,195.22	2,120.66	2,073.76	9.92	10.74	-17.86	-576.85	-38.78	474.31	454.44	19.86	23.879		
2,300.00	2,294.91	2,218.97	2,168.76	10.35	11.25	-17.87	-602.01	-41.15	492.63	471.91	20.72	23.774		
2,400.00	2,394.60	2,317.28	2,263.77	10.77	11.75	-17.87	-627.18	-43.52	510.95	489.37	21.59	23.671		
2,500.00	2,494.30	2,415.59	2,358.77	11.20	12.26	-17.88	-652.35	-45.89	529.27	506.82	22.45	23.572		
2,600.00	2,593.99	2,513.89	2,453.77	11.63	12.77	-17.89	-677.52	-48.26	547.60	524.27	23.33	23.476		
2,700.00	2,693.68	2,612.20	2,548.77	12.07	13.29	-17.89	-702.68	-50.63	565.92	541.72	24.20	23.383		
2,800.00	2,793.37	2,710.51	2,643.77	12.50	13.80	-17.90	-727.85	-53.00	584.24	559.16	25.08	23.294		
2,900.00	2,893.06	2,808.81	2,738.77	12.93	14.32	-17.91	-753.02	-55.37	602.56	576.60	25.96	23.208		
3,000.00	2,992.76	2,907.12	2,833.78	13.37	14.83	-17.91	-778.18	-57.74	620.88	594.04	26.85	23.125		
3,100.00	3,092.45	3,005.43	2,928.78	13.81	15.35	-17.92	-803.35	-60.11	639.21	611.47	27.74	23.046		
3,200.00	3,192.14	3,103.73	3,023.78	14.25	15.87	-17.92	-828.52	-62.48	657.53	628.90	28.63	22.970		
3,300.00	3,291.83	3,202.04	3,118.78	14.68	16.39	-17.93	-853.68	-64.85	675.85	646.33	29.52	22.897		
3,400.00	3,391.52	3,300.35	3,213.78	15.12	16.91	-17.93	-878.85	-67.22	694.17	663.76	30.41	22.826		
3,500.00	3,491.21	3,398.66	3,308.78	15.56	17.43	-17.93	-904.02	-69.60	712.50	681.19	31.31	22.759		
3,600.00	3,590.91	3,503.04	3,403.78	16.00	17.99	-17.94	-929.19	-71.97	730.82	698.59	32.23	22.674		
3,700.00	3,690.60	3,604.73	3,498.79	16.45	18.53	-17.94	-954.35	-74.34	749.14	715.99	33.15	22.601		
3,800.00	3,790.29	3,706.42	3,593.79	16.89	19.07	-17.95	-979.52	-76.71	767.46	733.40	34.06	22.531		
3,900.00	3,889.98	3,808.12	3,688.79	17.33	19.61	-17.95	-1,004.69	-79.08	785.79	750.81	34.98	22.464		
4,000.00	3,989.67	3,909.81	3,783.79	17.77	20.15	-17.95	-1,029.85	-81.45	804.11	768.21	35.90	22.400		
4,100.00	4,089.36	3,988.50	3,878.79	18.22	20.57	-17.96	-1,055.02	-83.82	822.43	785.73	36.71	22.406		
4,200.00	4,189.06	4,086.81	3,973.79	18.66	21.10	-17.96	-1,080.19	-86.19	840.75	803.14	37.61	22.355		
4,300.00	4,288.75	4,185.11	4,068.79	19.10	21.62	-17.96	-1,105.36	-88.56	859.08	820.56	38.51	22.306		
4,400.00	4,388.44	4,283.42	4,163.80	19.55	22.15	-17.96	-1,130.52	-90.93	877.40	837.98	39.42	22.258		
4,500.00	4,488.13	4,381.73	4,258.80	19.99	22.67	-17.97	-1,155.69	-93.30	895.72	855.39	40.33	22.212		
4,600.00	4,587.82	4,480.03	4,353.80	20.44	23.20	-17.97	-1,180.86	-95.67	914.04	872.81	41.23	22.168		
4,700.00	4,687.51	4,578.34	4,448.80	20.89	23.73	-17.97	-1,206.02	-98.04	932.36	890.23	42.14	22.126		
4,800.00	4,787.21	4,676.65	4,543.80	21.33	24.25	-17.97	-1,231.19	-100.41	950.69	907.64	43.05	22.084		
4,900.00	4,886.90	4,774.96	4,638.80	21.78	24.78	-17.98	-1,256.36	-102.78	969.01	925.05	43.96	22.045		
5,000.00	4,986.59	4,873.26	4,733.81	22.22	25.31	-17.98	-1,281.52	-105.16	987.33	942.47	44.87	22.006		
5,100.00	5,086.28	4,971.57	4,828.81	22.67	25.84	-17.98	-1,306.69	-107.53	1,005.65	959.88	45.78	21.969		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,069.88	4,923.81	23.12	26.36	-17.98	-1,331.86	-109.90	1,023.98	977.29	46.69	21.933		
5,300.00	5,285.66	5,168.18	5,018.81	23.56	26.89	-17.98	-1,357.03	-112.27	1,042.30	994.70	47.60	21.898		
5,400.00	5,385.36	5,266.49	5,113.81	24.01	27.42	-17.99	-1,382.19	-114.64	1,060.62	1,012.11	48.51	21.865		
5,500.00	5,485.05	5,364.80	5,208.81	24.46	27.95	-17.99	-1,407.36	-117.01	1,078.94	1,029.52	49.42	21.832		
5,600.00	5,584.74	5,463.11	5,303.81	24.90	28.48	-17.99	-1,432.53	-119.38	1,097.27	1,046.93	50.33	21.800		
5,700.00	5,684.43	5,561.41	5,398.82	25.35	29.00	-17.99	-1,457.69	-121.75	1,115.59	1,064.34	51.24	21.770		
5,800.00	5,784.12	5,659.72	5,493.82	25.80	29.53	-17.99	-1,482.86	-124.12	1,133.91	1,081.75	52.16	21.740		
5,900.00	5,883.81	5,758.03	5,588.82	26.25	30.06	-17.99	-1,508.03	-126.49	1,152.23	1,099.16	53.07	21.711		
6,000.00	5,983.51	5,856.33	5,683.82	26.70	30.59	-18.00	-1,533.20	-128.86	1,170.56	1,116.57	53.98	21.683		
6,100.00	6,083.20	5,954.64	5,778.82	27.14	31.12	-18.00	-1,558.36	-131.23	1,188.88	1,133.98	54.90	21.656		
6,200.00	6,182.89	6,052.95	5,873.82	27.59	31.65	-18.00	-1,583.53	-133.60	1,207.20	1,151.39	55.81	21.630		
6,300.00	6,282.58	6,151.26	5,968.82	28.04	32.18	-18.00	-1,608.70	-135.97	1,225.52	1,168.80	56.73	21.604		
6,400.00	6,382.27	6,249.56	6,063.83	28.49	32.71	-18.00	-1,633.86	-138.35	1,243.85	1,186.20	57.64	21.579		
6,500.00	6,481.96	6,347.87	6,158.83	28.94	33.24	-18.00	-1,659.03	-140.72	1,262.17	1,203.61	58.56	21.555		
6,600.00	6,581.66	6,446.18	6,253.83	29.39	33.77	-18.00	-1,684.20	-143.09	1,280.49	1,221.02	59.47	21.531		
6,700.00	6,681.21	6,544.41	6,348.76	29.83	34.30	-55.64	-1,709.35	-145.46	1,298.78	1,238.39	60.39	21.507		
6,800.00	6,778.96	6,642.64	6,443.16	30.28	34.82	-71.88	-1,734.40	-154.94	1,316.74	1,255.43	61.31	21.477		
6,900.00	6,872.51	6,742.52	6,536.52	30.70	35.32	-76.09	-1,759.29	-179.85	1,333.99	1,271.75	62.24	21.434		
7,000.00	6,959.55	6,844.25	6,626.52	31.10	35.79	-77.54	-1,783.40	-220.43	1,350.10	1,286.93	63.17	21.371		
7,100.00	7,037.93	6,947.96	6,710.62	31.48	36.22	-78.03	-1,806.06	-276.51	1,364.67	1,300.52	64.15	21.274		
7,200.00	7,105.74	7,053.68	6,786.12	31.88	36.60	-78.14	-1,826.54	-347.44	1,377.33	1,312.10	65.22	21.118		
7,300.00	7,161.29	7,161.35	6,850.26	32.41	36.95	-78.09	-1,844.11	-431.95	1,387.73	1,321.25	66.48	20.875		
7,400.00	7,203.22	7,270.75	6,900.38	33.13	37.29	-78.01	-1,858.05	-528.04	1,395.61	1,327.59	68.02	20.518		
7,500.00	7,230.50	7,381.54	6,934.17	34.04	37.68	-77.97	-1,867.74	-632.96	1,400.73	1,330.83	69.90	20.404		
7,600.00	7,242.45	7,493.28	6,949.94	35.13	38.23	-77.97	-1,872.68	-743.33	1,402.95	1,330.83	72.12	19.452		
7,700.00	7,242.72	7,602.40	6,950.76	36.39	39.04	-77.99	-1,873.63	-847.62	1,402.92	1,328.26	74.65	18.793		
7,800.00	7,242.33	7,702.40	6,950.38	37.81	40.08	-77.99	-1,874.23	-947.61	1,402.73	1,325.32	77.42	18.119		
7,900.00	7,241.93	7,802.40	6,950.00	39.40	41.39	-77.99	-1,874.82	-1,047.61	1,402.55	1,322.07	80.48	17.427		
8,000.00	7,241.54	7,902.40	6,949.62	41.13	42.90	-77.99	-1,875.42	-1,147.61	1,402.37	1,318.56	83.81	16.734		
8,100.00	7,241.15	8,002.40	6,949.24	42.97	44.57	-77.98	-1,876.02	-1,247.61	1,402.19	1,314.82	87.36	16.050		
8,200.00	7,240.75	8,102.40	6,948.86	44.92	46.39	-77.98	-1,876.62	-1,347.60	1,402.00	1,310.88	91.13	15.385		
8,300.00	7,240.36	8,202.40	6,948.48	46.97	48.31	-77.98	-1,877.22	-1,447.60	1,401.82	1,306.75	95.07	14.745		
8,400.00	7,239.97	8,302.40	6,948.10	49.10	50.33	-77.98	-1,877.82	-1,547.60	1,401.64	1,302.46	99.18	14.133		
8,500.00	7,239.57	8,397.60	6,947.72	51.29	52.34	-77.98	-1,878.42	-1,647.60	1,401.46	1,298.14	103.32	13.564		
8,600.00	7,239.18	8,502.41	6,947.35	53.56	54.62	-77.98	-1,879.01	-1,747.59	1,401.27	1,293.48	107.79	13.000		
8,700.00	7,238.79	8,602.41	6,946.97	55.87	56.86	-77.98	-1,879.61	-1,847.59	1,401.09	1,288.82	112.27	12.480		
8,800.00	7,238.39	8,702.41	6,946.59	58.24	59.15	-77.98	-1,880.21	-1,947.59	1,400.91	1,284.06	116.85	11.989		
8,900.00	7,238.00	8,802.41	6,946.21	60.64	61.50	-77.98	-1,880.81	-2,047.58	1,400.73	1,279.22	121.51	11.528		
9,000.00	7,237.61	8,902.41	6,945.83	63.09	63.89	-77.98	-1,881.41	-2,147.58	1,400.54	1,274.30	126.24	11.094		
9,100.00	7,237.21	9,002.41	6,945.45	65.56	66.31	-77.97	-1,882.01	-2,247.58	1,400.36	1,269.31	131.05	10.686		
9,200.00	7,236.82	9,102.41	6,945.07	68.07	68.77	-77.97	-1,882.61	-2,347.58	1,400.18	1,264.26	135.92	10.302		
9,300.00	7,236.43	9,202.41	6,944.69	70.61	71.26	-77.97	-1,883.21	-2,447.57	1,400.00	1,259.16	140.84	9.940		
9,400.00	7,236.03	9,297.59	6,944.31	73.16	73.66	-77.97	-1,883.80	-2,547.57	1,399.81	1,254.12	145.69	9.608		
9,500.00	7,235.64	9,402.41	6,943.93	75.74	76.32	-77.97	-1,884.40	-2,647.57	1,399.63	1,248.81	150.82	9.280		
9,600.00	7,235.25	9,502.41	6,943.55	78.34	78.88	-77.97	-1,885.00	-2,747.57	1,399.45	1,243.57	155.88	8.978		
9,700.00	7,234.85	9,602.41	6,943.17	80.96	81.47	-77.97	-1,885.60	-2,847.56	1,399.27	1,238.30	160.97	8.693		
9,800.00	7,234.46	9,697.59	6,942.79	83.59	83.94	-77.97	-1,886.20	-2,947.56	1,399.08	1,233.11	165.97	8.430		
9,900.00	7,234.07	9,802.41	6,942.41	86.24	86.68	-77.97	-1,886.80	-3,047.56	1,398.90	1,227.65	171.25	8.169		
10,000.00	7,233.67	9,902.41	6,942.03	88.90	89.32	-77.97	-1,887.40	-3,147.56	1,398.72	1,222.29	176.43	7.928		
10,100.00	7,233.28	10,002.41	6,941.66	91.57	91.96	-77.96	-1,887.99	-3,247.55	1,398.54	1,216.90	181.63	7.700		
10,200.00	7,232.89	10,102.41	6,941.28	94.25	94.62	-77.96	-1,888.59	-3,347.55	1,398.35	1,211.49	186.86	7.483		
10,300.00	7,232.49	10,202.41	6,940.90	96.95	97.29	-77.96	-1,889.19	-3,447.55	1,398.17	1,206.06	192.11	7.278		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error: 0.00 ft	
Survey Program: 0-MWD+IFR1													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,302.41	6,940.52	99.65	99.97	-77.96	-1,889.79	-3,547.54	1,397.99	1,200.61	197.38	7.083		
10,500.00	7,231.71	10,402.41	6,940.14	102.36	102.66	-77.96	-1,890.39	-3,647.54	1,397.81	1,195.14	202.67	6.897		
10,600.00	7,231.32	10,502.41	6,939.76	105.08	105.36	-77.96	-1,890.99	-3,747.54	1,397.62	1,189.65	207.97	6.720		
10,700.00	7,230.92	10,602.41	6,939.38	107.80	108.07	-77.96	-1,891.59	-3,847.54	1,397.44	1,184.15	213.29	6.552		
10,800.00	7,230.53	10,702.41	6,939.00	110.53	110.78	-77.96	-1,892.18	-3,947.53	1,397.26	1,178.64	218.62	6.391		
10,900.00	7,230.14	10,802.41	6,938.62	113.27	113.51	-77.96	-1,892.78	-4,047.53	1,397.08	1,173.11	223.97	6.238		
11,000.00	7,229.74	10,902.41	6,938.24	116.02	116.24	-77.96	-1,893.38	-4,147.53	1,396.89	1,167.57	229.33	6.091		
11,100.00	7,229.35	11,002.41	6,937.86	118.77	118.97	-77.95	-1,893.98	-4,247.53	1,396.71	1,162.02	234.70	5.951		
11,200.00	7,228.96	11,102.41	6,937.48	121.52	121.71	-77.95	-1,894.58	-4,347.52	1,396.53	1,156.45	240.08	5.817		
11,300.00	7,228.56	11,197.59	6,937.10	124.28	124.32	-77.95	-1,895.18	-4,447.52	1,396.35	1,151.01	245.34	5.692		
11,400.00	7,228.17	11,302.41	6,936.72	127.04	127.21	-77.95	-1,895.78	-4,547.52	1,396.17	1,145.30	250.86	5.565		
11,500.00	7,227.78	11,402.41	6,936.34	129.81	129.96	-77.95	-1,896.38	-4,647.52	1,395.98	1,139.71	256.27	5.447		
11,600.00	7,227.38	11,502.41	6,935.97	132.58	132.72	-77.95	-1,896.97	-4,747.51	1,395.80	1,134.11	261.69	5.334		
11,700.00	7,226.99	11,602.41	6,935.59	135.36	135.49	-77.95	-1,897.57	-4,847.51	1,395.62	1,128.51	267.11	5.225		
11,800.00	7,226.60	11,697.59	6,935.21	138.14	138.12	-77.95	-1,898.17	-4,947.51	1,395.44	1,123.02	272.41	5.123		
11,900.00	7,226.20	11,802.41	6,934.83	140.92	141.03	-77.95	-1,898.77	-5,047.50	1,395.25	1,117.27	277.98	5.019		
12,000.00	7,225.81	11,902.41	6,934.45	143.70	143.80	-77.95	-1,899.37	-5,147.50	1,395.07	1,111.65	283.42	4.922		
12,100.00	7,225.42	12,002.41	6,934.07	146.49	146.58	-77.94	-1,899.97	-5,247.50	1,394.89	1,106.02	288.87	4.829		
12,200.00	7,225.02	12,102.41	6,933.69	149.28	149.36	-77.94	-1,900.57	-5,347.50	1,394.71	1,100.38	294.33	4.739		
12,300.00	7,224.63	12,197.59	6,933.31	152.08	152.01	-77.94	-1,901.16	-5,447.49	1,394.52	1,094.87	299.66	4.654		
12,400.00	7,224.24	12,302.41	6,932.93	154.87	154.93	-77.94	-1,901.76	-5,547.49	1,394.34	1,089.09	305.25	4.568		
12,500.00	7,223.84	12,402.41	6,932.55	157.67	157.72	-77.94	-1,902.36	-5,647.49	1,394.16	1,083.43	310.72	4.487		
12,600.00	7,223.45	12,502.41	6,932.17	160.47	160.52	-77.94	-1,902.96	-5,747.49	1,393.98	1,077.78	316.20	4.409		
12,700.00	7,223.06	12,602.41	6,931.79	163.27	163.31	-77.94	-1,903.56	-5,847.48	1,393.79	1,072.12	321.68	4.333		
12,800.00	7,222.66	12,702.41	6,931.41	166.07	166.11	-77.94	-1,904.16	-5,947.48	1,393.61	1,066.45	327.16	4.260		
12,900.00	7,222.27	12,802.41	6,931.03	168.88	168.90	-77.94	-1,904.76	-6,047.48	1,393.43	1,060.78	332.65	4.189		
13,000.00	7,221.88	12,902.41	6,930.65	171.69	171.70	-77.94	-1,905.35	-6,147.48	1,393.25	1,055.11	338.14	4.120		
13,100.00	7,221.48	13,002.41	6,930.28	174.49	174.51	-77.93	-1,905.95	-6,247.47	1,393.06	1,049.43	343.63	4.054		
13,200.00	7,221.09	13,102.41	6,929.90	177.30	177.31	-77.93	-1,906.55	-6,347.47	1,392.88	1,043.75	349.13	3.990		
13,300.00	7,220.70	13,202.41	6,929.52	180.12	180.12	-77.93	-1,907.15	-6,447.47	1,392.70	1,038.07	354.63	3.927		
13,400.00	7,220.30	13,302.41	6,929.14	182.93	182.93	-77.93	-1,907.75	-6,547.46	1,392.52	1,032.38	360.14	3.867		
13,500.00	7,219.91	13,402.41	6,928.76	185.74	185.73	-77.93	-1,908.35	-6,647.46	1,392.33	1,026.69	365.64	3.808		
13,600.00	7,219.52	13,502.41	6,928.38	188.56	188.55	-77.93	-1,908.95	-6,747.46	1,392.15	1,021.00	371.15	3.751		
13,700.00	7,219.12	13,602.41	6,928.00	191.38	191.36	-77.93	-1,909.55	-6,847.46	1,391.97	1,015.30	376.66	3.696		
13,800.00	7,218.73	13,702.41	6,927.62	194.20	194.17	-77.93	-1,910.14	-6,947.45	1,391.79	1,009.61	382.18	3.642		
13,900.00	7,218.34	13,802.41	6,927.24	197.02	196.99	-77.93	-1,910.74	-7,047.45	1,391.60	1,003.91	387.70	3.589		
14,000.00	7,217.94	13,902.41	6,926.86	199.84	199.80	-77.93	-1,911.34	-7,147.45	1,391.42	998.21	393.22	3.539		
14,100.00	7,217.55	14,002.41	6,926.48	202.66	202.62	-77.92	-1,911.94	-7,247.45	1,391.24	992.50	398.74	3.489		
14,200.00	7,217.16	14,102.41	6,926.10	205.48	205.44	-77.92	-1,912.54	-7,347.44	1,391.06	986.80	404.26	3.441		
14,300.00	7,216.76	14,202.41	6,925.72	208.30	208.26	-77.92	-1,913.14	-7,447.44	1,390.87	981.09	409.79	3.394		
14,400.00	7,216.37	14,302.42	6,925.34	211.13	211.08	-77.92	-1,913.74	-7,547.44	1,390.69	975.38	415.31	3.349		
14,500.00	7,215.98	14,402.42	6,924.96	213.96	213.90	-77.92	-1,914.33	-7,647.43	1,390.51	969.66	420.84	3.304		
14,600.00	7,215.58	14,502.42	6,924.59	216.78	216.72	-77.92	-1,914.93	-7,747.43	1,390.33	963.95	426.38	3.261		
14,700.00	7,215.19	14,602.42	6,924.21	219.61	219.55	-77.92	-1,915.53	-7,847.43	1,390.14	958.24	431.91	3.219		
14,800.00	7,214.80	14,702.42	6,923.83	222.44	222.37	-77.92	-1,916.13	-7,947.43	1,389.96	952.52	437.44	3.177		
14,900.00	7,214.40	14,802.42	6,923.45	225.27	225.19	-77.92	-1,916.73	-8,047.42	1,389.78	946.80	442.98	3.137		
15,000.00	7,214.01	14,897.58	6,923.07	228.10	227.88	-77.91	-1,917.33	-8,147.42	1,389.60	941.21	448.39	3.099		
15,002.44	7,214.00	14,900.02	6,923.06	228.16	227.95	-77.91	-1,917.34	-8,149.86	1,389.59	941.07	448.52	3.098 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.54	-139.89	-1.11	139.90					
100.00	100.00	101.00	100.00	3.28	3.28	-179.54	-139.89	-1.11	139.90	133.33	6.57	21.295		
200.00	200.00	199.00	200.00	3.34	3.34	-179.54	-139.89	-1.11	139.90	133.22	6.67	20.964	CC, ES	
300.00	300.00	294.39	295.37	3.44	3.43	-179.47	-141.44	-1.31	141.52	134.63	6.89	20.546		
400.00	400.00	389.52	390.38	3.60	3.57	-179.25	-146.11	-1.91	146.44	139.23	7.21	20.309		
500.00	500.00	484.24	484.77	3.81	3.76	-178.91	-153.87	-2.91	154.65	147.02	7.63	20.275		
600.00	599.98	578.53	578.43	4.03	3.98	-16.77	-164.66	-4.31	164.46	156.36	8.11	20.289		
700.00	699.84	672.53	671.39	4.29	4.23	-16.71	-178.46	-6.09	174.21	165.57	8.63	20.177		
800.00	799.54	768.61	765.94	4.57	4.53	-16.81	-195.39	-8.27	184.53	175.32	9.20	20.051		
900.00	899.23	868.03	863.68	4.87	4.87	-16.91	-213.44	-10.60	195.30	185.50	9.80	19.923		
1,000.00	998.92	967.45	961.42	5.20	5.24	-16.99	-231.50	-12.93	206.07	195.62	10.46	19.707		
1,100.00	1,098.61	1,066.87	1,059.15	5.54	5.62	-17.07	-249.55	-15.26	216.85	205.70	11.14	19.461		
1,200.00	1,198.30	1,166.28	1,156.89	5.90	6.02	-17.15	-267.60	-17.59	227.62	215.76	11.86	19.196		
1,300.00	1,298.00	1,265.70	1,254.63	6.27	6.43	-17.21	-285.65	-19.91	238.39	225.80	12.60	18.923		
1,400.00	1,397.69	1,365.12	1,352.36	6.66	6.86	-17.27	-303.71	-22.24	249.17	235.81	13.36	18.653		
1,500.00	1,497.38	1,464.54	1,450.10	7.05	7.29	-17.32	-321.76	-24.57	259.94	245.81	14.14	18.389		
1,600.00	1,597.07	1,563.95	1,547.84	7.44	7.73	-17.38	-339.81	-26.90	270.72	255.79	14.93	18.134		
1,700.00	1,696.76	1,663.37	1,645.57	7.85	8.18	-17.42	-357.87	-29.23	281.49	265.76	15.73	17.892		
1,800.00	1,796.45	1,762.79	1,743.31	8.25	8.63	-17.46	-375.92	-31.56	292.27	275.72	16.55	17.661		
1,900.00	1,896.15	1,862.21	1,841.05	8.67	9.08	-17.50	-393.97	-33.89	303.04	285.67	17.37	17.444		
2,000.00	1,995.84	1,961.62	1,938.79	9.08	9.54	-17.54	-412.03	-36.22	313.82	295.61	18.20	17.238		
2,100.00	2,095.53	2,061.04	2,036.52	9.50	10.00	-17.58	-430.08	-38.54	324.59	305.55	19.04	17.045		
2,200.00	2,195.22	2,160.46	2,134.26	9.92	10.47	-17.61	-448.13	-40.87	335.37	315.48	19.89	16.862		
2,300.00	2,294.91	2,259.88	2,232.00	10.35	10.93	-17.64	-466.19	-43.20	346.15	325.41	20.74	16.691		
2,400.00	2,394.60	2,359.29	2,329.73	10.77	11.40	-17.67	-484.24	-45.53	356.92	335.33	21.59	16.529		
2,500.00	2,494.30	2,458.71	2,427.47	11.20	11.88	-17.69	-502.29	-47.86	367.70	345.25	22.45	16.377		
2,600.00	2,593.99	2,558.13	2,525.21	11.63	12.35	-17.72	-520.35	-50.19	378.47	355.16	23.31	16.233		
2,700.00	2,693.68	2,657.55	2,622.94	12.07	12.82	-17.74	-538.40	-52.52	389.25	365.07	24.18	16.098		
2,800.00	2,793.37	2,756.96	2,720.68	12.50	13.30	-17.77	-556.45	-54.84	400.03	374.98	25.05	15.970		
2,900.00	2,893.06	2,856.38	2,818.42	12.93	13.78	-17.79	-574.50	-57.17	410.80	384.88	25.92	15.849		
3,000.00	2,992.76	2,955.80	2,916.15	13.37	14.25	-17.81	-592.56	-59.50	421.58	394.78	26.79	15.734		
3,100.00	3,092.45	3,055.22	3,013.89	13.81	14.73	-17.83	-610.61	-61.83	432.35	404.69	27.67	15.626		
3,200.00	3,192.14	3,154.63	3,111.63	14.25	15.21	-17.85	-628.66	-64.16	443.13	414.58	28.55	15.523		
3,300.00	3,291.83	3,254.05	3,209.37	14.68	15.69	-17.86	-646.72	-66.49	453.91	424.48	29.43	15.425		
3,400.00	3,391.52	3,353.47	3,307.10	15.12	16.17	-17.88	-664.77	-68.82	464.68	434.38	30.31	15.332		
3,500.00	3,491.21	3,452.89	3,404.84	15.56	16.66	-17.90	-682.82	-71.15	475.46	444.27	31.19	15.244		
3,600.00	3,590.91	3,552.30	3,502.58	16.00	17.14	-17.91	-700.88	-73.47	486.24	454.16	32.07	15.160		
3,700.00	3,690.60	3,651.72	3,600.31	16.45	17.62	-17.93	-718.93	-75.80	497.01	464.05	32.96	15.080		
3,800.00	3,790.29	3,751.14	3,698.05	16.89	18.11	-17.94	-736.98	-78.13	507.79	473.94	33.85	15.003		
3,900.00	3,889.98	3,850.56	3,795.79	17.33	18.59	-17.95	-755.04	-80.46	518.57	483.83	34.73	14.930		
4,000.00	3,989.67	3,949.97	3,893.52	17.77	19.08	-17.97	-773.09	-82.79	529.34	493.72	35.62	14.860		
4,100.00	4,089.36	4,049.39	3,991.26	18.22	19.56	-17.98	-791.14	-85.12	540.12	503.61	36.51	14.794		
4,200.00	4,189.06	4,148.81	4,089.00	18.66	20.05	-17.99	-809.20	-87.45	550.90	513.50	37.40	14.730		
4,300.00	4,288.75	4,248.23	4,186.74	19.10	20.53	-18.00	-827.25	-89.77	561.67	523.38	38.29	14.668		
4,400.00	4,388.44	4,347.64	4,284.47	19.55	21.02	-18.01	-845.30	-92.10	572.45	533.27	39.18	14.610		
4,500.00	4,488.13	4,447.06	4,382.21	19.99	21.50	-18.02	-863.35	-94.43	583.23	543.15	40.08	14.553		
4,600.00	4,587.82	4,546.48	4,479.95	20.44	21.99	-18.03	-881.41	-96.76	594.00	553.04	40.97	14.499		
4,700.00	4,687.51	4,645.90	4,577.68	20.89	22.48	-18.04	-899.46	-99.09	604.78	562.92	41.86	14.447		
4,800.00	4,787.21	4,745.31	4,675.42	21.33	22.96	-18.05	-917.51	-101.42	615.56	572.80	42.76	14.397		
4,900.00	4,886.90	4,844.73	4,773.16	21.78	23.45	-18.06	-935.57	-103.75	626.33	582.68	43.65	14.349		
5,000.00	4,986.59	4,944.15	4,870.89	22.22	23.94	-18.07	-953.62	-106.08	637.11	592.57	44.55	14.303		
5,100.00	5,086.28	5,043.57	4,968.63	22.67	24.43	-18.08	-971.67	-108.40	647.89	602.45	45.44	14.258		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,142.99	5,066.37	23.12	24.92	-18.09	-989.73	-110.73	658.66	612.33	46.34	14.215		
5,300.00	5,285.66	5,242.40	5,164.10	23.56	25.40	-18.10	-1,007.78	-113.06	669.44	622.21	47.23	14.173		
5,400.00	5,385.36	5,341.82	5,261.84	24.01	25.89	-18.10	-1,025.83	-115.39	680.22	632.09	48.13	14.133		
5,500.00	5,485.05	5,441.24	5,359.58	24.46	26.38	-18.11	-1,043.89	-117.72	691.00	641.97	49.03	14.094		
5,600.00	5,584.74	5,540.66	5,457.32	24.90	26.87	-18.12	-1,061.94	-120.05	701.77	651.85	49.93	14.057		
5,700.00	5,684.43	5,640.07	5,555.05	25.35	27.36	-18.13	-1,079.99	-122.38	712.55	661.73	50.82	14.020		
5,800.00	5,784.12	5,739.49	5,652.79	25.80	27.85	-18.13	-1,098.05	-124.70	723.33	671.61	51.72	13.985		
5,900.00	5,883.81	5,838.91	5,750.53	26.25	28.34	-18.14	-1,116.10	-127.03	734.10	681.48	52.62	13.951		
6,000.00	5,983.51	5,938.33	5,848.26	26.70	28.83	-18.15	-1,134.15	-129.36	744.88	691.36	53.52	13.918		
6,100.00	6,083.20	6,037.74	5,946.00	27.14	29.31	-18.15	-1,152.21	-131.69	755.66	701.24	54.42	13.886		
6,200.00	6,182.89	6,137.16	6,043.74	27.59	29.80	-18.16	-1,170.26	-134.02	766.43	711.12	55.32	13.855		
6,300.00	6,282.58	6,236.58	6,141.47	28.04	30.29	-18.17	-1,188.31	-136.35	777.21	720.99	56.22	13.825		
6,400.00	6,382.27	6,336.00	6,239.21	28.49	30.78	-18.17	-1,206.36	-138.68	787.99	730.87	57.12	13.796		
6,500.00	6,481.96	6,435.41	6,336.95	28.94	31.27	-18.18	-1,224.42	-141.01	798.77	740.75	58.02	13.768		
6,600.00	6,581.66	6,534.83	6,434.69	29.39	31.76	-18.18	-1,242.47	-143.33	809.54	750.63	58.92	13.740		
6,700.00	6,681.21	6,634.17	6,532.35	29.83	32.25	-56.29	-1,260.51	-145.66	820.30	760.48	59.82	13.713		
6,800.00	6,778.96	6,732.69	6,628.60	30.28	32.73	-73.40	-1,278.42	-155.70	830.97	770.26	60.72	13.686		
6,900.00	6,872.51	6,832.66	6,723.48	30.70	33.20	-78.43	-1,296.33	-181.18	841.42	779.80	61.62	13.656		
7,000.00	6,959.55	6,934.17	6,814.57	31.10	33.63	-80.63	-1,313.81	-222.18	851.38	788.86	62.52	13.618		
7,100.00	7,037.93	7,037.29	6,899.30	31.48	34.04	-81.78	-1,330.36	-278.37	860.61	797.15	63.46	13.562		
7,200.00	7,105.74	7,142.02	6,975.05	31.88	34.41	-82.45	-1,345.50	-348.92	868.85	804.35	64.49	13.472		
7,300.00	7,161.29	7,248.31	7,039.21	32.41	34.76	-82.85	-1,358.72	-432.47	875.88	810.16	65.72	13.328		
7,400.00	7,203.22	7,356.01	7,089.34	33.13	35.15	-83.11	-1,369.54	-527.02	881.50	814.27	67.23	13.112		
7,500.00	7,230.50	7,464.91	7,123.35	34.04	35.69	-83.28	-1,377.53	-630.03	885.54	816.45	69.09	12.817		
7,600.00	7,242.45	7,574.71	7,139.66	35.13	36.53	-83.38	-1,382.35	-738.37	887.88	816.57	71.31	12.451		
7,700.00	7,242.72	7,678.92	7,140.68	36.39	37.61	-83.41	-1,384.27	-842.52	888.81	815.00	73.81	12.042		
7,800.00	7,242.33	7,778.91	7,140.14	37.81	38.88	-83.40	-1,385.84	-942.51	889.61	812.99	76.62	11.611		
7,900.00	7,241.93	7,878.91	7,139.59	39.40	40.34	-83.40	-1,387.41	-1,042.49	890.41	810.68	79.72	11.169		
8,000.00	7,241.54	7,978.91	7,139.05	41.13	41.96	-83.39	-1,388.98	-1,142.47	891.21	808.10	83.10	10.724		
8,100.00	7,241.15	8,078.90	7,138.51	42.97	43.72	-83.39	-1,390.55	-1,242.46	892.01	805.28	86.72	10.286		
8,200.00	7,240.75	8,178.90	7,137.97	44.92	45.59	-83.39	-1,392.12	-1,342.44	892.81	802.25	90.56	9.859		
8,300.00	7,240.36	8,278.90	7,137.43	46.97	47.56	-83.38	-1,393.69	-1,442.42	893.61	799.03	94.57	9.449		
8,400.00	7,239.97	8,378.90	7,136.88	49.10	49.62	-83.38	-1,395.26	-1,542.40	894.41	795.65	98.75	9.057		
8,500.00	7,239.57	8,478.89	7,136.34	51.29	51.76	-83.38	-1,396.83	-1,642.39	895.21	792.13	103.08	8.685		
8,600.00	7,239.18	8,578.89	7,135.80	53.56	53.96	-83.37	-1,398.40	-1,742.37	896.01	788.48	107.53	8.333		
8,700.00	7,238.79	8,678.89	7,135.26	55.87	56.22	-83.37	-1,399.97	-1,842.35	896.81	784.72	112.09	8.001		
8,800.00	7,238.39	8,778.88	7,134.72	58.24	58.54	-83.37	-1,401.54	-1,942.34	897.61	780.86	116.75	7.688		
8,900.00	7,238.00	8,878.88	7,134.17	60.64	60.90	-83.36	-1,403.11	-2,042.32	898.41	776.91	121.49	7.395		
9,000.00	7,237.61	8,978.88	7,133.63	63.09	63.31	-83.36	-1,404.68	-2,142.30	899.21	772.89	126.32	7.119		
9,100.00	7,237.21	9,078.87	7,133.09	65.56	65.75	-83.35	-1,406.25	-2,242.29	900.01	768.80	131.21	6.859		
9,200.00	7,236.82	9,178.87	7,132.55	68.07	68.22	-83.35	-1,407.82	-2,342.27	900.80	764.65	136.16	6.616		
9,300.00	7,236.43	9,278.87	7,132.01	70.61	70.72	-83.35	-1,409.39	-2,442.25	901.60	760.44	141.16	6.387		
9,400.00	7,236.03	9,378.86	7,131.46	73.16	73.25	-83.34	-1,410.96	-2,542.23	902.40	756.19	146.22	6.172		
9,500.00	7,235.64	9,478.86	7,130.92	75.74	75.80	-83.34	-1,412.53	-2,642.22	903.20	751.89	151.32	5.969		
9,600.00	7,235.25	9,578.86	7,130.38	78.34	78.37	-83.34	-1,414.10	-2,742.20	904.00	747.55	156.46	5.778		
9,700.00	7,234.85	9,678.85	7,129.84	80.96	80.97	-83.33	-1,415.67	-2,842.18	904.80	743.17	161.63	5.598		
9,800.00	7,234.46	9,778.85	7,129.30	83.59	83.58	-83.33	-1,417.24	-2,942.17	905.60	738.76	166.84	5.428		
9,900.00	7,234.07	9,878.85	7,128.75	86.24	86.20	-83.33	-1,418.81	-3,042.15	906.40	734.33	172.08	5.267		
10,000.00	7,233.67	9,978.84	7,128.21	88.90	88.84	-83.32	-1,420.38	-3,142.13	907.20	729.86	177.34	5.116		
10,100.00	7,233.28	10,078.84	7,127.67	91.57	91.49	-83.32	-1,421.95	-3,242.12	908.00	725.37	182.63	4.972		
10,200.00	7,232.89	10,178.84	7,127.13	94.25	94.15	-83.32	-1,423.52	-3,342.10	908.80	720.86	187.94	4.836		
10,300.00	7,232.49	10,278.83	7,126.59	96.95	96.83	-83.31	-1,425.09	-3,442.08	909.60	716.33	193.27	4.706		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,232.10	10,378.83	7,126.04	99.65	99.51	-83.31	-1,426.66	-3,542.06	910.40	711.78	198.62	4.584		
10,500.00	7,231.71	10,478.83	7,125.50	102.36	102.21	-83.30	-1,428.23	-3,642.05	911.20	707.21	203.99	4.467		
10,600.00	7,231.32	10,578.82	7,124.96	105.08	104.91	-83.30	-1,429.80	-3,742.03	912.00	702.63	209.38	4.356		
10,700.00	7,230.92	10,678.82	7,124.42	107.80	107.62	-83.30	-1,431.37	-3,842.01	912.80	698.03	214.78	4.250		
10,800.00	7,230.53	10,778.82	7,123.88	110.53	110.34	-83.29	-1,432.94	-3,942.00	913.60	693.41	220.19	4.149		
10,900.00	7,230.14	10,878.81	7,123.33	113.27	113.06	-83.29	-1,434.51	-4,041.98	914.40	688.79	225.62	4.053		
11,000.00	7,229.74	10,978.81	7,122.79	116.02	115.79	-83.29	-1,436.08	-4,141.96	915.20	684.15	231.06	3.961		
11,100.00	7,229.35	11,078.81	7,122.25	118.77	118.53	-83.28	-1,437.65	-4,241.95	916.00	679.50	236.50	3.873		
11,200.00	7,228.96	11,178.81	7,121.71	121.52	121.27	-83.28	-1,439.22	-4,341.93	916.80	674.84	241.96	3.789		
11,300.00	7,228.56	11,278.80	7,121.17	124.28	124.02	-83.28	-1,440.79	-4,441.91	917.60	670.17	247.43	3.708		
11,400.00	7,228.17	11,378.80	7,120.63	127.04	126.77	-83.27	-1,442.36	-4,541.89	918.40	665.49	252.91	3.631		
11,500.00	7,227.78	11,478.80	7,120.08	129.81	129.53	-83.27	-1,443.93	-4,641.88	919.20	660.80	258.40	3.557		
11,600.00	7,227.38	11,578.79	7,119.54	132.58	132.29	-83.27	-1,445.50	-4,741.86	920.00	656.11	263.89	3.486		
11,700.00	7,226.99	11,678.79	7,119.00	135.36	135.06	-83.26	-1,447.07	-4,841.84	920.80	651.41	269.40	3.418		
11,800.00	7,226.60	11,778.79	7,118.46	138.14	137.82	-83.26	-1,448.64	-4,941.83	921.60	646.70	274.90	3.352		
11,900.00	7,226.20	11,878.78	7,117.92	140.92	140.60	-83.26	-1,450.21	-5,041.81	922.40	641.98	280.42	3.289		
12,000.00	7,225.81	11,978.78	7,117.37	143.70	143.37	-83.25	-1,451.78	-5,141.79	923.20	637.26	285.94	3.229		
12,100.00	7,225.42	12,078.78	7,116.83	146.49	146.15	-83.25	-1,453.35	-5,241.78	924.00	632.53	291.47	3.170		
12,200.00	7,225.02	12,178.77	7,116.29	149.28	148.93	-83.25	-1,454.92	-5,341.76	924.80	627.80	297.00	3.114		
12,300.00	7,224.63	12,278.77	7,115.75	152.08	151.72	-83.24	-1,456.49	-5,441.74	925.60	623.06	302.54	3.059		
12,400.00	7,224.24	12,378.77	7,115.21	154.87	154.50	-83.24	-1,458.06	-5,541.72	926.40	618.32	308.08	3.007		
12,500.00	7,223.84	12,478.76	7,114.66	157.67	157.29	-83.24	-1,459.63	-5,641.71	927.20	613.57	313.63	2.956		
12,600.00	7,223.45	12,578.76	7,114.12	160.47	160.08	-83.23	-1,461.20	-5,741.69	928.00	608.81	319.18	2.907		
12,700.00	7,223.06	12,678.76	7,113.58	163.27	162.88	-83.23	-1,462.77	-5,841.67	928.80	604.06	324.74	2.860		
12,800.00	7,222.66	12,778.75	7,113.04	166.07	165.67	-83.23	-1,464.34	-5,941.66	929.60	599.30	330.30	2.814		
12,900.00	7,222.27	12,878.75	7,112.50	168.88	168.47	-83.22	-1,465.91	-6,041.64	930.40	594.53	335.87	2.770		
13,000.00	7,221.88	12,978.75	7,111.95	171.69	171.27	-83.22	-1,467.48	-6,141.62	931.20	589.77	341.43	2.727		
13,100.00	7,221.48	13,078.74	7,111.41	174.49	174.07	-83.22	-1,469.05	-6,241.61	932.00	584.99	347.00	2.686		
13,200.00	7,221.09	13,178.74	7,110.87	177.30	176.87	-83.21	-1,470.62	-6,341.59	932.80	580.22	352.58	2.646		
13,300.00	7,220.70	13,278.74	7,110.33	180.12	179.68	-83.21	-1,472.19	-6,441.57	933.60	575.44	358.16	2.607		
13,400.00	7,220.30	13,378.73	7,109.79	182.93	182.49	-83.21	-1,473.76	-6,541.55	934.40	570.66	363.74	2.569		
13,500.00	7,219.91	13,478.73	7,109.24	185.74	185.29	-83.20	-1,475.33	-6,641.54	935.20	565.88	369.32	2.532		
13,600.00	7,219.52	13,578.73	7,108.70	188.56	188.10	-83.20	-1,476.90	-6,741.52	936.00	561.09	374.91	2.497		
13,700.00	7,219.12	13,678.72	7,108.16	191.38	190.91	-83.20	-1,478.47	-6,841.50	936.80	556.30	380.49	2.462		
13,800.00	7,218.73	13,778.72	7,107.62	194.20	193.73	-83.19	-1,480.04	-6,941.49	937.60	551.51	386.09	2.428		
13,900.00	7,218.34	13,878.72	7,107.08	197.02	196.54	-83.19	-1,481.61	-7,041.47	938.40	546.72	391.68	2.396		
14,000.00	7,217.94	13,978.72	7,106.53	199.84	199.35	-83.19	-1,483.18	-7,141.45	939.20	541.93	397.27	2.364		
14,100.00	7,217.55	14,078.71	7,105.99	202.66	202.17	-83.18	-1,484.75	-7,241.44	940.00	537.13	402.87	2.333		
14,200.00	7,217.16	14,178.71	7,105.45	205.48	204.99	-83.18	-1,486.32	-7,341.42	940.80	532.33	408.47	2.303		
14,300.00	7,216.76	14,278.71	7,104.91	208.30	207.80	-83.18	-1,487.89	-7,441.40	941.60	527.53	414.07	2.274		
14,400.00	7,216.37	14,378.70	7,104.37	211.13	210.62	-83.17	-1,489.46	-7,541.38	942.40	522.72	419.68	2.246		
14,500.00	7,215.98	14,478.70	7,103.82	213.96	213.44	-83.17	-1,491.03	-7,641.37	943.20	517.92	425.28	2.218		
14,600.00	7,215.58	14,578.70	7,103.28	216.78	216.26	-83.17	-1,492.60	-7,741.35	944.00	513.11	430.89	2.191		
14,700.00	7,215.19	14,678.69	7,102.74	219.61	219.09	-83.16	-1,494.17	-7,841.33	944.80	508.30	436.50	2.165		
14,800.00	7,214.80	14,778.69	7,102.20	222.44	221.91	-83.16	-1,495.74	-7,941.32	945.60	503.49	442.11	2.139		
14,900.00	7,214.40	14,878.69	7,101.66	225.27	224.73	-83.16	-1,497.31	-8,041.30	946.40	498.68	447.72	2.114		
15,000.00	7,214.01	14,978.68	7,101.11	228.10	227.56	-83.15	-1,498.88	-8,141.28	947.20	493.87	453.33	2.089		
15,002.44	7,214.00	14,981.12	7,101.10	228.16	227.62	-83.15	-1,498.92	-8,143.72	947.22	493.75	453.47	2.089 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-179.54	-279.79	-2.23	279.80					
100.00	100.00	102.00	100.00	3.28	3.29	-179.54	-279.79	-2.23	279.80	273.23	6.57	42.588		
200.00	200.00	198.00	200.00	3.34	3.34	-179.54	-279.79	-2.23	279.80	273.12	6.67	41.933 CC, ES		
300.00	300.00	289.26	291.25	3.44	3.43	-179.53	-281.17	-2.31	281.32	274.44	6.88	40.887		
400.00	400.00	380.17	382.05	3.60	3.56	-179.49	-285.44	-2.56	286.02	278.82	7.19	39.767		
500.00	500.00	470.71	472.31	3.81	3.73	-179.42	-292.54	-2.99	293.87	286.27	7.59	38.697		
600.00	599.98	560.89	561.93	4.03	3.94	-17.52	-302.45	-3.58	303.20	295.15	8.06	37.640		
700.00	699.84	650.81	650.95	4.29	4.17	-17.61	-315.12	-4.33	312.35	303.78	8.56	36.469		
800.00	799.54	740.41	739.21	4.57	4.44	-17.83	-330.52	-5.25	322.23	313.11	9.13	35.309		
900.00	899.23	829.38	826.33	4.87	4.74	-18.03	-348.52	-6.32	335.11	325.38	9.73	34.448		
1,000.00	998.92	917.56	912.08	5.20	5.07	-18.18	-369.03	-7.54	351.05	340.69	10.36	33.894		
1,100.00	1,098.61	1,004.80	996.25	5.54	5.42	-18.30	-391.89	-8.90	370.00	358.99	11.01	33.616		
1,200.00	1,198.30	1,090.94	1,078.65	5.90	5.79	-18.37	-416.97	-10.40	391.90	380.23	11.67	33.588		
1,300.00	1,298.00	1,175.86	1,159.10	6.27	6.18	-18.42	-444.10	-12.02	416.70	404.37	12.34	33.781		
1,400.00	1,397.69	1,259.44	1,237.46	6.66	6.59	-18.43	-473.12	-13.74	444.34	431.33	13.00	34.169		
1,500.00	1,497.38	1,341.83	1,313.83	7.05	7.01	-18.42	-503.94	-15.58	474.73	461.06	13.67	34.726		
1,600.00	1,597.07	1,436.67	1,401.27	7.44	7.52	-18.41	-540.63	-17.77	506.43	492.00	14.43	35.087		
1,700.00	1,696.76	1,531.51	1,488.70	7.85	8.05	-18.39	-577.32	-19.95	538.13	522.92	15.22	35.363		
1,800.00	1,796.45	1,626.35	1,576.13	8.25	8.59	-18.38	-614.01	-22.14	569.83	553.81	16.02	35.572		
1,900.00	1,896.15	1,721.20	1,663.56	8.67	9.13	-18.36	-650.69	-24.32	601.53	584.70	16.84	35.728		
2,000.00	1,995.84	1,816.04	1,750.99	9.08	9.69	-18.35	-687.38	-26.51	633.23	615.57	17.67	35.843		
2,100.00	2,095.53	1,910.88	1,838.42	9.50	10.25	-18.34	-724.07	-28.70	664.94	646.43	18.51	35.925		
2,200.00	2,195.22	2,005.72	1,925.86	9.92	10.82	-18.33	-760.76	-30.88	696.64	677.28	19.36	35.982		
2,300.00	2,294.91	2,100.57	2,013.29	10.35	11.39	-18.32	-797.45	-33.07	728.34	708.12	20.22	36.019		
2,400.00	2,394.60	2,195.41	2,100.72	10.77	11.97	-18.32	-834.13	-35.25	760.04	738.95	21.09	36.040		
2,500.00	2,494.30	2,309.75	2,188.15	11.20	12.67	-18.31	-870.82	-37.44	791.74	769.67	22.06	35.884		
2,600.00	2,593.99	2,385.09	2,275.58	11.63	13.13	-18.30	-907.51	-39.63	823.44	800.59	22.84	36.046		
2,700.00	2,693.68	2,479.94	2,363.01	12.07	13.72	-18.30	-944.20	-41.81	855.14	831.41	23.73	36.036		
2,800.00	2,793.37	2,574.78	2,450.45	12.50	14.30	-18.29	-980.89	-44.00	886.84	862.22	24.62	36.021		
2,900.00	2,893.06	2,669.62	2,537.88	12.93	14.89	-18.29	-1,017.57	-46.18	918.54	893.02	25.51	36.000		
3,000.00	2,992.76	2,764.46	2,625.31	13.37	15.49	-18.28	-1,054.26	-48.37	950.24	923.83	26.41	35.976		
3,100.00	3,092.45	2,859.30	2,712.74	13.81	16.08	-18.28	-1,090.95	-50.56	981.94	954.63	27.31	35.949		
3,200.00	3,192.14	2,954.15	2,800.17	14.25	16.67	-18.27	-1,127.64	-52.74	1,013.64	985.42	28.22	35.920		
3,300.00	3,291.83	3,048.99	2,887.60	14.68	17.27	-18.27	-1,164.33	-54.93	1,045.34	1,016.21	29.13	35.889		
3,400.00	3,391.52	3,143.83	2,975.04	15.12	17.87	-18.26	-1,201.01	-57.11	1,077.04	1,047.01	30.04	35.857		
3,500.00	3,491.21	3,238.67	3,062.47	15.56	18.47	-18.26	-1,237.70	-59.30	1,108.74	1,077.79	30.95	35.825		
3,600.00	3,590.91	3,333.52	3,149.90	16.00	19.07	-18.26	-1,274.39	-61.49	1,140.44	1,108.58	31.86	35.792		
3,700.00	3,690.60	3,428.36	3,237.33	16.45	19.67	-18.25	-1,311.08	-63.67	1,172.14	1,139.36	32.78	35.758		
3,800.00	3,790.29	3,523.20	3,324.76	16.89	20.27	-18.25	-1,347.77	-65.86	1,203.84	1,170.15	33.70	35.725		
3,900.00	3,889.98	3,618.04	3,412.19	17.33	20.87	-18.25	-1,384.45	-68.04	1,235.54	1,200.93	34.62	35.691		
4,000.00	3,989.67	3,712.89	3,499.62	17.77	21.47	-18.25	-1,421.14	-70.23	1,267.25	1,231.71	35.54	35.658		
4,100.00	4,089.36	3,807.73	3,587.06	18.22	22.08	-18.24	-1,457.83	-72.42	1,298.95	1,262.48	36.46	35.625		
4,200.00	4,189.06	3,902.57	3,674.49	18.66	22.68	-18.24	-1,494.52	-74.60	1,330.65	1,293.26	37.39	35.593		
4,300.00	4,288.75	4,002.59	3,761.92	19.10	23.32	-18.24	-1,531.21	-76.79	1,362.35	1,324.01	38.34	35.535		
4,400.00	4,388.44	4,107.74	3,849.35	19.55	23.99	-18.24	-1,567.89	-78.97	1,394.05	1,354.73	39.32	35.453		
4,500.00	4,488.13	4,187.10	3,936.78	19.99	24.50	-18.23	-1,604.58	-81.16	1,425.75	1,385.58	40.16	35.498		
4,600.00	4,587.82	4,281.94	4,024.21	20.44	25.10	-18.23	-1,641.27	-83.35	1,457.45	1,416.36	41.09	35.467		
4,700.00	4,687.51	4,376.78	4,111.65	20.89	25.71	-18.23	-1,677.96	-85.53	1,489.15	1,447.13	42.02	35.437		
4,800.00	4,787.21	4,471.62	4,199.08	21.33	26.32	-18.23	-1,714.65	-87.72	1,520.85	1,477.90	42.95	35.408		
4,900.00	4,886.90	4,566.47	4,286.51	21.78	26.92	-18.23	-1,751.33	-89.90	1,552.55	1,508.67	43.88	35.379		
5,000.00	4,986.59	4,661.31	4,373.94	22.22	27.53	-18.22	-1,788.02	-92.09	1,584.25	1,539.44	44.81	35.351		
5,100.00	5,086.28	4,756.15	4,461.37	22.67	28.14	-18.22	-1,824.71	-94.28	1,615.95	1,570.20	45.75	35.323		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	4,850.99	4,548.80	23.12	28.75	-18.22	-1,861.40	-96.46	1,647.65	1,600.97	46.68	35.296		
5,300.00	5,285.66	4,945.84	4,636.24	23.56	29.35	-18.22	-1,898.09	-98.65	1,679.35	1,631.74	47.61	35.270		
5,400.00	5,385.36	5,040.68	4,723.67	24.01	29.96	-18.22	-1,934.77	-100.83	1,711.05	1,662.50	48.55	35.244		
5,500.00	5,485.05	5,135.52	4,811.10	24.46	30.57	-18.22	-1,971.46	-103.02	1,742.75	1,693.27	49.48	35.219		
5,600.00	5,584.74	5,230.36	4,898.53	24.90	31.18	-18.21	-2,008.15	-105.21	1,774.45	1,724.04	50.42	35.194		
5,700.00	5,684.43	5,325.21	4,985.96	25.35	31.79	-18.21	-2,044.84	-107.39	1,806.16	1,754.80	51.36	35.169		
5,800.00	5,784.12	5,420.05	5,073.39	25.80	32.40	-18.21	-2,081.53	-109.58	1,837.86	1,785.56	52.29	35.146		
5,900.00	5,883.81	5,514.89	5,160.83	26.25	33.01	-18.21	-2,118.21	-111.76	1,869.56	1,816.33	53.23	35.122		
6,000.00	5,983.51	5,609.73	5,248.26	26.70	33.62	-18.21	-2,154.90	-113.95	1,901.26	1,847.09	54.17	35.100		
6,100.00	6,083.20	5,704.58	5,335.69	27.14	34.23	-18.21	-2,191.59	-116.14	1,932.96	1,877.85	55.11	35.077		
6,200.00	6,182.89	5,800.58	5,423.12	27.59	34.84	-18.21	-2,228.28	-118.32	1,964.66	1,908.61	56.05	35.052		
6,300.00	6,282.58	5,905.74	5,510.55	28.04	35.52	-18.21	-2,264.97	-120.51	1,996.36	1,939.31	57.05	34.996		
6,400.00	6,382.27	5,989.10	5,597.98	28.49	36.05	-18.21	-2,301.65	-122.69	2,028.06	1,970.14	57.92	35.013		
6,500.00	6,481.96	6,083.94	5,685.41	28.94	36.67	-18.20	-2,338.34	-124.88	2,059.76	2,000.90	58.86	34.993		
6,600.00	6,581.66	6,178.79	5,772.85	29.39	37.28	-18.20	-2,375.03	-127.07	2,091.46	2,031.66	59.80	34.973		
6,700.00	6,681.21	6,273.56	5,860.22	29.83	37.89	-55.03	-2,411.69	-129.25	2,123.12	2,062.38	60.74	34.952		
6,800.00	6,778.96	6,367.00	5,946.35	30.28	38.49	-69.99	-2,447.84	-131.40	2,154.32	2,092.64	61.68	34.928		
6,900.00	6,872.51	6,456.84	6,029.17	30.70	39.07	-73.30	-2,482.59	-133.47	2,184.64	2,122.04	62.60	34.899		
7,000.00	6,959.55	6,540.86	6,106.62	31.10	39.61	-74.13	-2,515.09	-135.41	2,213.95	2,150.45	63.50	34.863		
7,100.00	7,037.93	6,616.99	6,176.81	31.48	40.10	-74.12	-2,544.54	-137.17	2,242.35	2,177.94	64.41	34.814		
7,200.00	7,105.74	6,683.37	6,238.00	31.88	40.52	-73.68	-2,570.22	-138.70	2,270.07	2,204.73	65.34	34.741		
7,300.00	7,161.29	6,738.35	6,288.69	32.41	40.88	-72.89	-2,591.49	-139.96	2,297.36	2,231.02	66.34	34.629		
7,400.00	7,203.22	6,780.59	6,327.63	33.13	41.15	-71.74	-2,607.83	-140.94	2,324.44	2,257.01	67.43	34.472		
7,500.00	7,230.50	6,809.04	6,353.85	34.04	41.33	-70.20	-2,618.83	-141.59	2,351.37	2,282.76	68.61	34.270		
7,600.00	7,242.45	6,823.00	6,366.72	35.13	41.42	-68.24	-2,624.23	-141.91	2,378.00	2,308.14	69.86	34.040		
7,700.00	7,242.72	6,825.88	6,369.37	36.39	41.44	-67.64	-2,625.34	-141.98	2,405.16	2,334.01	71.15	33.802		
7,800.00	7,242.33	8,112.20	7,070.52	37.81	46.83	-85.94	-2,925.21	-941.94	2,429.10	2,348.32	80.79	30.068		
7,900.00	7,241.93	8,212.20	7,070.22	39.40	47.37	-85.95	-2,925.81	-1,041.93	2,428.91	2,345.16	83.75	29.003		
8,000.00	7,241.54	8,312.20	7,069.93	41.13	48.14	-85.95	-2,926.41	-1,141.93	2,428.72	2,341.74	86.98	27.922		
8,100.00	7,241.15	8,412.20	7,069.63	42.97	49.16	-85.95	-2,927.01	-1,241.93	2,428.53	2,338.07	90.46	26.847		
8,200.00	7,240.75	8,512.20	7,069.33	44.92	50.44	-85.95	-2,927.61	-1,341.93	2,428.34	2,334.19	94.15	25.791		
8,300.00	7,240.36	8,612.20	7,069.03	46.97	51.95	-85.95	-2,928.20	-1,441.92	2,428.15	2,330.11	98.04	24.767		
8,400.00	7,239.97	8,712.20	7,068.74	49.10	53.64	-85.96	-2,928.80	-1,541.92	2,427.96	2,325.86	102.10	23.781		
8,500.00	7,239.57	8,812.20	7,068.44	51.29	55.47	-85.96	-2,929.40	-1,641.92	2,427.77	2,321.46	106.30	22.838		
8,600.00	7,239.18	8,912.20	7,068.14	53.56	57.42	-85.96	-2,930.00	-1,741.92	2,427.58	2,316.93	110.64	21.940		
8,700.00	7,238.79	9,012.20	7,067.84	55.87	59.47	-85.96	-2,930.59	-1,841.91	2,427.39	2,312.28	115.10	21.089		
8,800.00	7,238.39	9,112.20	7,067.54	58.24	61.59	-85.96	-2,931.19	-1,941.91	2,427.20	2,307.53	119.67	20.283		
8,900.00	7,238.00	9,212.20	7,067.25	60.64	63.79	-85.97	-2,931.79	-2,041.91	2,427.01	2,302.68	124.33	19.521		
9,000.00	7,237.61	9,312.20	7,066.95	63.09	66.04	-85.97	-2,932.39	-2,141.91	2,426.82	2,297.75	129.07	18.803		
9,100.00	7,237.21	9,412.20	7,066.65	65.56	68.34	-85.97	-2,932.99	-2,241.90	2,426.62	2,292.74	133.88	18.125		
9,200.00	7,236.82	9,512.20	7,066.35	68.07	70.69	-85.97	-2,933.58	-2,341.90	2,426.43	2,287.67	138.77	17.486		
9,300.00	7,236.43	9,612.20	7,066.06	70.61	73.08	-85.97	-2,934.18	-2,441.90	2,426.24	2,282.53	143.71	16.883		
9,400.00	7,236.03	9,712.20	7,065.76	73.16	75.50	-85.98	-2,934.78	-2,541.90	2,426.05	2,277.35	148.71	16.314		
9,500.00	7,235.64	9,812.20	7,065.46	75.74	77.95	-85.98	-2,935.38	-2,641.89	2,425.86	2,272.11	153.75	15.778		
9,600.00	7,235.25	9,912.20	7,065.16	78.34	80.44	-85.98	-2,935.98	-2,741.89	2,425.67	2,266.83	158.85	15.271		
9,700.00	7,234.85	10,012.20	7,064.87	80.96	82.95	-85.98	-2,936.57	-2,841.89	2,425.48	2,261.50	163.98	14.792		
9,800.00	7,234.46	10,112.20	7,064.57	83.59	85.48	-85.98	-2,937.17	-2,941.89	2,425.29	2,256.15	169.14	14.339		
9,900.00	7,234.07	10,212.20	7,064.27	86.24	88.03	-85.99	-2,937.77	-3,041.88	2,425.10	2,250.75	174.35	13.910		
10,000.00	7,233.67	10,312.20	7,063.97	88.90	90.60	-85.99	-2,938.37	-3,141.88	2,424.91	2,245.33	179.58	13.503		
10,100.00	7,233.28	10,412.20	7,063.68	91.57	93.19	-85.99	-2,938.97	-3,241.88	2,424.72	2,239.88	184.84	13.118		
10,200.00	7,232.89	10,512.20	7,063.38	94.25	95.79	-85.99	-2,939.56	-3,341.88	2,424.53	2,234.41	190.12	12.752		
10,300.00	7,232.49	10,612.20	7,063.08	96.95	98.41	-85.99	-2,940.16	-3,441.88	2,424.34	2,228.91	195.43	12.405		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,232.10	10,712.20	7,062.78	99.65	101.04	-86.00	-2,940.76	-3,541.87	2,424.15	2,223.39	200.76	12.075	
10,500.00	7,231.71	10,812.20	7,062.49	102.36	103.69	-86.00	-2,941.36	-3,641.87	2,423.96	2,217.85	206.11	11.760	
10,600.00	7,231.32	10,912.20	7,062.19	105.08	106.35	-86.00	-2,941.96	-3,741.87	2,423.77	2,212.29	211.48	11.461	
10,700.00	7,230.92	11,012.20	7,061.89	107.80	109.01	-86.00	-2,942.55	-3,841.87	2,423.58	2,206.71	216.87	11.175	
10,800.00	7,230.53	11,112.20	7,061.59	110.53	111.69	-86.00	-2,943.15	-3,941.86	2,423.39	2,201.12	222.27	10.903	
10,900.00	7,230.14	11,212.20	7,061.30	113.27	114.37	-86.00	-2,943.75	-4,041.86	2,423.19	2,195.51	227.68	10.643	
11,000.00	7,229.74	11,312.20	7,061.00	116.02	117.07	-86.01	-2,944.35	-4,141.86	2,423.00	2,189.89	233.11	10.394	
11,100.00	7,229.35	11,412.20	7,060.70	118.77	119.77	-86.01	-2,944.94	-4,241.86	2,422.81	2,184.26	238.56	10.156	
11,200.00	7,228.96	11,512.20	7,060.40	121.52	122.48	-86.01	-2,945.54	-4,341.85	2,422.62	2,178.61	244.01	9.928	
11,300.00	7,228.56	11,612.20	7,060.10	124.28	125.19	-86.01	-2,946.14	-4,441.85	2,422.43	2,172.96	249.48	9.710	
11,400.00	7,228.17	11,712.20	7,059.81	127.04	127.91	-86.01	-2,946.74	-4,541.85	2,422.24	2,167.29	254.95	9.501	
11,500.00	7,227.78	11,812.20	7,059.51	129.81	130.64	-86.02	-2,947.34	-4,641.85	2,422.05	2,161.61	260.44	9.300	
11,600.00	7,227.38	11,912.20	7,059.21	132.58	133.38	-86.02	-2,947.93	-4,741.84	2,421.86	2,155.93	265.93	9.107	
11,700.00	7,226.99	12,012.20	7,058.91	135.36	136.11	-86.02	-2,948.53	-4,841.84	2,421.67	2,150.23	271.44	8.922	
11,800.00	7,226.60	12,112.20	7,058.62	138.14	138.86	-86.02	-2,949.13	-4,941.84	2,421.48	2,144.53	276.95	8.743	
11,900.00	7,226.20	12,212.19	7,058.32	140.92	141.61	-86.02	-2,949.73	-5,041.84	2,421.29	2,138.82	282.47	8.572	
12,000.00	7,225.81	12,312.19	7,058.02	143.70	144.36	-86.03	-2,950.33	-5,141.83	2,421.10	2,133.10	288.00	8.407	
12,100.00	7,225.42	12,412.19	7,057.72	146.49	147.11	-86.03	-2,950.92	-5,241.83	2,420.91	2,127.38	293.53	8.248	
12,200.00	7,225.02	12,512.19	7,057.43	149.28	149.87	-86.03	-2,951.52	-5,341.83	2,420.72	2,121.65	299.07	8.094	
12,300.00	7,224.63	12,612.19	7,057.13	152.08	152.64	-86.03	-2,952.12	-5,441.83	2,420.53	2,115.91	304.62	7.946	
12,400.00	7,224.24	12,712.19	7,056.83	154.87	155.41	-86.03	-2,952.72	-5,541.82	2,420.34	2,110.17	310.17	7.803	
12,500.00	7,223.84	12,812.19	7,056.53	157.67	158.18	-86.04	-2,953.32	-5,641.82	2,420.15	2,104.42	315.73	7.665	
12,600.00	7,223.45	12,912.19	7,056.24	160.47	160.95	-86.04	-2,953.91	-5,741.82	2,419.96	2,098.67	321.29	7.532	
12,700.00	7,223.06	13,012.19	7,055.94	163.27	163.73	-86.04	-2,954.51	-5,841.82	2,419.77	2,092.91	326.86	7.403	
12,800.00	7,222.66	13,112.19	7,055.64	166.07	166.51	-86.04	-2,955.11	-5,941.81	2,419.58	2,087.15	332.43	7.279	
12,900.00	7,222.27	13,212.19	7,055.34	168.88	169.29	-86.04	-2,955.71	-6,041.81	2,419.38	2,081.38	338.00	7.158	
13,000.00	7,221.88	13,312.19	7,055.05	171.69	172.07	-86.05	-2,956.31	-6,141.81	2,419.19	2,075.61	343.58	7.041	
13,100.00	7,221.48	13,412.19	7,054.75	174.49	174.86	-86.05	-2,956.90	-6,241.81	2,419.00	2,069.83	349.17	6.928	
13,200.00	7,221.09	13,512.19	7,054.45	177.30	177.65	-86.05	-2,957.50	-6,341.80	2,418.81	2,064.06	354.76	6.818	
13,300.00	7,220.70	13,612.19	7,054.15	180.12	180.44	-86.05	-2,958.10	-6,441.80	2,418.62	2,058.27	360.35	6.712	
13,400.00	7,220.30	13,712.19	7,053.86	182.93	183.24	-86.05	-2,958.70	-6,541.80	2,418.43	2,052.49	365.95	6.609	
13,500.00	7,219.91	13,812.19	7,053.56	185.74	186.03	-86.06	-2,959.29	-6,641.80	2,418.24	2,046.70	371.54	6.509	
13,600.00	7,219.52	13,912.19	7,053.26	188.56	188.83	-86.06	-2,959.89	-6,741.79	2,418.05	2,040.91	377.15	6.411	
13,700.00	7,219.12	14,012.19	7,052.96	191.38	191.63	-86.06	-2,960.49	-6,841.79	2,417.86	2,035.11	382.75	6.317	
13,800.00	7,218.73	14,112.19	7,052.67	194.20	194.43	-86.06	-2,961.09	-6,941.79	2,417.67	2,029.31	388.36	6.225	
13,900.00	7,218.34	14,212.19	7,052.37	197.02	197.23	-86.06	-2,961.69	-7,041.79	2,417.48	2,023.51	393.97	6.136	
14,000.00	7,217.94	14,312.19	7,052.07	199.84	200.04	-86.07	-2,962.28	-7,141.78	2,417.29	2,017.71	399.58	6.050	
14,100.00	7,217.55	14,412.19	7,051.77	202.66	202.84	-86.07	-2,962.88	-7,241.78	2,417.10	2,011.90	405.20	5.965	
14,200.00	7,217.16	14,512.19	7,051.47	205.48	205.65	-86.07	-2,963.48	-7,341.78	2,416.91	2,006.09	410.82	5.883	
14,300.00	7,216.76	14,612.19	7,051.18	208.30	208.46	-86.07	-2,964.08	-7,441.78	2,416.72	2,000.28	416.44	5.803	
14,400.00	7,216.37	14,712.19	7,050.88	211.13	211.27	-86.07	-2,964.68	-7,541.78	2,416.53	1,994.47	422.06	5.726	
14,500.00	7,215.98	14,812.19	7,050.58	213.96	214.08	-86.08	-2,965.27	-7,641.77	2,416.34	1,988.65	427.69	5.650	
14,600.00	7,215.58	14,912.19	7,050.28	216.78	216.90	-86.08	-2,965.87	-7,741.77	2,416.15	1,982.83	433.32	5.576	
14,700.00	7,215.19	15,012.19	7,049.99	219.61	219.71	-86.08	-2,966.47	-7,841.77	2,415.96	1,977.01	438.95	5.504	
14,800.00	7,214.80	15,112.19	7,049.69	222.44	222.52	-86.08	-2,967.07	-7,941.77	2,415.77	1,971.19	444.58	5.434	
14,900.00	7,214.40	15,212.19	7,049.39	225.27	225.34	-86.08	-2,967.67	-8,041.76	2,415.58	1,965.37	450.21	5.365	
15,000.00	7,214.01	15,312.19	7,049.09	228.10	228.16	-86.09	-2,968.26	-8,141.76	2,415.39	1,959.54	455.84	5.299	
15,002.44	7,214.00	15,314.63	7,049.09	228.16	228.23	-86.09	-2,968.28	-8,144.20	2,415.38	1,959.40	455.98	5.297 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.60	80.15	0.83	80.16					
100.00	100.00	100.00	100.00	3.28	3.28	0.60	80.15	0.83	80.16	73.59	6.57	12.201		
200.00	200.00	200.00	200.00	3.34	3.34	0.60	80.15	0.83	80.16	73.48	6.67	12.010		
300.00	300.00	300.00	300.00	3.44	3.44	0.60	80.15	0.83	80.16	73.27	6.89	11.634		
400.00	400.00	400.00	400.00	3.60	3.60	0.60	80.15	0.83	80.16	72.95	7.21	11.122		
500.00	500.00	500.00	500.00	3.81	3.81	0.60	80.15	0.83	80.16	72.54	7.61	10.530 CC, ES		
600.00	599.98	597.49	597.47	4.03	4.04	162.23	81.62	0.07	83.32	75.24	8.08	10.312		
700.00	699.84	704.36	695.51	4.29	4.33	161.80	85.77	-2.08	92.51	83.88	8.63	10.718		
800.00	799.54	805.09	794.64	4.57	4.63	161.77	90.42	-4.48	104.52	95.31	9.21	11.347		
900.00	899.23	905.82	893.77	4.87	4.95	161.79	95.07	-6.89	116.64	106.80	9.83	11.861		
1,000.00	998.92	1,006.56	992.90	5.20	5.29	161.80	99.72	-9.30	128.75	118.26	10.49	12.270		
1,100.00	1,098.61	1,107.30	1,092.02	5.54	5.65	161.81	104.37	-11.71	140.87	129.68	11.18	12.595		
1,200.00	1,198.30	1,208.03	1,191.15	5.90	6.01	161.81	109.01	-14.11	152.98	141.08	11.90	12.854		
1,300.00	1,298.00	1,308.77	1,290.27	6.27	6.39	161.82	113.66	-16.52	165.10	152.46	12.64	13.061		
1,400.00	1,397.69	1,409.51	1,389.40	6.66	6.77	161.83	118.31	-18.93	177.22	163.82	13.40	13.228		
1,500.00	1,497.38	1,489.76	1,488.52	7.05	7.09	161.83	122.96	-21.33	189.33	175.24	14.09	13.439		
1,600.00	1,597.07	1,589.02	1,587.65	7.44	7.48	161.84	127.60	-23.74	201.45	186.58	14.87	13.551		
1,700.00	1,696.76	1,688.28	1,686.77	7.85	7.87	161.84	132.25	-26.15	213.57	197.91	15.65	13.642		
1,800.00	1,796.45	1,787.55	1,785.90	8.25	8.27	161.84	136.90	-28.55	225.68	209.23	16.45	13.717		
1,900.00	1,896.15	1,886.81	1,885.02	8.67	8.68	161.85	141.55	-30.96	237.80	220.54	17.26	13.779		
2,000.00	1,995.84	1,986.07	1,984.15	9.08	9.08	161.85	146.19	-33.37	249.91	231.84	18.07	13.830		
2,100.00	2,095.53	2,085.34	2,083.27	9.50	9.49	161.85	150.84	-35.78	262.03	243.14	18.89	13.872		
2,200.00	2,195.22	2,184.60	2,182.40	9.92	9.90	161.85	155.49	-38.18	274.15	254.43	19.71	13.907		
2,300.00	2,294.91	2,283.86	2,281.52	10.35	10.32	161.86	160.14	-40.59	286.26	265.72	20.54	13.936		
2,400.00	2,394.60	2,383.13	2,380.65	10.77	10.73	161.86	164.79	-43.00	298.38	277.00	21.37	13.960		
2,500.00	2,494.30	2,482.39	2,479.77	11.20	11.15	161.86	169.43	-45.40	310.50	288.28	22.21	13.979		
2,600.00	2,593.99	2,581.65	2,578.90	11.63	11.57	161.86	174.08	-47.81	322.61	299.56	23.05	13.996		
2,700.00	2,693.68	2,680.92	2,678.02	12.07	11.99	161.86	178.73	-50.22	334.73	310.84	23.89	14.009		
2,800.00	2,793.37	2,780.18	2,777.15	12.50	12.41	161.86	183.38	-52.62	346.84	322.11	24.74	14.021		
2,900.00	2,893.06	2,879.44	2,876.27	12.93	12.84	161.87	188.02	-55.03	358.96	333.38	25.59	14.030		
3,000.00	2,992.76	2,978.71	2,975.40	13.37	13.26	161.87	192.67	-57.44	371.08	344.64	26.44	14.037		
3,100.00	3,092.45	3,077.97	3,074.52	13.81	13.69	161.87	197.32	-59.85	383.19	355.91	27.29	14.043		
3,200.00	3,192.14	3,177.23	3,173.65	14.25	14.11	161.87	201.97	-62.25	395.31	367.17	28.14	14.048		
3,300.00	3,291.83	3,276.50	3,272.77	14.68	14.54	161.87	206.61	-64.66	407.43	378.43	29.00	14.051		
3,400.00	3,391.52	3,375.76	3,371.90	15.12	14.96	161.87	211.26	-67.07	419.54	389.69	29.85	14.054		
3,500.00	3,491.21	3,475.02	3,471.02	15.56	15.39	161.87	215.91	-69.47	431.66	400.95	30.71	14.056		
3,600.00	3,590.91	3,574.29	3,570.15	16.00	15.82	161.87	220.56	-71.88	443.77	412.21	31.57	14.058		
3,700.00	3,690.60	3,673.55	3,669.28	16.45	16.25	161.87	225.21	-74.29	455.89	423.46	32.43	14.058		
3,800.00	3,790.29	3,772.81	3,768.40	16.89	16.68	161.87	229.85	-76.69	468.01	434.72	33.29	14.059		
3,900.00	3,889.98	3,872.08	3,867.53	17.33	17.11	161.87	234.50	-79.10	480.12	445.97	34.15	14.059		
4,000.00	3,989.67	3,971.34	3,966.65	17.77	17.54	161.88	239.15	-81.51	492.24	457.23	35.01	14.058		
4,100.00	4,089.36	4,070.60	4,065.78	18.22	17.97	161.88	243.80	-83.91	504.36	468.48	35.88	14.057		
4,200.00	4,189.06	4,169.87	4,164.90	18.66	18.40	161.88	248.44	-86.32	516.47	479.73	36.74	14.056		
4,300.00	4,288.75	4,269.13	4,264.03	19.10	18.83	161.88	253.09	-88.73	528.59	490.98	37.61	14.055		
4,400.00	4,388.44	4,368.39	4,363.15	19.55	19.26	161.88	257.74	-91.14	540.70	502.23	38.47	14.054		
4,500.00	4,488.13	4,467.66	4,462.28	19.99	19.69	161.88	262.39	-93.54	552.82	513.48	39.34	14.052		
4,600.00	4,587.82	4,566.92	4,561.40	20.44	20.13	161.88	267.03	-95.95	564.94	524.73	40.21	14.050		
4,700.00	4,687.51	4,666.18	4,660.53	20.89	20.56	161.88	271.68	-98.36	577.05	535.98	41.08	14.048		
4,800.00	4,787.21	4,765.45	4,759.65	21.33	20.99	161.88	276.33	-100.76	589.17	547.23	41.94	14.046		
4,900.00	4,886.90	4,864.71	4,858.78	21.78	21.42	161.88	280.98	-103.17	601.29	558.47	42.81	14.044		
5,000.00	4,986.59	4,963.97	4,957.90	22.22	21.86	161.88	285.62	-105.58	613.40	569.72	43.68	14.042		
5,100.00	5,086.28	5,063.24	5,057.03	22.67	22.29	161.88	290.27	-107.98	625.52	580.97	44.55	14.040		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error: 0.00 ft	
Survey Program: 0-MWD+IFR1													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,185.97	5,162.50	5,156.15	23.12	22.72	161.88	294.92	-110.39	637.63	592.21	45.42	14.038		
5,300.00	5,285.66	5,261.76	5,255.28	23.56	23.16	161.88	299.57	-112.80	649.75	603.46	46.29	14.036		
5,400.00	5,385.36	5,361.03	5,354.40	24.01	23.59	161.88	304.22	-115.21	661.87	614.70	47.16	14.034		
5,500.00	5,485.05	5,460.29	5,453.53	24.46	24.02	161.88	308.86	-117.61	673.98	625.95	48.03	14.031		
5,600.00	5,584.74	5,559.55	5,552.65	24.90	24.46	161.88	313.51	-120.02	686.10	637.19	48.91	14.029		
5,700.00	5,684.43	5,658.82	5,651.78	25.35	24.89	161.88	318.16	-122.43	698.22	648.44	49.78	14.027		
5,800.00	5,784.12	5,758.08	5,750.90	25.80	25.33	161.88	322.81	-124.83	710.33	659.68	50.65	14.024		
5,900.00	5,883.81	5,857.34	5,850.03	26.25	25.76	161.88	327.45	-127.24	722.45	670.93	51.52	14.022		
6,000.00	5,983.51	5,956.60	5,949.15	26.70	26.20	161.88	332.10	-129.65	734.56	682.17	52.39	14.020		
6,100.00	6,083.20	6,055.87	6,048.28	27.14	26.63	161.89	336.75	-132.05	746.68	693.41	53.27	14.017		
6,200.00	6,182.89	6,155.13	6,147.40	27.59	27.07	161.89	341.40	-134.46	758.80	704.66	54.14	14.015		
6,300.00	6,282.58	6,254.39	6,246.53	28.04	27.50	161.89	346.04	-136.87	770.91	715.90	55.01	14.013		
6,400.00	6,382.27	6,353.66	6,345.66	28.49	27.94	161.89	350.69	-139.28	783.03	727.14	55.89	14.011		
6,500.00	6,481.96	6,452.97	6,444.83	28.94	28.37	161.89	355.34	-141.70	795.15	738.38	56.76	14.008		
6,600.00	6,581.66	6,552.53	6,543.59	29.39	28.81	161.28	359.92	-152.56	807.23	749.59	57.64	14.005		
6,700.00	6,681.21	6,647.97	6,635.58	29.83	29.23	120.74	364.08	-177.31	819.61	761.13	58.48	14.016		
6,800.00	6,778.96	6,740.31	6,720.10	30.28	29.64	100.79	367.81	-214.08	832.33	773.06	59.26	14.045		
6,900.00	6,872.51	6,830.23	6,796.48	30.70	30.06	93.12	371.09	-261.29	844.96	784.95	60.00	14.082		
7,000.00	6,959.55	6,918.15	6,864.01	31.10	30.50	88.54	373.89	-317.40	857.07	796.35	60.72	14.115		
7,100.00	7,037.93	7,004.40	6,922.16	31.48	30.98	85.29	376.20	-380.98	868.26	806.80	61.47	14.126		
7,200.00	7,105.74	7,089.31	6,970.50	31.88	31.55	82.85	378.00	-450.68	878.17	815.84	62.33	14.090		
7,300.00	7,161.29	7,173.15	7,008.74	32.41	32.21	81.01	379.30	-525.22	886.46	823.08	63.38	13.987		
7,400.00	7,203.22	7,256.19	7,036.65	33.13	32.97	79.68	380.09	-603.36	892.87	828.18	64.69	13.801		
7,500.00	7,230.50	7,338.64	7,054.08	34.04	33.84	78.80	380.37	-683.89	897.21	830.88	66.32	13.527		
7,600.00	7,242.45	7,420.72	7,060.97	35.13	34.81	78.37	380.15	-765.62	899.32	831.06	68.26	13.175		
7,700.00	7,242.72	7,515.48	7,059.76	36.39	36.05	78.27	379.46	-860.37	899.72	829.03	70.69	12.727		
7,800.00	7,242.33	7,615.48	7,058.01	37.81	37.53	78.18	378.70	-960.34	900.03	826.49	73.53	12.240		
7,900.00	7,241.93	7,715.47	7,056.26	39.40	39.16	78.10	377.95	-1,060.31	900.34	823.66	76.68	11.742		
8,000.00	7,241.54	7,815.46	7,054.51	41.13	40.92	78.01	377.20	-1,160.29	900.64	820.56	80.08	11.246		
8,100.00	7,241.15	7,915.45	7,052.76	42.97	42.80	77.93	376.45	-1,260.26	900.96	817.23	83.73	10.761		
8,200.00	7,240.75	8,015.44	7,051.01	44.92	44.78	77.85	375.69	-1,360.23	901.27	813.70	87.57	10.292		
8,300.00	7,240.36	8,115.43	7,049.26	46.97	46.86	77.76	374.94	-1,460.20	901.58	809.99	91.60	9.843		
8,400.00	7,239.97	8,215.42	7,047.51	49.10	49.01	77.68	374.19	-1,560.18	901.90	806.13	95.77	9.417		
8,500.00	7,239.57	8,315.41	7,045.76	51.29	51.24	77.59	373.44	-1,660.15	902.22	802.13	100.09	9.014		
8,600.00	7,239.18	8,415.40	7,044.01	53.56	53.52	77.51	372.68	-1,760.12	902.54	798.03	104.52	8.635		
8,700.00	7,238.79	8,515.39	7,042.26	55.87	55.85	77.43	371.93	-1,860.10	902.87	793.82	109.05	8.279		
8,800.00	7,238.39	8,615.38	7,040.51	58.24	58.24	77.34	371.18	-1,960.07	903.19	789.52	113.67	7.946		
8,900.00	7,238.00	8,715.37	7,038.76	60.64	60.66	77.26	370.43	-2,060.04	903.52	785.14	118.37	7.633		
9,000.00	7,237.61	8,815.37	7,037.01	63.09	63.12	77.18	369.67	-2,160.01	903.85	780.70	123.14	7.340		
9,100.00	7,237.21	8,915.36	7,035.26	65.56	65.61	77.09	368.92	-2,259.99	904.18	776.20	127.97	7.065		
9,200.00	7,236.82	9,015.35	7,033.52	68.07	68.13	77.01	368.17	-2,359.96	904.51	771.65	132.86	6.808		
9,300.00	7,236.43	9,115.34	7,031.77	70.61	70.68	76.93	367.42	-2,459.93	904.84	767.05	137.79	6.567		
9,400.00	7,236.03	9,215.33	7,030.02	73.16	73.25	76.84	366.66	-2,559.90	905.18	762.41	142.77	6.340		
9,500.00	7,235.64	9,315.32	7,028.27	75.74	75.84	76.76	365.91	-2,659.88	905.52	757.74	147.78	6.127		
9,600.00	7,235.25	9,415.31	7,026.52	78.34	78.45	76.68	365.16	-2,759.85	905.86	753.03	152.83	5.927		
9,700.00	7,234.85	9,515.30	7,024.77	80.96	81.07	76.59	364.41	-2,859.82	906.20	748.30	157.90	5.739		
9,800.00	7,234.46	9,615.29	7,023.02	83.59	83.71	76.51	363.65	-2,959.79	906.55	743.54	163.01	5.561		
9,900.00	7,234.07	9,715.28	7,021.27	86.24	86.37	76.43	362.90	-3,059.77	906.89	738.76	168.14	5.394		
10,000.00	7,233.67	9,815.27	7,019.52	88.90	89.04	76.35	362.15	-3,159.74	907.24	733.96	173.28	5.236		
10,100.00	7,233.28	9,915.26	7,017.77	91.57	91.71	76.26	361.39	-3,259.71	907.59	729.14	178.45	5.086		
10,200.00	7,232.89	10,015.25	7,016.02	94.25	94.40	76.18	360.64	-3,359.69	907.94	724.30	183.64	4.944		
10,300.00	7,232.49	10,115.25	7,014.27	96.95	97.10	76.10	359.89	-3,459.66	908.29	719.46	188.84	4.810		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error: 0.00 ft	
Survey Program: 0-MWD+IFR1													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,232.10	10,215.24	7,012.52	99.65	99.81	76.01	359.14	-3,559.63	908.65	714.60	194.05	4.682		
10,500.00	7,231.71	10,315.23	7,010.77	102.36	102.53	75.93	358.38	-3,659.60	909.01	709.73	199.28	4.561		
10,600.00	7,231.32	10,415.22	7,009.02	105.08	105.25	75.85	357.63	-3,759.58	909.37	704.85	204.52	4.446		
10,700.00	7,230.92	10,515.21	7,007.27	107.80	107.98	75.77	356.88	-3,859.55	909.73	699.96	209.77	4.337		
10,800.00	7,230.53	10,615.20	7,005.53	110.53	110.72	75.69	356.13	-3,959.52	910.09	695.07	215.02	4.233		
10,900.00	7,230.14	10,715.19	7,003.78	113.27	113.46	75.60	355.37	-4,059.49	910.46	690.17	220.29	4.133		
11,000.00	7,229.74	10,815.18	7,002.03	116.02	116.21	75.52	354.62	-4,159.47	910.82	685.26	225.56	4.038		
11,100.00	7,229.35	10,915.17	7,000.28	118.77	118.96	75.44	353.87	-4,259.44	911.19	680.35	230.84	3.947		
11,200.00	7,228.96	11,015.16	6,998.53	121.52	121.72	75.36	353.12	-4,359.41	911.56	675.44	236.12	3.861		
11,300.00	7,228.56	11,115.15	6,996.78	124.28	124.48	75.27	352.36	-4,459.38	911.93	670.52	241.41	3.777		
11,400.00	7,228.17	11,215.14	6,995.03	127.04	127.25	75.19	351.61	-4,559.36	912.31	665.60	246.71	3.698		
11,500.00	7,227.78	11,315.14	6,993.28	129.81	130.02	75.11	350.86	-4,659.33	912.68	660.68	252.01	3.622		
11,600.00	7,227.38	11,415.13	6,991.53	132.58	132.79	75.03	350.11	-4,759.30	913.06	655.76	257.31	3.549		
11,700.00	7,226.99	11,515.12	6,989.78	135.36	135.57	74.95	349.35	-4,859.28	913.44	650.83	262.61	3.478		
11,800.00	7,226.60	11,615.11	6,988.03	138.14	138.35	74.87	348.60	-4,959.25	913.82	645.91	267.92	3.411		
11,900.00	7,226.20	11,715.10	6,986.28	140.92	141.14	74.78	347.85	-5,059.22	914.21	640.98	273.22	3.346		
12,000.00	7,225.81	11,815.09	6,984.53	143.70	143.92	74.70	347.10	-5,159.19	914.59	636.06	278.53	3.284		
12,100.00	7,225.42	11,915.08	6,982.78	146.49	146.71	74.62	346.34	-5,259.17	914.98	631.13	283.85	3.224		
12,200.00	7,225.02	12,015.07	6,981.03	149.28	149.51	74.54	345.59	-5,359.14	915.37	626.21	289.16	3.166		
12,300.00	7,224.63	12,115.06	6,979.28	152.08	152.30	74.46	344.84	-5,459.11	915.76	621.29	294.47	3.110		
12,400.00	7,224.24	12,215.05	6,977.54	154.87	155.10	74.38	344.09	-5,559.08	916.15	616.37	299.78	3.056		
12,500.00	7,223.84	12,315.04	6,975.79	157.67	157.90	74.30	343.33	-5,659.06	916.55	611.45	305.10	3.004		
12,600.00	7,223.45	12,415.03	6,974.04	160.47	160.70	74.22	342.58	-5,759.03	916.94	606.53	310.41	2.954		
12,700.00	7,223.06	12,515.02	6,972.29	163.27	163.50	74.13	341.83	-5,859.00	917.34	601.62	315.72	2.906		
12,800.00	7,222.66	12,615.02	6,970.54	166.07	166.31	74.05	341.08	-5,958.97	917.74	596.71	321.03	2.859		
12,900.00	7,222.27	12,715.01	6,968.79	168.88	169.11	73.97	340.32	-6,058.95	918.14	591.80	326.34	2.813		
13,000.00	7,221.88	12,815.00	6,967.04	171.69	171.92	73.89	339.57	-6,158.92	918.55	586.89	331.65	2.770		
13,100.00	7,221.48	12,914.99	6,965.29	174.49	174.73	73.81	338.82	-6,258.89	918.95	581.99	336.96	2.727		
13,200.00	7,221.09	13,014.98	6,963.54	177.30	177.55	73.73	338.07	-6,358.87	919.36	577.09	342.27	2.686		
13,300.00	7,220.70	13,114.97	6,961.79	180.12	180.36	73.65	337.31	-6,458.84	919.77	572.19	347.58	2.646		
13,400.00	7,220.30	13,214.96	6,960.04	182.93	183.17	73.57	336.56	-6,558.81	920.18	567.30	352.88	2.608		
13,500.00	7,219.91	13,314.95	6,958.29	185.74	185.99	73.49	335.81	-6,658.78	920.59	562.41	358.18	2.570		
13,600.00	7,219.52	13,414.94	6,956.54	188.56	188.81	73.41	335.06	-6,758.76	921.01	557.53	363.48	2.534		
13,700.00	7,219.12	13,514.93	6,954.79	191.38	191.62	73.33	334.30	-6,858.73	921.42	552.64	368.78	2.499		
13,800.00	7,218.73	13,614.92	6,953.04	194.20	194.44	73.25	333.55	-6,958.70	921.84	547.77	374.08	2.464		
13,900.00	7,218.34	13,714.91	6,951.29	197.02	197.26	73.17	332.80	-7,058.67	922.26	542.89	379.37	2.431		
14,000.00	7,217.94	13,814.91	6,949.55	199.84	200.09	73.09	332.04	-7,158.65	922.68	538.02	384.66	2.399		
14,100.00	7,217.55	13,914.90	6,947.80	202.66	202.91	73.01	331.29	-7,258.62	923.11	533.16	389.95	2.367		
14,200.00	7,217.16	14,014.89	6,946.05	205.48	205.73	72.93	330.54	-7,358.59	923.53	528.30	395.24	2.337		
14,300.00	7,216.76	14,114.88	6,944.30	208.30	208.56	72.85	329.79	-7,458.56	923.96	523.44	400.52	2.307		
14,400.00	7,216.37	14,214.87	6,942.55	211.13	211.38	72.77	329.03	-7,558.54	924.39	518.59	405.80	2.278		
14,500.00	7,215.98	14,314.86	6,940.80	213.96	214.21	72.69	328.28	-7,658.51	924.82	513.74	411.08	2.250		
14,600.00	7,215.58	14,414.85	6,939.05	216.78	217.04	72.61	327.53	-7,758.48	925.25	508.90	416.35	2.222		
14,700.00	7,215.19	14,514.84	6,937.30	219.61	219.86	72.53	326.78	-7,858.46	925.69	504.06	421.62	2.196		
14,800.00	7,214.80	14,614.83	6,935.55	222.44	222.69	72.45	326.02	-7,958.43	926.12	499.23	426.89	2.169		
14,900.00	7,214.40	14,714.82	6,933.80	225.27	225.52	72.37	325.27	-8,058.40	926.56	494.41	432.16	2.144		
15,000.00	7,214.01	14,814.81	6,932.05	228.10	228.35	72.29	324.52	-8,158.37	927.00	489.58	437.42	2.119		
15,002.44	7,214.00	14,817.25	6,932.01	228.16	228.42	72.29	324.50	-8,160.81	927.01	489.47	437.55	2.119 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.60	-119.86	-0.83	119.86					
100.00	100.00	101.00	100.00	3.28	3.28	-179.60	-119.86	-0.83	119.86	113.29	6.57	18.244		
200.00	200.00	199.00	200.00	3.34	3.34	-179.60	-119.86	-0.83	119.86	113.19	6.67	17.961	CC, ES	
300.00	300.00	295.02	296.01	3.44	3.43	-179.50	-121.42	-1.05	121.49	114.60	6.89	17.636		
400.00	400.00	390.79	391.65	3.60	3.58	-179.22	-126.15	-1.72	126.43	119.22	7.21	17.528		
500.00	500.00	486.14	486.66	3.81	3.76	-178.79	-133.99	-2.83	134.69	127.05	7.63	17.647		
600.00	599.98	581.05	580.93	4.03	4.00	-16.57	-144.91	-4.37	144.57	136.45	8.11	17.818		
700.00	699.84	675.86	674.67	4.29	4.29	-16.44	-158.90	-6.35	154.39	145.75	8.64	17.864		
800.00	799.54	775.45	772.92	4.57	4.65	-16.56	-175.07	-8.63	163.32	154.12	9.20	17.750		
900.00	899.23	875.06	871.18	4.87	5.04	-16.69	-191.25	-10.92	172.16	162.35	9.81	17.554		
1,000.00	998.92	974.67	969.44	5.20	5.47	-16.80	-207.43	-13.21	180.99	170.53	10.46	17.299		
1,100.00	1,098.61	1,074.28	1,067.70	5.54	5.91	-16.91	-223.61	-15.49	189.83	178.67	11.15	17.022		
1,200.00	1,198.30	1,173.89	1,165.96	5.90	6.37	-17.00	-239.78	-17.78	198.66	186.79	11.87	16.737		
1,300.00	1,298.00	1,273.50	1,264.22	6.27	6.85	-17.09	-255.96	-20.06	207.50	194.88	12.61	16.453		
1,400.00	1,397.69	1,373.11	1,362.48	6.66	7.34	-17.17	-272.14	-22.35	216.33	202.96	13.37	16.176		
1,500.00	1,497.38	1,472.71	1,460.74	7.05	7.84	-17.24	-288.32	-24.63	225.17	211.01	14.15	15.910		
1,600.00	1,597.07	1,572.32	1,559.00	7.44	8.34	-17.31	-304.49	-26.92	234.00	219.06	14.95	15.657		
1,700.00	1,696.76	1,671.93	1,657.26	7.85	8.85	-17.37	-320.67	-29.20	242.84	227.09	15.75	15.418		
1,800.00	1,796.45	1,771.54	1,755.51	8.25	9.37	-17.43	-336.85	-31.49	251.68	235.11	16.57	15.192		
1,900.00	1,896.15	1,871.15	1,853.77	8.67	9.89	-17.48	-353.03	-33.77	260.52	243.12	17.39	14.980		
2,000.00	1,995.84	1,970.76	1,952.03	9.08	10.42	-17.53	-369.20	-36.06	269.35	251.13	18.22	14.781		
2,100.00	2,095.53	2,070.36	2,050.29	9.50	10.95	-17.58	-385.38	-38.35	278.19	259.13	19.06	14.595		
2,200.00	2,195.22	2,169.97	2,148.55	9.92	11.48	-17.63	-401.56	-40.63	287.03	267.12	19.91	14.420		
2,300.00	2,294.91	2,269.58	2,246.81	10.35	12.02	-17.67	-417.74	-42.92	295.87	275.11	20.75	14.255		
2,400.00	2,394.60	2,369.19	2,345.07	10.77	12.55	-17.71	-433.91	-45.20	304.70	283.10	21.61	14.101		
2,500.00	2,494.30	2,468.80	2,443.33	11.20	13.09	-17.75	-450.09	-47.49	313.54	291.08	22.47	13.956		
2,600.00	2,593.99	2,568.41	2,541.59	11.63	13.63	-17.78	-466.27	-49.77	322.38	299.05	23.33	13.819		
2,700.00	2,693.68	2,668.02	2,639.85	12.07	14.17	-17.81	-482.45	-52.06	331.22	307.03	24.19	13.691		
2,800.00	2,793.37	2,767.62	2,738.11	12.50	14.72	-17.85	-498.63	-54.34	340.06	315.00	25.06	13.569		
2,900.00	2,893.06	2,867.23	2,836.37	12.93	15.26	-17.88	-514.80	-56.63	348.90	322.97	25.93	13.455		
3,000.00	2,992.76	2,966.84	2,934.63	13.37	15.80	-17.90	-530.98	-58.91	357.74	330.93	26.80	13.347		
3,100.00	3,092.45	3,066.45	3,032.89	13.81	16.35	-17.93	-547.16	-61.20	366.58	338.90	27.68	13.244		
3,200.00	3,192.14	3,166.06	3,131.15	14.25	16.90	-17.96	-563.34	-63.49	375.41	346.86	28.55	13.147		
3,300.00	3,291.83	3,265.67	3,229.41	14.68	17.44	-17.98	-579.51	-65.77	384.25	354.82	29.43	13.055		
3,400.00	3,391.52	3,365.27	3,327.66	15.12	17.99	-18.01	-595.69	-68.06	393.09	362.78	30.31	12.968		
3,500.00	3,491.21	3,464.88	3,425.92	15.56	18.54	-18.03	-611.87	-70.34	401.93	370.74	31.19	12.885		
3,600.00	3,590.91	3,564.49	3,524.18	16.00	19.09	-18.05	-628.05	-72.63	410.77	378.70	32.08	12.806		
3,700.00	3,690.60	3,664.10	3,622.44	16.45	19.64	-18.07	-644.22	-74.91	419.61	386.65	32.96	12.731		
3,800.00	3,790.29	3,763.71	3,720.70	16.89	20.19	-18.09	-660.40	-77.20	428.45	394.61	33.85	12.659		
3,900.00	3,889.98	3,863.32	3,818.96	17.33	20.74	-18.11	-676.58	-79.48	437.29	402.56	34.73	12.591		
4,000.00	3,989.67	3,962.93	3,917.22	17.77	21.29	-18.13	-692.76	-81.77	446.13	410.51	35.62	12.525		
4,100.00	4,089.36	4,062.53	4,015.48	18.22	21.85	-18.15	-708.93	-84.05	454.97	418.46	36.51	12.463		
4,200.00	4,189.06	4,162.14	4,113.74	18.66	22.40	-18.16	-725.11	-86.34	463.81	426.41	37.39	12.403		
4,300.00	4,288.75	4,261.75	4,212.00	19.10	22.95	-18.18	-741.29	-88.62	472.65	434.36	38.28	12.346		
4,400.00	4,388.44	4,361.36	4,310.26	19.55	23.50	-18.19	-757.47	-90.91	481.49	442.31	39.17	12.291		
4,500.00	4,488.13	4,460.97	4,408.52	19.99	24.06	-18.21	-773.65	-93.20	490.33	450.26	40.07	12.238		
4,600.00	4,587.82	4,560.58	4,506.78	20.44	24.61	-18.22	-789.82	-95.48	499.17	458.21	40.96	12.188		
4,700.00	4,687.51	4,660.18	4,605.04	20.89	25.16	-18.24	-806.00	-97.77	508.01	466.16	41.85	12.139		
4,800.00	4,787.21	4,759.79	4,703.30	21.33	25.72	-18.25	-822.18	-100.05	516.85	474.11	42.74	12.092		
4,900.00	4,886.90	4,859.40	4,801.56	21.78	26.27	-18.26	-838.36	-102.34	525.69	482.05	43.63	12.047		
5,000.00	4,986.59	4,959.01	4,899.81	22.22	26.83	-18.28	-854.53	-104.62	534.53	490.00	44.53	12.004		
5,100.00	5,086.28	5,058.62	4,998.07	22.67	27.38	-18.29	-870.71	-106.91	543.37	497.94	45.42	11.963		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,185.97	5,158.23	5,096.33	23.12	27.93	-18.30	-886.89	-109.19	552.21	505.89	46.32	11.922	
5,300.00	5,285.66	5,257.84	5,194.59	23.56	28.49	-18.31	-903.07	-111.48	561.05	513.84	47.21	11.884	
5,400.00	5,385.36	5,357.44	5,292.85	24.01	29.04	-18.32	-919.24	-113.76	569.89	521.78	48.11	11.846	
5,500.00	5,485.05	5,457.05	5,391.11	24.46	29.60	-18.34	-935.42	-116.05	578.73	529.72	49.00	11.810	
5,600.00	5,584.74	5,556.66	5,489.37	24.90	30.15	-18.35	-951.60	-118.34	587.57	537.67	49.90	11.775	
5,700.00	5,684.43	5,656.27	5,587.63	25.35	30.71	-18.36	-967.78	-120.62	596.41	545.61	50.80	11.741	
5,800.00	5,784.12	5,755.88	5,685.89	25.80	31.27	-18.37	-983.95	-122.91	605.25	553.55	51.69	11.709	
5,900.00	5,883.81	5,855.49	5,784.15	26.25	31.82	-18.38	-1,000.13	-125.19	614.09	561.50	52.59	11.677	
6,000.00	5,983.51	5,955.09	5,882.41	26.70	32.38	-18.38	-1,016.31	-127.48	622.93	569.44	53.49	11.646	
6,100.00	6,083.20	6,054.70	5,980.67	27.14	32.93	-18.39	-1,032.49	-129.76	631.77	577.38	54.38	11.617	
6,200.00	6,182.89	6,154.31	6,078.93	27.59	33.49	-18.40	-1,048.67	-132.05	640.61	585.33	55.28	11.588	
6,300.00	6,282.58	6,253.92	6,177.19	28.04	34.04	-18.41	-1,064.84	-134.33	649.45	593.27	56.18	11.560	
6,400.00	6,382.27	6,353.53	6,275.45	28.49	34.60	-18.42	-1,081.02	-136.62	658.29	601.21	57.08	11.533	
6,500.00	6,481.96	6,453.14	6,373.71	28.94	35.16	-18.43	-1,097.20	-138.90	667.13	609.15	57.98	11.507	
6,600.00	6,581.66	6,552.74	6,471.96	29.39	35.71	-18.44	-1,113.38	-141.19	675.97	617.09	58.88	11.481	
6,700.00	6,681.21	6,652.27	6,570.15	29.83	36.27	-56.68	-1,129.54	-143.47	684.80	625.02	59.78	11.455	
6,800.00	6,778.96	6,751.42	6,667.91	30.28	36.82	-74.64	-1,145.64	-146.68	693.71	632.98	60.73	11.422	
6,900.00	6,872.51	6,853.91	6,767.66	30.70	37.40	-80.76	-1,162.16	-162.75	702.75	641.00	61.75	11.380	
7,000.00	6,959.55	6,959.87	6,866.71	31.10	37.99	-84.00	-1,178.68	-196.17	711.65	648.82	62.83	11.327	
7,100.00	7,037.93	7,069.48	6,961.94	31.48	38.59	-86.10	-1,194.69	-247.76	720.09	656.13	63.96	11.258	
7,200.00	7,105.74	7,182.79	7,049.68	31.88	39.22	-87.61	-1,209.59	-317.65	727.75	662.55	65.21	11.161	
7,300.00	7,161.29	7,299.63	7,125.88	32.41	39.90	-88.72	-1,222.71	-405.03	734.29	667.66	66.64	11.019	
7,400.00	7,203.22	7,419.59	7,186.36	33.13	40.69	-89.51	-1,233.35	-507.87	739.39	670.99	68.40	10.810	
7,500.00	7,230.50	7,541.98	7,227.36	34.04	41.67	-90.03	-1,240.86	-622.74	742.76	672.19	70.58	10.524	
7,600.00	7,242.45	7,665.88	7,246.02	35.13	42.92	-90.29	-1,244.75	-744.97	744.23	670.99	73.24	10.162	
7,700.00	7,242.72	7,773.54	7,246.64	36.39	44.28	-90.30	-1,245.58	-852.61	744.14	667.87	76.27	9.756	
7,800.00	7,242.33	7,873.54	7,246.11	37.81	45.78	-90.29	-1,246.16	-952.61	743.94	664.30	79.65	9.341	
7,900.00	7,241.93	7,973.54	7,245.58	39.40	47.50	-90.28	-1,246.74	-1,052.60	743.74	660.40	83.34	8.924	
8,000.00	7,241.54	8,073.54	7,245.05	41.13	49.43	-90.27	-1,247.33	-1,152.60	743.54	656.23	87.31	8.516	
8,100.00	7,241.15	8,173.54	7,244.53	42.97	51.53	-90.26	-1,247.91	-1,252.60	743.35	651.81	91.54	8.121	
8,200.00	7,240.75	8,273.54	7,244.00	44.92	53.77	-90.25	-1,248.50	-1,352.59	743.15	647.18	95.97	7.743	
8,300.00	7,240.36	8,373.54	7,243.47	46.97	56.14	-90.24	-1,249.08	-1,452.59	742.95	642.36	100.59	7.386	
8,400.00	7,239.97	8,473.54	7,242.94	49.10	58.62	-90.23	-1,249.67	-1,552.59	742.75	637.38	105.37	7.049	
8,500.00	7,239.57	8,573.54	7,242.41	51.29	61.19	-90.22	-1,250.25	-1,652.58	742.55	632.25	110.30	6.732	
8,600.00	7,239.18	8,673.54	7,241.88	53.56	63.83	-90.21	-1,250.83	-1,752.58	742.35	627.01	115.34	6.436	
8,700.00	7,238.79	8,773.54	7,241.35	55.87	66.55	-90.20	-1,251.42	-1,852.58	742.15	621.66	120.49	6.159	
8,800.00	7,238.39	8,873.54	7,240.82	58.24	69.32	-90.19	-1,252.00	-1,952.57	741.96	616.22	125.74	5.901	
8,900.00	7,238.00	8,973.54	7,240.30	60.64	72.14	-90.18	-1,252.59	-2,052.57	741.76	610.69	131.07	5.659	
9,000.00	7,237.61	9,073.54	7,239.77	63.09	75.01	-90.17	-1,253.17	-2,152.57	741.56	605.09	136.47	5.434	
9,100.00	7,237.21	9,173.54	7,239.24	65.56	77.92	-90.16	-1,253.76	-2,252.56	741.36	599.43	141.93	5.223	
9,200.00	7,236.82	9,273.54	7,238.71	68.07	80.86	-90.15	-1,254.34	-2,352.56	741.16	593.71	147.46	5.026	
9,300.00	7,236.43	9,373.54	7,238.18	70.61	83.83	-90.14	-1,254.93	-2,452.56	740.97	587.93	153.03	4.842	
9,400.00	7,236.03	9,473.54	7,237.65	73.16	86.84	-90.13	-1,255.51	-2,552.55	740.77	582.12	158.65	4.669	
9,500.00	7,235.64	9,573.54	7,237.12	75.74	89.86	-90.12	-1,256.09	-2,652.55	740.57	576.26	164.31	4.507	
9,600.00	7,235.25	9,673.54	7,236.59	78.34	92.91	-90.10	-1,256.68	-2,752.55	740.37	570.36	170.01	4.355	
9,700.00	7,234.85	9,773.54	7,236.07	80.96	95.97	-90.09	-1,257.26	-2,852.54	740.17	564.43	175.74	4.212	
9,800.00	7,234.46	9,873.54	7,235.54	83.59	99.06	-90.08	-1,257.85	-2,952.54	739.97	558.47	181.50	4.077	
9,900.00	7,234.07	9,973.54	7,235.01	86.24	102.16	-90.07	-1,258.43	-3,052.54	739.78	552.48	187.29	3.950	
10,000.00	7,233.67	10,073.54	7,234.48	88.90	105.28	-90.06	-1,259.02	-3,152.53	739.58	546.47	193.11	3.830	
10,100.00	7,233.28	10,173.54	7,233.95	91.57	108.40	-90.05	-1,259.60	-3,252.53	739.38	540.43	198.95	3.716	
10,200.00	7,232.89	10,273.54	7,233.42	94.25	111.55	-90.04	-1,260.18	-3,352.53	739.18	534.38	204.80	3.609	
10,300.00	7,232.49	10,373.54	7,232.89	96.95	114.70	-90.03	-1,260.77	-3,452.52	738.98	528.30	210.68	3.508	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,473.54	7,232.37	99.65	117.86	-90.02	-1,261.35	-3,552.52	738.79	522.21	216.58	3.411		
10,500.00	7,231.71	10,573.54	7,231.84	102.36	121.03	-90.01	-1,261.94	-3,652.52	738.59	516.10	222.49	3.320		
10,600.00	7,231.32	10,673.54	7,231.31	105.08	124.21	-90.00	-1,262.52	-3,752.51	738.39	509.98	228.41	3.233		
10,700.00	7,230.92	10,773.54	7,230.78	107.80	127.40	-89.99	-1,263.11	-3,852.51	738.19	503.84	234.35	3.150		
10,800.00	7,230.53	10,873.54	7,230.25	110.53	130.60	-89.98	-1,263.69	-3,952.51	738.00	497.69	240.31	3.071		
10,900.00	7,230.14	10,973.54	7,229.72	113.27	133.80	-89.97	-1,264.27	-4,052.50	737.80	491.53	246.27	2.996		
11,000.00	7,229.74	11,073.54	7,229.19	116.02	137.01	-89.96	-1,264.86	-4,152.50	737.60	485.35	252.24	2.924		
11,100.00	7,229.35	11,173.53	7,228.66	118.77	140.22	-89.95	-1,265.44	-4,252.50	737.40	479.17	258.23	2.856		
11,200.00	7,228.96	11,273.53	7,228.14	121.52	143.44	-89.94	-1,266.03	-4,352.49	737.20	472.98	264.23	2.790		
11,300.00	7,228.56	11,373.53	7,227.61	124.28	146.67	-89.93	-1,266.61	-4,452.49	737.01	466.78	270.23	2.727		
11,400.00	7,228.17	11,473.53	7,227.08	127.04	149.90	-89.92	-1,267.20	-4,552.49	736.81	460.57	276.24	2.667		
11,500.00	7,227.78	11,573.53	7,226.55	129.81	153.14	-89.91	-1,267.78	-4,652.48	736.61	454.35	282.26	2.610		
11,600.00	7,227.38	11,673.53	7,226.02	132.58	156.37	-89.89	-1,268.37	-4,752.48	736.41	448.13	288.29	2.554		
11,700.00	7,226.99	11,773.53	7,225.49	135.36	159.62	-89.88	-1,268.95	-4,852.48	736.22	441.89	294.32	2.501		
11,800.00	7,226.60	11,873.53	7,224.96	138.14	162.86	-89.87	-1,269.53	-4,952.47	736.02	435.66	300.36	2.450		
11,900.00	7,226.20	11,973.53	7,224.43	140.92	166.11	-89.86	-1,270.12	-5,052.47	735.82	429.41	306.41	2.401		
12,000.00	7,225.81	12,073.53	7,223.91	143.70	169.37	-89.85	-1,270.70	-5,152.47	735.62	423.16	312.46	2.354		
12,100.00	7,225.42	12,173.53	7,223.38	146.49	172.63	-89.84	-1,271.29	-5,252.46	735.43	416.91	318.52	2.309		
12,200.00	7,225.02	12,273.53	7,222.85	149.28	175.88	-89.83	-1,271.87	-5,352.46	735.23	410.65	324.58	2.265		
12,300.00	7,224.63	12,373.53	7,222.32	152.08	179.15	-89.82	-1,272.46	-5,452.46	735.03	404.38	330.65	2.223		
12,400.00	7,224.24	12,473.53	7,221.79	154.87	182.41	-89.81	-1,273.04	-5,552.45	734.83	398.11	336.72	2.182		
12,500.00	7,223.84	12,573.53	7,221.26	157.67	185.68	-89.80	-1,273.62	-5,652.45	734.64	391.84	342.80	2.143		
12,600.00	7,223.45	12,673.53	7,220.73	160.47	188.95	-89.79	-1,274.21	-5,752.45	734.44	385.56	348.88	2.105		
12,700.00	7,223.06	12,773.53	7,220.20	163.27	192.22	-89.78	-1,274.79	-5,852.44	734.24	379.28	354.96	2.069		
12,800.00	7,222.66	12,873.53	7,219.68	166.07	195.50	-89.77	-1,275.38	-5,952.44	734.04	372.99	361.05	2.033		
12,900.00	7,222.27	12,973.53	7,219.15	168.88	198.77	-89.76	-1,275.96	-6,052.44	733.85	366.71	367.14	1.999		
13,000.00	7,221.88	13,073.53	7,218.62	171.69	202.05	-89.75	-1,276.55	-6,152.43	733.65	360.41	373.24	1.966		
13,100.00	7,221.48	13,173.53	7,218.09	174.49	205.33	-89.74	-1,277.13	-6,252.43	733.45	354.12	379.33	1.934		
13,200.00	7,221.09	13,273.53	7,217.56	177.30	208.61	-89.72	-1,277.71	-6,352.43	733.26	347.82	385.43	1.902		
13,300.00	7,220.70	13,373.53	7,217.03	180.12	211.89	-89.71	-1,278.30	-6,452.42	733.06	341.52	391.54	1.872		
13,400.00	7,220.30	13,473.53	7,216.50	182.93	215.18	-89.70	-1,278.88	-6,552.42	732.86	335.22	397.64	1.843		
13,500.00	7,219.91	13,573.53	7,215.98	185.74	218.46	-89.69	-1,279.47	-6,652.41	732.66	328.91	403.75	1.815		
13,600.00	7,219.52	13,673.53	7,215.45	188.56	221.75	-89.68	-1,280.05	-6,752.41	732.47	322.60	409.86	1.787		
13,700.00	7,219.12	13,773.53	7,214.92	191.38	225.04	-89.67	-1,280.64	-6,852.41	732.27	316.29	415.98	1.760		
13,800.00	7,218.73	13,873.53	7,214.39	194.20	228.33	-89.66	-1,281.22	-6,952.40	732.07	309.98	422.09	1.734		
13,900.00	7,218.34	13,973.53	7,213.86	197.02	231.62	-89.65	-1,281.81	-7,052.40	731.88	303.66	428.21	1.709		
14,000.00	7,217.94	14,073.53	7,213.33	199.84	234.92	-89.64	-1,282.39	-7,152.40	731.68	297.35	434.33	1.685		
14,100.00	7,217.55	14,173.53	7,212.80	202.66	238.21	-89.63	-1,282.97	-7,252.39	731.48	291.03	440.45	1.661		
14,200.00	7,217.16	14,273.53	7,212.27	205.48	241.50	-89.62	-1,283.56	-7,352.39	731.28	284.71	446.58	1.638		
14,300.00	7,216.76	14,373.53	7,211.75	208.30	244.80	-89.61	-1,284.14	-7,452.39	731.09	278.38	452.70	1.615		
14,400.00	7,216.37	14,473.53	7,211.22	211.13	248.10	-89.60	-1,284.73	-7,552.38	730.89	272.06	458.83	1.593		
14,500.00	7,215.98	14,573.53	7,210.69	213.96	251.40	-89.59	-1,285.31	-7,652.38	730.69	265.73	464.96	1.572		
14,600.00	7,215.58	14,673.52	7,210.16	216.78	254.69	-89.58	-1,285.90	-7,752.38	730.50	259.41	471.09	1.551		
14,700.00	7,215.19	14,773.52	7,209.63	219.61	257.99	-89.56	-1,286.48	-7,852.37	730.30	253.08	477.22	1.530		
14,800.00	7,214.80	14,873.52	7,209.10	222.44	261.29	-89.55	-1,287.06	-7,952.37	730.10	246.75	483.36	1.510		
14,900.00	7,214.40	14,973.52	7,208.57	225.27	264.60	-89.54	-1,287.65	-8,052.37	729.91	240.41	489.49	1.491 Level 3		
15,000.00	7,214.01	15,073.52	7,208.04	228.10	267.90	-89.53	-1,288.23	-8,152.36	729.71	234.08	495.63	1.472 Level 3		
15,002.44	7,214.00	15,075.96	7,208.03	228.16	267.98	-89.53	-1,288.25	-8,154.80	729.70	233.93	495.78	1.472 Level 3, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.52	-99.82	-0.83	99.82					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-99.82	-0.83	99.82	93.25	6.57	15.195		
200.00	200.00	201.00	200.00	3.34	3.34	-179.52	-99.82	-0.83	99.82	93.15	6.67	14.955		
300.00	300.00	299.00	300.00	3.44	3.44	-179.52	-99.82	-0.83	99.82	92.93	6.89	14.491 CC, ES		
400.00	400.00	395.67	396.66	3.60	3.59	-179.37	-101.39	-1.11	101.45	94.25	7.20	14.090		
500.00	500.00	492.10	492.95	3.81	3.77	-178.96	-106.16	-1.94	106.41	98.81	7.61	13.992		
600.00	599.98	588.23	588.75	4.03	3.99	-16.71	-114.09	-3.31	113.03	104.95	8.08	13.994		
700.00	699.84	684.16	684.01	4.29	4.25	-16.57	-125.16	-5.23	119.62	111.02	8.60	13.905		
800.00	799.54	783.01	781.88	4.57	4.53	-16.64	-138.85	-7.61	126.15	116.99	9.16	13.767		
900.00	899.23	882.80	880.66	4.87	4.86	-16.72	-152.76	-10.03	132.66	122.89	9.77	13.578		
1,000.00	998.92	982.59	979.45	5.20	5.21	-16.80	-166.67	-12.44	139.18	128.76	10.42	13.355		
1,100.00	1,098.61	1,082.37	1,078.23	5.54	5.58	-16.86	-180.58	-14.86	145.70	134.59	11.11	13.117		
1,200.00	1,198.30	1,182.16	1,177.01	5.90	5.96	-16.93	-194.49	-17.27	152.21	140.39	11.82	12.876		
1,300.00	1,298.00	1,281.95	1,275.80	6.27	6.35	-16.98	-208.40	-19.69	158.73	146.17	12.56	12.638		
1,400.00	1,397.69	1,381.74	1,374.58	6.66	6.76	-17.03	-222.31	-22.10	165.25	151.93	13.32	12.409		
1,500.00	1,497.38	1,481.52	1,473.37	7.05	7.17	-17.08	-236.22	-24.52	171.76	157.67	14.09	12.190		
1,600.00	1,597.07	1,581.31	1,572.15	7.44	7.59	-17.13	-250.13	-26.93	178.28	163.40	14.88	11.982		
1,700.00	1,696.76	1,681.10	1,670.93	7.85	8.02	-17.17	-264.04	-29.35	184.80	169.12	15.68	11.786		
1,800.00	1,796.45	1,780.89	1,769.72	8.25	8.45	-17.21	-277.95	-31.76	191.31	174.83	16.49	11.602		
1,900.00	1,896.15	1,880.67	1,868.50	8.67	8.88	-17.24	-291.86	-34.18	197.83	180.52	17.31	11.430		
2,000.00	1,995.84	1,980.46	1,967.28	9.08	9.32	-17.27	-305.77	-36.59	204.35	186.21	18.14	11.268		
2,100.00	2,095.53	2,080.25	2,066.07	9.50	9.77	-17.31	-319.68	-39.01	210.87	191.90	18.97	11.117		
2,200.00	2,195.22	2,180.04	2,164.85	9.92	10.21	-17.34	-333.59	-41.42	217.38	197.58	19.81	10.975		
2,300.00	2,294.91	2,279.82	2,263.63	10.35	10.66	-17.36	-347.50	-43.83	223.90	203.25	20.65	10.842		
2,400.00	2,394.60	2,379.61	2,362.42	10.77	11.11	-17.39	-361.41	-46.25	230.42	208.92	21.50	10.717		
2,500.00	2,494.30	2,479.40	2,461.20	11.20	11.56	-17.42	-375.32	-48.66	236.94	214.58	22.35	10.600		
2,600.00	2,593.99	2,579.18	2,559.98	11.63	12.02	-17.44	-389.23	-51.08	243.45	220.25	23.21	10.490		
2,700.00	2,693.68	2,678.97	2,658.77	12.07	12.47	-17.46	-403.14	-53.49	249.97	225.90	24.07	10.386		
2,800.00	2,793.37	2,778.76	2,757.55	12.50	12.93	-17.48	-417.05	-55.91	256.49	231.56	24.93	10.289		
2,900.00	2,893.06	2,878.55	2,856.33	12.93	13.39	-17.50	-430.96	-58.32	263.01	237.21	25.79	10.197		
3,000.00	2,992.76	2,978.33	2,955.12	13.37	13.84	-17.52	-444.87	-60.74	269.53	242.87	26.66	10.110		
3,100.00	3,092.45	3,078.12	3,053.90	13.81	14.30	-17.54	-458.78	-63.15	276.04	248.51	27.53	10.027		
3,200.00	3,192.14	3,177.91	3,152.69	14.25	14.76	-17.56	-472.69	-65.57	282.56	254.16	28.40	9.949		
3,300.00	3,291.83	3,277.70	3,251.47	14.68	15.23	-17.57	-486.60	-67.98	289.08	259.81	29.27	9.876		
3,400.00	3,391.52	3,377.48	3,350.25	15.12	15.69	-17.59	-500.51	-70.40	295.60	265.45	30.15	9.805		
3,500.00	3,491.21	3,477.27	3,449.04	15.56	16.15	-17.60	-514.42	-72.81	302.12	271.09	31.02	9.739		
3,600.00	3,590.91	3,577.06	3,547.82	16.00	16.61	-17.62	-528.33	-75.23	308.63	276.73	31.90	9.676		
3,700.00	3,690.60	3,676.85	3,646.60	16.45	17.08	-17.63	-542.24	-77.64	315.15	282.37	32.78	9.615		
3,800.00	3,790.29	3,776.63	3,745.39	16.89	17.54	-17.65	-556.15	-80.06	321.67	288.01	33.66	9.558		
3,900.00	3,889.98	3,876.42	3,844.17	17.33	18.01	-17.66	-570.06	-82.47	328.19	293.65	34.54	9.503		
4,000.00	3,989.67	3,976.21	3,942.95	17.77	18.47	-17.67	-583.97	-84.89	334.71	299.29	35.42	9.451		
4,100.00	4,089.36	4,075.99	4,041.74	18.22	18.94	-17.68	-597.88	-87.30	341.22	304.93	36.30	9.401		
4,200.00	4,189.06	4,175.78	4,140.52	18.66	19.41	-17.70	-611.79	-89.72	347.74	310.56	37.18	9.353		
4,300.00	4,288.75	4,275.57	4,239.30	19.10	19.87	-17.71	-625.70	-92.13	354.26	316.20	38.06	9.307		
4,400.00	4,388.44	4,375.36	4,338.09	19.55	20.34	-17.72	-639.61	-94.55	360.78	321.83	38.95	9.263		
4,500.00	4,488.13	4,475.14	4,436.87	19.99	20.81	-17.73	-653.52	-96.96	367.30	327.46	39.83	9.221		
4,600.00	4,587.82	4,574.93	4,535.66	20.44	21.28	-17.74	-667.43	-99.38	373.81	333.09	40.72	9.180		
4,700.00	4,687.51	4,674.72	4,634.44	20.89	21.74	-17.75	-681.34	-101.79	380.33	338.73	41.60	9.142		
4,800.00	4,787.21	4,774.51	4,733.22	21.33	22.21	-17.76	-695.25	-104.21	386.85	344.36	42.49	9.104		
4,900.00	4,886.90	4,874.29	4,832.01	21.78	22.68	-17.76	-709.16	-106.62	393.37	349.99	43.38	9.068		
5,000.00	4,986.59	4,974.08	4,930.79	22.22	23.15	-17.77	-723.07	-109.04	399.89	355.62	44.27	9.034		
5,100.00	5,086.28	5,073.87	5,029.57	22.67	23.62	-17.78	-736.98	-111.45	406.40	361.25	45.15	9.000		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,185.97	5,173.66	5,128.36	23.12	24.09	-17.79	-750.89	-113.87	412.92	366.88	46.04	8.968	
5,300.00	5,285.66	5,273.44	5,227.14	23.56	24.56	-17.80	-764.80	-116.28	419.44	372.51	46.93	8.937	
5,400.00	5,385.36	5,373.23	5,325.92	24.01	25.03	-17.80	-778.71	-118.70	425.96	378.14	47.82	8.907	
5,500.00	5,485.05	5,473.02	5,424.71	24.46	25.49	-17.81	-792.62	-121.11	432.48	383.77	48.71	8.879	
5,600.00	5,584.74	5,572.80	5,523.49	24.90	25.96	-17.82	-806.53	-123.53	438.99	389.39	49.60	8.851	
5,700.00	5,684.43	5,672.59	5,622.27	25.35	26.43	-17.83	-820.44	-125.94	445.51	395.02	50.49	8.824	
5,800.00	5,784.12	5,772.38	5,721.06	25.80	26.90	-17.83	-834.35	-128.36	452.03	400.65	51.38	8.798	
5,900.00	5,883.81	5,872.17	5,819.84	26.25	27.37	-17.84	-848.26	-130.77	458.55	406.28	52.27	8.772	
6,000.00	5,983.51	5,971.95	5,918.63	26.70	27.84	-17.85	-862.17	-133.19	465.07	411.90	53.16	8.748	
6,100.00	6,083.20	6,071.74	6,017.41	27.14	28.32	-17.85	-876.08	-135.60	471.59	417.53	54.05	8.724	
6,200.00	6,182.89	6,171.53	6,116.19	27.59	28.79	-17.86	-889.99	-138.02	478.10	423.16	54.95	8.701	
6,300.00	6,282.58	6,271.32	6,214.98	28.04	29.26	-17.86	-903.90	-140.43	484.62	428.78	55.84	8.679	
6,400.00	6,382.27	6,371.10	6,313.76	28.49	29.73	-17.87	-917.81	-142.85	491.14	434.41	56.73	8.658	
6,500.00	6,481.96	6,470.89	6,412.54	28.94	30.20	-17.88	-931.72	-145.26	497.66	440.04	57.62	8.637	
6,600.00	6,581.66	6,569.98	6,510.48	29.39	30.66	-17.56	-945.54	-150.45	504.22	445.71	58.50	8.618	
6,700.00	6,681.21	6,666.44	6,604.10	29.83	31.11	-54.13	-958.86	-168.99	511.16	451.83	59.33	8.615	
6,800.00	6,778.96	6,760.63	6,691.81	30.28	31.51	-69.40	-971.47	-200.67	518.43	458.33	60.10	8.626	
6,900.00	6,872.51	6,852.98	6,772.39	30.70	31.89	-72.72	-983.18	-244.09	525.73	464.93	60.80	8.647	
7,000.00	6,969.55	6,943.76	6,844.70	31.10	32.23	-73.40	-993.81	-297.79	532.78	471.32	61.46	8.669	
7,100.00	7,037.93	7,033.22	6,907.85	31.48	32.54	-73.22	-1,003.23	-360.35	539.32	477.19	62.13	8.680	
7,200.00	7,105.74	7,121.59	6,961.09	31.88	32.85	-72.76	-1,011.32	-430.33	545.11	482.21	62.90	8.666	
7,300.00	7,161.29	7,209.12	7,003.86	32.41	33.22	-72.27	-1,017.99	-506.32	549.93	486.06	63.87	8.610	
7,400.00	7,203.22	7,296.01	7,035.71	33.13	33.74	-71.85	-1,023.17	-586.93	553.61	488.47	65.14	8.499	
7,500.00	7,230.50	7,382.48	7,056.32	34.04	34.45	-71.57	-1,026.80	-670.76	556.01	489.25	66.76	8.329	
7,600.00	7,242.45	7,468.74	7,065.50	35.13	35.33	-71.47	-1,028.83	-756.44	557.05	488.31	68.74	8.104	
7,700.00	7,242.72	7,564.27	7,065.73	36.39	36.49	-71.48	-1,029.69	-851.96	557.12	485.96	71.15	7.830	
7,800.00	7,242.33	7,664.27	7,065.34	37.81	37.87	-71.48	-1,030.50	-951.95	557.14	483.23	73.91	7.538	
7,900.00	7,241.93	7,764.27	7,064.94	39.40	39.43	-71.48	-1,031.31	-1,051.95	557.17	480.22	76.96	7.240	
8,000.00	7,241.54	7,864.27	7,064.55	41.13	41.13	-71.48	-1,032.13	-1,151.94	557.20	476.94	80.26	6.943	
8,100.00	7,241.15	7,964.27	7,064.16	42.97	42.95	-71.48	-1,032.94	-1,251.94	557.23	473.45	83.78	6.651	
8,200.00	7,240.75	8,064.27	7,063.77	44.92	44.88	-71.48	-1,033.75	-1,351.93	557.26	469.75	87.50	6.368	
8,300.00	7,240.36	8,164.27	7,063.37	46.97	46.91	-71.48	-1,034.56	-1,451.93	557.28	465.88	91.40	6.097	
8,400.00	7,239.97	8,264.27	7,062.98	49.10	49.02	-71.48	-1,035.37	-1,551.93	557.31	461.86	95.45	5.839	
8,500.00	7,239.57	8,364.27	7,062.59	51.29	51.21	-71.48	-1,036.18	-1,651.92	557.34	457.71	99.63	5.594	
8,600.00	7,239.18	8,464.27	7,062.19	53.56	53.46	-71.49	-1,037.00	-1,751.92	557.37	453.44	103.93	5.363	
8,700.00	7,238.79	8,564.27	7,061.80	55.87	55.77	-71.49	-1,037.81	-1,851.91	557.40	449.06	108.33	5.145	
8,800.00	7,238.39	8,664.27	7,061.41	58.24	58.12	-71.49	-1,038.62	-1,951.91	557.42	444.59	112.83	4.940	
8,900.00	7,238.00	8,764.27	7,061.01	60.64	60.52	-71.49	-1,039.43	-2,051.91	557.45	440.05	117.41	4.748	
9,000.00	7,237.61	8,864.27	7,060.62	63.09	62.96	-71.49	-1,040.24	-2,151.90	557.48	435.42	122.05	4.567	
9,100.00	7,237.21	8,964.27	7,060.23	65.56	65.43	-71.49	-1,041.05	-2,251.90	557.51	430.74	126.77	4.398	
9,200.00	7,236.82	9,064.27	7,059.83	68.07	67.93	-71.49	-1,041.87	-2,351.89	557.54	426.00	131.54	4.239	
9,300.00	7,236.43	9,164.27	7,059.44	70.61	70.46	-71.49	-1,042.68	-2,451.89	557.56	421.21	136.36	4.089	
9,400.00	7,236.03	9,264.27	7,059.05	73.16	73.01	-71.49	-1,043.49	-2,551.89	557.59	416.37	141.22	3.948	
9,500.00	7,235.64	9,364.27	7,058.65	75.74	75.59	-71.49	-1,044.30	-2,651.88	557.62	411.49	146.13	3.816	
9,600.00	7,235.25	9,464.27	7,058.26	78.34	78.18	-71.50	-1,045.11	-2,751.88	557.65	406.57	151.07	3.691	
9,700.00	7,234.85	9,564.27	7,057.87	80.96	80.80	-71.50	-1,045.92	-2,851.87	557.67	401.62	156.05	3.574	
9,800.00	7,234.46	9,664.27	7,057.47	83.59	83.42	-71.50	-1,046.74	-2,951.87	557.70	396.64	161.06	3.463	
9,900.00	7,234.07	9,764.27	7,057.08	86.24	86.07	-71.50	-1,047.55	-3,051.87	557.73	391.63	166.10	3.358	
10,000.00	7,233.67	9,864.27	7,056.69	88.90	88.73	-71.50	-1,048.36	-3,151.86	557.76	386.60	171.16	3.259	
10,100.00	7,233.28	9,964.27	7,056.30	91.57	91.39	-71.50	-1,049.17	-3,251.86	557.79	381.54	176.25	3.165	
10,200.00	7,232.89	10,064.27	7,055.90	94.25	94.07	-71.50	-1,049.98	-3,351.85	557.81	376.46	181.35	3.076	
10,300.00	7,232.49	10,164.27	7,055.51	96.95	96.77	-71.50	-1,050.79	-3,451.85	557.84	371.36	186.48	2.991	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.10	10,264.27	7,055.12	99.65	99.46	-71.50	-1,051.61	-3,551.85	557.87	366.25	191.62	2.911		
10,500.00	7,231.71	10,364.27	7,054.72	102.36	102.17	-71.50	-1,052.42	-3,651.84	557.90	361.11	196.79	2.835		
10,600.00	7,231.32	10,464.27	7,054.33	105.08	104.89	-71.50	-1,053.23	-3,751.84	557.93	355.96	201.96	2.763		
10,700.00	7,230.92	10,564.27	7,053.94	107.80	107.61	-71.51	-1,054.04	-3,851.83	557.95	350.80	207.15	2.693		
10,800.00	7,230.53	10,664.27	7,053.54	110.53	110.34	-71.51	-1,054.85	-3,951.83	557.98	345.63	212.36	2.628		
10,900.00	7,230.14	10,764.27	7,053.15	113.27	113.08	-71.51	-1,055.67	-4,051.83	558.01	340.44	217.57	2.565		
11,000.00	7,229.74	10,864.27	7,052.76	116.02	115.82	-71.51	-1,056.48	-4,151.82	558.04	335.24	222.80	2.505		
11,100.00	7,229.35	10,964.27	7,052.36	118.77	118.57	-71.51	-1,057.29	-4,251.82	558.07	330.03	228.04	2.447		
11,200.00	7,228.96	11,064.27	7,051.97	121.52	121.33	-71.51	-1,058.10	-4,351.81	558.09	324.81	233.28	2.392		
11,300.00	7,228.56	11,164.27	7,051.58	124.28	124.08	-71.51	-1,058.91	-4,451.81	558.12	319.58	238.54	2.340		
11,400.00	7,228.17	11,264.27	7,051.18	127.04	126.85	-71.51	-1,059.72	-4,551.80	558.15	314.35	243.80	2.289		
11,500.00	7,227.78	11,364.27	7,050.79	129.81	129.61	-71.51	-1,060.54	-4,651.80	558.18	309.10	249.08	2.241		
11,600.00	7,227.38	11,464.27	7,050.40	132.58	132.38	-71.51	-1,061.35	-4,751.80	558.21	303.85	254.36	2.195		
11,700.00	7,226.99	11,564.27	7,050.00	135.36	135.16	-71.52	-1,062.16	-4,851.79	558.23	298.59	259.65	2.150		
11,800.00	7,226.60	11,664.27	7,049.61	138.14	137.93	-71.52	-1,062.97	-4,951.79	558.26	293.32	264.94	2.107		
11,900.00	7,226.20	11,764.27	7,049.22	140.92	140.72	-71.52	-1,063.78	-5,051.78	558.29	288.05	270.24	2.066		
12,000.00	7,225.81	11,864.27	7,048.82	143.70	143.50	-71.52	-1,064.59	-5,151.78	558.32	282.77	275.55	2.026		
12,100.00	7,225.42	11,964.27	7,048.43	146.49	146.29	-71.52	-1,065.41	-5,251.78	558.35	277.48	280.86	1.988		
12,200.00	7,225.02	12,064.27	7,048.04	149.28	149.08	-71.52	-1,066.22	-5,351.77	558.37	272.19	286.18	1.951		
12,300.00	7,224.63	12,164.27	7,047.65	152.08	151.87	-71.52	-1,067.03	-5,451.77	558.40	266.90	291.50	1.916		
12,400.00	7,224.24	12,264.27	7,047.25	154.87	154.66	-71.52	-1,067.84	-5,551.76	558.43	261.60	296.83	1.881		
12,500.00	7,223.84	12,364.27	7,046.86	157.67	157.46	-71.52	-1,068.65	-5,651.76	558.46	256.30	302.16	1.848		
12,600.00	7,223.45	12,464.27	7,046.47	160.47	160.26	-71.52	-1,069.46	-5,751.76	558.49	250.99	307.50	1.816		
12,700.00	7,223.06	12,564.27	7,046.07	163.27	163.06	-71.53	-1,070.28	-5,851.75	558.51	245.67	312.84	1.785		
12,800.00	7,222.66	12,664.27	7,045.68	166.07	165.86	-71.53	-1,071.09	-5,951.75	558.54	240.36	318.18	1.755		
12,900.00	7,222.27	12,764.27	7,045.29	168.88	168.67	-71.53	-1,071.90	-6,051.74	558.57	235.04	323.53	1.726		
13,000.00	7,221.88	12,864.27	7,044.89	171.69	171.47	-71.53	-1,072.71	-6,151.74	558.60	229.72	328.88	1.698		
13,100.00	7,221.48	12,964.27	7,044.50	174.49	174.28	-71.53	-1,073.52	-6,251.74	558.63	224.39	334.24	1.671		
13,200.00	7,221.09	13,064.27	7,044.11	177.30	177.09	-71.53	-1,074.33	-6,351.73	558.65	219.06	339.59	1.645		
13,300.00	7,220.70	13,164.27	7,043.71	180.12	179.90	-71.53	-1,075.15	-6,451.73	558.68	213.73	344.95	1.620		
13,400.00	7,220.30	13,264.27	7,043.32	182.93	182.71	-71.53	-1,075.96	-6,551.72	558.71	208.39	350.32	1.595		
13,500.00	7,219.91	13,364.27	7,042.93	185.74	185.53	-71.53	-1,076.77	-6,651.72	558.74	203.05	355.69	1.571		
13,600.00	7,219.52	13,464.27	7,042.53	188.56	188.34	-71.53	-1,077.58	-6,751.72	558.76	197.71	361.05	1.548		
13,700.00	7,219.12	13,564.27	7,042.14	191.38	191.16	-71.54	-1,078.39	-6,851.71	558.79	192.37	366.43	1.525		
13,800.00	7,218.73	13,664.27	7,041.75	194.20	193.98	-71.54	-1,079.21	-6,951.71	558.82	187.02	371.80	1.503		
13,900.00	7,218.34	13,764.27	7,041.35	197.02	196.80	-71.54	-1,080.02	-7,051.70	558.85	181.67	377.18	1.482	Level 3	
14,000.00	7,217.94	13,864.27	7,040.96	199.84	199.62	-71.54	-1,080.83	-7,151.70	558.88	176.32	382.55	1.461	Level 3	
14,100.00	7,217.55	13,964.27	7,040.57	202.66	202.44	-71.54	-1,081.64	-7,251.69	558.90	170.97	387.94	1.441	Level 3	
14,200.00	7,217.16	14,064.27	7,040.18	205.48	205.26	-71.54	-1,082.45	-7,351.69	558.93	165.61	393.32	1.421	Level 3	
14,300.00	7,216.76	14,164.27	7,039.78	208.30	208.08	-71.54	-1,083.26	-7,451.69	558.96	160.26	398.70	1.402	Level 3	
14,400.00	7,216.37	14,264.27	7,039.39	211.13	210.91	-71.54	-1,084.08	-7,551.68	558.99	154.90	404.09	1.383	Level 3	
14,500.00	7,215.98	14,364.27	7,039.00	213.96	213.73	-71.54	-1,084.89	-7,651.68	559.02	149.54	409.48	1.365	Level 3	
14,600.00	7,215.58	14,464.27	7,038.60	216.78	216.56	-71.54	-1,085.70	-7,751.67	559.04	144.18	414.87	1.348	Level 3	
14,700.00	7,215.19	14,564.27	7,038.21	219.61	219.39	-71.54	-1,086.51	-7,851.67	559.07	138.81	420.26	1.330	Level 3	
14,800.00	7,214.80	14,664.27	7,037.82	222.44	222.21	-71.55	-1,087.32	-7,951.67	559.10	133.45	425.65	1.314	Level 3	
14,900.00	7,214.40	14,764.27	7,037.42	225.27	225.04	-71.55	-1,088.13	-8,051.66	559.13	128.08	431.05	1.297	Level 3	
15,000.00	7,214.01	14,864.27	7,037.03	228.10	227.87	-71.55	-1,088.95	-8,151.66	559.16	122.71	436.44	1.281	Level 3	
15,002.44	7,214.00	14,866.70	7,037.02	228.16	227.94	-71.55	-1,088.97	-8,154.09	559.16	122.58	436.58	1.281	Level 3, SF	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	180.00	-19.67	0.00	19.67					
100.00	100.00	100.00	100.00	3.28	3.28	180.00	-19.67	0.00	19.67	13.10	6.57	2.994		
200.00	200.00	200.00	200.00	3.34	3.34	180.00	-19.67	0.00	19.67	12.99	6.67	2.947		
300.00	300.00	300.00	300.00	3.44	3.44	180.00	-19.67	0.00	19.67	12.78	6.89	2.855		
400.00	400.00	400.00	400.00	3.60	3.60	180.00	-19.67	0.00	19.67	12.46	7.21	2.729		
500.00	500.00	500.00	500.00	3.81	3.81	180.00	-19.67	0.00	19.67	12.06	7.61	2.584		
600.00	599.98	599.86	599.86	4.03	4.04	-19.84	-19.74	-0.02	18.09	10.01	8.08	2.239		
700.00	699.84	699.26	699.23	4.29	4.29	-24.10	-22.09	-0.56	15.55	6.97	8.58	1.812		
797.40	796.97	796.18	795.97	4.56	4.56	-28.39	-27.61	-1.86	14.39	5.26	9.13	1.576		
800.00	799.54	798.77	798.55	4.57	4.57	-29.10	-27.80	-1.90	14.11	4.96	9.15	1.542 CC		
900.00	899.23	898.28	897.63	4.87	4.87	-29.07	-36.87	-4.02	15.80	6.04	9.76	1.619		
1,000.00	998.92	1,001.77	996.96	5.20	5.20	-26.93	-47.66	-6.54	19.09	8.68	10.42	1.833		
1,100.00	1,098.61	1,101.83	1,096.28	5.54	5.55	-25.41	-58.45	-9.06	22.40	11.31	11.10	2.019		
1,200.00	1,198.30	1,201.88	1,195.61	5.90	5.91	-24.29	-69.24	-11.58	25.73	13.92	11.80	2.179		
1,300.00	1,298.00	1,301.94	1,294.94	6.27	6.29	-23.43	-80.03	-14.10	29.06	16.52	12.54	2.318		
1,400.00	1,397.69	1,402.00	1,394.27	6.66	6.67	-22.74	-90.82	-16.63	32.39	19.10	13.29	2.438		
1,500.00	1,497.38	1,502.05	1,493.60	7.05	7.07	-22.18	-101.61	-19.15	35.73	21.67	14.06	2.542		
1,600.00	1,597.07	1,602.11	1,592.92	7.44	7.47	-21.72	-112.40	-21.67	39.07	24.23	14.84	2.633		
1,700.00	1,696.76	1,702.17	1,692.25	7.85	7.88	-21.33	-123.18	-24.19	42.41	26.78	15.63	2.713		
1,800.00	1,796.45	1,802.22	1,791.58	8.25	8.30	-20.99	-133.97	-26.71	45.76	29.32	16.44	2.784		
1,900.00	1,896.15	1,902.28	1,890.91	8.67	8.72	-20.71	-144.76	-29.23	49.11	31.86	17.25	2.847		
2,000.00	1,995.84	2,002.34	1,990.23	9.08	9.14	-20.46	-155.55	-31.75	52.45	34.38	18.07	2.903		
2,100.00	2,095.53	2,102.39	2,089.56	9.50	9.57	-20.23	-166.34	-34.27	55.80	36.91	18.90	2.953		
2,200.00	2,195.22	2,202.45	2,188.89	9.92	10.00	-20.04	-177.13	-36.80	59.15	39.42	19.73	2.998		
2,300.00	2,294.91	2,302.50	2,288.22	10.35	10.43	-19.86	-187.92	-39.32	62.50	41.93	20.57	3.039		
2,400.00	2,394.60	2,402.56	2,387.54	10.77	10.87	-19.71	-198.71	-41.84	65.85	44.44	21.41	3.076		
2,500.00	2,494.30	2,502.62	2,486.87	11.20	11.31	-19.56	-209.50	-44.36	69.20	46.94	22.26	3.109		
2,600.00	2,593.99	2,597.33	2,586.20	11.63	11.72	-19.44	-220.29	-46.88	72.55	49.47	23.09	3.143		
2,700.00	2,693.68	2,702.73	2,685.53	12.07	12.19	-19.32	-231.08	-49.40	75.91	51.94	23.96	3.168		
2,800.00	2,793.37	2,802.79	2,784.85	12.50	12.63	-19.21	-241.87	-51.92	79.26	54.44	24.82	3.193		
2,900.00	2,893.06	2,897.16	2,884.18	12.93	13.05	-19.11	-252.66	-54.44	82.61	56.96	25.65	3.220		
3,000.00	2,992.76	3,002.90	2,983.51	13.37	13.52	-19.02	-263.45	-56.97	85.96	59.42	26.54	3.239		
3,100.00	3,092.45	3,102.95	3,082.84	13.81	13.97	-18.94	-274.24	-59.49	89.31	61.91	27.40	3.259		
3,200.00	3,192.14	3,203.01	3,182.16	14.25	14.42	-18.86	-285.03	-62.01	92.67	64.40	28.27	3.278		
3,300.00	3,291.83	3,303.07	3,281.49	14.68	14.86	-18.79	-295.82	-64.53	96.02	66.88	29.14	3.296		
3,400.00	3,391.52	3,403.12	3,380.82	15.12	15.31	-18.72	-306.61	-67.05	99.37	69.37	30.00	3.312		
3,500.00	3,491.21	3,503.18	3,480.15	15.56	15.76	-18.65	-317.40	-69.57	102.73	71.85	30.87	3.327		
3,600.00	3,590.91	3,603.24	3,579.47	16.00	16.22	-18.60	-328.19	-72.09	106.08	74.33	31.75	3.345		
3,700.00	3,690.60	3,703.29	3,678.80	16.45	16.67	-18.54	-338.98	-74.61	109.43	76.81	32.62	3.355		
3,800.00	3,790.29	3,803.35	3,778.13	16.89	17.12	-18.49	-349.77	-77.14	112.79	79.29	33.49	3.368		
3,900.00	3,889.98	3,903.40	3,877.46	17.33	17.57	-18.44	-360.56	-79.66	116.14	81.77	34.37	3.379		
4,000.00	3,989.67	4,003.46	3,976.79	17.77	18.03	-18.39	-371.35	-82.18	119.49	84.25	35.24	3.391		
4,100.00	4,089.36	4,103.52	4,076.11	18.22	18.48	-18.35	-382.14	-84.70	122.85	86.73	36.12	3.401		
4,200.00	4,189.06	4,203.57	4,175.44	18.66	18.93	-18.31	-392.93	-87.22	126.20	89.20	37.00	3.411		
4,300.00	4,288.75	4,303.63	4,274.77	19.10	19.39	-18.27	-403.72	-89.74	129.56	91.68	37.88	3.420		
4,400.00	4,388.44	4,403.69	4,374.10	19.55	19.84	-18.23	-414.50	-92.26	132.91	94.15	38.76	3.429		
4,500.00	4,488.13	4,496.26	4,473.42	19.99	20.26	-18.19	-425.29	-94.78	136.26	96.66	39.60	3.441		
4,600.00	4,587.82	4,603.80	4,572.75	20.44	20.75	-18.16	-436.08	-97.31	139.62	99.10	40.52	3.446		
4,700.00	4,687.51	4,696.14	4,672.08	20.89	21.17	-18.13	-446.87	-99.83	142.97	101.61	41.36	3.457		
4,800.00	4,787.21	4,803.91	4,771.41	21.33	21.67	-18.10	-457.66	-102.35	146.33	104.05	42.28	3.461		
4,900.00	4,886.90	4,896.03	4,870.73	21.78	22.09	-18.07	-468.45	-104.87	149.68	106.55	43.13	3.471		
5,000.00	4,986.59	5,004.02	4,970.06	22.22	22.58	-18.04	-479.24	-107.39	153.03	108.99	44.04	3.475		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,086.28	5,095.92	5,069.39	22.67	23.00	-18.01	-490.03	-109.91	156.39	111.50	44.89	3.484		
5,200.00	5,185.97	5,204.14	5,168.72	23.12	23.49	-17.98	-500.82	-112.43	159.74	113.93	45.81	3.487		
5,300.00	5,285.66	5,304.19	5,268.04	23.56	23.95	-17.96	-511.61	-114.95	163.10	116.40	46.69	3.493		
5,400.00	5,385.36	5,404.25	5,367.37	24.01	24.41	-17.94	-522.40	-117.48	166.45	118.87	47.58	3.499		
5,500.00	5,485.05	5,504.31	5,466.70	24.46	24.87	-17.91	-533.19	-120.00	169.81	121.34	48.46	3.504		
5,600.00	5,584.74	5,604.36	5,566.03	24.90	25.32	-17.89	-543.98	-122.52	173.16	123.81	49.35	3.509		
5,700.00	5,684.43	5,704.42	5,665.35	25.35	25.78	-17.87	-554.77	-125.04	176.51	126.28	50.23	3.514		
5,800.00	5,784.12	5,804.47	5,764.68	25.80	26.24	-17.85	-565.56	-127.56	179.87	128.75	51.12	3.519		
5,900.00	5,883.81	5,904.53	5,864.01	26.25	26.70	-17.83	-576.35	-130.08	183.22	131.22	52.00	3.523		
6,000.00	5,983.51	6,004.59	5,963.34	26.70	27.16	-17.81	-587.14	-132.60	186.58	133.69	52.89	3.528		
6,100.00	6,083.20	6,104.64	6,062.66	27.14	27.62	-17.79	-597.93	-135.13	189.93	136.16	53.78	3.532		
6,200.00	6,182.89	6,204.70	6,161.99	27.59	28.08	-17.78	-608.72	-137.65	193.29	138.62	54.66	3.536		
6,300.00	6,282.58	6,304.76	6,261.32	28.04	28.53	-17.76	-619.51	-140.17	196.64	141.09	55.55	3.540		
6,400.00	6,382.27	6,404.81	6,360.65	28.49	28.99	-17.74	-630.30	-142.69	200.00	143.56	56.44	3.544		
6,500.00	6,481.96	6,504.87	6,459.98	28.94	29.45	-17.73	-641.09	-145.21	203.35	146.03	57.32	3.547		
6,600.00	6,581.66	6,594.79	6,558.94	29.39	29.86	-17.72	-651.85	-147.72	206.73	148.57	58.16	3.555		
6,700.00	6,681.21	6,692.42	6,654.46	29.83	30.30	-17.70	-662.64	-150.23	210.10	151.03	58.97	3.557		
6,800.00	6,778.96	6,788.01	6,744.44	30.28	30.72	-17.69	-672.35	-152.73	213.59	153.52	59.78	3.560		
6,900.00	6,872.51	6,881.90	6,827.44	30.70	31.10	-17.68	-682.10	-155.23	217.10	156.03	60.59	3.563		
7,000.00	6,969.55	6,974.31	6,902.16	31.10	31.45	-17.67	-691.89	-157.73	220.64	158.56	61.40	3.566		
7,100.00	7,037.93	7,065.46	6,967.53	31.48	31.78	-17.66	-701.70	-160.23	224.22	161.10	62.22	3.569		
7,200.00	7,105.74	7,155.55	7,022.71	31.88	32.14	-17.65	-711.54	-162.73	227.82	163.69	63.03	3.572		
7,300.00	7,161.29	7,244.80	7,067.03	32.41	32.61	-17.64	-721.41	-165.23	231.44	166.28	63.84	3.575		
7,400.00	7,203.22	7,333.41	7,100.00	33.13	33.25	-17.63	-731.31	-167.73	235.09	168.87	64.65	3.578		
7,500.00	7,230.50	7,421.58	7,121.25	34.04	34.06	-17.62	-741.24	-170.23	238.76	171.46	65.46	3.581		
7,600.00	7,242.45	7,509.51	7,130.55	35.13	35.01	-17.61	-751.20	-172.73	242.44	174.05	66.27	3.584		
7,700.00	7,242.72	7,605.82	7,130.69	36.39	36.21	-17.60	-761.20	-175.23	246.14	176.64	67.08	3.587		
7,800.00	7,242.33	7,705.82	7,130.26	37.81	37.64	-17.59	-771.24	-177.73	249.86	179.23	67.89	3.590		
7,900.00	7,241.93	7,805.82	7,129.83	39.40	39.21	-17.58	-781.31	-180.23	253.59	181.82	68.70	3.593		
8,000.00	7,241.54	7,905.82	7,129.39	41.13	40.93	-17.57	-791.41	-182.73	257.34	184.41	69.51	3.596		
8,100.00	7,241.15	8,005.82	7,128.96	42.97	42.79	-17.56	-801.54	-185.23	261.10	187.00	70.32	3.599		
8,200.00	7,240.75	8,105.82	7,128.52	44.92	44.74	-17.55	-811.70	-187.73	264.87	189.59	71.13	3.602		
8,300.00	7,240.36	8,205.82	7,128.09	46.97	46.79	-17.54	-821.89	-190.23	268.66	192.18	71.94	3.605		
8,400.00	7,239.97	8,305.82	7,127.66	49.10	48.91	-17.53	-832.10	-192.73	272.47	194.77	72.75	3.608		
8,500.00	7,239.57	8,405.82	7,127.22	51.29	51.11	-17.52	-842.33	-195.23	276.29	197.36	73.56	3.611		
8,600.00	7,239.18	8,505.82	7,126.79	53.56	53.38	-17.51	-852.58	-197.73	280.12	200.00	74.37	3.614		
8,700.00	7,238.79	8,605.82	7,126.36	55.87	55.69	-17.50	-862.84	-200.23	283.96	202.59	75.18	3.617		
8,800.00	7,238.39	8,705.82	7,125.92	58.24	58.06	-17.49	-873.12	-202.73	287.81	205.18	75.99	3.620		
8,900.00	7,238.00	8,805.82	7,125.49	60.64	60.47	-17.48	-883.41	-205.23	291.67	207.77	76.80	3.623		
9,000.00	7,237.61	8,905.82	7,125.05	63.09	62.91	-17.47	-893.71	-207.73	295.54	210.36	77.61	3.626		
9,100.00	7,237.21	9,005.82	7,124.62	65.56	65.39	-17.46	-904.02	-210.23	299.42	212.95	78.42	3.629		
9,200.00	7,236.82	9,105.82	7,124.19	68.07	67.90	-17.45	-914.34	-212.73	303.31	215.54	79.23	3.632		
9,300.00	7,236.43	9,205.82	7,123.75	70.61	70.44	-17.44	-924.67	-215.23	307.21	218.13	80.04	3.635		
9,400.00	7,236.03	9,305.82	7,123.32	73.16	73.00	-17.43	-935.01	-217.73	311.12	220.72	80.85	3.638		
9,500.00	7,235.64	9,405.82	7,122.88	75.74	75.58	-17.42	-945.36	-220.23	315.04	223.31	81.66	3.641		
9,600.00	7,235.25	9,505.82	7,122.45	78.34	78.18	-17.41	-955.72	-222.73	318.97	225.90	82.47	3.644		
9,700.00	7,234.85	9,605.82	7,122.02	80.96	80.80	-17.40	-966.09	-225.23	322.91	228.49	83.28	3.647		
9,800.00	7,234.46	9,705.82	7,121.58	83.59	83.43	-17.39	-976.47	-227.73	326.86	231.08	84.09	3.650		
9,900.00	7,234.07	9,805.82	7,121.15	86.24	86.08	-17.38	-986.86	-230.23	330.82	233.67	84.90	3.653		
10,000.00	7,233.67	9,905.82	7,120.71	88.90	88.74	-17.37	-997.26	-232.73	334.79	236.26	85.71	3.656		
10,100.00	7,233.28	10,005.82	7,120.28	91.57	91.42	-17.36	-1,007.67	-235.23	338.77	238.85	86.52	3.659		
10,200.00	7,232.89	10,105.82	7,119.85	94.25	94.10	-17.35	-1,018.09	-237.73	342.76	241.44	87.33	3.662		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	10,205.82	7,119.41	96.95	96.80	-62.59	-739.87	-3,454.65	245.66	69.20	176.45	1.392 Level 3		
10,400.00	7,232.10	10,305.82	7,118.98	99.65	99.50	-62.58	-740.64	-3,554.65	245.67	64.37	181.30	1.355 Level 3		
10,500.00	7,231.71	10,405.82	7,118.54	102.36	102.21	-62.57	-741.42	-3,654.65	245.68	59.53	186.16	1.320 Level 3		
10,600.00	7,231.32	10,505.82	7,118.11	105.08	104.93	-62.56	-742.20	-3,754.64	245.70	54.67	191.03	1.286 Level 3		
10,700.00	7,230.92	10,605.82	7,117.68	107.80	107.66	-62.56	-742.98	-3,854.64	245.71	49.80	195.92	1.254 Level 3		
10,800.00	7,230.53	10,705.82	7,117.24	110.53	110.39	-62.55	-743.75	-3,954.63	245.73	44.91	200.82	1.224 Level 2		
10,900.00	7,230.14	10,805.82	7,116.81	113.27	113.13	-62.54	-744.53	-4,054.63	245.74	40.02	205.72	1.195 Level 2		
11,000.00	7,229.74	10,905.82	7,116.37	116.02	115.88	-62.53	-745.31	-4,154.63	245.76	35.12	210.64	1.167 Level 2		
11,100.00	7,229.35	11,005.82	7,115.94	118.77	118.63	-62.52	-746.08	-4,254.62	245.77	30.20	215.57	1.140 Level 2		
11,200.00	7,228.96	11,105.82	7,115.51	121.52	121.38	-62.51	-746.86	-4,354.62	245.79	25.28	220.50	1.115 Level 2		
11,300.00	7,228.56	11,205.82	7,115.07	124.28	124.14	-62.50	-747.64	-4,454.61	245.80	20.35	225.45	1.090 Level 2		
11,400.00	7,228.17	11,305.82	7,114.64	127.04	126.91	-62.49	-748.42	-4,554.61	245.81	15.42	230.40	1.067 Level 2		
11,500.00	7,227.78	11,405.82	7,114.21	129.81	129.67	-62.48	-749.19	-4,654.61	245.83	10.48	235.35	1.045 Level 2		
11,600.00	7,227.38	11,505.82	7,113.77	132.58	132.45	-62.48	-749.97	-4,754.60	245.84	5.53	240.32	1.023 Level 2		
11,700.00	7,226.99	11,605.82	7,113.34	135.36	135.22	-62.47	-750.75	-4,854.60	245.86	0.57	245.29	1.002 Level 2		
11,800.00	7,226.60	11,705.82	7,112.90	138.14	138.00	-62.46	-751.53	-4,954.59	245.87	-4.39	250.26	0.982 Level 1		
11,900.00	7,226.20	11,805.82	7,112.47	140.92	140.78	-62.45	-752.30	-5,054.59	245.89	-9.35	255.24	0.963 Level 1		
12,000.00	7,225.81	11,905.82	7,112.04	143.70	143.57	-62.44	-753.08	-5,154.59	245.90	-14.33	260.23	0.945 Level 1		
12,100.00	7,225.42	12,005.82	7,111.60	146.49	146.36	-62.43	-753.86	-5,254.58	245.92	-19.30	265.22	0.927 Level 1		
12,200.00	7,225.02	12,105.82	7,111.17	149.28	149.15	-62.42	-754.64	-5,354.58	245.93	-24.28	270.21	0.910 Level 1		
12,300.00	7,224.63	12,205.82	7,110.73	152.08	151.94	-62.41	-755.41	-5,454.57	245.94	-29.26	275.21	0.894 Level 1		
12,400.00	7,224.24	12,305.82	7,110.30	154.87	154.74	-62.40	-756.19	-5,554.57	245.96	-34.25	280.21	0.878 Level 1		
12,500.00	7,223.84	12,405.82	7,109.87	157.67	157.54	-62.40	-756.97	-5,654.57	245.97	-39.24	285.21	0.862 Level 1		
12,600.00	7,223.45	12,505.82	7,109.43	160.47	160.34	-62.39	-757.75	-5,754.56	245.99	-44.23	290.22	0.848 Level 1		
12,700.00	7,223.06	12,605.82	7,109.00	163.27	163.14	-62.38	-758.52	-5,854.56	246.00	-49.23	295.23	0.833 Level 1		
12,800.00	7,222.66	12,705.82	7,108.56	166.07	165.94	-62.37	-759.30	-5,954.55	246.02	-54.23	300.24	0.819 Level 1		
12,900.00	7,222.27	12,805.82	7,108.13	168.88	168.75	-62.36	-760.08	-6,054.55	246.03	-59.23	305.26	0.806 Level 1		
13,000.00	7,221.88	12,905.82	7,107.70	171.69	171.56	-62.35	-760.85	-6,154.55	246.05	-64.23	310.28	0.793 Level 1		
13,100.00	7,221.48	13,005.82	7,107.26	174.49	174.37	-62.34	-761.63	-6,254.54	246.06	-69.24	315.30	0.780 Level 1		
13,200.00	7,221.09	13,105.82	7,106.83	177.30	177.18	-62.33	-762.41	-6,354.54	246.08	-74.25	320.32	0.768 Level 1		
13,300.00	7,220.70	13,205.82	7,106.39	180.12	179.99	-62.32	-763.19	-6,454.53	246.09	-79.26	325.35	0.756 Level 1		
13,400.00	7,220.30	13,305.82	7,105.96	182.93	182.80	-62.32	-763.96	-6,554.53	246.10	-84.27	330.38	0.745 Level 1		
13,500.00	7,219.91	13,405.82	7,105.53	185.74	185.62	-62.31	-764.74	-6,654.53	246.12	-89.29	335.40	0.734 Level 1		
13,600.00	7,219.52	13,505.82	7,105.09	188.56	188.44	-62.30	-765.52	-6,754.52	246.13	-94.30	340.44	0.723 Level 1		
13,700.00	7,219.12	13,605.82	7,104.66	191.38	191.25	-62.29	-766.30	-6,854.52	246.15	-99.32	345.47	0.713 Level 1		
13,800.00	7,218.73	13,705.82	7,104.23	194.20	194.07	-62.28	-767.07	-6,954.51	246.16	-104.34	350.50	0.702 Level 1		
13,900.00	7,218.34	13,805.82	7,103.79	197.02	196.89	-62.27	-767.85	-7,054.51	246.18	-109.36	355.54	0.692 Level 1		
14,000.00	7,217.94	13,905.82	7,103.36	199.84	199.71	-62.26	-768.63	-7,154.51	246.19	-114.38	360.57	0.683 Level 1		
14,100.00	7,217.55	14,005.82	7,102.92	202.66	202.53	-62.25	-769.41	-7,254.50	246.21	-119.40	365.61	0.673 Level 1		
14,200.00	7,217.16	14,105.82	7,102.49	205.48	205.36	-62.24	-770.18	-7,354.50	246.22	-124.43	370.65	0.664 Level 1		
14,300.00	7,216.76	14,205.82	7,102.06	208.30	208.18	-62.23	-770.96	-7,454.49	246.24	-129.45	375.69	0.655 Level 1		
14,400.00	7,216.37	14,305.82	7,101.62	211.13	211.01	-62.23	-771.74	-7,554.49	246.25	-134.48	380.73	0.647 Level 1		
14,500.00	7,215.98	14,405.82	7,101.19	213.96	213.83	-62.22	-772.52	-7,654.49	246.27	-139.51	385.77	0.638 Level 1		
14,600.00	7,215.58	14,505.82	7,100.75	216.78	216.66	-62.21	-773.29	-7,754.48	246.28	-144.53	390.82	0.630 Level 1		
14,700.00	7,215.19	14,605.82	7,100.32	219.61	219.49	-62.20	-774.07	-7,854.48	246.29	-149.56	395.86	0.622 Level 1		
14,800.00	7,214.80	14,705.82	7,099.89	222.44	222.32	-62.19	-774.85	-7,954.48	246.31	-154.59	400.90	0.614 Level 1		
14,900.00	7,214.40	14,805.82	7,099.45	225.27	225.14	-62.18	-775.62	-8,054.47	246.32	-159.62	405.95	0.607 Level 1		
15,000.00	7,214.01	14,905.82	7,099.02	228.10	227.97	-62.17	-776.40	-8,154.47	246.34	-164.65	410.99	0.599 Level 1		
15,002.44	7,214.00	14,908.26	7,099.01	228.16	228.04	-62.17	-776.42	-8,156.90	246.34	-164.78	411.12	0.599 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.56	-219.67	-1.67	219.68					
100.00	100.00	101.00	100.00	3.28	3.28	-179.56	-219.67	-1.67	219.68	213.11	6.57	33.439		
200.00	200.00	199.00	200.00	3.34	3.34	-179.56	-219.67	-1.67	219.68	213.01	6.67	32.919	CC, ES	
300.00	300.00	291.93	292.92	3.44	3.43	-179.54	-221.14	-1.78	221.26	214.38	6.88	32.141		
400.00	400.00	384.60	385.47	3.60	3.57	-179.46	-225.60	-2.12	226.08	218.88	7.20	31.395		
500.00	500.00	476.89	477.46	3.81	3.74	-179.34	-233.00	-2.69	234.11	226.50	7.61	30.766		
600.00	599.98	568.78	568.76	4.03	3.96	-17.40	-243.31	-3.48	243.67	235.60	8.08	30.165		
700.00	699.84	660.40	659.42	4.29	4.20	-17.48	-256.48	-4.49	253.11	244.51	8.60	29.447		
800.00	799.54	751.67	749.27	4.57	4.48	-17.70	-272.47	-5.72	263.33	254.17	9.16	28.733		
900.00	899.23	842.27	837.90	4.87	4.79	-17.88	-291.16	-7.15	276.60	266.83	9.77	28.302		
1,000.00	998.92	932.03	925.09	5.20	5.12	-17.99	-312.42	-8.79	292.98	282.57	10.41	28.140		
1,100.00	1,098.61	1,020.77	1,010.59	5.54	5.48	-18.06	-336.11	-10.60	312.42	301.35	11.07	28.225		
1,200.00	1,198.30	1,110.03	1,095.81	5.90	5.87	-18.08	-362.54	-12.63	334.81	323.07	11.74	28.516		
1,300.00	1,298.00	1,207.24	1,188.33	6.27	6.32	-18.09	-392.30	-14.91	358.24	345.79	12.46	28.755		
1,400.00	1,397.69	1,304.46	1,280.85	6.66	6.79	-18.09	-422.06	-17.20	381.68	368.47	13.20	28.908		
1,500.00	1,497.38	1,401.68	1,373.37	7.05	7.26	-18.10	-451.83	-19.48	405.11	391.14	13.97	28.998		
1,600.00	1,597.07	1,501.11	1,465.89	7.44	7.77	-18.10	-481.59	-21.77	428.54	413.77	14.77	29.021		
1,700.00	1,696.76	1,603.89	1,558.41	7.85	8.29	-18.11	-511.35	-24.05	451.97	436.38	15.59	28.983		
1,800.00	1,796.45	1,693.32	1,650.93	8.25	8.76	-18.11	-541.11	-26.33	475.41	459.03	16.38	29.031		
1,900.00	1,896.15	1,809.46	1,743.45	8.67	9.38	-18.11	-570.88	-28.62	498.84	481.55	17.29	28.848		
2,000.00	1,995.84	1,887.76	1,835.97	9.08	9.79	-18.12	-600.64	-30.90	522.27	504.23	18.04	28.946		
2,100.00	2,095.53	1,984.97	1,928.49	9.50	10.32	-18.12	-630.40	-33.18	545.70	526.81	18.89	28.888		
2,200.00	2,195.22	2,082.19	2,021.01	9.92	10.85	-18.12	-660.16	-35.47	569.13	549.39	19.75	28.824		
2,300.00	2,294.91	2,179.40	2,113.53	10.35	11.38	-18.12	-689.92	-37.75	592.57	571.96	20.61	28.755		
2,400.00	2,394.60	2,276.62	2,206.05	10.77	11.91	-18.13	-719.69	-40.03	616.00	594.52	21.48	28.684		
2,500.00	2,494.30	2,373.84	2,298.57	11.20	12.45	-18.13	-749.45	-42.32	639.43	617.08	22.35	28.612		
2,600.00	2,593.99	2,471.05	2,391.09	11.63	12.99	-18.13	-779.21	-44.60	662.86	639.64	23.23	28.540		
2,700.00	2,693.68	2,568.27	2,483.61	12.07	13.53	-18.13	-808.97	-46.89	686.30	662.19	24.11	28.468		
2,800.00	2,793.37	2,665.48	2,576.13	12.50	14.07	-18.13	-838.74	-49.17	709.73	684.74	24.99	28.397		
2,900.00	2,893.06	2,762.70	2,668.65	12.93	14.61	-18.14	-868.50	-51.45	733.16	707.28	25.88	28.327		
3,000.00	2,992.76	2,859.91	2,761.17	13.37	15.16	-18.14	-898.26	-53.74	756.59	729.82	26.77	28.259		
3,100.00	3,092.45	2,957.13	2,853.69	13.81	15.70	-18.14	-928.02	-56.02	780.03	752.36	27.67	28.192		
3,200.00	3,192.14	3,054.35	2,946.21	14.25	16.25	-18.14	-957.79	-58.30	803.46	774.89	28.57	28.127		
3,300.00	3,291.83	3,151.56	3,038.73	14.68	16.80	-18.14	-987.55	-60.59	826.89	797.43	29.46	28.064		
3,400.00	3,391.52	3,248.78	3,131.25	15.12	17.35	-18.14	-1,017.31	-62.87	850.32	819.96	30.37	28.003		
3,500.00	3,491.21	3,345.99	3,223.77	15.56	17.90	-18.14	-1,047.07	-65.16	873.75	842.49	31.27	27.944		
3,600.00	3,590.91	3,443.21	3,316.29	16.00	18.45	-18.14	-1,076.84	-67.44	897.19	865.01	32.17	27.886		
3,700.00	3,690.60	3,540.43	3,408.81	16.45	19.00	-18.15	-1,106.60	-69.72	920.62	887.54	33.08	27.830		
3,800.00	3,790.29	3,637.64	3,501.33	16.89	19.56	-18.15	-1,136.36	-72.01	944.05	910.06	33.99	27.777		
3,900.00	3,889.98	3,734.86	3,593.85	17.33	20.11	-18.15	-1,166.12	-74.29	967.48	932.59	34.90	27.724		
4,000.00	3,989.67	3,832.07	3,686.37	17.77	20.66	-18.15	-1,195.89	-76.57	990.92	955.11	35.81	27.674		
4,100.00	4,089.36	3,929.29	3,778.89	18.22	21.22	-18.15	-1,225.65	-78.86	1,014.35	977.63	36.72	27.625		
4,200.00	4,189.06	4,026.51	3,871.41	18.66	21.77	-18.15	-1,255.41	-81.14	1,037.78	1,000.15	37.63	27.578		
4,300.00	4,288.75	4,123.72	3,963.93	19.10	22.33	-18.15	-1,285.17	-83.42	1,061.21	1,022.67	38.54	27.532		
4,400.00	4,388.44	4,220.94	4,056.45	19.55	22.88	-18.15	-1,314.94	-85.71	1,084.64	1,045.19	39.46	27.488		
4,500.00	4,488.13	4,318.15	4,148.97	19.99	23.44	-18.15	-1,344.70	-87.99	1,108.08	1,067.70	40.37	27.445		
4,600.00	4,587.82	4,415.37	4,241.49	20.44	23.99	-18.15	-1,374.46	-90.28	1,131.51	1,090.22	41.29	27.404		
4,700.00	4,687.51	4,512.58	4,334.01	20.89	24.55	-18.15	-1,404.22	-92.56	1,154.94	1,112.73	42.21	27.364		
4,800.00	4,787.21	4,609.80	4,426.53	21.33	25.11	-18.15	-1,433.99	-94.84	1,178.37	1,135.25	43.12	27.325		
4,900.00	4,886.90	4,707.02	4,519.05	21.78	25.66	-18.15	-1,463.75	-97.13	1,201.81	1,157.76	44.04	27.287		
5,000.00	4,986.59	4,804.23	4,611.57	22.22	26.22	-18.15	-1,493.51	-99.41	1,225.24	1,180.28	44.96	27.251		
5,100.00	5,086.28	4,901.45	4,704.09	22.67	26.78	-18.15	-1,523.27	-101.69	1,248.67	1,202.79	45.88	27.215		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,001.34	4,796.61	23.12	27.35	-18.16	-1,553.04	-103.98	1,272.10	1,225.29	46.81	27.173		
5,300.00	5,285.66	5,095.88	4,889.13	23.56	27.89	-18.16	-1,582.80	-106.26	1,295.54	1,247.81	47.72	27.148		
5,400.00	5,385.36	5,206.90	4,981.65	24.01	28.53	-18.16	-1,612.56	-108.55	1,318.97	1,270.25	48.71	27.076		
5,500.00	5,485.05	5,309.69	5,074.17	24.46	29.12	-18.16	-1,642.32	-110.83	1,342.40	1,292.74	49.66	27.030		
5,600.00	5,584.74	5,387.53	5,166.69	24.90	29.57	-18.16	-1,672.09	-113.11	1,365.83	1,315.35	50.49	27.054		
5,700.00	5,684.43	5,484.74	5,259.20	25.35	30.13	-18.16	-1,701.85	-115.40	1,389.26	1,337.86	51.41	27.024		
5,800.00	5,784.12	5,581.96	5,351.72	25.80	30.69	-18.16	-1,731.61	-117.68	1,412.70	1,360.37	52.33	26.995		
5,900.00	5,883.81	5,679.18	5,444.24	26.25	31.24	-18.16	-1,761.37	-119.96	1,436.13	1,382.87	53.25	26.967		
6,000.00	5,983.51	5,776.39	5,536.76	26.70	31.80	-18.16	-1,791.13	-122.25	1,459.56	1,405.38	54.18	26.940		
6,100.00	6,083.20	5,873.61	5,629.28	27.14	32.36	-18.16	-1,820.90	-124.53	1,482.99	1,427.89	55.10	26.913		
6,200.00	6,182.89	5,970.82	5,721.80	27.59	32.92	-18.16	-1,850.66	-126.81	1,506.43	1,450.40	56.03	26.888		
6,300.00	6,282.58	6,068.04	5,814.32	28.04	33.48	-18.16	-1,880.42	-129.10	1,529.86	1,472.91	56.95	26.862		
6,400.00	6,382.27	6,165.25	5,906.84	28.49	34.04	-18.16	-1,910.18	-131.38	1,553.29	1,495.41	57.88	26.838		
6,500.00	6,481.96	6,262.47	5,999.36	28.94	34.60	-18.16	-1,939.95	-133.67	1,576.72	1,517.92	58.80	26.814		
6,600.00	6,581.66	6,359.69	6,091.88	29.39	35.16	-18.16	-1,969.71	-135.95	1,600.16	1,540.43	59.73	26.791		
6,700.00	6,681.21	6,456.83	6,184.33	29.83	35.72	-55.49	-1,999.45	-138.23	1,623.55	1,562.90	60.65	26.767		
6,800.00	6,778.96	6,552.59	6,275.47	30.28	36.27	-71.40	-2,028.77	-140.48	1,646.62	1,585.05	61.58	26.741		
6,900.00	6,872.51	6,644.65	6,363.08	30.70	36.80	-75.71	-2,056.95	-142.64	1,669.25	1,606.77	62.48	26.715		
7,000.00	6,959.55	6,730.73	6,445.00	31.10	37.30	-77.52	-2,083.30	-144.67	1,691.69	1,628.31	63.38	26.691		
7,100.00	7,037.93	6,820.12	6,529.99	31.48	37.81	-78.63	-2,110.66	-148.48	1,714.35	1,649.95	64.39	26.623		
7,200.00	7,105.74	6,930.88	6,633.48	31.88	38.42	-79.68	-2,144.08	-168.70	1,736.58	1,670.88	65.70	26.432		
7,300.00	7,161.29	7,062.02	6,749.39	32.41	39.07	-80.78	-2,181.72	-216.51	1,757.49	1,690.28	67.21	26.148		
7,400.00	7,203.22	7,222.63	6,874.79	33.13	39.74	-82.09	-2,222.74	-307.36	1,775.89	1,707.00	68.89	25.780		
7,500.00	7,230.50	7,422.25	6,994.16	34.04	40.40	-83.51	-2,262.30	-461.33	1,789.95	1,719.18	70.78	25.291		
7,600.00	7,242.45	7,600.00	7,065.36	35.13	40.91	-84.44	-2,286.75	-663.63	1,797.31	1,724.43	72.87	24.663		
7,700.00	7,242.72	7,820.79	7,075.80	36.39	41.81	-84.67	-2,291.50	-844.45	1,797.85	1,721.62	76.23	23.585		
7,800.00	7,242.33	7,920.79	7,075.47	37.81	42.52	-84.67	-2,292.17	-944.45	1,797.73	1,718.78	78.95	22.769		
7,900.00	7,241.93	8,020.79	7,075.15	39.40	43.50	-84.68	-2,292.84	-1,044.44	1,797.61	1,715.63	81.98	21.926		
8,000.00	7,241.54	8,120.79	7,074.82	41.13	44.76	-84.68	-2,293.51	-1,144.44	1,797.49	1,712.21	85.29	21.076		
8,100.00	7,241.15	8,220.79	7,074.50	42.97	46.24	-84.68	-2,294.17	-1,244.44	1,797.37	1,708.54	88.83	20.234		
8,200.00	7,240.75	8,320.79	7,074.17	44.92	47.90	-84.68	-2,294.84	-1,344.43	1,797.25	1,704.66	92.59	19.411		
8,300.00	7,240.36	8,420.79	7,073.85	46.97	49.70	-84.68	-2,295.51	-1,444.43	1,797.13	1,700.59	96.54	18.616		
8,400.00	7,239.97	8,520.79	7,073.52	49.10	51.61	-84.69	-2,296.18	-1,544.43	1,797.01	1,696.36	100.65	17.853		
8,500.00	7,239.57	8,620.79	7,073.20	51.29	53.62	-84.69	-2,296.84	-1,644.43	1,796.89	1,691.97	104.92	17.127		
8,600.00	7,239.18	8,720.79	7,072.87	53.56	55.72	-84.69	-2,297.51	-1,744.42	1,796.77	1,687.46	109.31	16.438		
8,700.00	7,238.79	8,820.79	7,072.55	55.87	57.89	-84.69	-2,298.18	-1,844.42	1,796.65	1,682.83	113.82	15.785		
8,800.00	7,238.39	8,920.79	7,072.22	58.24	60.11	-84.69	-2,298.85	-1,944.42	1,796.53	1,678.10	118.43	15.170		
8,900.00	7,238.00	9,020.79	7,071.90	60.64	62.40	-84.69	-2,299.51	-2,044.41	1,796.41	1,673.28	123.13	14.590		
9,000.00	7,237.61	9,120.79	7,071.57	63.09	64.73	-84.70	-2,300.18	-2,144.41	1,796.29	1,668.38	127.91	14.044		
9,100.00	7,237.21	9,220.79	7,071.25	65.56	67.11	-84.70	-2,300.85	-2,244.41	1,796.17	1,663.40	132.76	13.529		
9,200.00	7,236.82	9,320.79	7,070.92	68.07	69.52	-84.70	-2,301.52	-2,344.41	1,796.05	1,658.37	137.68	13.045		
9,300.00	7,236.43	9,420.79	7,070.60	70.61	71.97	-84.70	-2,302.18	-2,444.40	1,795.93	1,653.27	142.65	12.589		
9,400.00	7,236.03	9,520.79	7,070.27	73.16	74.44	-84.70	-2,302.85	-2,544.40	1,795.80	1,648.12	147.68	12.160		
9,500.00	7,235.64	9,620.79	7,069.95	75.74	76.95	-84.71	-2,303.52	-2,644.40	1,795.68	1,642.93	152.75	11.755		
9,600.00	7,235.25	9,720.79	7,069.62	78.34	79.48	-84.71	-2,304.19	-2,744.39	1,795.56	1,637.69	157.87	11.374		
9,700.00	7,234.85	9,820.79	7,069.30	80.96	82.03	-84.71	-2,304.85	-2,844.39	1,795.44	1,632.42	163.03	11.013		
9,800.00	7,234.46	9,920.79	7,068.97	83.59	84.60	-84.71	-2,305.52	-2,944.39	1,795.32	1,627.11	168.21	10.673		
9,900.00	7,234.07	10,020.79	7,068.65	86.24	87.19	-84.71	-2,306.19	-3,044.39	1,795.20	1,621.77	173.44	10.351		
10,000.00	7,233.67	10,120.79	7,068.32	88.90	89.79	-84.72	-2,306.86	-3,144.38	1,795.08	1,616.40	178.68	10.046		
10,100.00	7,233.28	10,220.79	7,068.00	91.57	92.41	-84.72	-2,307.52	-3,244.38	1,794.96	1,611.00	183.96	9.757		
10,200.00	7,232.89	10,320.79	7,067.67	94.25	95.05	-84.72	-2,308.19	-3,344.38	1,794.84	1,605.58	189.26	9.483		
10,300.00	7,232.49	10,420.78	7,067.35	96.95	97.69	-84.72	-2,308.86	-3,444.37	1,794.72	1,600.14	194.58	9.223		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,520.78	7,067.02	99.65	100.35	-84.72	-2,309.53	-3,544.37	1,794.60	1,594.67	199.93	8.976		
10,500.00	7,231.71	10,620.78	7,066.70	102.36	103.02	-84.72	-2,310.19	-3,644.37	1,794.48	1,589.19	205.29	8.741		
10,600.00	7,231.32	10,720.78	7,066.38	105.08	105.70	-84.73	-2,310.86	-3,744.37	1,794.36	1,583.69	210.67	8.517		
10,700.00	7,230.92	10,820.78	7,066.05	107.80	108.39	-84.73	-2,311.53	-3,844.36	1,794.24	1,578.17	216.06	8.304		
10,800.00	7,230.53	10,920.78	7,065.73	110.53	111.09	-84.73	-2,312.20	-3,944.36	1,794.12	1,572.64	221.47	8.101		
10,900.00	7,230.14	11,020.78	7,065.40	113.27	113.80	-84.73	-2,312.86	-4,044.36	1,794.00	1,567.10	226.90	7.907		
11,000.00	7,229.74	11,120.78	7,065.08	116.02	116.51	-84.73	-2,313.53	-4,144.35	1,793.88	1,561.54	232.34	7.721		
11,100.00	7,229.35	11,220.78	7,064.75	118.77	119.23	-84.74	-2,314.20	-4,244.35	1,793.76	1,555.97	237.79	7.544		
11,200.00	7,228.96	11,320.78	7,064.43	121.52	121.96	-84.74	-2,314.87	-4,344.35	1,793.63	1,550.39	243.25	7.374		
11,300.00	7,228.56	11,420.78	7,064.10	124.28	124.69	-84.74	-2,315.53	-4,444.35	1,793.51	1,544.80	248.72	7.211		
11,400.00	7,228.17	11,520.78	7,063.78	127.04	127.43	-84.74	-2,316.20	-4,544.34	1,793.39	1,539.20	254.20	7.055		
11,500.00	7,227.78	11,620.78	7,063.45	129.81	130.17	-84.74	-2,316.87	-4,644.34	1,793.27	1,533.58	259.69	6.905		
11,600.00	7,227.38	11,720.78	7,063.13	132.58	132.92	-84.74	-2,317.54	-4,744.34	1,793.15	1,527.97	265.19	6.762		
11,700.00	7,226.99	11,820.78	7,062.80	135.36	135.67	-84.75	-2,318.20	-4,844.33	1,793.03	1,522.34	270.69	6.624		
11,800.00	7,226.60	11,920.78	7,062.48	138.14	138.43	-84.75	-2,318.87	-4,944.33	1,792.91	1,516.70	276.21	6.491		
11,900.00	7,226.20	12,020.78	7,062.15	140.92	141.19	-84.75	-2,319.54	-5,044.33	1,792.79	1,511.06	281.73	6.363		
12,000.00	7,225.81	12,120.78	7,061.83	143.70	143.95	-84.75	-2,320.21	-5,144.33	1,792.67	1,505.41	287.26	6.241		
12,100.00	7,225.42	12,220.78	7,061.50	146.49	146.72	-84.75	-2,320.87	-5,244.32	1,792.55	1,499.76	292.79	6.122		
12,200.00	7,225.02	12,320.78	7,061.18	149.28	149.49	-84.76	-2,321.54	-5,344.32	1,792.43	1,494.09	298.33	6.008		
12,300.00	7,224.63	12,420.78	7,060.85	152.08	152.27	-84.76	-2,322.21	-5,444.32	1,792.31	1,488.43	303.88	5.898		
12,400.00	7,224.24	12,520.78	7,060.53	154.87	155.05	-84.76	-2,322.88	-5,544.31	1,792.19	1,482.75	309.43	5.792		
12,500.00	7,223.84	12,620.78	7,060.20	157.67	157.83	-84.76	-2,323.54	-5,644.31	1,792.07	1,477.08	314.99	5.689		
12,600.00	7,223.45	12,720.78	7,059.88	160.47	160.61	-84.76	-2,324.21	-5,744.31	1,791.95	1,471.39	320.55	5.590		
12,700.00	7,223.06	12,820.78	7,059.55	163.27	163.40	-84.76	-2,324.88	-5,844.31	1,791.83	1,465.71	326.12	5.494		
12,800.00	7,222.66	12,920.78	7,059.23	166.07	166.19	-84.77	-2,325.55	-5,944.30	1,791.71	1,460.02	331.69	5.402		
12,900.00	7,222.27	13,020.78	7,058.90	168.88	168.98	-84.77	-2,326.21	-6,044.30	1,791.59	1,454.32	337.27	5.312		
13,000.00	7,221.88	13,120.78	7,058.58	171.69	171.77	-84.77	-2,326.88	-6,144.30	1,791.47	1,448.62	342.84	5.225		
13,100.00	7,221.48	13,220.78	7,058.25	174.49	174.57	-84.77	-2,327.55	-6,244.29	1,791.34	1,442.92	348.43	5.141		
13,200.00	7,221.09	13,320.78	7,057.93	177.30	177.36	-84.77	-2,328.21	-6,344.29	1,791.22	1,437.21	354.01	5.060		
13,300.00	7,220.70	13,420.78	7,057.60	180.12	180.16	-84.78	-2,328.88	-6,444.29	1,791.10	1,431.50	359.60	4.981		
13,400.00	7,220.30	13,520.78	7,057.28	182.93	182.96	-84.78	-2,329.55	-6,544.29	1,790.98	1,425.79	365.20	4.904		
13,500.00	7,219.91	13,620.78	7,056.95	185.74	185.77	-84.78	-2,330.22	-6,644.28	1,790.86	1,420.07	370.79	4.830		
13,600.00	7,219.52	13,720.78	7,056.63	188.56	188.57	-84.78	-2,330.88	-6,744.28	1,790.74	1,414.35	376.39	4.758		
13,700.00	7,219.12	13,820.78	7,056.30	191.38	191.38	-84.78	-2,331.55	-6,844.28	1,790.62	1,408.63	382.00	4.688		
13,800.00	7,218.73	13,920.78	7,055.98	194.20	194.19	-84.79	-2,332.22	-6,944.27	1,790.50	1,402.90	387.60	4.619		
13,900.00	7,218.34	14,020.78	7,055.65	197.02	197.00	-84.79	-2,332.89	-7,044.27	1,790.38	1,397.17	393.21	4.553		
14,000.00	7,217.94	14,120.78	7,055.33	199.84	199.81	-84.79	-2,333.55	-7,144.27	1,790.26	1,391.44	398.82	4.489		
14,100.00	7,217.55	14,220.78	7,055.00	202.66	202.62	-84.79	-2,334.22	-7,244.27	1,790.14	1,385.71	404.43	4.426		
14,200.00	7,217.16	14,320.78	7,054.68	205.48	205.43	-84.79	-2,334.89	-7,344.26	1,790.02	1,379.97	410.04	4.365		
14,300.00	7,216.76	14,420.78	7,054.35	208.30	208.25	-84.79	-2,335.56	-7,444.26	1,789.90	1,374.24	415.66	4.306		
14,400.00	7,216.37	14,520.78	7,054.03	211.13	211.06	-84.80	-2,336.22	-7,544.26	1,789.78	1,368.50	421.28	4.248		
14,500.00	7,215.98	14,620.78	7,053.70	213.96	213.88	-84.80	-2,336.89	-7,644.26	1,789.66	1,362.76	426.90	4.192		
14,600.00	7,215.58	14,720.78	7,053.38	216.78	216.70	-84.80	-2,337.56	-7,744.25	1,789.54	1,357.01	432.53	4.137		
14,700.00	7,215.19	14,820.78	7,053.05	219.61	219.52	-84.80	-2,338.23	-7,844.25	1,789.42	1,351.27	438.15	4.084		
14,800.00	7,214.80	14,920.78	7,052.73	222.44	222.34	-84.80	-2,338.89	-7,944.25	1,789.30	1,345.52	443.78	4.032		
14,900.00	7,214.40	15,020.78	7,052.40	225.27	225.16	-84.81	-2,339.56	-8,044.24	1,789.18	1,339.77	449.41	3.981		
15,000.00	7,214.01	15,120.78	7,052.08	228.10	227.98	-84.81	-2,340.23	-8,144.24	1,789.06	1,334.02	455.04	3.932		
15,002.44	7,214.00	15,123.22	7,052.07	228.16	228.05	-84.81	-2,340.25	-8,146.68	1,789.05	1,333.88	455.17	3.930 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-179.52	-299.82	-2.50	299.83					
100.00	100.00	102.00	100.00	3.28	3.29	-179.52	-299.82	-2.50	299.83	293.26	6.57	45.638		
200.00	200.00	198.00	200.00	3.34	3.34	-179.52	-299.82	-2.50	299.83	293.16	6.67	44.936 CC, ES		
300.00	300.00	288.70	290.68	3.44	3.43	-179.51	-301.19	-2.58	301.35	294.47	6.88	43.803		
400.00	400.00	379.03	380.91	3.60	3.56	-179.47	-305.41	-2.81	306.02	298.83	7.19	42.561		
500.00	500.00	469.00	470.60	3.81	3.73	-179.41	-312.42	-3.19	313.82	306.23	7.59	41.347		
600.00	599.98	558.62	559.68	4.03	3.93	-17.53	-322.21	-3.73	323.09	315.04	8.05	40.141		
700.00	699.84	647.99	648.17	4.29	4.16	-17.62	-334.73	-4.41	332.15	323.59	8.56	38.821		
800.00	799.54	737.04	735.90	4.57	4.43	-17.84	-349.94	-5.25	341.93	332.82	9.11	37.515		
900.00	899.23	825.48	822.52	4.87	4.73	-18.04	-367.73	-6.22	354.69	344.98	9.71	36.512		
1,000.00	998.92	913.14	907.80	5.20	5.05	-18.20	-388.00	-7.33	370.49	360.15	10.34	35.828		
1,100.00	1,098.61	999.88	991.53	5.54	5.40	-18.33	-410.60	-8.57	389.29	378.30	10.99	35.429		
1,200.00	1,198.30	1,085.55	1,073.51	5.90	5.76	-18.41	-435.40	-9.93	411.03	399.38	11.65	35.291		
1,300.00	1,298.00	1,170.01	1,153.59	6.27	6.15	-18.47	-462.24	-11.40	435.65	423.34	12.31	35.383		
1,400.00	1,397.69	1,253.16	1,231.60	6.66	6.56	-18.50	-490.95	-12.97	463.09	450.11	12.98	35.680		
1,500.00	1,497.38	1,334.89	1,307.44	7.05	6.98	-18.51	-521.36	-14.63	493.28	479.64	13.64	36.155		
1,600.00	1,597.07	1,416.81	1,382.56	7.44	7.42	-18.50	-553.98	-16.42	526.13	511.82	14.31	36.757		
1,700.00	1,696.76	1,510.90	1,468.44	7.85	7.95	-18.49	-592.36	-18.52	560.01	544.92	15.09	37.114		
1,800.00	1,796.45	1,604.99	1,554.31	8.25	8.49	-18.47	-630.75	-20.62	593.88	578.00	15.88	37.390		
1,900.00	1,896.15	1,700.93	1,640.19	8.67	9.06	-18.46	-669.13	-22.72	627.76	611.05	16.70	37.582		
2,000.00	1,995.84	1,806.84	1,726.07	9.08	9.69	-18.45	-707.51	-24.82	661.63	644.04	17.59	37.619		
2,100.00	2,095.53	1,887.25	1,811.94	9.50	10.18	-18.44	-745.90	-26.93	695.51	677.15	18.36	37.885		
2,200.00	2,195.22	1,981.34	1,897.82	9.92	10.76	-18.43	-784.28	-29.03	729.38	710.18	19.21	37.975		
2,300.00	2,294.91	2,075.42	1,983.70	10.35	11.34	-18.42	-822.66	-31.13	763.26	743.19	20.06	38.040		
2,400.00	2,394.60	2,169.51	2,069.57	10.77	11.92	-18.41	-861.05	-33.23	797.13	776.20	20.93	38.085		
2,500.00	2,494.30	2,263.60	2,155.45	11.20	12.51	-18.40	-899.43	-35.33	831.01	809.20	21.80	38.113		
2,600.00	2,593.99	2,357.69	2,241.33	11.63	13.11	-18.39	-937.81	-37.43	864.88	842.20	22.68	38.129		
2,700.00	2,693.68	2,451.77	2,327.20	12.07	13.71	-18.39	-976.20	-39.54	898.76	875.19	23.57	38.134		
2,800.00	2,793.37	2,545.86	2,413.08	12.50	14.30	-18.38	-1,014.58	-41.64	932.63	908.17	24.46	38.131		
2,900.00	2,893.06	2,639.95	2,498.96	12.93	14.91	-18.38	-1,052.96	-43.74	966.51	941.15	25.35	38.122		
3,000.00	2,992.76	2,734.04	2,584.83	13.37	15.51	-18.37	-1,091.35	-45.84	1,000.38	974.13	26.25	38.108		
3,100.00	3,092.45	2,828.12	2,670.71	13.81	16.12	-18.37	-1,129.73	-47.94	1,034.26	1,007.10	27.15	38.089		
3,200.00	3,192.14	2,922.21	2,756.59	14.25	16.72	-18.36	-1,168.11	-50.04	1,068.13	1,040.07	28.06	38.067		
3,300.00	3,291.83	3,016.30	2,842.46	14.68	17.33	-18.36	-1,206.50	-52.15	1,102.01	1,073.04	28.97	38.043		
3,400.00	3,391.52	3,110.39	2,928.34	15.12	17.94	-18.35	-1,244.88	-54.25	1,135.88	1,106.00	29.88	38.017		
3,500.00	3,491.21	3,204.48	3,014.21	15.56	18.55	-18.35	-1,283.26	-56.35	1,169.76	1,138.97	30.79	37.989		
3,600.00	3,590.91	3,301.44	3,100.09	16.00	19.18	-18.35	-1,321.65	-58.45	1,203.63	1,171.91	31.72	37.941		
3,700.00	3,690.60	3,407.35	3,185.97	16.45	19.87	-18.34	-1,360.03	-60.55	1,237.51	1,204.80	32.71	37.837		
3,800.00	3,790.29	3,486.74	3,271.84	16.89	20.39	-18.34	-1,398.41	-62.65	1,271.38	1,237.84	33.55	37.900		
3,900.00	3,889.98	3,580.83	3,357.72	17.33	21.01	-18.34	-1,436.80	-64.75	1,305.26	1,270.79	34.47	37.870		
4,000.00	3,989.67	3,674.91	3,443.60	17.77	21.62	-18.33	-1,475.18	-66.86	1,339.13	1,303.74	35.39	37.839		
4,100.00	4,089.36	3,769.00	3,529.47	18.22	22.24	-18.33	-1,513.56	-68.96	1,373.01	1,336.69	36.31	37.809		
4,200.00	4,189.06	3,863.09	3,615.35	18.66	22.86	-18.33	-1,551.95	-71.06	1,406.88	1,369.64	37.24	37.778		
4,300.00	4,288.75	3,957.18	3,701.23	19.10	23.47	-18.33	-1,590.33	-73.16	1,440.76	1,402.59	38.17	37.748		
4,400.00	4,388.44	4,051.26	3,787.10	19.55	24.09	-18.32	-1,628.71	-75.26	1,474.63	1,435.54	39.10	37.718		
4,500.00	4,488.13	4,145.35	3,872.98	19.99	24.71	-18.32	-1,667.10	-77.36	1,508.51	1,468.48	40.03	37.688		
4,600.00	4,587.82	4,239.44	3,958.86	20.44	25.33	-18.32	-1,705.48	-79.47	1,542.38	1,501.43	40.96	37.659		
4,700.00	4,687.51	4,333.53	4,044.73	20.89	25.95	-18.32	-1,743.86	-81.57	1,576.26	1,534.37	41.89	37.630		
4,800.00	4,787.21	4,427.61	4,130.61	21.33	26.57	-18.32	-1,782.25	-83.67	1,610.13	1,567.31	42.82	37.602		
4,900.00	4,886.90	4,521.70	4,216.49	21.78	27.19	-18.31	-1,820.63	-85.77	1,644.01	1,600.26	43.75	37.574		
5,000.00	4,986.59	4,615.79	4,302.36	22.22	27.81	-18.31	-1,859.01	-87.87	1,677.88	1,633.20	44.69	37.546		
5,100.00	5,086.28	4,709.88	4,388.24	22.67	28.43	-18.31	-1,897.40	-89.97	1,711.76	1,666.14	45.62	37.519		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	4,803.96	4,474.12	23.12	29.05	-18.31	-1,935.78	-92.07	1,745.63	1,699.08	46.56	37.493		
5,300.00	5,285.66	4,901.95	4,559.99	23.56	29.69	-18.31	-1,974.16	-94.18	1,779.51	1,731.99	47.52	37.450		
5,400.00	5,385.36	5,007.86	4,645.87	24.01	30.39	-18.31	-2,012.55	-96.28	1,813.38	1,764.86	48.52	37.374		
5,500.00	5,485.05	5,086.23	4,731.74	24.46	30.91	-18.31	-2,050.93	-98.38	1,847.26	1,797.89	49.37	37.416		
5,600.00	5,584.74	5,180.31	4,817.62	24.90	31.53	-18.30	-2,089.31	-100.48	1,881.14	1,830.83	50.31	37.392		
5,700.00	5,684.43	5,274.40	4,903.50	25.35	32.16	-18.30	-2,127.70	-102.58	1,915.01	1,863.76	51.25	37.367		
5,800.00	5,784.12	5,368.49	4,989.37	25.80	32.78	-18.30	-2,166.08	-104.68	1,948.89	1,896.70	52.19	37.344		
5,900.00	5,883.81	5,462.58	5,075.25	26.25	33.40	-18.30	-2,204.46	-106.79	1,982.76	1,929.63	53.13	37.321		
6,000.00	5,983.51	5,556.66	5,161.13	26.70	34.02	-18.30	-2,242.85	-108.89	2,016.64	1,962.57	54.07	37.298		
6,100.00	6,083.20	5,650.75	5,247.00	27.14	34.65	-18.30	-2,281.23	-110.99	2,050.51	1,995.50	55.01	37.276		
6,200.00	6,182.89	5,744.84	5,332.88	27.59	35.27	-18.30	-2,319.61	-113.09	2,084.39	2,028.43	55.95	37.254		
6,300.00	6,282.58	5,838.93	5,418.76	28.04	35.89	-18.29	-2,358.00	-115.19	2,118.26	2,061.37	56.89	37.232		
6,400.00	6,382.27	5,933.02	5,504.63	28.49	36.51	-18.29	-2,396.38	-117.29	2,152.14	2,094.30	57.84	37.211		
6,500.00	6,481.96	6,027.10	5,590.51	28.94	37.14	-18.29	-2,434.77	-119.39	2,186.01	2,127.23	58.78	37.191		
6,600.00	6,581.66	6,121.19	5,676.39	29.39	37.76	-18.29	-2,473.15	-121.50	2,219.89	2,160.16	59.72	37.171		
6,700.00	6,681.21	6,215.21	5,762.20	29.83	38.38	-54.98	-2,511.50	-123.60	2,253.72	2,193.06	60.67	37.150		
6,800.00	6,778.96	6,307.90	5,846.80	30.28	39.00	-69.69	-2,549.32	-125.67	2,287.09	2,225.48	61.60	37.125		
6,900.00	6,872.51	6,402.99	5,928.13	30.70	39.63	-72.74	-2,585.67	-127.66	2,319.48	2,256.92	62.56	37.076		
7,000.00	6,959.55	6,480.35	6,004.20	31.10	40.14	-73.32	-2,619.67	-129.52	2,350.70	2,287.26	63.43	37.058		
7,100.00	7,037.93	6,555.86	6,073.12	31.48	40.64	-73.08	-2,650.47	-131.21	2,380.73	2,316.39	64.34	37.003		
7,200.00	7,105.74	6,621.68	6,133.20	31.88	41.08	-72.45	-2,677.33	-132.68	2,409.72	2,344.45	65.27	36.919		
7,300.00	7,161.29	6,676.20	6,182.96	32.41	41.44	-71.52	-2,699.57	-133.89	2,437.84	2,371.58	66.27	36.789		
7,400.00	7,203.22	6,718.07	6,221.18	33.13	41.72	-70.30	-2,716.65	-134.83	2,465.24	2,397.89	67.35	36.603		
7,500.00	7,230.50	6,746.26	6,246.91	34.04	41.91	-68.74	-2,728.15	-135.46	2,491.92	2,423.40	68.53	36.365		
7,600.00	7,242.45	6,760.08	6,259.52	35.13	42.00	-66.86	-2,733.79	-135.77	2,517.74	2,447.97	69.77	36.088		
7,700.00	7,242.72	6,762.90	6,262.09	36.39	42.02	-66.29	-2,734.94	-135.83	2,543.63	2,472.57	71.06	35.794		
7,800.00	7,242.33	6,765.09	6,264.09	37.81	42.03	-66.34	-2,735.83	-135.88	2,572.94	2,500.47	72.47	35.505		
7,900.00	7,241.93	6,767.29	6,266.10	39.40	42.05	-66.39	-2,736.73	-135.93	2,605.75	2,531.80	73.95	35.236		
8,000.00	7,241.54	6,769.55	6,268.11	41.13	42.07	-66.44	-2,737.62	-135.98	2,638.56	2,563.61	75.49	34.987		
8,100.00	7,241.15	6,771.81	6,270.12	42.97	42.08	-66.49	-2,738.51	-136.03	2,671.37	2,595.42	77.07	34.757		
8,200.00	7,240.75	6,774.07	6,272.13	44.82	42.09	-66.54	-2,739.40	-136.08	2,704.18	2,627.23	78.69	34.536		
8,300.00	7,240.36	6,776.33	6,274.14	46.67	42.10	-66.59	-2,740.29	-136.13	2,736.99	2,659.04	80.35	34.324		
8,400.00	7,239.97	6,778.59	6,276.15	48.52	42.11	-66.64	-2,741.18	-136.18	2,769.80	2,690.85	82.05	34.121		
8,500.00	7,239.57	6,780.85	6,278.16	50.37	42.12	-66.69	-2,742.07	-136.23	2,802.61	2,722.66	83.79	33.927		
8,600.00	7,239.18	6,783.11	6,280.17	52.22	42.13	-66.74	-2,742.96	-136.28	2,835.42	2,754.47	85.57	33.742		
8,700.00	7,238.79	6,785.37	6,282.18	54.07	42.14	-66.79	-2,743.85	-136.33	2,868.23	2,786.28	87.39	33.566		
8,800.00	7,238.39	6,787.63	6,284.19	55.92	42.15	-66.84	-2,744.74	-136.38	2,901.04	2,818.09	89.25	33.400		
8,900.00	7,237.99	6,789.89	6,286.20	57.77	42.16	-66.89	-2,745.63	-136.43	2,933.85	2,849.90	91.15	33.243		
9,000.00	7,237.60	6,792.15	6,288.21	59.62	42.17	-66.94	-2,746.52	-136.48	2,966.66	2,881.71	93.09	33.095		
9,100.00	7,237.21	6,794.41	6,290.22	61.47	42.18	-66.99	-2,747.41	-136.53	2,999.47	2,913.52	95.07	32.956		
9,200.00	7,236.82	6,796.67	6,292.23	63.32	42.19	-67.04	-2,748.30	-136.58	3,032.28	2,945.33	97.09	32.825		
9,300.00	7,236.43	6,798.93	6,294.24	65.17	42.20	-67.09	-2,749.19	-136.63	3,065.09	2,977.14	99.15	32.702		
9,400.00	7,236.03	6,801.19	6,296.25	67.02	42.21	-67.14	-2,750.08	-136.68	3,097.90	3,008.95	101.25	32.587		
9,500.00	7,235.64	6,803.45	6,298.26	68.87	42.22	-67.19	-2,750.97	-136.73	3,130.71	3,040.76	103.39	32.480		
9,600.00	7,235.25	6,805.71	6,300.27	70.72	42.23	-67.24	-2,751.86	-136.78	3,163.52	3,072.57	105.57	32.381		
9,700.00	7,234.85	6,807.97	6,302.28	72.57	42.24	-67.29	-2,752.75	-136.83	3,196.33	3,104.38	107.79	32.290		
9,800.00	7,234.46	6,810.23	6,304.29	74.42	42.25	-67.34	-2,753.64	-136.88	3,229.14	3,136.19	110.05	32.207		
9,900.00	7,234.07	6,812.49	6,306.30	76.27	42.26	-67.39	-2,754.53	-136.93	3,261.95	3,168.00	112.35	32.132		
10,000.00	7,233.67	6,814.75	6,308.31	78.12	42.27	-67.44	-2,755.42	-136.98	3,294.76	3,200.00	114.69	32.065		
10,100.00	7,233.28	6,817.01	6,310.32	80.00	42.28	-67.49	-2,756.31	-137.03	3,327.57	3,232.00	117.07	32.006		
10,200.00	7,232.89	6,819.27	6,312.33	81.85	42.29	-67.54	-2,757.20	-137.08	3,360.38	3,264.00	119.49	31.954		
10,300.00	7,232.49	6,821.53	6,314.34	83.70	42.30	-67.59	-2,758.09	-137.13	3,393.19	3,296.00	121.95	31.909		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	10,857.54	7,131.07	99.65	101.45	-87.80	-3,151.41	-3,540.83	2,630.82	2,429.80	201.02	13.087		
10,500.00	7,231.71	10,957.54	7,130.53	102.36	104.08	-87.80	-3,152.00	-3,640.83	2,630.63	2,424.26	206.38	12.747		
10,600.00	7,231.32	11,057.54	7,129.99	105.08	106.73	-87.79	-3,152.59	-3,740.83	2,630.44	2,418.70	211.75	12.423		
10,700.00	7,230.92	11,157.54	7,129.45	107.80	109.38	-87.79	-3,153.17	-3,840.82	2,630.26	2,413.12	217.14	12.113		
10,800.00	7,230.53	11,257.54	7,128.91	110.53	112.05	-87.79	-3,153.76	-3,940.82	2,630.07	2,407.53	222.54	11.818		
10,900.00	7,230.14	11,357.54	7,128.37	113.27	114.72	-87.78	-3,154.35	-4,040.82	2,629.88	2,401.92	227.96	11.537		
11,000.00	7,229.74	11,457.54	7,127.83	116.02	117.41	-87.78	-3,154.94	-4,140.81	2,629.69	2,396.30	233.39	11.267		
11,100.00	7,229.35	11,557.54	7,127.29	118.77	120.10	-87.78	-3,155.53	-4,240.81	2,629.50	2,390.66	238.84	11.009		
11,200.00	7,228.96	11,657.54	7,126.75	121.52	122.80	-87.77	-3,156.11	-4,340.81	2,629.31	2,385.01	244.30	10.763		
11,300.00	7,228.56	11,757.54	7,126.20	124.28	125.51	-87.77	-3,156.70	-4,440.80	2,629.13	2,379.36	249.77	10.526		
11,400.00	7,228.17	11,857.54	7,125.66	127.04	128.22	-87.77	-3,157.29	-4,540.80	2,628.94	2,373.69	255.25	10.299		
11,500.00	7,227.78	11,957.54	7,125.12	129.81	130.94	-87.76	-3,157.88	-4,640.79	2,628.75	2,368.01	260.74	10.082		
11,600.00	7,227.38	12,057.54	7,124.58	132.58	133.67	-87.76	-3,158.47	-4,740.79	2,628.56	2,362.32	266.24	9.873		
11,700.00	7,226.99	12,157.54	7,124.04	135.36	136.40	-87.76	-3,159.05	-4,840.79	2,628.37	2,356.62	271.75	9.672		
11,800.00	7,226.60	12,257.54	7,123.50	138.14	139.14	-87.75	-3,159.64	-4,940.78	2,628.18	2,350.92	277.27	9.479		
11,900.00	7,226.20	12,357.54	7,122.96	140.92	141.88	-87.75	-3,160.23	-5,040.78	2,627.99	2,345.21	282.79	9.293		
12,000.00	7,225.81	12,457.54	7,122.42	143.70	144.63	-87.75	-3,160.82	-5,140.78	2,627.81	2,339.48	288.32	9.114		
12,100.00	7,225.42	12,557.54	7,121.88	146.49	147.38	-87.74	-3,161.41	-5,240.77	2,627.62	2,333.76	293.86	8.942		
12,200.00	7,225.02	12,657.54	7,121.33	149.28	150.13	-87.74	-3,161.99	-5,340.77	2,627.43	2,328.02	299.41	8.775		
12,300.00	7,224.63	12,757.54	7,120.79	152.08	152.89	-87.74	-3,162.58	-5,440.77	2,627.24	2,322.28	304.96	8.615		
12,400.00	7,224.24	12,857.53	7,120.25	154.87	155.66	-87.73	-3,163.17	-5,540.76	2,627.05	2,316.54	310.51	8.460		
12,500.00	7,223.84	12,957.53	7,119.71	157.67	158.42	-87.73	-3,163.76	-5,640.76	2,626.87	2,310.79	316.08	8.311		
12,600.00	7,223.45	13,057.53	7,119.17	160.47	161.19	-87.73	-3,164.34	-5,740.76	2,626.68	2,305.03	321.64	8.166		
12,700.00	7,223.06	13,157.53	7,118.63	163.27	163.96	-87.72	-3,164.93	-5,840.75	2,626.49	2,299.27	327.22	8.027		
12,800.00	7,222.66	13,257.53	7,118.09	166.07	166.74	-87.72	-3,165.52	-5,940.75	2,626.30	2,293.51	332.79	7.892		
12,900.00	7,222.27	13,357.53	7,117.55	168.88	169.52	-87.72	-3,166.11	-6,040.75	2,626.11	2,287.74	338.38	7.761		
13,000.00	7,221.88	13,457.53	7,117.01	171.69	172.30	-87.71	-3,166.70	-6,140.74	2,625.92	2,281.96	343.96	7.634		
13,100.00	7,221.48	13,557.53	7,116.46	174.49	175.08	-87.71	-3,167.28	-6,240.74	2,625.74	2,276.18	349.55	7.512		
13,200.00	7,221.09	13,657.53	7,115.92	177.30	177.87	-87.70	-3,167.87	-6,340.74	2,625.55	2,270.40	355.15	7.393		
13,300.00	7,220.70	13,757.53	7,115.38	180.12	180.65	-87.70	-3,168.46	-6,440.73	2,625.36	2,264.61	360.75	7.278		
13,400.00	7,220.30	13,857.53	7,114.84	182.93	183.44	-87.70	-3,169.05	-6,540.73	2,625.17	2,258.82	366.35	7.166		
13,500.00	7,219.91	13,957.53	7,114.30	185.74	186.24	-87.69	-3,169.64	-6,640.72	2,624.98	2,253.03	371.95	7.057		
13,600.00	7,219.52	14,057.53	7,113.76	188.56	189.03	-87.69	-3,170.22	-6,740.72	2,624.79	2,247.24	377.56	6.952		
13,700.00	7,219.12	14,157.53	7,113.22	191.38	191.83	-87.69	-3,170.81	-6,840.72	2,624.61	2,241.44	383.17	6.850		
13,800.00	7,218.73	14,257.53	7,112.68	194.20	194.63	-87.68	-3,171.40	-6,940.71	2,624.42	2,235.63	388.78	6.750		
13,900.00	7,218.34	14,357.53	7,112.14	197.02	197.42	-87.68	-3,171.99	-7,040.71	2,624.23	2,229.83	394.40	6.654		
14,000.00	7,217.94	14,457.53	7,111.60	199.84	200.23	-87.68	-3,172.58	-7,140.71	2,624.04	2,224.02	400.02	6.560		
14,100.00	7,217.55	14,557.53	7,111.05	202.66	203.03	-87.67	-3,173.16	-7,240.70	2,623.85	2,218.21	405.64	6.468		
14,200.00	7,217.16	14,657.53	7,110.51	205.48	205.83	-87.67	-3,173.75	-7,340.70	2,623.67	2,212.40	411.27	6.379		
14,300.00	7,216.76	14,757.53	7,109.97	208.30	208.64	-87.67	-3,174.34	-7,440.70	2,623.48	2,206.59	416.89	6.293		
14,400.00	7,216.37	14,857.53	7,109.43	211.13	211.45	-87.66	-3,174.93	-7,540.69	2,623.29	2,200.77	422.52	6.209		
14,500.00	7,215.98	14,957.53	7,108.89	213.96	214.26	-87.66	-3,175.52	-7,640.69	2,623.10	2,194.95	428.15	6.127		
14,600.00	7,215.58	15,057.53	7,108.35	216.78	217.07	-87.66	-3,176.10	-7,740.69	2,622.91	2,189.13	433.78	6.047		
14,700.00	7,215.19	15,157.53	7,107.81	219.61	219.88	-87.65	-3,176.69	-7,840.68	2,622.73	2,183.31	439.42	5.969		
14,800.00	7,214.80	15,257.53	7,107.27	222.44	222.69	-87.65	-3,177.28	-7,940.68	2,622.54	2,177.48	445.06	5.893		
14,900.00	7,214.40	15,357.53	7,106.73	225.27	225.50	-87.65	-3,177.87	-8,040.68	2,622.35	2,171.65	450.70	5.818		
15,000.00	7,214.01	15,457.53	7,106.18	228.10	228.32	-87.64	-3,178.45	-8,140.67	2,622.16	2,165.82	456.34	5.746		
15,002.44	7,214.00	15,459.96	7,106.17	228.16	228.39	-87.64	-3,178.47	-8,143.11	2,622.16	2,165.68	456.47	5.744 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.53	120.22	1.11	120.22					
100.00	100.00	100.00	100.00	3.28	3.28	0.53	120.22	1.11	120.22	113.65	6.57	18.300		
200.00	200.00	200.00	200.00	3.34	3.34	0.53	120.22	1.11	120.22	113.55	6.67	18.013		
300.00	300.00	300.00	300.00	3.44	3.44	0.53	120.22	1.11	120.22	113.33	6.89	17.449		
400.00	400.00	400.00	400.00	3.60	3.60	0.53	120.22	1.11	120.22	113.02	7.21	16.682		
500.00	500.00	500.00	500.00	3.81	3.81	0.53	120.22	1.11	120.22	112.61	7.61	15.794 CC, ES		
600.00	599.98	599.98	599.98	4.03	4.05	162.60	120.22	1.11	121.89	113.80	8.08	15.083		
700.00	699.84	695.70	695.69	4.29	4.31	163.06	121.77	0.74	128.50	119.90	8.60	14.941		
800.00	799.54	790.65	790.51	4.57	4.59	163.43	126.38	-0.36	140.72	131.54	9.18	15.336		
900.00	899.23	884.74	884.27	4.87	4.89	163.45	133.97	-2.18	156.20	146.41	9.78	15.965		
1,000.00	998.92	980.42	979.35	5.20	5.21	163.23	144.37	-4.67	174.43	164.01	10.42	16.737		
1,100.00	1,098.61	1,078.66	1,076.93	5.54	5.55	163.01	155.47	-7.33	193.09	182.00	11.09	17.406		
1,200.00	1,198.30	1,176.90	1,174.51	5.90	5.91	162.83	166.56	-9.99	211.75	199.96	11.79	17.957		
1,300.00	1,298.00	1,275.15	1,272.08	6.27	6.28	162.68	177.66	-12.65	230.41	217.90	12.51	18.413		
1,400.00	1,397.69	1,373.39	1,369.66	6.66	6.65	162.55	188.75	-15.30	249.08	235.82	13.25	18.791		
1,500.00	1,497.38	1,471.63	1,467.24	7.05	7.04	162.44	199.85	-17.96	267.74	253.73	14.01	19.108		
1,600.00	1,597.07	1,569.87	1,564.81	7.44	7.43	162.34	210.94	-20.62	286.41	271.63	14.78	19.374		
1,700.00	1,696.76	1,668.11	1,662.39	7.85	7.83	162.26	222.03	-23.28	305.08	289.51	15.57	19.600		
1,800.00	1,796.45	1,766.35	1,759.97	8.25	8.23	162.18	233.13	-25.93	323.74	307.38	16.36	19.792		
1,900.00	1,896.15	1,864.59	1,857.54	8.67	8.64	162.12	244.22	-28.59	342.41	325.25	17.16	19.956		
2,000.00	1,995.84	1,962.84	1,955.12	9.08	9.05	162.06	255.32	-31.25	361.08	343.11	17.97	20.097		
2,100.00	2,095.53	2,061.08	2,052.70	9.50	9.46	162.00	266.41	-33.91	379.75	360.96	18.78	20.219		
2,200.00	2,195.22	2,159.32	2,150.27	9.92	9.88	161.95	277.51	-36.56	398.41	378.81	19.60	20.325		
2,300.00	2,294.91	2,257.56	2,247.85	10.35	10.29	161.91	288.60	-39.22	417.08	396.65	20.43	20.417		
2,400.00	2,394.60	2,355.80	2,345.43	10.77	10.71	161.87	299.70	-41.88	435.75	414.49	21.26	20.499		
2,500.00	2,494.30	2,454.04	2,443.00	11.20	11.14	161.83	310.79	-44.54	454.42	432.33	22.09	20.570		
2,600.00	2,593.99	2,552.29	2,540.58	11.63	11.56	161.80	321.89	-47.19	473.09	450.16	22.93	20.633		
2,700.00	2,693.68	2,650.53	2,638.16	12.07	11.99	161.77	332.98	-49.85	491.76	467.99	23.77	20.689		
2,800.00	2,793.37	2,748.77	2,735.73	12.50	12.41	161.74	344.07	-52.51	510.43	485.82	24.61	20.739		
2,900.00	2,893.06	2,847.01	2,833.31	12.93	12.84	161.71	355.17	-55.17	529.10	503.64	25.46	20.783		
3,000.00	2,992.76	2,945.25	2,930.89	13.37	13.27	161.68	366.26	-57.82	547.77	521.46	26.31	20.823		
3,100.00	3,092.45	3,043.49	3,028.46	13.81	13.70	161.66	377.36	-60.48	566.44	539.28	27.16	20.859		
3,200.00	3,192.14	3,141.73	3,126.04	14.25	14.13	161.64	388.45	-63.14	585.11	557.10	28.01	20.891		
3,300.00	3,291.83	3,239.98	3,223.62	14.68	14.57	161.62	399.55	-65.80	603.78	574.92	28.86	20.920		
3,400.00	3,391.52	3,338.22	3,321.19	15.12	15.00	161.60	410.64	-68.45	622.45	592.73	29.72	20.946		
3,500.00	3,491.21	3,436.46	3,418.77	15.56	15.43	161.58	421.74	-71.11	641.12	610.54	30.57	20.970		
3,600.00	3,590.91	3,534.70	3,516.35	16.00	15.87	161.56	432.83	-73.77	659.79	628.36	31.43	20.991		
3,700.00	3,690.60	3,632.94	3,613.93	16.45	16.30	161.54	443.93	-76.43	678.46	646.17	32.29	21.011		
3,800.00	3,790.29	3,731.18	3,711.50	16.89	16.74	161.53	455.02	-79.08	697.13	663.98	33.15	21.029		
3,900.00	3,889.98	3,829.42	3,809.08	17.33	17.17	161.51	466.12	-81.74	715.80	681.79	34.01	21.045		
4,000.00	3,989.67	3,927.67	3,906.66	17.77	17.61	161.50	477.21	-84.40	734.47	699.59	34.87	21.060		
4,100.00	4,089.36	4,025.91	4,004.23	18.22	18.05	161.49	488.30	-87.06	753.14	717.40	35.74	21.074		
4,200.00	4,189.06	4,124.15	4,101.81	18.66	18.48	161.47	499.40	-89.71	771.81	735.21	36.60	21.087		
4,300.00	4,288.75	4,222.39	4,199.39	19.10	18.92	161.46	510.49	-92.37	790.48	753.01	37.47	21.098		
4,400.00	4,388.44	4,320.63	4,296.96	19.55	19.36	161.45	521.59	-95.03	809.15	770.82	38.33	21.109		
4,500.00	4,488.13	4,418.87	4,394.54	19.99	19.80	161.44	532.68	-97.69	827.82	788.62	39.20	21.119		
4,600.00	4,587.82	4,517.11	4,492.12	20.44	20.23	161.43	543.78	-100.34	846.49	806.43	40.06	21.128		
4,700.00	4,687.51	4,615.36	4,589.69	20.89	20.67	161.42	554.87	-103.00	865.16	824.23	40.93	21.136		
4,800.00	4,787.21	4,713.60	4,687.27	21.33	21.11	161.41	565.97	-105.66	883.83	842.03	41.80	21.144		
4,900.00	4,886.90	4,811.84	4,784.85	21.78	21.55	161.40	577.06	-108.32	902.50	859.84	42.67	21.151		
5,000.00	4,986.59	4,910.08	4,882.42	22.22	21.99	161.39	588.16	-110.97	921.17	877.64	43.54	21.158		
5,100.00	5,086.28	5,008.32	4,980.00	22.67	22.43	161.38	599.25	-113.63	939.85	895.44	44.41	21.164		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,185.97	5,106.56	5,077.58	23.12	22.87	161.37	610.34	-116.29	958.52	913.24	45.28	21.170		
5,300.00	5,285.66	5,204.80	5,175.15	23.56	23.31	161.37	621.44	-118.95	977.19	931.04	46.15	21.175		
5,400.00	5,385.36	5,303.05	5,272.73	24.01	23.75	161.36	632.53	-121.61	995.86	948.84	47.02	21.180		
5,500.00	5,485.05	5,401.29	5,370.31	24.46	24.19	161.35	643.63	-124.26	1,014.53	966.64	47.89	21.185		
5,600.00	5,584.74	5,500.47	5,467.88	24.90	24.63	161.34	654.72	-126.92	1,033.20	984.43	48.77	21.187		
5,700.00	5,684.43	5,597.77	5,565.46	25.35	25.07	161.34	665.82	-129.58	1,051.87	1,002.24	49.63	21.193		
5,800.00	5,784.12	5,703.99	5,663.04	25.80	25.55	161.33	676.91	-132.24	1,070.54	1,020.00	50.54	21.182		
5,900.00	5,883.81	5,805.75	5,760.62	26.25	26.00	161.32	688.01	-134.89	1,089.21	1,037.78	51.43	21.179		
6,000.00	5,983.51	5,907.51	5,858.19	26.70	26.46	161.32	699.10	-137.55	1,107.88	1,055.57	52.32	21.176		
6,100.00	6,083.20	6,009.26	5,955.77	27.14	26.92	161.31	710.20	-140.21	1,126.55	1,073.35	53.21	21.173		
6,200.00	6,182.89	6,088.98	6,053.35	27.59	27.28	161.31	721.29	-142.87	1,145.22	1,091.23	54.00	21.209		
6,300.00	6,282.58	6,187.22	6,150.92	28.04	27.72	161.30	732.39	-145.52	1,163.90	1,109.03	54.87	21.212		
6,400.00	6,382.27	6,285.46	6,248.50	28.49	28.16	161.30	743.48	-148.18	1,182.57	1,126.82	55.74	21.214		
6,500.00	6,481.96	6,383.73	6,346.10	28.94	28.60	161.29	754.58	-150.94	1,201.24	1,144.62	56.62	21.216		
6,600.00	6,581.66	6,481.14	6,442.09	29.39	29.04	160.84	765.43	-162.68	1,219.93	1,162.45	57.49	21.221		
6,700.00	6,681.21	6,574.39	6,531.31	29.83	29.45	120.42	775.41	-187.60	1,238.90	1,180.59	58.31	21.248		
6,800.00	6,778.96	6,664.73	6,613.41	30.28	29.85	100.34	784.51	-223.98	1,257.89	1,198.81	59.08	21.290		
6,900.00	6,872.51	6,752.92	6,687.85	30.70	30.24	92.56	792.66	-270.43	1,276.34	1,216.52	59.82	21.335		
7,000.00	6,969.55	6,839.38	6,753.97	31.10	30.65	87.86	799.80	-325.57	1,293.71	1,233.15	60.57	21.361		
7,100.00	7,037.93	6,924.47	6,811.22	31.48	31.12	84.52	805.88	-388.15	1,309.51	1,248.15	61.36	21.341		
7,200.00	7,105.74	7,008.51	6,859.13	31.88	31.67	82.02	810.85	-456.93	1,323.29	1,261.01	62.28	21.248		
7,300.00	7,161.29	7,091.73	6,897.32	32.41	32.32	80.14	814.68	-530.71	1,334.66	1,271.26	63.40	21.051		
7,400.00	7,203.22	7,174.36	6,925.46	33.13	33.09	78.80	817.34	-608.30	1,343.31	1,278.52	64.80	20.730		
7,500.00	7,230.50	7,256.59	6,943.32	34.04	33.96	77.94	818.81	-688.49	1,349.02	1,282.53	66.49	20.288		
7,600.00	7,242.45	7,338.56	6,950.77	35.13	34.92	77.55	819.09	-770.07	1,351.63	1,283.14	68.49	19.736		
7,700.00	7,242.72	7,434.31	6,950.77	36.39	36.19	77.53	818.41	-865.81	1,351.80	1,280.84	70.97	19.049		
7,800.00	7,242.33	7,534.31	6,950.47	37.81	37.66	77.53	817.68	-965.80	1,351.83	1,278.00	73.83	18.311		
7,900.00	7,241.93	7,634.31	6,950.18	39.40	39.28	77.54	816.94	-1,065.80	1,351.85	1,274.86	76.99	17.559		
8,000.00	7,241.54	7,734.31	6,949.88	41.13	41.04	77.54	816.20	-1,165.80	1,351.87	1,271.46	80.42	16.811		
8,100.00	7,241.15	7,834.31	6,949.58	42.97	42.92	77.54	815.46	-1,265.79	1,351.90	1,267.82	84.08	16.079		
8,200.00	7,240.75	7,934.31	6,949.28	44.92	44.90	77.55	814.72	-1,365.79	1,351.92	1,263.97	87.95	15.372		
8,300.00	7,240.36	8,034.31	6,948.98	46.97	46.97	77.55	813.99	-1,465.79	1,351.94	1,259.95	91.99	14.696		
8,400.00	7,239.97	8,134.31	6,948.68	49.10	49.12	77.56	813.25	-1,565.78	1,351.96	1,255.77	96.20	14.054		
8,500.00	7,239.57	8,234.31	6,948.39	51.29	51.34	77.56	812.51	-1,665.78	1,351.99	1,251.45	100.54	13.448		
8,600.00	7,239.18	8,334.31	6,948.09	53.56	53.62	77.57	811.77	-1,765.78	1,352.01	1,247.01	105.00	12.877		
8,700.00	7,238.79	8,434.31	6,947.79	55.87	55.95	77.57	811.04	-1,865.77	1,352.03	1,242.47	109.56	12.341		
8,800.00	7,238.39	8,534.31	6,947.49	58.24	58.33	77.58	810.30	-1,965.77	1,352.06	1,237.84	114.22	11.838		
8,900.00	7,238.00	8,634.31	6,947.19	60.64	60.75	77.58	809.56	-2,065.77	1,352.08	1,233.12	118.96	11.366		
9,000.00	7,237.61	8,734.31	6,946.89	63.09	63.21	77.58	808.82	-2,165.76	1,352.10	1,228.33	123.77	10.924		
9,100.00	7,237.21	8,834.31	6,946.60	65.56	65.70	77.59	808.08	-2,265.76	1,352.13	1,223.48	128.64	10.511		
9,200.00	7,236.82	8,934.31	6,946.30	68.07	68.22	77.59	807.35	-2,365.76	1,352.15	1,218.57	133.58	10.123		
9,300.00	7,236.43	9,034.31	6,946.00	70.61	70.76	77.60	806.61	-2,465.75	1,352.17	1,213.61	138.56	9.759		
9,400.00	7,236.03	9,134.31	6,945.70	73.16	73.33	77.60	805.87	-2,565.75	1,352.19	1,208.60	143.59	9.417		
9,500.00	7,235.64	9,234.31	6,945.40	75.74	75.92	77.61	805.13	-2,665.75	1,352.22	1,203.56	148.66	9.096		
9,600.00	7,235.25	9,334.31	6,945.10	78.34	78.52	77.61	804.40	-2,765.74	1,352.24	1,198.47	153.77	8.794		
9,700.00	7,234.85	9,434.31	6,944.80	80.96	81.15	77.61	803.66	-2,865.74	1,352.26	1,193.35	158.91	8.509		
9,800.00	7,234.46	9,534.31	6,944.51	83.59	83.79	77.62	802.92	-2,965.74	1,352.29	1,188.20	164.08	8.241		
9,900.00	7,234.07	9,634.31	6,944.21	86.24	86.44	77.62	802.18	-3,065.74	1,352.31	1,183.02	169.28	7.988		
10,000.00	7,233.67	9,734.31	6,943.91	88.90	89.11	77.63	801.44	-3,165.73	1,352.33	1,177.82	174.51	7.749		
10,100.00	7,233.28	9,834.31	6,943.61	91.57	91.79	77.63	800.71	-3,265.73	1,352.36	1,172.60	179.76	7.523		
10,200.00	7,232.89	9,934.31	6,943.31	94.25	94.47	77.64	799.97	-3,365.73	1,352.38	1,167.35	185.03	7.309		
10,300.00	7,232.49	10,034.31	6,943.01	96.95	97.17	77.64	799.23	-3,465.72	1,352.40	1,162.09	190.32	7.106		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.10	10,134.31	6,942.72	99.65	99.88	77.64	798.49	-3,565.72	1,352.43	1,156.80	195.62	6.913		
10,500.00	7,231.71	10,234.31	6,942.42	102.36	102.59	77.65	797.76	-3,665.72	1,352.45	1,151.50	200.95	6.730		
10,600.00	7,231.32	10,334.31	6,942.12	105.08	105.32	77.65	797.02	-3,765.71	1,352.47	1,146.19	206.28	6.556		
10,700.00	7,230.92	10,434.31	6,941.82	107.80	108.05	77.66	796.28	-3,865.71	1,352.49	1,140.86	211.64	6.391		
10,800.00	7,230.53	10,534.30	6,941.52	110.53	110.78	77.66	795.54	-3,965.71	1,352.52	1,135.52	217.00	6.233		
10,900.00	7,230.14	10,634.30	6,941.22	113.27	113.52	77.67	794.80	-4,065.70	1,352.54	1,130.16	222.38	6.082		
11,000.00	7,229.74	10,734.30	6,940.93	116.02	116.27	77.67	794.07	-4,165.70	1,352.56	1,124.80	227.77	5.938		
11,100.00	7,229.35	10,834.30	6,940.63	118.77	119.03	77.67	793.33	-4,265.70	1,352.59	1,119.42	233.16	5.801		
11,200.00	7,228.96	10,934.30	6,940.33	121.52	121.78	77.68	792.59	-4,365.69	1,352.61	1,114.04	238.57	5.670		
11,300.00	7,228.56	11,034.30	6,940.03	124.28	124.55	77.68	791.85	-4,465.69	1,352.63	1,108.64	243.99	5.544		
11,400.00	7,228.17	11,134.30	6,939.73	127.04	127.31	77.69	791.12	-4,565.69	1,352.66	1,103.24	249.42	5.423		
11,500.00	7,227.78	11,234.30	6,939.43	129.81	130.08	77.69	790.38	-4,665.68	1,352.68	1,097.83	254.85	5.308		
11,600.00	7,227.38	11,334.30	6,939.14	132.58	132.86	77.70	789.64	-4,765.68	1,352.70	1,092.41	260.29	5.197		
11,700.00	7,226.99	11,434.30	6,938.84	135.36	135.64	77.70	788.90	-4,865.68	1,352.73	1,086.99	265.74	5.090		
11,800.00	7,226.60	11,534.30	6,938.54	138.14	138.42	77.71	788.16	-4,965.67	1,352.75	1,081.56	271.19	4.988		
11,900.00	7,226.20	11,634.30	6,938.24	140.92	141.20	77.71	787.43	-5,065.67	1,352.77	1,076.12	276.66	4.890		
12,000.00	7,225.81	11,734.30	6,937.94	143.70	143.99	77.71	786.69	-5,165.67	1,352.80	1,070.67	282.12	4.795		
12,100.00	7,225.42	11,834.30	6,937.64	146.49	146.78	77.72	785.95	-5,265.66	1,352.82	1,065.22	287.60	4.704		
12,200.00	7,225.02	11,934.30	6,937.35	149.28	149.57	77.72	785.21	-5,365.66	1,352.84	1,059.77	293.07	4.616		
12,300.00	7,224.63	12,034.30	6,937.05	152.08	152.37	77.73	784.48	-5,465.66	1,352.87	1,054.31	298.56	4.531		
12,400.00	7,224.24	12,134.30	6,936.75	154.87	155.16	77.73	783.74	-5,565.65	1,352.89	1,048.84	304.05	4.450		
12,500.00	7,223.84	12,234.30	6,936.45	157.67	157.96	77.74	783.00	-5,665.65	1,352.91	1,043.38	309.54	4.371		
12,600.00	7,223.45	12,334.30	6,936.15	160.47	160.76	77.74	782.26	-5,765.65	1,352.94	1,037.90	315.03	4.295		
12,700.00	7,223.06	12,434.30	6,935.85	163.27	163.57	77.74	781.52	-5,865.64	1,352.96	1,032.42	320.53	4.221		
12,800.00	7,222.66	12,534.30	6,935.56	166.07	166.37	77.75	780.79	-5,965.64	1,352.98	1,026.94	326.04	4.150		
12,900.00	7,222.27	12,634.30	6,935.26	168.88	169.18	77.75	780.05	-6,065.64	1,353.01	1,021.46	331.55	4.081		
13,000.00	7,221.88	12,734.30	6,934.96	171.69	171.99	77.76	779.31	-6,165.64	1,353.03	1,015.97	337.06	4.014		
13,100.00	7,221.48	12,834.30	6,934.66	174.49	174.80	77.76	778.57	-6,265.63	1,353.05	1,010.48	342.57	3.950		
13,200.00	7,221.09	12,934.30	6,934.36	177.30	177.61	77.77	777.84	-6,365.63	1,353.08	1,004.98	348.09	3.887		
13,300.00	7,220.70	13,034.30	6,934.06	180.12	180.42	77.77	777.10	-6,465.63	1,353.10	999.49	353.61	3.826		
13,400.00	7,220.30	13,134.30	6,933.77	182.93	183.24	77.77	776.36	-6,565.62	1,353.12	993.99	359.14	3.768		
13,500.00	7,219.91	13,234.30	6,933.47	185.74	186.06	77.78	775.62	-6,665.62	1,353.15	988.48	364.66	3.711		
13,600.00	7,219.52	13,334.30	6,933.17	188.56	188.87	77.78	774.89	-6,765.62	1,353.17	982.98	370.19	3.655		
13,700.00	7,219.12	13,434.30	6,932.87	191.38	191.69	77.79	774.15	-6,865.61	1,353.19	977.47	375.73	3.602		
13,800.00	7,218.73	13,534.30	6,932.57	194.20	194.51	77.79	773.41	-6,965.61	1,353.22	971.96	381.26	3.549		
13,900.00	7,218.34	13,634.30	6,932.27	197.02	197.33	77.80	772.67	-7,065.61	1,353.24	966.44	386.80	3.499		
14,000.00	7,217.94	13,734.30	6,931.97	199.84	200.15	77.80	771.93	-7,165.60	1,353.26	960.93	392.34	3.449		
14,100.00	7,217.55	13,834.30	6,931.68	202.66	202.98	77.80	771.20	-7,265.60	1,353.29	955.41	397.88	3.401		
14,200.00	7,217.16	13,934.30	6,931.38	205.48	205.80	77.81	770.46	-7,365.60	1,353.31	949.89	403.42	3.355		
14,300.00	7,216.76	14,034.30	6,931.08	208.30	208.63	77.81	769.72	-7,465.59	1,353.33	944.37	408.97	3.309		
14,400.00	7,216.37	14,134.30	6,930.78	211.13	211.45	77.82	768.98	-7,565.59	1,353.36	938.84	414.51	3.265		
14,500.00	7,215.98	14,234.30	6,930.48	213.96	214.28	77.82	768.25	-7,665.59	1,353.38	933.32	420.06	3.222		
14,600.00	7,215.58	14,334.30	6,930.18	216.78	217.11	77.83	767.51	-7,765.58	1,353.40	927.79	425.61	3.180		
14,700.00	7,215.19	14,434.30	6,929.89	219.61	219.93	77.83	766.77	-7,865.58	1,353.43	922.26	431.17	3.139		
14,800.00	7,214.80	14,534.30	6,929.59	222.44	222.76	77.83	766.03	-7,965.58	1,353.45	916.73	436.72	3.099		
14,900.00	7,214.40	14,634.30	6,929.29	225.27	225.59	77.84	765.29	-8,065.57	1,353.47	911.20	442.28	3.060		
15,000.00	7,214.01	14,734.30	6,928.99	228.10	228.42	77.84	764.56	-8,165.57	1,353.50	905.66	447.83	3.022		
15,002.44	7,214.00	14,732.12	6,929.00	228.16	228.36	77.84	764.57	-8,163.39	1,353.51	905.67	447.84	3.022 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.45	140.26	1.11	140.27					
100.00	100.00	100.00	100.00	3.28	3.28	0.45	140.26	1.11	140.27	133.70	6.57	21.351		
200.00	200.00	200.00	200.00	3.34	3.34	0.45	140.26	1.11	140.27	133.59	6.67	21.017		
300.00	300.00	300.00	300.00	3.44	3.44	0.45	140.26	1.11	140.27	133.38	6.89	20.359		
400.00	400.00	400.00	400.00	3.60	3.60	0.45	140.26	1.11	140.27	133.06	7.21	19.463		
500.00	500.00	500.00	500.00	3.81	3.81	0.45	140.26	1.11	140.27	132.65	7.61	18.427 CC, ES		
600.00	599.98	599.98	599.98	4.03	4.05	162.49	140.26	1.11	141.93	133.85	8.08	17.563		
700.00	699.84	695.01	694.99	4.29	4.30	162.93	141.82	0.86	148.56	139.96	8.60	17.277		
800.00	799.54	789.25	789.11	4.57	4.58	163.38	146.43	0.12	160.82	151.65	9.17	17.534		
900.00	899.23	882.64	882.18	4.87	4.88	163.60	154.02	-1.10	176.38	166.60	9.78	18.038		
1,000.00	998.92	975.00	973.93	5.20	5.19	163.61	164.46	-2.78	195.07	184.66	10.41	18.739		
1,100.00	1,098.61	1,066.22	1,064.16	5.54	5.52	163.46	177.63	-4.91	216.85	205.79	11.06	19.612		
1,200.00	1,198.30	1,163.47	1,160.13	5.90	5.87	163.26	193.17	-7.41	240.12	228.39	11.74	20.455		
1,300.00	1,298.00	1,260.72	1,256.10	6.27	6.23	163.10	208.70	-9.91	263.40	250.95	12.45	21.152		
1,400.00	1,397.69	1,357.97	1,352.07	6.66	6.61	162.96	224.23	-12.41	286.68	273.50	13.18	21.744		
1,500.00	1,497.38	1,455.22	1,448.04	7.05	6.99	162.84	239.76	-14.91	309.96	296.03	13.93	22.246		
1,600.00	1,597.07	1,552.47	1,544.01	7.44	7.39	162.74	255.30	-17.42	333.24	318.54	14.70	22.675		
1,700.00	1,696.76	1,649.72	1,639.98	7.85	7.79	162.66	270.83	-19.92	356.52	341.05	15.47	23.042		
1,800.00	1,796.45	1,746.97	1,735.95	8.25	8.19	162.58	286.36	-22.42	379.81	363.55	16.26	23.359		
1,900.00	1,896.15	1,844.22	1,831.92	8.67	8.61	162.51	301.89	-24.92	403.09	386.03	17.06	23.633		
2,000.00	1,995.84	1,941.47	1,927.89	9.08	9.02	162.45	317.43	-27.42	426.37	408.51	17.86	23.873		
2,100.00	2,095.53	2,038.73	2,023.86	9.50	9.44	162.40	332.96	-29.93	449.66	430.98	18.67	24.082		
2,200.00	2,195.22	2,135.98	2,119.83	9.92	9.87	162.35	348.49	-32.43	472.94	453.45	19.49	24.267		
2,300.00	2,294.91	2,233.23	2,215.80	10.35	10.29	162.31	364.02	-34.93	496.22	475.91	20.31	24.430		
2,400.00	2,394.60	2,330.48	2,311.77	10.77	10.72	162.27	379.56	-37.43	519.51	498.37	21.14	24.575		
2,500.00	2,494.30	2,427.73	2,407.74	11.20	11.15	162.23	395.09	-39.93	542.79	520.82	21.97	24.705		
2,600.00	2,593.99	2,524.98	2,503.71	11.63	11.58	162.20	410.62	-42.43	566.08	543.27	22.81	24.821		
2,700.00	2,693.68	2,622.23	2,599.68	12.07	12.02	162.17	426.15	-44.94	589.36	565.72	23.65	24.925		
2,800.00	2,793.37	2,719.48	2,695.65	12.50	12.45	162.14	441.69	-47.44	612.65	588.16	24.49	25.019		
2,900.00	2,893.06	2,816.73	2,791.62	12.93	12.89	162.11	457.22	-49.94	635.94	610.60	25.33	25.103		
3,000.00	2,992.76	2,913.98	2,887.59	13.37	13.33	162.09	472.75	-52.44	659.22	633.04	26.18	25.181		
3,100.00	3,092.45	3,011.23	2,983.56	13.81	13.77	162.06	488.29	-54.94	682.51	655.48	27.03	25.251		
3,200.00	3,192.14	3,108.48	3,079.53	14.25	14.21	162.04	503.82	-57.45	705.79	677.91	27.88	25.315		
3,300.00	3,291.83	3,205.73	3,175.50	14.68	14.65	162.02	519.35	-59.95	729.08	700.35	28.73	25.374		
3,400.00	3,391.52	3,302.98	3,271.47	15.12	15.09	162.00	534.88	-62.45	752.37	722.78	29.59	25.427		
3,500.00	3,491.21	3,400.24	3,367.44	15.56	15.53	161.98	550.42	-64.95	775.65	745.21	30.45	25.477		
3,600.00	3,590.91	3,502.51	3,463.40	16.00	16.00	161.97	565.95	-67.45	798.94	767.61	31.33	25.504		
3,700.00	3,690.60	3,605.26	3,559.37	16.45	16.47	161.95	581.48	-69.95	822.22	790.01	32.21	25.527		
3,800.00	3,790.29	3,708.01	3,655.34	16.89	16.94	161.94	597.01	-72.46	845.51	812.42	33.10	25.548		
3,900.00	3,889.98	3,789.24	3,751.31	17.33	17.31	161.92	612.55	-74.96	868.80	834.91	33.88	25.640		
4,000.00	3,989.67	3,886.49	3,847.28	17.77	17.76	161.91	628.08	-77.46	892.08	857.34	34.75	25.673		
4,100.00	4,089.36	3,983.74	3,943.25	18.22	18.20	161.90	643.61	-79.96	915.37	879.76	35.61	25.705		
4,200.00	4,189.06	4,080.99	4,039.22	18.66	18.65	161.88	659.14	-82.46	938.66	902.18	36.48	25.734		
4,300.00	4,288.75	4,178.24	4,135.19	19.10	19.10	161.87	674.68	-84.97	961.94	924.60	37.34	25.761		
4,400.00	4,388.44	4,275.49	4,231.16	19.55	19.54	161.86	690.21	-87.47	985.23	947.02	38.21	25.787		
4,500.00	4,488.13	4,372.74	4,327.13	19.99	19.99	161.85	705.74	-89.97	1,008.52	969.44	39.07	25.811		
4,600.00	4,587.82	4,469.99	4,423.10	20.44	20.44	161.84	721.28	-92.47	1,031.80	991.86	39.94	25.833		
4,700.00	4,687.51	4,567.24	4,519.07	20.89	20.89	161.83	736.81	-94.97	1,055.09	1,014.28	40.81	25.854		
4,800.00	4,787.21	4,664.49	4,615.04	21.33	21.34	161.82	752.34	-97.47	1,078.38	1,036.70	41.68	25.874		
4,900.00	4,886.90	4,761.74	4,711.01	21.78	21.79	161.81	767.87	-99.98	1,101.66	1,059.12	42.55	25.892		
5,000.00	4,986.59	4,859.00	4,806.98	22.22	22.23	161.81	783.41	-102.48	1,124.95	1,081.53	43.42	25.910		
5,100.00	5,086.28	4,956.25	4,902.95	22.67	22.68	161.80	798.94	-104.98	1,148.24	1,103.95	44.29	25.927		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,053.50	4,998.92	23.12	23.13	161.79	814.47	-107.48	1,171.52	1,126.37	45.16	25.942		
5,300.00	5,285.66	5,150.75	5,094.89	23.56	23.58	161.78	830.00	-109.98	1,194.81	1,148.78	46.03	25.957		
5,400.00	5,385.36	5,248.00	5,190.86	24.01	24.03	161.78	845.54	-112.49	1,218.10	1,171.20	46.90	25.971		
5,500.00	5,485.05	5,345.25	5,286.83	24.46	24.48	161.77	861.07	-114.99	1,241.38	1,193.61	47.77	25.984		
5,600.00	5,584.74	5,442.50	5,382.80	24.90	24.93	161.76	876.60	-117.49	1,264.67	1,216.02	48.65	25.997		
5,700.00	5,684.43	5,539.75	5,478.77	25.35	25.39	161.76	892.13	-119.99	1,287.96	1,238.44	49.52	26.009		
5,800.00	5,784.12	5,637.00	5,574.74	25.80	25.84	161.75	907.67	-122.49	1,311.25	1,260.85	50.39	26.020		
5,900.00	5,883.81	5,734.25	5,670.71	26.25	26.29	161.74	923.20	-124.99	1,334.53	1,283.27	51.27	26.031		
6,000.00	5,983.51	5,831.50	5,766.68	26.70	26.74	161.74	938.73	-127.50	1,357.82	1,305.68	52.14	26.041		
6,100.00	6,083.20	5,928.75	5,862.65	27.14	27.19	161.73	954.26	-130.00	1,381.11	1,328.09	53.02	26.051		
6,200.00	6,182.89	6,026.00	5,958.62	27.59	27.64	161.73	969.80	-132.50	1,404.39	1,350.50	53.89	26.060		
6,300.00	6,282.58	6,123.25	6,054.59	28.04	28.09	161.72	985.33	-135.00	1,427.68	1,372.92	54.76	26.069		
6,400.00	6,382.27	6,220.51	6,150.56	28.49	28.54	161.72	1,000.86	-137.50	1,450.97	1,395.33	55.64	26.078		
6,500.00	6,481.96	6,317.76	6,246.53	28.94	29.00	161.71	1,016.40	-140.01	1,474.25	1,417.74	56.52	26.086		
6,600.00	6,581.66	6,415.01	6,342.49	29.39	29.45	161.71	1,031.93	-142.51	1,497.54	1,440.15	57.39	26.093		
6,700.00	6,681.21	6,512.18	6,438.39	29.83	29.90	122.09	1,047.45	-145.01	1,520.83	1,462.56	58.27	26.101		
6,800.00	6,778.96	6,608.97	6,533.90	30.28	30.35	103.13	1,062.90	-147.56	1,543.95	1,484.82	59.14	26.108		
6,900.00	6,872.51	6,718.85	6,641.44	30.70	30.86	96.68	1,079.94	-161.29	1,566.25	1,506.12	60.13	26.049		
7,000.00	6,959.55	6,834.40	6,750.35	31.10	31.38	93.20	1,096.50	-195.67	1,586.85	1,525.69	61.17	25.943		
7,100.00	7,037.93	6,955.90	6,856.36	31.48	31.89	90.95	1,111.82	-252.60	1,605.13	1,542.87	62.27	25.778		
7,200.00	7,105.74	7,083.12	6,953.95	31.88	32.43	89.35	1,124.98	-332.83	1,620.49	1,557.00	63.49	25.522		
7,300.00	7,161.29	7,215.21	7,036.63	32.41	33.11	88.19	1,134.96	-435.05	1,632.39	1,567.43	64.96	25.129		
7,400.00	7,203.22	7,350.58	7,098.02	33.13	34.08	87.34	1,140.88	-555.26	1,640.38	1,573.59	66.80	24.558		
7,500.00	7,230.50	7,487.01	7,133.21	34.04	35.40	86.74	1,142.14	-686.80	1,644.21	1,575.12	69.09	23.799		
7,600.00	7,242.45	7,613.94	7,140.90	35.13	36.86	86.41	1,139.10	-813.29	1,643.84	1,572.17	71.67	22.938		
7,700.00	7,242.72	7,713.90	7,140.47	36.39	38.19	86.43	1,135.64	-913.18	1,641.26	1,567.00	74.26	22.101		
7,800.00	7,242.33	7,813.86	7,140.03	37.81	39.67	86.43	1,132.19	-1,013.08	1,638.59	1,561.39	77.19	21.227		
7,900.00	7,241.93	7,913.82	7,139.60	39.40	41.30	86.42	1,128.73	-1,112.99	1,635.92	1,555.49	80.42	20.342		
8,000.00	7,241.54	8,013.79	7,139.17	41.13	43.05	86.41	1,125.27	-1,212.89	1,633.25	1,549.33	83.91	19.463		
8,100.00	7,241.15	8,113.75	7,138.73	42.97	44.92	86.40	1,121.81	-1,312.79	1,630.58	1,542.94	87.64	18.606		
8,200.00	7,240.75	8,213.72	7,138.30	44.92	46.88	86.40	1,118.35	-1,412.70	1,627.90	1,536.34	91.57	17.779		
8,300.00	7,240.36	8,313.68	7,137.87	46.97	48.94	86.39	1,114.89	-1,512.60	1,625.23	1,529.56	95.67	16.988		
8,400.00	7,239.97	8,413.64	7,137.43	49.10	51.06	86.38	1,111.43	-1,612.50	1,622.56	1,522.63	99.93	16.237		
8,500.00	7,239.57	8,513.61	7,137.00	51.29	53.26	86.37	1,107.97	-1,712.41	1,619.89	1,515.56	104.33	15.527		
8,600.00	7,239.18	8,613.57	7,136.56	53.56	55.52	86.37	1,104.51	-1,812.31	1,617.22	1,508.37	108.85	14.858		
8,700.00	7,238.79	8,713.54	7,136.13	55.87	57.82	86.36	1,101.05	-1,912.21	1,614.55	1,501.08	113.47	14.228		
8,800.00	7,238.39	8,813.50	7,135.70	58.24	60.18	86.35	1,097.59	-2,012.12	1,611.88	1,493.69	118.19	13.638		
8,900.00	7,238.00	8,913.46	7,135.26	60.64	62.57	86.34	1,094.14	-2,112.02	1,609.21	1,486.22	122.99	13.084		
9,000.00	7,237.61	9,013.43	7,134.83	63.09	65.00	86.34	1,090.68	-2,211.92	1,606.54	1,478.67	127.87	12.564		
9,100.00	7,237.21	9,113.39	7,134.40	65.56	67.47	86.33	1,087.22	-2,311.83	1,603.87	1,471.06	132.81	12.077		
9,200.00	7,236.82	9,213.36	7,133.96	68.07	69.96	86.32	1,083.76	-2,411.73	1,601.20	1,463.40	137.80	11.619		
9,300.00	7,236.43	9,313.32	7,133.53	70.61	72.48	86.31	1,080.30	-2,511.63	1,598.53	1,455.67	142.85	11.190		
9,400.00	7,236.03	9,413.29	7,133.10	73.16	75.02	86.31	1,076.84	-2,611.54	1,595.86	1,447.91	147.95	10.786		
9,500.00	7,235.64	9,513.25	7,132.66	75.74	77.59	86.30	1,073.38	-2,711.44	1,593.19	1,440.10	153.09	10.407		
9,600.00	7,235.25	9,613.21	7,132.23	78.34	80.17	86.29	1,069.92	-2,811.34	1,590.52	1,432.25	158.27	10.050		
9,700.00	7,234.85	9,713.18	7,131.79	80.96	82.77	86.28	1,066.46	-2,911.25	1,587.85	1,424.37	163.48	9.713		
9,800.00	7,234.46	9,813.14	7,131.36	83.59	85.39	86.28	1,063.00	-3,011.15	1,585.18	1,416.46	168.72	9.395		
9,900.00	7,234.07	9,913.11	7,130.93	86.24	88.02	86.27	1,059.54	-3,111.05	1,582.51	1,408.52	173.99	9.095		
10,000.00	7,233.67	10,013.07	7,130.49	88.90	90.66	86.26	1,056.09	-3,210.96	1,579.84	1,400.55	179.29	8.812		
10,100.00	7,233.28	10,113.03	7,130.06	91.57	93.32	86.25	1,052.63	-3,310.86	1,577.17	1,392.56	184.61	8.543		
10,200.00	7,232.89	10,213.00	7,129.63	94.25	95.98	86.24	1,049.17	-3,410.76	1,574.50	1,384.55	189.95	8.289		
10,300.00	7,232.49	10,312.96	7,129.19	96.95	98.66	86.24	1,045.71	-3,510.67	1,571.83	1,376.52	195.31	8.048		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.10	10,412.93	7,128.76	99.65	101.34	86.23	1,042.25	-3,610.57	1,569.16	1,368.47	200.69	7.819		
10,500.00	7,231.71	10,512.89	7,128.33	102.36	104.04	86.22	1,038.79	-3,710.47	1,566.49	1,360.40	206.09	7.601		
10,600.00	7,231.32	10,612.85	7,127.89	105.08	106.74	86.21	1,035.33	-3,810.38	1,563.82	1,352.32	211.50	7.394		
10,700.00	7,230.92	10,712.82	7,127.46	107.80	109.45	86.20	1,031.87	-3,910.28	1,561.15	1,344.22	216.92	7.197		
10,800.00	7,230.53	10,812.78	7,127.03	110.53	112.17	86.20	1,028.41	-4,010.18	1,558.48	1,336.11	222.36	7.009		
10,900.00	7,230.14	10,912.75	7,126.59	113.27	114.89	86.19	1,024.95	-4,110.09	1,555.81	1,327.99	227.81	6.829		
11,000.00	7,229.74	11,012.71	7,126.16	116.02	117.62	86.18	1,021.49	-4,209.99	1,553.14	1,319.86	233.28	6.658		
11,100.00	7,229.35	11,112.68	7,125.72	118.77	120.36	86.17	1,018.04	-4,309.89	1,550.47	1,311.71	238.75	6.494		
11,200.00	7,228.96	11,212.64	7,125.29	121.52	123.10	86.16	1,014.58	-4,409.80	1,547.80	1,303.56	244.24	6.337		
11,300.00	7,228.56	11,312.60	7,124.86	124.28	125.84	86.16	1,011.12	-4,509.70	1,545.13	1,295.40	249.73	6.187		
11,400.00	7,228.17	11,412.57	7,124.42	127.04	128.59	86.15	1,007.66	-4,609.60	1,542.46	1,287.23	255.23	6.043		
11,500.00	7,227.78	11,512.53	7,123.99	129.81	131.34	86.14	1,004.20	-4,709.51	1,539.79	1,279.05	260.74	5.905		
11,600.00	7,227.38	11,612.50	7,123.56	132.58	134.10	86.13	1,000.74	-4,809.41	1,537.12	1,270.86	266.26	5.773		
11,700.00	7,226.99	11,712.46	7,123.12	135.36	136.86	86.12	997.28	-4,909.31	1,534.45	1,262.67	271.78	5.646		
11,800.00	7,226.60	11,812.42	7,122.69	138.14	139.62	86.12	993.82	-5,009.22	1,531.78	1,254.47	277.31	5.524		
11,900.00	7,226.20	11,912.39	7,122.26	140.92	142.39	86.11	990.36	-5,109.12	1,529.11	1,246.26	282.85	5.406		
12,000.00	7,225.81	12,012.35	7,121.82	143.70	145.16	86.10	986.90	-5,209.02	1,526.44	1,238.04	288.39	5.293		
12,100.00	7,225.42	12,112.32	7,121.39	146.49	147.94	86.09	983.44	-5,308.93	1,523.77	1,229.83	293.94	5.184		
12,200.00	7,225.02	12,212.28	7,120.95	149.28	150.71	86.08	979.98	-5,408.83	1,521.10	1,221.60	299.50	5.079		
12,300.00	7,224.63	12,312.24	7,120.52	152.08	153.49	86.07	976.53	-5,508.73	1,518.43	1,213.37	305.06	4.978		
12,400.00	7,224.24	12,412.21	7,120.09	154.87	156.27	86.06	973.07	-5,608.63	1,515.76	1,205.14	310.62	4.880		
12,500.00	7,223.84	12,512.17	7,119.65	157.67	159.06	86.06	969.61	-5,708.54	1,513.09	1,196.90	316.19	4.785		
12,600.00	7,223.45	12,612.14	7,119.22	160.47	161.84	86.05	966.15	-5,808.44	1,510.42	1,188.66	321.76	4.694		
12,700.00	7,223.06	12,712.10	7,118.79	163.27	164.63	86.04	962.69	-5,908.34	1,507.75	1,180.42	327.34	4.606		
12,800.00	7,222.66	12,812.07	7,118.35	166.07	167.42	86.03	959.23	-6,008.25	1,505.08	1,172.17	332.92	4.521		
12,900.00	7,222.27	12,912.03	7,117.92	168.88	170.21	86.02	955.77	-6,108.15	1,502.42	1,163.91	338.50	4.438		
13,000.00	7,221.88	13,011.99	7,117.49	171.69	173.01	86.01	952.31	-6,208.05	1,499.75	1,155.66	344.09	4.359		
13,100.00	7,221.48	13,111.96	7,117.05	174.49	175.80	86.00	948.85	-6,307.96	1,497.08	1,147.40	349.68	4.281		
13,200.00	7,221.09	13,211.92	7,116.62	177.30	178.60	86.00	945.39	-6,407.86	1,494.41	1,139.13	355.27	4.206		
13,300.00	7,220.70	13,311.89	7,116.18	180.12	181.40	85.99	941.93	-6,507.76	1,491.74	1,130.87	360.87	4.134		
13,400.00	7,220.30	13,411.85	7,115.75	182.93	184.20	85.98	938.48	-6,607.67	1,489.07	1,122.60	366.47	4.063		
13,500.00	7,219.91	13,511.81	7,115.32	185.74	187.00	85.97	935.02	-6,707.57	1,486.40	1,114.33	372.07	3.995		
13,600.00	7,219.52	13,611.78	7,114.88	188.56	189.80	85.96	931.56	-6,807.47	1,483.73	1,106.05	377.68	3.929		
13,700.00	7,219.12	13,711.74	7,114.45	191.38	192.61	85.95	928.10	-6,907.38	1,481.06	1,097.78	383.28	3.864		
13,800.00	7,218.73	13,811.71	7,114.02	194.20	195.41	85.94	924.64	-7,007.28	1,478.39	1,089.50	388.89	3.802		
13,900.00	7,218.34	13,911.67	7,113.58	197.02	198.22	85.93	921.18	-7,107.18	1,475.72	1,081.22	394.50	3.741		
14,000.00	7,217.94	14,011.63	7,113.15	199.84	201.03	85.93	917.72	-7,207.09	1,473.06	1,072.94	400.12	3.682		
14,100.00	7,217.55	14,111.60	7,112.72	202.66	203.84	85.92	914.26	-7,306.99	1,470.39	1,064.65	405.73	3.624		
14,200.00	7,217.16	14,211.56	7,112.28	205.48	206.65	85.91	910.80	-7,406.89	1,467.72	1,056.37	411.35	3.568		
14,300.00	7,216.76	14,311.53	7,111.85	208.30	209.46	85.90	907.34	-7,506.80	1,465.05	1,048.08	416.97	3.514		
14,400.00	7,216.37	14,411.49	7,111.41	211.13	212.27	85.89	903.88	-7,606.70	1,462.38	1,039.79	422.59	3.461		
14,500.00	7,215.98	14,511.46	7,110.98	213.96	215.08	85.88	900.43	-7,706.60	1,459.71	1,031.50	428.21	3.409		
14,600.00	7,215.58	14,611.42	7,110.55	216.78	217.90	85.87	896.97	-7,806.51	1,457.04	1,023.21	433.84	3.359		
14,700.00	7,215.19	14,711.38	7,110.11	219.61	220.71	85.86	893.51	-7,906.41	1,454.37	1,014.91	439.46	3.309		
14,800.00	7,214.80	14,811.35	7,109.68	222.44	223.53	85.85	890.05	-8,006.31	1,451.71	1,006.62	445.09	3.262		
14,900.00	7,214.40	14,911.31	7,109.25	225.27	226.34	85.84	886.59	-8,106.22	1,449.04	998.32	450.72	3.215		
14,996.50	7,214.02	14,969.16	7,109.00	228.00	227.97	85.84	884.59	-8,164.03	1,446.98	991.86	455.12	3.179		
15,000.00	7,214.01	14,969.16	7,109.00	228.10	227.97	85.84	884.59	-8,164.03	1,446.98	991.77	455.21	3.179		
15,002.44	7,214.00	14,969.16	7,109.00	228.16	227.97	85.84	884.59	-8,164.03	1,446.99	991.72	455.27	3.178 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.80	20.04	0.28	20.04					
100.00	100.00	100.00	100.00	3.28	3.28	0.80	20.04	0.28	20.04	13.47	6.57	3.051		
200.00	200.00	200.00	200.00	3.34	3.34	0.80	20.04	0.28	20.04	13.37	6.67	3.003		
300.00	300.00	300.00	300.00	3.44	3.44	0.80	20.04	0.28	20.04	13.15	6.89	2.909		
400.00	400.00	400.00	400.00	3.60	3.60	0.80	20.04	0.28	20.04	12.84	7.21	2.781		
500.00	500.00	500.52	500.50	3.81	3.80	-2.49	18.66	-0.81	18.68	11.07	7.61	2.455		
588.28	588.27	588.84	588.75	4.01	4.00	153.38	15.90	-2.98	17.39	9.38	8.01	2.172 CC		
600.00	599.98	600.55	600.45	4.03	4.02	152.83	15.53	-3.27	17.41	9.35	8.06	2.160		
700.00	699.84	700.53	700.35	4.29	4.28	151.17	12.38	-5.75	19.35	10.78	8.57	2.257		
800.00	799.54	800.44	800.18	4.57	4.57	152.89	9.23	-8.23	23.50	14.36	9.14	2.572		
900.00	899.23	900.35	900.01	4.87	4.88	154.20	6.07	-10.71	27.77	18.02	9.75	2.848		
1,000.00	998.92	1,000.25	999.83	5.20	5.21	155.17	2.92	-13.19	32.05	21.64	10.40	3.080		
1,100.00	1,098.61	1,100.16	1,099.66	5.54	5.55	155.90	-0.23	-15.67	36.33	25.24	11.09	3.276		
1,200.00	1,198.30	1,200.07	1,199.49	5.90	5.91	156.48	-3.38	-18.15	40.62	28.82	11.80	3.442		
1,300.00	1,298.00	1,300.02	1,299.31	6.27	6.28	156.95	-6.53	-20.63	44.91	32.38	12.53	3.584		
1,400.00	1,397.69	1,400.12	1,399.14	6.66	6.66	157.34	-9.68	-23.11	49.21	35.92	13.29	3.704		
1,500.00	1,497.38	1,500.21	1,498.97	7.05	7.04	157.66	-12.83	-25.59	53.50	39.45	14.05	3.807		
1,600.00	1,597.07	1,600.30	1,598.79	7.44	7.44	157.94	-15.98	-28.07	57.80	42.97	14.83	3.896		
1,700.00	1,696.76	1,700.39	1,698.62	7.85	7.83	158.18	-19.13	-30.55	62.10	46.47	15.63	3.974		
1,800.00	1,796.45	1,800.49	1,798.45	8.25	8.24	158.39	-22.28	-33.03	66.40	49.97	16.43	4.042		
1,900.00	1,896.15	1,900.58	1,898.27	8.67	8.64	158.57	-25.43	-35.51	70.70	53.46	17.24	4.102		
2,000.00	1,995.84	2,000.67	1,998.10	9.08	9.05	158.73	-28.59	-37.99	75.00	56.95	18.05	4.154		
2,100.00	2,095.53	2,100.77	2,097.93	9.50	9.47	158.87	-31.74	-40.47	79.31	60.43	18.88	4.201		
2,200.00	2,195.22	2,200.86	2,197.75	9.92	9.88	159.00	-34.89	-42.95	83.61	63.90	19.71	4.243		
2,300.00	2,294.91	2,300.95	2,297.58	10.35	10.30	159.12	-38.04	-45.43	87.91	67.37	20.54	4.280		
2,400.00	2,394.60	2,401.04	2,397.41	10.77	10.72	159.23	-41.19	-47.90	92.22	70.84	21.38	4.314		
2,500.00	2,494.30	2,501.14	2,497.23	11.20	11.14	159.32	-44.34	-50.38	96.52	74.30	22.22	4.344		
2,600.00	2,593.99	2,601.23	2,597.06	11.63	11.57	159.41	-47.49	-52.86	100.82	77.76	23.06	4.372		
2,700.00	2,693.68	2,701.32	2,696.89	12.07	11.99	159.49	-50.64	-55.34	105.13	81.22	23.91	4.397		
2,800.00	2,793.37	2,801.42	2,796.71	12.50	12.42	159.56	-53.79	-57.82	109.43	84.67	24.76	4.420		
2,900.00	2,893.06	2,901.51	2,896.54	12.93	12.84	159.63	-56.94	-60.30	113.74	88.12	25.61	4.441		
3,000.00	2,992.76	3,001.60	2,996.37	13.37	13.27	159.70	-60.09	-62.78	118.04	91.57	26.47	4.460		
3,100.00	3,092.45	3,101.69	3,096.19	13.81	13.70	159.76	-63.24	-65.26	122.35	95.02	27.32	4.478		
3,200.00	3,192.14	3,201.79	3,196.02	14.25	14.13	159.81	-66.40	-67.74	126.65	98.47	28.18	4.494		
3,300.00	3,291.83	3,301.88	3,295.85	14.68	14.56	159.86	-69.55	-70.22	130.96	101.91	29.04	4.509		
3,400.00	3,391.52	3,401.97	3,395.67	15.12	15.00	159.91	-72.70	-72.70	135.26	105.36	29.90	4.523		
3,500.00	3,491.21	3,502.06	3,495.50	15.56	15.43	159.96	-75.85	-75.18	139.57	108.80	30.77	4.536		
3,600.00	3,590.91	3,602.16	3,595.33	16.00	15.86	160.00	-79.00	-77.66	143.87	112.24	31.63	4.548		
3,700.00	3,690.60	3,702.25	3,695.15	16.45	16.29	160.04	-82.15	-80.14	148.18	115.68	32.50	4.560		
3,800.00	3,790.29	3,802.34	3,794.98	16.89	16.73	160.08	-85.30	-82.62	152.48	119.12	33.36	4.570		
3,900.00	3,889.98	3,902.44	3,894.81	17.33	17.16	160.11	-88.45	-85.10	156.79	122.56	34.23	4.580		
4,000.00	3,989.67	4,002.53	3,994.64	17.77	17.60	160.15	-91.60	-87.58	161.09	126.00	35.10	4.590		
4,100.00	4,089.36	4,102.62	4,094.46	18.22	18.03	160.18	-94.75	-90.06	165.40	129.43	35.97	4.599		
4,200.00	4,189.06	4,202.71	4,194.29	18.66	18.47	160.21	-97.90	-92.54	169.71	132.87	36.84	4.607		
4,300.00	4,288.75	4,302.81	4,294.12	19.10	18.91	160.24	-101.06	-95.01	174.01	136.30	37.71	4.615		
4,400.00	4,388.44	4,402.90	4,393.94	19.55	19.34	160.27	-104.21	-97.49	178.32	139.74	38.58	4.622		
4,500.00	4,488.13	4,502.99	4,493.77	19.99	19.78	160.29	-107.36	-99.97	182.62	143.17	39.45	4.629		
4,600.00	4,587.82	4,603.09	4,593.60	20.44	20.22	160.32	-110.51	-102.45	186.93	146.61	40.32	4.636		
4,700.00	4,687.51	4,703.18	4,693.42	20.89	20.65	160.34	-113.66	-104.93	191.23	150.04	41.20	4.642		
4,800.00	4,787.21	4,803.27	4,793.25	21.33	21.09	160.37	-116.81	-107.41	195.54	153.47	42.07	4.648		
4,900.00	4,886.90	4,903.36	4,893.08	21.78	21.53	160.39	-119.96	-109.89	199.85	156.90	42.94	4.654		
5,000.00	4,986.59	5,003.46	4,992.90	22.22	21.97	160.41	-123.11	-112.37	204.15	160.33	43.82	4.659		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	
5,100.00	5,086.28	5,103.55	5,092.73	22.67	22.41	160.43	-126.26	-114.85	208.46	163.77	44.69	4.664	
5,200.00	5,185.97	5,203.64	5,192.56	23.12	22.84	160.45	-129.41	-117.33	212.76	167.20	45.57	4.669	
5,300.00	5,285.66	5,303.73	5,292.38	23.56	23.28	160.47	-132.56	-119.81	217.07	170.63	46.44	4.674	
5,400.00	5,385.36	5,403.83	5,392.21	24.01	23.72	160.48	-135.71	-122.29	221.38	174.06	47.32	4.678	
5,500.00	5,485.05	5,503.92	5,492.04	24.46	24.16	160.50	-138.87	-124.77	225.68	177.49	48.20	4.683	
5,600.00	5,584.74	5,604.01	5,591.86	24.90	24.60	160.52	-142.02	-127.25	229.99	180.92	49.07	4.687	
5,700.00	5,684.43	5,704.11	5,691.69	25.35	25.04	160.53	-145.17	-129.73	234.30	184.35	49.95	4.691	
5,800.00	5,784.12	5,804.20	5,791.52	25.80	25.48	160.55	-148.32	-132.21	238.60	187.77	50.83	4.694	
5,900.00	5,883.81	5,904.29	5,891.34	26.25	25.92	160.56	-151.47	-134.69	242.91	191.20	51.71	4.698	
6,000.00	5,983.51	6,004.38	5,991.17	26.70	26.36	160.58	-154.62	-137.17	247.21	194.63	52.58	4.701	
6,100.00	6,083.20	6,104.48	6,091.00	27.14	26.80	160.59	-157.77	-139.65	251.52	198.06	53.46	4.705	
6,200.00	6,182.89	6,204.57	6,190.82	27.59	27.24	160.60	-160.92	-142.13	255.83	201.49	54.34	4.708	
6,300.00	6,282.58	6,304.66	6,290.65	28.04	27.68	160.62	-164.07	-144.60	260.13	204.91	55.22	4.711	
6,400.00	6,382.27	6,395.24	6,390.48	28.49	28.08	160.63	-167.22	-147.08	264.44	208.38	56.06	4.717	
6,500.00	6,481.96	6,494.75	6,489.80	28.94	28.52	160.63	-170.37	-151.46	268.78	211.85	56.93	4.721	
6,600.00	6,581.66	6,591.52	6,584.90	29.39	28.94	157.15	-173.46	-168.61	273.84	216.05	57.79	4.738	
6,700.00	6,681.21	6,682.73	6,671.18	29.83	29.33	113.24	-176.35	-197.79	281.52	222.99	58.52	4.810	
6,800.00	6,778.96	6,770.40	6,749.38	30.28	29.70	90.40	-179.05	-237.19	291.49	232.52	58.97	4.943	
6,900.00	6,872.51	6,855.43	6,819.37	30.70	30.06	80.34	-181.54	-285.31	302.75	243.71	59.04	5.128	
7,000.00	6,959.55	6,938.29	6,880.81	31.10	30.44	73.84	-183.81	-340.77	314.43	255.68	58.75	5.352	
7,100.00	7,037.93	7,019.39	6,933.48	31.48	30.87	69.11	-185.84	-402.33	325.73	267.53	58.20	5.597	
7,200.00	7,105.74	7,100.00	6,977.66	31.88	31.38	65.56	-187.64	-469.66	336.02	278.39	57.63	5.831	
7,300.00	7,161.29	7,177.68	7,011.87	32.41	31.98	62.96	-189.14	-539.33	344.75	287.64	57.11	6.037	
7,400.00	7,203.22	7,255.48	7,037.38	33.13	32.68	61.13	-190.39	-612.77	351.53	294.54	56.99	6.168	
7,500.00	7,230.50	7,332.73	7,053.66	34.04	33.49	60.00	-191.37	-688.23	356.08	298.66	57.42	6.201	
7,600.00	7,242.45	7,409.67	7,060.69	35.13	34.39	59.50	-192.06	-764.80	358.21	299.70	58.50	6.123	
7,700.00	7,242.72	7,502.88	7,060.69	36.39	35.60	59.48	-192.63	-858.00	358.49	297.90	60.58	5.917	
7,800.00	7,242.33	7,602.88	7,060.26	37.81	37.07	59.49	-193.23	-958.00	358.67	295.50	63.17	5.678	
7,900.00	7,241.93	7,702.88	7,059.82	39.40	38.69	59.50	-193.83	-1,057.99	358.84	292.81	66.03	5.434	
8,000.00	7,241.54	7,802.88	7,059.39	41.13	40.46	59.51	-194.43	-1,157.99	359.02	289.87	69.15	5.192	
8,100.00	7,241.15	7,902.88	7,058.95	42.97	42.34	59.52	-195.02	-1,257.99	359.20	286.72	72.48	4.956	
8,200.00	7,240.75	8,002.88	7,058.52	44.92	44.33	59.53	-195.62	-1,357.98	359.38	283.38	76.00	4.729	
8,300.00	7,240.36	8,102.88	7,058.09	46.97	46.41	59.54	-196.22	-1,457.98	359.56	279.88	79.68	4.512	
8,400.00	7,239.97	8,202.88	7,057.65	49.10	48.57	59.55	-196.82	-1,557.98	359.74	276.23	83.51	4.308	
8,500.00	7,239.57	8,302.88	7,057.22	51.29	50.79	59.56	-197.42	-1,657.98	359.92	272.46	87.46	4.115	
8,600.00	7,239.18	8,402.87	7,056.78	53.56	53.08	59.57	-198.02	-1,757.97	360.10	268.58	91.51	3.935	
8,700.00	7,238.79	8,502.87	7,056.35	55.87	55.42	59.58	-198.62	-1,857.97	360.27	264.61	95.66	3.766	
8,800.00	7,238.39	8,602.87	7,055.92	58.24	57.81	59.58	-199.22	-1,957.97	360.45	260.56	99.90	3.608	
8,900.00	7,238.00	8,702.87	7,055.48	60.64	60.24	59.59	-199.81	-2,057.96	360.63	256.43	104.20	3.461	
9,000.00	7,237.61	8,802.87	7,055.05	63.09	62.71	59.60	-200.41	-2,157.96	360.81	252.24	108.57	3.323	
9,100.00	7,237.21	8,902.87	7,054.61	65.56	65.20	59.61	-201.01	-2,257.96	360.99	247.99	113.00	3.195	
9,200.00	7,236.82	9,002.87	7,054.18	68.07	67.73	59.62	-201.61	-2,357.95	361.17	243.69	117.47	3.074	
9,300.00	7,236.43	9,102.87	7,053.75	70.61	70.28	59.63	-202.21	-2,457.95	361.35	239.35	122.00	2.962	
9,400.00	7,236.03	9,202.87	7,053.31	73.16	72.86	59.64	-202.81	-2,557.95	361.53	234.97	126.56	2.857	
9,500.00	7,235.64	9,302.87	7,052.88	75.74	75.45	59.65	-203.41	-2,657.95	361.70	230.55	131.16	2.758	
9,600.00	7,235.25	9,402.87	7,052.44	78.34	78.06	59.66	-204.01	-2,757.94	361.88	226.10	135.79	2.665	
9,700.00	7,234.85	9,502.87	7,052.01	80.96	80.69	59.67	-204.60	-2,857.94	362.06	221.62	140.45	2.578	
9,800.00	7,234.46	9,602.87	7,051.58	83.59	83.34	59.68	-205.20	-2,957.94	362.24	217.11	145.13	2.496	
9,900.00	7,234.07	9,702.87	7,051.14	86.24	86.00	59.69	-205.80	-3,057.93	362.42	212.58	149.84	2.419	
10,000.00	7,233.67	9,802.87	7,050.71	88.90	88.67	59.69	-206.40	-3,157.93	362.60	208.02	154.57	2.346	
10,100.00	7,233.28	9,902.87	7,050.27	91.57	91.35	59.70	-207.00	-3,257.93	362.78	203.45	159.33	2.277	
10,200.00	7,232.89	10,002.87	7,049.84	94.25	94.05	59.71	-207.60	-3,357.93	362.96	198.86	164.10	2.212	

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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		
10,300.00	7,232.49	10,102.87	7,049.41	96.95	96.75	59.72	-208.20	-3,457.92	363.14	194.25	168.89	2.150		
10,400.00	7,232.10	10,202.87	7,048.97	99.65	99.46	59.73	-208.80	-3,557.92	363.31	189.62	173.69	2.092		
10,500.00	7,231.71	10,302.87	7,048.54	102.36	102.18	59.74	-209.39	-3,657.92	363.49	184.98	178.51	2.036		
10,600.00	7,231.32	10,402.87	7,048.10	105.08	104.91	59.75	-209.99	-3,757.91	363.67	180.33	183.34	1.984		
10,700.00	7,230.92	10,502.87	7,047.67	107.80	107.64	59.76	-210.59	-3,857.91	363.85	175.67	188.19	1.933		
10,800.00	7,230.53	10,602.87	7,047.24	110.53	110.38	59.77	-211.19	-3,957.91	364.03	170.99	193.04	1.886		
10,900.00	7,230.14	10,702.87	7,046.80	113.27	113.12	59.78	-211.79	-4,057.91	364.21	166.30	197.91	1.840		
11,000.00	7,229.74	10,802.87	7,046.37	116.02	115.88	59.78	-212.39	-4,157.90	364.39	161.60	202.79	1.797		
11,100.00	7,229.35	10,902.87	7,045.93	118.77	118.63	59.79	-212.99	-4,257.90	364.57	156.90	207.67	1.756		
11,200.00	7,228.96	11,002.87	7,045.50	121.52	121.39	59.80	-213.59	-4,357.90	364.75	152.18	212.57	1.716		
11,300.00	7,228.56	11,102.87	7,045.07	124.28	124.16	59.81	-214.18	-4,457.89	364.93	147.46	217.47	1.678		
11,400.00	7,228.17	11,202.87	7,044.63	127.04	126.93	59.82	-214.78	-4,557.89	365.10	142.73	222.38	1.642		
11,500.00	7,227.78	11,302.87	7,044.20	129.81	129.70	59.83	-215.38	-4,657.89	365.28	137.99	227.30	1.607		
11,600.00	7,227.38	11,402.87	7,043.76	132.58	132.48	59.84	-215.98	-4,757.88	365.46	133.24	232.22	1.574		
11,700.00	7,226.99	11,502.87	7,043.33	135.36	135.26	59.85	-216.58	-4,857.88	365.64	128.49	237.15	1.542		
11,800.00	7,226.60	11,602.87	7,042.90	138.14	138.04	59.86	-217.18	-4,957.88	365.82	123.73	242.09	1.511		
11,900.00	7,226.20	11,702.87	7,042.46	140.92	140.83	59.87	-217.78	-5,057.88	366.00	118.97	247.03	1.482 Level 3		
12,000.00	7,225.81	11,802.87	7,042.03	143.70	143.62	59.87	-218.38	-5,157.87	366.18	114.20	251.98	1.453 Level 3		
12,100.00	7,225.42	11,902.87	7,041.59	146.49	146.41	59.88	-218.97	-5,257.87	366.36	109.42	256.94	1.426 Level 3		
12,200.00	7,225.02	12,002.87	7,041.16	149.28	149.21	59.89	-219.57	-5,357.87	366.54	104.64	261.90	1.400 Level 3		
12,300.00	7,224.63	12,102.87	7,040.73	152.08	152.00	59.90	-220.17	-5,457.86	366.72	99.86	266.86	1.374 Level 3		
12,400.00	7,224.24	12,202.87	7,040.29	154.87	154.80	59.91	-220.77	-5,557.86	366.90	95.07	271.83	1.350 Level 3		
12,500.00	7,223.84	12,302.87	7,039.86	157.67	157.61	59.92	-221.37	-5,657.86	367.07	90.27	276.80	1.326 Level 3		
12,600.00	7,223.45	12,402.87	7,039.42	160.47	160.41	59.93	-221.97	-5,757.86	367.25	85.48	281.78	1.303 Level 3		
12,700.00	7,223.06	12,502.87	7,038.99	163.27	163.21	59.94	-222.57	-5,857.85	367.43	80.67	286.76	1.281 Level 3		
12,800.00	7,222.66	12,602.87	7,038.56	166.07	166.02	59.95	-223.17	-5,957.85	367.61	75.87	291.74	1.260 Level 3		
12,900.00	7,222.27	12,702.87	7,038.12	168.88	168.83	59.95	-223.76	-6,057.85	367.79	71.06	296.73	1.239 Level 2		
13,000.00	7,221.88	12,802.87	7,037.69	171.69	171.64	59.96	-224.36	-6,157.84	367.97	66.25	301.72	1.220 Level 2		
13,100.00	7,221.48	12,902.87	7,037.25	174.49	174.45	59.97	-224.96	-6,257.84	368.15	61.43	306.72	1.200 Level 2		
13,200.00	7,221.09	13,002.87	7,036.82	177.30	177.27	59.98	-225.56	-6,357.84	368.33	56.61	311.72	1.182 Level 2		
13,300.00	7,220.70	13,102.87	7,036.39	180.12	180.08	59.99	-226.16	-6,457.84	368.51	51.79	316.72	1.164 Level 2		
13,400.00	7,220.30	13,202.87	7,035.95	182.93	182.90	60.00	-226.76	-6,557.83	368.69	46.96	321.72	1.146 Level 2		
13,500.00	7,219.91	13,302.87	7,035.52	185.74	185.72	60.01	-227.36	-6,657.83	368.87	42.14	326.73	1.129 Level 2		
13,600.00	7,219.52	13,402.87	7,035.08	188.56	188.54	60.02	-227.96	-6,757.83	369.05	37.30	331.74	1.112 Level 2		
13,700.00	7,219.12	13,502.87	7,034.65	191.38	191.36	60.02	-228.55	-6,857.82	369.23	32.47	336.75	1.096 Level 2		
13,800.00	7,218.73	13,602.87	7,034.22	194.20	194.18	60.03	-229.15	-6,957.82	369.40	27.63	341.77	1.081 Level 2		
13,900.00	7,218.34	13,702.87	7,033.78	197.02	197.00	60.04	-229.75	-7,057.82	369.58	22.80	346.79	1.066 Level 2		
14,000.00	7,217.94	13,802.87	7,033.35	199.84	199.82	60.05	-230.35	-7,157.81	369.76	17.95	351.81	1.051 Level 2		
14,100.00	7,217.55	13,902.87	7,032.91	202.66	202.65	60.06	-230.95	-7,257.81	369.94	13.11	356.83	1.037 Level 2		
14,200.00	7,217.16	14,002.87	7,032.48	205.48	205.47	60.07	-231.55	-7,357.81	370.12	8.26	361.86	1.023 Level 2		
14,300.00	7,216.76	14,102.87	7,032.05	208.30	208.30	60.08	-232.15	-7,457.81	370.30	3.42	366.88	1.009 Level 2		
14,400.00	7,216.37	14,202.86	7,031.61	211.13	211.13	60.09	-232.75	-7,557.80	370.48	-1.43	371.91	0.996 Level 1		
14,500.00	7,215.98	14,302.86	7,031.18	213.96	213.95	60.09	-233.34	-7,657.80	370.66	-6.29	376.95	0.983 Level 1		
14,600.00	7,215.58	14,402.86	7,030.74	216.78	216.78	60.10	-233.94	-7,757.80	370.84	-11.14	381.98	0.971 Level 1		
14,700.00	7,215.19	14,502.86	7,030.31	219.61	219.61	60.11	-234.54	-7,857.79	371.02	-16.00	387.01	0.959 Level 1		
14,800.00	7,214.80	14,602.86	7,029.88	222.44	222.44	60.12	-235.14	-7,957.79	371.20	-20.86	392.05	0.947 Level 1		
14,900.00	7,214.40	14,702.86	7,029.44	225.27	225.27	60.13	-235.74	-8,057.79	371.38	-25.72	397.09	0.935 Level 1		
15,000.00	7,214.01	14,802.86	7,029.01	228.10	228.11	60.14	-236.34	-8,157.79	371.56	-30.58	402.13	0.924 Level 1		
15,002.44	7,214.00	14,805.30	7,029.00	228.16	228.18	60.14	-236.35	-8,160.22	371.56	-30.70	402.26	0.924 Level 1, ES, SF		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	40.07	0.28	40.07					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	40.07	0.28	40.07	33.51	6.57	6.100		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	40.07	0.28	40.07	33.40	6.67	6.005		
300.00	300.00	300.00	300.00	3.44	3.44	0.40	40.07	0.28	40.07	33.18	6.89	5.817		
400.00	400.00	400.00	400.00	3.60	3.60	0.40	40.07	0.28	40.07	32.87	7.21	5.561		
500.00	500.00	500.00	500.00	3.81	3.81	0.40	40.07	0.28	40.07	32.46	7.61	5.265 CC		
600.00	599.98	600.02	599.96	4.03	4.04	160.75	40.07	-1.33	41.74	33.66	8.07	5.169		
700.00	699.84	700.16	699.80	4.29	4.30	159.77	40.07	-3.82	46.73	38.14	8.59	5.441		
800.00	799.54	800.43	799.49	4.57	4.59	159.95	40.07	-6.31	54.08	44.92	9.16	5.903		
900.00	899.23	900.71	899.18	4.87	4.90	160.13	40.07	-8.80	61.54	51.76	9.78	6.294		
1,000.00	998.92	1,000.98	998.88	5.20	5.24	160.27	40.07	-11.30	68.99	58.56	10.43	6.614		
1,100.00	1,098.61	1,101.26	1,098.57	5.54	5.58	160.38	40.07	-13.79	76.44	65.33	11.12	6.876		
1,200.00	1,198.30	1,201.54	1,198.26	5.90	5.94	160.48	40.07	-16.28	83.90	72.07	11.83	7.091		
1,300.00	1,298.00	1,301.82	1,297.95	6.27	6.31	160.55	40.07	-18.77	91.35	78.79	12.57	7.270		
1,400.00	1,397.69	1,402.10	1,397.64	6.66	6.69	160.62	40.07	-21.26	98.81	85.49	13.32	7.419		
1,500.00	1,497.38	1,502.38	1,497.33	7.05	7.07	160.68	40.07	-23.76	106.26	92.18	14.09	7.543		
1,600.00	1,597.07	1,602.65	1,597.02	7.44	7.47	160.73	40.07	-26.25	113.72	98.85	14.87	7.649		
1,700.00	1,696.76	1,702.93	1,696.71	7.85	7.86	160.77	40.07	-28.74	121.17	105.51	15.66	7.738		
1,800.00	1,796.45	1,803.21	1,796.40	8.25	8.27	160.81	40.07	-31.23	128.63	112.17	16.46	7.814		
1,900.00	1,896.15	1,903.49	1,896.09	8.67	8.67	160.84	40.07	-33.72	136.08	118.81	17.27	7.879		
2,000.00	1,995.84	2,003.77	1,995.78	9.08	9.08	160.87	40.07	-36.21	143.54	125.45	18.09	7.935		
2,100.00	2,095.53	2,104.04	2,095.47	9.50	9.49	160.90	40.07	-38.71	150.99	132.08	18.91	7.984		
2,200.00	2,195.22	2,204.32	2,195.16	9.92	9.91	160.93	40.07	-41.20	158.45	138.71	19.74	8.027		
2,300.00	2,294.91	2,304.60	2,294.85	10.35	10.32	160.95	40.07	-43.69	165.90	145.33	20.57	8.064		
2,400.00	2,394.60	2,404.88	2,394.54	10.77	10.74	160.97	40.07	-46.18	173.36	151.95	21.41	8.097		
2,500.00	2,494.30	2,505.16	2,494.23	11.20	11.16	160.99	40.07	-48.67	180.81	158.56	22.25	8.126		
2,600.00	2,593.99	2,605.44	2,593.92	11.63	11.58	161.01	40.07	-51.16	188.27	165.17	23.09	8.152		
2,700.00	2,693.68	2,705.71	2,693.62	12.07	12.01	161.02	40.07	-53.66	195.72	171.78	23.94	8.175		
2,800.00	2,793.37	2,805.99	2,793.31	12.50	12.43	161.04	40.07	-56.15	203.18	178.39	24.79	8.196		
2,900.00	2,893.06	2,906.27	2,893.00	12.93	12.86	161.05	40.07	-58.64	210.63	184.99	25.64	8.214		
3,000.00	2,992.76	3,006.55	2,992.69	13.37	13.28	161.06	40.07	-61.13	218.09	191.59	26.50	8.231		
3,100.00	3,092.45	3,106.83	3,092.38	13.81	13.71	161.08	40.07	-63.62	225.54	198.19	27.35	8.246		
3,200.00	3,192.14	3,207.11	3,192.07	14.25	14.14	161.09	40.07	-66.11	233.00	204.79	28.21	8.259		
3,300.00	3,291.83	3,307.38	3,291.76	14.68	14.57	161.10	40.07	-68.61	240.45	211.39	29.07	8.272		
3,400.00	3,391.52	3,407.66	3,391.45	15.12	15.00	161.11	40.07	-71.10	247.91	217.98	29.93	8.283		
3,500.00	3,491.21	3,507.94	3,491.14	15.56	15.43	161.12	40.07	-73.59	255.37	224.57	30.79	8.293		
3,600.00	3,590.91	3,608.22	3,590.83	16.00	15.86	161.13	40.07	-76.08	262.82	231.16	31.66	8.302		
3,700.00	3,690.60	3,708.50	3,690.52	16.45	16.29	161.13	40.07	-78.57	270.28	237.76	32.52	8.311		
3,800.00	3,790.29	3,808.78	3,790.21	16.89	16.73	161.14	40.07	-81.07	277.73	244.35	33.39	8.319		
3,900.00	3,889.98	3,909.05	3,889.90	17.33	17.16	161.15	40.07	-83.56	285.19	250.93	34.25	8.326		
4,000.00	3,989.67	4,009.33	3,989.59	17.77	17.59	161.16	40.07	-86.05	292.64	257.52	35.12	8.333		
4,100.00	4,089.36	4,109.61	4,089.28	18.22	18.03	161.16	40.07	-88.54	300.10	264.11	35.99	8.339		
4,200.00	4,189.06	4,209.89	4,188.97	18.66	18.46	161.17	40.07	-91.03	307.55	270.69	36.86	8.344		
4,300.00	4,288.75	4,288.83	4,288.66	19.10	18.81	161.18	40.07	-93.52	315.01	277.37	37.64	8.369		
4,400.00	4,388.44	4,389.55	4,388.35	19.55	19.24	161.18	40.07	-96.02	322.46	283.96	38.51	8.374		
4,500.00	4,488.13	4,489.28	4,488.05	19.99	19.67	161.19	40.07	-98.51	329.92	290.54	39.38	8.379		
4,600.00	4,587.82	4,589.00	4,587.74	20.44	20.10	161.19	40.07	-101.00	337.37	297.13	40.25	8.383		
4,700.00	4,687.51	4,688.72	4,687.43	20.89	20.54	161.20	40.07	-103.49	344.83	303.71	41.12	8.387		
4,800.00	4,787.21	4,788.44	4,787.12	21.33	20.97	161.20	40.07	-105.98	352.28	310.30	41.99	8.391		
4,900.00	4,886.90	4,888.16	4,886.81	21.78	21.40	161.21	40.07	-108.47	359.74	316.88	42.86	8.394		
5,000.00	4,986.59	4,987.88	4,986.50	22.22	21.84	161.21	40.07	-110.97	367.20	323.47	43.73	8.397		
5,100.00	5,086.28	5,087.61	5,086.19	22.67	22.27	161.22	40.07	-113.46	374.65	330.05	44.60	8.400		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	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	5,185.97	5,187.33	5,185.88	23.12	22.70	161.22	40.07	-115.95	382.11	336.63	45.47	8.403		
5,300.00	5,285.66	5,287.05	5,285.57	23.56	23.14	161.23	40.07	-118.44	389.56	343.22	46.34	8.406		
5,400.00	5,385.36	5,386.77	5,385.26	24.01	23.57	161.23	40.07	-120.93	397.02	349.80	47.22	8.408		
5,500.00	5,485.05	5,486.49	5,484.95	24.46	24.01	161.23	40.07	-123.43	404.47	356.38	48.09	8.411		
5,600.00	5,584.74	5,586.21	5,584.64	24.90	24.44	161.24	40.07	-125.92	411.93	362.96	48.96	8.413		
5,700.00	5,684.43	5,685.94	5,684.33	25.35	24.88	161.24	40.07	-128.41	419.38	369.55	49.84	8.415		
5,800.00	5,784.12	5,785.66	5,784.02	25.80	25.31	161.24	40.07	-130.90	426.84	376.13	50.71	8.417		
5,900.00	5,883.81	5,885.38	5,883.71	26.25	25.75	161.25	40.07	-133.39	434.29	382.71	51.59	8.419		
6,000.00	5,983.51	5,985.10	5,983.40	26.70	26.18	161.25	40.07	-135.88	441.75	389.29	52.46	8.421		
6,100.00	6,083.20	6,084.82	6,083.09	27.14	26.62	161.25	40.07	-138.38	449.20	395.87	53.34	8.422		
6,200.00	6,182.89	6,184.54	6,182.78	27.59	27.05	161.26	40.07	-140.87	456.66	402.45	54.21	8.424		
6,300.00	6,282.58	6,284.27	6,282.48	28.04	27.49	161.26	40.07	-143.36	464.12	409.03	55.09	8.425		
6,400.00	6,382.27	6,383.99	6,382.17	28.49	27.93	161.26	40.07	-145.85	471.57	415.61	55.96	8.427		
6,500.00	6,481.96	6,483.71	6,481.86	28.94	28.36	161.26	40.07	-148.34	479.03	422.19	56.84	8.428		
6,600.00	6,581.66	6,583.71	6,581.57	29.39	28.80	160.79	40.00	-154.85	486.46	428.73	57.72	8.428		
6,700.00	6,681.21	6,681.12	6,676.67	29.83	29.24	120.08	39.64	-175.51	494.10	435.51	58.59	8.433		
6,800.00	6,778.96	6,775.93	6,765.16	30.28	29.66	100.10	39.02	-209.30	502.00	442.59	59.41	8.450		
6,900.00	6,872.51	6,868.64	6,845.90	30.70	30.09	92.44	38.17	-254.68	509.86	449.69	60.16	8.474		
7,000.00	6,959.55	6,959.52	6,917.84	31.10	30.53	87.88	37.12	-310.08	517.36	456.49	60.87	8.499		
7,100.00	7,037.93	7,048.84	6,980.16	31.48	31.01	84.67	35.90	-373.96	524.22	462.64	61.58	8.513		
7,200.00	7,105.74	7,136.88	7,032.24	31.88	31.57	82.29	34.54	-444.84	530.16	467.79	62.36	8.501		
7,300.00	7,161.29	7,223.88	7,073.63	32.41	32.23	80.51	33.07	-521.28	534.94	471.62	63.32	8.448		
7,400.00	7,203.22	7,310.07	7,103.97	33.13	32.99	79.24	31.51	-601.85	538.38	473.83	64.54	8.341		
7,500.00	7,230.50	7,395.66	7,123.08	34.04	33.88	78.44	29.89	-685.21	540.31	474.22	66.09	8.175		
7,600.00	7,242.45	7,480.87	7,130.82	35.13	34.87	78.06	28.23	-769.99	540.67	472.69	67.98	7.954		
7,700.00	7,242.72	7,577.76	7,130.71	36.39	36.14	78.02	26.34	-866.85	539.64	469.21	70.43	7.662		
7,800.00	7,242.33	7,677.75	7,130.35	37.81	37.61	78.00	24.38	-966.83	538.49	465.21	73.28	7.349		
7,900.00	7,241.93	7,777.74	7,129.98	39.40	39.22	77.98	22.43	-1,066.80	537.34	460.91	76.42	7.031		
8,000.00	7,241.54	7,877.74	7,129.61	41.13	40.98	77.95	20.47	-1,166.77	536.18	456.34	79.84	6.716		
8,100.00	7,241.15	7,977.73	7,129.25	42.97	42.85	77.93	18.52	-1,266.75	535.03	451.54	83.49	6.408		
8,200.00	7,240.75	8,077.72	7,128.88	44.92	44.83	77.91	16.56	-1,366.72	533.88	446.52	87.35	6.112		
8,300.00	7,240.36	8,177.72	7,128.51	46.97	46.89	77.88	14.61	-1,466.69	532.72	441.33	91.39	5.829		
8,400.00	7,239.97	8,277.71	7,128.15	49.10	49.04	77.86	12.65	-1,566.67	531.57	435.98	95.59	5.561		
8,500.00	7,239.57	8,377.70	7,127.78	51.29	51.25	77.83	10.70	-1,666.64	530.42	430.50	99.92	5.309		
8,600.00	7,239.18	8,477.69	7,127.42	53.56	53.53	77.81	8.74	-1,766.61	529.26	424.90	104.37	5.071		
8,700.00	7,238.79	8,577.69	7,127.05	55.87	55.86	77.79	6.78	-1,866.59	528.11	419.19	108.92	4.848		
8,800.00	7,238.39	8,677.68	7,126.68	58.24	58.23	77.76	4.83	-1,966.56	526.96	413.39	113.57	4.640		
8,900.00	7,238.00	8,777.67	7,126.32	60.64	60.65	77.74	2.87	-2,066.53	525.81	407.51	118.30	4.445		
9,000.00	7,237.61	8,877.67	7,125.95	63.09	63.10	77.71	0.92	-2,166.51	524.65	401.55	123.10	4.262		
9,100.00	7,237.21	8,977.66	7,125.59	65.56	65.59	77.69	-1.04	-2,266.48	523.50	395.54	127.97	4.091		
9,200.00	7,236.82	9,077.65	7,125.22	68.07	68.10	77.67	-2.99	-2,366.45	522.35	389.46	132.89	3.931		
9,300.00	7,236.43	9,177.65	7,124.85	70.61	70.65	77.64	-4.95	-2,466.43	521.20	383.34	137.86	3.781		
9,400.00	7,236.03	9,277.64	7,124.49	73.16	73.21	77.62	-6.90	-2,566.40	520.05	377.18	142.87	3.640		
9,500.00	7,235.64	9,377.63	7,124.12	75.74	75.79	77.59	-8.86	-2,666.37	518.89	370.97	147.93	3.508		
9,600.00	7,235.25	9,477.63	7,123.75	78.34	78.40	77.57	-10.81	-2,766.35	517.74	364.73	153.02	3.384		
9,700.00	7,234.85	9,577.62	7,123.39	80.96	81.02	77.54	-12.77	-2,866.32	516.59	358.45	158.14	3.267		
9,800.00	7,234.46	9,677.61	7,123.02	83.59	83.65	77.52	-14.73	-2,966.29	515.44	352.15	163.29	3.157		
9,900.00	7,234.07	9,777.60	7,122.66	86.24	86.30	77.49	-16.68	-3,066.27	514.29	345.82	168.47	3.053		
10,000.00	7,233.67	9,877.60	7,122.29	88.90	88.96	77.46	-18.64	-3,166.24	513.14	339.46	173.68	2.955		
10,100.00	7,233.28	9,977.59	7,121.92	91.57	91.64	77.44	-20.59	-3,266.21	511.99	333.08	178.90	2.862		
10,200.00	7,232.89	10,077.58	7,121.56	94.25	94.32	77.41	-22.55	-3,366.19	510.83	326.69	184.15	2.774		
10,300.00	7,232.49	10,177.58	7,121.19	96.95	97.01	77.39	-24.50	-3,466.16	509.68	320.27	189.41	2.691		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,232.10	10,277.57	7,120.83	99.65	99.72	77.36	-26.46	-3,566.13	508.53	313.84	194.69	2.612		
10,500.00	7,231.71	10,377.56	7,120.46	102.36	102.43	77.34	-28.41	-3,666.11	507.38	307.40	199.98	2.537		
10,600.00	7,231.32	10,477.56	7,120.09	105.08	105.15	77.31	-30.37	-3,766.08	506.23	300.94	205.29	2.466		
10,700.00	7,230.92	10,577.55	7,119.73	107.80	107.87	77.28	-32.32	-3,866.05	505.08	294.47	210.61	2.398		
10,800.00	7,230.53	10,677.54	7,119.36	110.53	110.60	77.26	-34.28	-3,966.03	503.93	287.99	215.94	2.334		
10,900.00	7,230.14	10,777.54	7,118.99	113.27	113.34	77.23	-36.24	-4,066.00	502.78	281.49	221.29	2.272		
11,000.00	7,229.74	10,877.53	7,118.63	116.02	116.09	77.20	-38.19	-4,165.97	501.63	274.99	226.64	2.213		
11,100.00	7,229.35	10,977.52	7,118.26	118.77	118.83	77.18	-40.15	-4,265.95	500.48	268.48	232.00	2.157		
11,200.00	7,228.96	11,077.52	7,117.90	121.52	121.59	77.15	-42.10	-4,365.92	499.33	261.96	237.37	2.104		
11,300.00	7,228.56	11,177.51	7,117.53	124.28	124.35	77.12	-44.06	-4,465.89	498.18	255.43	242.75	2.052		
11,400.00	7,228.17	11,277.50	7,117.16	127.04	127.11	77.10	-46.01	-4,565.87	497.03	248.89	248.14	2.003		
11,500.00	7,227.78	11,377.49	7,116.80	129.81	129.88	77.07	-47.97	-4,665.84	495.88	242.35	253.53	1.956		
11,600.00	7,227.38	11,477.49	7,116.43	132.58	132.65	77.04	-49.92	-4,765.81	494.73	235.80	258.92	1.911		
11,700.00	7,226.99	11,577.48	7,116.07	135.36	135.42	77.01	-51.88	-4,865.79	493.58	229.25	264.33	1.867		
11,800.00	7,226.60	11,677.47	7,115.70	138.14	138.20	76.99	-53.83	-4,965.76	492.43	222.69	269.74	1.826		
11,900.00	7,226.20	11,777.47	7,115.33	140.92	140.98	76.96	-55.79	-5,065.73	491.28	216.13	275.15	1.785		
12,000.00	7,225.81	11,877.46	7,114.97	143.70	143.76	76.93	-57.74	-5,165.71	490.13	209.56	280.57	1.747		
12,100.00	7,225.42	11,977.45	7,114.60	146.49	146.54	76.90	-59.70	-5,265.68	488.98	202.99	285.99	1.710		
12,200.00	7,225.02	12,077.45	7,114.23	149.28	149.33	76.88	-61.66	-5,365.65	487.83	196.42	291.42	1.674		
12,300.00	7,224.63	12,177.44	7,113.87	152.08	152.12	76.85	-63.61	-5,465.63	486.68	189.84	296.85	1.640		
12,400.00	7,224.24	12,277.43	7,113.50	154.87	154.92	76.82	-65.57	-5,565.60	485.53	183.26	302.28	1.606		
12,500.00	7,223.84	12,377.43	7,113.14	157.67	157.71	76.79	-67.52	-5,665.57	484.39	176.67	307.71	1.574		
12,600.00	7,223.45	12,477.42	7,112.77	160.47	160.51	76.76	-69.48	-5,765.55	483.24	170.09	313.15	1.543		
12,700.00	7,223.06	12,577.41	7,112.40	163.27	163.31	76.73	-71.43	-5,865.52	482.09	163.50	318.59	1.513		
12,800.00	7,222.66	12,677.41	7,112.04	166.07	166.11	76.70	-73.39	-5,965.49	480.94	156.91	324.04	1.484 Level 3		
12,900.00	7,222.27	12,777.40	7,111.67	168.88	168.91	76.67	-75.34	-6,065.47	479.79	150.31	329.48	1.456 Level 3		
13,000.00	7,221.88	12,877.39	7,111.31	171.69	171.72	76.65	-77.30	-6,165.44	478.64	143.72	334.93	1.429 Level 3		
13,100.00	7,221.48	12,977.38	7,110.94	174.49	174.52	76.62	-79.25	-6,265.41	477.50	137.12	340.38	1.403 Level 3		
13,200.00	7,221.09	13,077.38	7,110.57	177.30	177.33	76.59	-81.21	-6,365.39	476.35	130.52	345.83	1.377 Level 3		
13,300.00	7,220.70	13,177.37	7,110.21	180.12	180.14	76.56	-83.17	-6,465.36	475.20	123.92	351.28	1.353 Level 3		
13,400.00	7,220.30	13,277.36	7,109.84	182.93	182.95	76.53	-85.12	-6,565.33	474.05	117.32	356.73	1.329 Level 3		
13,500.00	7,219.91	13,377.36	7,109.47	185.74	185.76	76.50	-87.08	-6,665.31	472.91	110.72	362.19	1.306 Level 3		
13,600.00	7,219.52	13,477.35	7,109.11	188.56	188.57	76.47	-89.03	-6,765.28	471.76	104.12	367.64	1.283 Level 3		
13,700.00	7,219.12	13,577.34	7,108.74	191.38	191.39	76.44	-90.99	-6,865.25	470.61	97.52	373.10	1.261 Level 3		
13,800.00	7,218.73	13,677.34	7,108.38	194.20	194.20	76.41	-92.94	-6,965.22	469.47	90.91	378.55	1.240 Level 2		
13,900.00	7,218.34	13,777.33	7,108.01	197.02	197.02	76.38	-94.90	-7,065.20	468.32	84.31	384.01	1.220 Level 2		
14,000.00	7,217.94	13,877.32	7,107.64	199.84	199.84	76.35	-96.85	-7,165.17	467.17	77.70	389.47	1.200 Level 2		
14,100.00	7,217.55	13,977.32	7,107.28	202.66	202.66	76.31	-98.81	-7,265.14	466.03	71.10	394.93	1.180 Level 2		
14,200.00	7,217.16	14,077.31	7,106.91	205.48	205.48	76.28	-100.76	-7,365.12	464.88	64.49	400.39	1.161 Level 2		
14,300.00	7,216.76	14,177.30	7,106.55	208.30	208.30	76.25	-102.72	-7,465.09	463.73	57.89	405.84	1.143 Level 2		
14,400.00	7,216.37	14,277.30	7,106.18	211.13	211.12	76.22	-104.67	-7,565.06	462.59	51.28	411.30	1.125 Level 2		
14,500.00	7,215.98	14,377.29	7,105.81	213.96	213.94	76.19	-106.63	-7,665.04	461.44	44.68	416.76	1.107 Level 2		
14,600.00	7,215.58	14,477.28	7,105.45	216.78	216.76	76.16	-108.59	-7,765.01	460.29	38.07	422.22	1.090 Level 2		
14,700.00	7,215.19	14,577.27	7,105.08	219.61	219.59	76.13	-110.54	-7,864.98	459.15	31.47	427.68	1.074 Level 2		
14,800.00	7,214.80	14,677.27	7,104.71	222.44	222.41	76.09	-112.50	-7,964.96	458.00	24.86	433.14	1.057 Level 2		
14,900.00	7,214.40	14,777.26	7,104.35	225.27	225.24	76.06	-114.45	-8,064.93	456.86	18.26	438.60	1.042 Level 2		
15,000.00	7,214.01	14,877.25	7,103.98	228.10	228.06	76.03	-116.41	-8,164.90	455.71	11.66	444.05	1.026 Level 2		
15,002.32	7,214.00	14,879.57	7,103.97	228.16	228.13	76.03	-116.45	-8,167.22	455.69	11.50	444.18	1.026 Level 2, ES, SF		
15,002.44	7,214.00	14,872.41	7,104.00	228.16	227.93	76.03	-116.31	-8,160.06	455.74	11.82	443.92	1.027 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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	61.00	3.28	3.28	-115.22	-4,235.59	-8,994.59	9,942.17					
100.00	100.00	39.00	100.00	3.28	3.35	-115.22	-4,235.59	-8,994.59	9,941.98	9,935.34	6.63	1,498.500		
200.00	200.00	139.00	200.00	3.34	4.52	-115.22	-4,235.59	-8,994.59	9,941.98	9,934.12	7.85	1,265.693		
300.00	300.00	239.00	300.00	3.44	7.37	-115.22	-4,235.59	-8,994.59	9,941.98	9,931.17	10.81	919.429		
400.00	400.00	339.00	400.00	3.60	10.61	-115.22	-4,235.59	-8,994.59	9,941.98	9,927.77	14.21	699.543		
500.00	500.00	439.00	500.00	3.81	13.97	-115.22	-4,235.59	-8,994.59	9,941.98	9,924.20	17.78	559.276		
600.00	599.98	538.98	599.98	4.03	17.38	46.64	-4,235.59	-8,994.59	9,940.78	9,919.36	21.42	464.154		
700.00	699.84	638.84	699.84	4.29	20.82	46.72	-4,235.59	-8,994.59	9,937.19	9,912.09	25.10	395.872		
800.00	799.54	738.54	799.54	4.57	24.26	46.77	-4,235.59	-8,994.59	9,931.88	9,903.05	28.83	344.546		
900.00	899.23	838.23	899.23	4.87	27.71	46.80	-4,235.59	-8,994.59	9,926.50	9,893.91	32.58	304.656		
1,000.00	998.92	937.92	998.92	5.20	31.17	46.84	-4,235.59	-8,994.59	9,921.12	9,884.75	36.37	272.810		
1,100.00	1,098.61	1,037.61	1,098.61	5.54	34.63	46.87	-4,235.59	-8,994.59	9,915.74	9,875.57	40.17	246.834		
1,200.00	1,198.30	1,137.30	1,198.30	5.90	38.10	46.90	-4,235.59	-8,994.59	9,910.37	9,866.38	43.99	225.265		
1,300.00	1,298.00	1,237.00	1,298.00	6.27	41.57	46.94	-4,235.59	-8,994.59	9,905.00	9,857.17	47.83	207.083		
1,400.00	1,397.69	1,336.69	1,397.69	6.66	45.04	46.97	-4,235.59	-8,994.59	9,899.64	9,847.96	51.68	191.559		
1,500.00	1,497.38	1,436.38	1,497.38	7.05	48.51	47.00	-4,235.59	-8,994.59	9,894.28	9,838.74	55.54	178.155		
1,600.00	1,597.07	1,536.07	1,597.07	7.44	51.98	47.03	-4,235.59	-8,994.59	9,888.92	9,829.52	59.40	166.470		
1,700.00	1,696.76	1,635.76	1,696.76	7.85	55.46	47.07	-4,235.59	-8,994.59	9,883.56	9,820.29	63.28	156.196		
1,800.00	1,796.45	1,735.45	1,796.45	8.25	58.93	47.10	-4,235.59	-8,994.59	9,878.21	9,811.06	67.16	147.095		
1,900.00	1,896.15	1,835.15	1,896.15	8.67	62.41	47.13	-4,235.59	-8,994.59	9,872.87	9,801.83	71.04	138.978		
2,000.00	1,995.84	1,934.84	1,995.84	9.08	65.88	47.17	-4,235.59	-8,994.59	9,867.52	9,792.59	74.93	131.695		
2,100.00	2,095.53	2,034.53	2,095.53	9.50	69.36	47.20	-4,235.59	-8,994.59	9,862.18	9,783.36	78.82	125.125		
2,200.00	2,195.22	2,134.22	2,195.22	9.92	72.83	47.23	-4,235.59	-8,994.59	9,856.84	9,774.13	82.71	119.168		
2,300.00	2,294.91	2,233.91	2,294.91	10.35	76.31	47.27	-4,235.59	-8,994.59	9,851.51	9,764.89	86.61	113.743		
2,400.00	2,394.60	2,333.60	2,394.60	10.77	79.79	47.30	-4,235.59	-8,994.59	9,846.17	9,755.66	90.51	108.783		
2,500.00	2,494.30	2,433.30	2,494.30	11.20	83.27	47.33	-4,235.59	-8,994.59	9,840.85	9,746.43	94.41	104.230		
2,600.00	2,593.99	2,532.99	2,593.99	11.63	86.74	47.37	-4,235.59	-8,994.59	9,835.52	9,737.20	98.32	100.037		
2,700.00	2,693.68	2,632.68	2,693.68	12.07	90.22	47.40	-4,235.59	-8,994.59	9,830.20	9,727.98	102.23	96.162		
2,800.00	2,793.37	2,732.37	2,793.37	12.50	93.70	47.44	-4,235.59	-8,994.59	9,824.88	9,718.75	106.13	92.571		
2,900.00	2,893.06	2,832.06	2,893.06	12.93	97.18	47.47	-4,235.59	-8,994.59	9,819.57	9,709.53	110.04	89.234		
3,000.00	2,992.76	2,931.76	2,992.76	13.37	100.66	47.50	-4,235.59	-8,994.59	9,814.26	9,700.30	113.95	86.125		
3,100.00	3,092.45	3,031.45	3,092.45	13.81	104.13	47.54	-4,235.59	-8,994.59	9,808.95	9,691.08	117.86	83.222		
3,200.00	3,192.14	3,131.14	3,192.14	14.25	107.61	47.57	-4,235.59	-8,994.59	9,803.64	9,681.87	121.78	80.505		
3,300.00	3,291.83	3,230.83	3,291.83	14.68	111.09	47.60	-4,235.59	-8,994.59	9,798.34	9,672.65	125.69	77.956		
3,400.00	3,391.52	3,330.52	3,391.52	15.12	114.57	47.64	-4,235.59	-8,994.59	9,793.05	9,663.44	129.61	75.560		
3,500.00	3,491.21	3,430.21	3,491.21	15.56	118.05	47.67	-4,235.59	-8,994.59	9,787.75	9,654.23	133.52	73.305		
3,600.00	3,590.91	3,529.91	3,590.91	16.00	121.53	47.71	-4,235.59	-8,994.59	9,782.46	9,645.02	137.44	71.178		
3,700.00	3,690.60	3,629.60	3,690.60	16.45	125.01	47.74	-4,235.59	-8,994.59	9,777.17	9,635.82	141.35	69.168		
3,800.00	3,790.29	3,729.29	3,790.29	16.89	128.49	47.77	-4,235.59	-8,994.59	9,771.89	9,626.62	145.27	67.266		
3,900.00	3,889.98	3,828.98	3,889.98	17.33	131.97	47.81	-4,235.59	-8,994.59	9,766.61	9,617.42	149.19	65.464		
4,000.00	3,989.67	3,928.67	3,989.67	17.77	135.44	47.84	-4,235.59	-8,994.59	9,761.33	9,608.23	153.11	63.754		
4,100.00	4,089.36	4,028.36	4,089.36	18.22	138.92	47.88	-4,235.59	-8,994.59	9,756.06	9,599.03	157.03	62.130		
4,200.00	4,189.06	4,128.06	4,189.06	18.66	142.40	47.91	-4,235.59	-8,994.59	9,750.79	9,589.84	160.95	60.584		
4,300.00	4,288.75	4,227.75	4,288.75	19.10	145.88	47.94	-4,235.59	-8,994.59	9,745.52	9,580.66	164.87	59.111		
4,400.00	4,388.44	4,327.44	4,388.44	19.55	149.36	47.98	-4,235.59	-8,994.59	9,740.26	9,571.47	168.79	57.707		
4,500.00	4,488.13	4,427.13	4,488.13	19.99	152.84	48.01	-4,235.59	-8,994.59	9,735.00	9,562.29	172.71	56.367		
4,600.00	4,587.82	4,526.82	4,587.82	20.44	156.32	48.05	-4,235.59	-8,994.59	9,729.74	9,553.12	176.63	55.086		
4,700.00	4,687.51	4,626.51	4,687.51	20.89	159.80	48.08	-4,235.59	-8,994.59	9,724.49	9,543.94	180.55	53.860		
4,800.00	4,787.21	4,726.21	4,787.21	21.33	163.28	48.12	-4,235.59	-8,994.59	9,719.24	9,534.77	184.47	52.687		
4,900.00	4,886.90	4,825.90	4,886.90	21.78	166.76	48.15	-4,235.59	-8,994.59	9,714.00	9,525.60	188.39	51.562		
5,000.00	4,986.59	4,925.59	4,986.59	22.22	170.24	48.18	-4,235.59	-8,994.59	9,708.76	9,516.44	192.32	50.483		
5,100.00	5,086.28	5,025.28	5,086.28	22.67	173.72	48.22	-4,235.59	-8,994.59	9,703.52	9,507.28	196.24	49.447		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,124.97	5,185.97	23.12	177.20	48.25	-4,235.59	-8,994.59	9,698.28	9,498.12	200.16	48.452		
5,300.00	5,285.66	5,224.66	5,285.66	23.56	180.68	48.29	-4,235.59	-8,994.59	9,693.05	9,488.96	204.09	47.495		
5,400.00	5,385.36	5,324.36	5,385.36	24.01	184.16	48.32	-4,235.59	-8,994.59	9,687.82	9,479.81	208.01	46.574		
5,500.00	5,485.05	5,424.05	5,485.05	24.46	187.64	48.36	-4,235.59	-8,994.59	9,682.60	9,470.67	211.93	45.687		
5,600.00	5,584.74	5,523.74	5,584.74	24.90	191.12	48.39	-4,235.59	-8,994.59	9,677.38	9,461.52	215.86	44.833		
5,700.00	5,684.43	5,623.43	5,684.43	25.35	194.60	48.43	-4,235.59	-8,994.59	9,672.16	9,452.38	219.78	44.008		
5,800.00	5,784.12	5,723.12	5,784.12	25.80	198.08	48.46	-4,235.59	-8,994.59	9,666.95	9,443.24	223.70	43.213		
5,900.00	5,883.81	5,822.81	5,883.81	26.25	201.56	48.50	-4,235.59	-8,994.59	9,661.74	9,434.11	227.63	42.445		
6,000.00	5,983.51	5,922.51	5,983.51	26.70	205.04	48.53	-4,235.59	-8,994.59	9,656.53	9,424.98	231.55	41.703		
6,100.00	6,083.20	6,022.20	6,083.20	27.14	208.52	48.57	-4,235.59	-8,994.59	9,651.33	9,415.85	235.48	40.986		
6,200.00	6,182.89	6,121.89	6,182.89	27.59	212.00	48.60	-4,235.59	-8,994.59	9,646.13	9,406.72	239.40	40.293		
6,300.00	6,282.58	6,221.58	6,282.58	28.04	215.48	48.64	-4,235.59	-8,994.59	9,640.93	9,397.60	243.33	39.621		
6,400.00	6,382.27	6,321.27	6,382.27	28.49	218.96	48.67	-4,235.59	-8,994.59	9,635.74	9,388.49	247.25	38.971		
6,500.00	6,481.96	6,420.96	6,481.96	28.94	222.44	48.71	-4,235.59	-8,994.59	9,630.55	9,379.37	251.18	38.342		
6,600.00	6,581.66	6,520.66	6,581.66	29.39	225.91	48.74	-4,235.59	-8,994.59	9,625.36	9,370.26	255.10	37.731		
6,700.00	6,681.21	6,620.21	6,681.21	29.83	229.39	10.10	-4,235.59	-8,994.59	9,617.80	9,358.78	259.02	37.131		
6,800.00	6,778.96	6,717.96	6,778.96	30.28	232.80	-8.10	-4,235.59	-8,994.59	9,597.23	9,334.37	262.86	36.510		
6,900.00	6,872.51	6,811.51	6,872.51	30.70	236.07	-14.84	-4,235.59	-8,994.59	9,562.85	9,296.32	266.53	35.879		
7,000.00	6,959.55	6,901.45	6,959.55	31.10	239.21	-19.54	-4,235.59	-8,994.59	9,515.53	9,245.50	270.04	35.238		
7,100.00	7,037.93	6,976.93	7,037.93	31.48	241.84	-24.26	-4,235.59	-8,994.59	9,456.46	9,183.47	272.99	34.640		
7,200.00	7,105.74	7,044.74	7,105.74	31.88	244.21	-30.03	-4,235.59	-8,994.59	9,387.11	9,111.48	275.62	34.058		
7,300.00	7,161.29	7,100.29	7,161.29	32.41	246.15	-37.88	-4,235.59	-8,994.59	9,309.24	9,031.45	277.78	33.512		
7,400.00	7,203.22	7,142.22	7,203.22	33.13	247.61	-49.11	-4,235.59	-8,994.59	9,224.80	8,945.37	279.43	33.012		
7,500.00	7,230.50	7,169.50	7,230.50	34.04	248.56	-64.91	-4,235.59	-8,994.59	9,135.92	8,855.37	280.55	32.565		
7,600.00	7,242.45	7,181.45	7,242.45	35.13	248.98	-84.60	-4,235.59	-8,994.59	9,044.82	8,763.70	281.12	32.174		
7,700.00	7,242.72	7,181.72	7,242.72	36.39	248.99	-90.50	-4,235.59	-8,994.59	8,953.50	8,672.19	281.31	31.828		
7,800.00	7,242.33	7,181.33	7,242.33	37.81	248.98	-90.50	-4,235.59	-8,994.59	8,862.38	8,580.87	281.52	31.481		
7,900.00	7,241.93	7,180.93	7,241.93	39.40	248.96	-90.49	-4,235.59	-8,994.59	8,771.46	8,489.68	281.79	31.128		
8,000.00	7,241.54	7,180.54	7,241.54	41.13	248.95	-90.48	-4,235.59	-8,994.59	8,680.74	8,398.63	282.11	30.771		
8,100.00	7,241.15	7,180.15	7,241.15	42.97	248.94	-90.48	-4,235.59	-8,994.59	8,590.22	8,307.74	282.49	30.409		
8,200.00	7,240.75	7,179.75	7,240.75	44.92	248.92	-90.47	-4,235.59	-8,994.59	8,499.92	8,216.99	282.92	30.043		
8,300.00	7,240.36	7,179.36	7,240.36	46.97	248.91	-90.46	-4,235.59	-8,994.59	8,409.83	8,126.41	283.42	29.672		
8,400.00	7,239.97	7,178.97	7,239.97	49.10	248.89	-90.46	-4,235.59	-8,994.59	8,319.98	8,035.99	283.98	29.298		
8,500.00	7,239.57	7,178.57	7,239.57	51.29	248.88	-90.45	-4,235.59	-8,994.59	8,230.35	7,945.75	284.60	28.919		
8,600.00	7,239.18	7,178.18	7,239.18	53.56	248.87	-90.45	-4,235.59	-8,994.59	8,140.97	7,855.68	285.29	28.536		
8,700.00	7,238.79	7,177.79	7,238.79	55.87	248.85	-90.44	-4,235.59	-8,994.59	8,051.84	7,765.80	286.04	28.150		
8,800.00	7,238.39	7,177.39	7,238.39	58.24	248.84	-90.43	-4,235.59	-8,994.59	7,962.96	7,676.11	286.85	27.760		
8,900.00	7,238.00	7,177.00	7,238.00	60.64	248.83	-90.43	-4,235.59	-8,994.59	7,874.35	7,586.63	287.72	27.368		
9,000.00	7,237.61	7,176.61	7,237.61	63.09	248.81	-90.42	-4,235.59	-8,994.59	7,786.02	7,497.35	288.67	26.972		
9,100.00	7,237.21	7,176.21	7,237.21	65.56	248.80	-90.42	-4,235.59	-8,994.59	7,697.97	7,408.30	289.68	26.575		
9,200.00	7,236.82	7,175.82	7,236.82	68.07	248.78	-90.41	-4,235.59	-8,994.59	7,610.22	7,319.47	290.75	26.175		
9,300.00	7,236.43	7,175.43	7,236.43	70.61	248.77	-90.40	-4,235.59	-8,994.59	7,522.78	7,230.89	291.89	25.773		
9,400.00	7,236.03	7,175.03	7,236.03	73.16	248.76	-90.40	-4,235.59	-8,994.59	7,435.65	7,142.56	293.09	25.370		
9,500.00	7,235.64	7,174.64	7,235.64	75.74	248.74	-90.39	-4,235.59	-8,994.59	7,348.85	7,054.48	294.36	24.965		
9,600.00	7,235.25	7,174.25	7,235.25	78.34	248.73	-90.38	-4,235.59	-8,994.59	7,262.38	6,966.68	295.70	24.560		
9,700.00	7,234.85	7,173.85	7,234.85	80.96	248.72	-90.38	-4,235.59	-8,994.59	7,176.27	6,879.17	297.10	24.154		
9,800.00	7,234.46	7,173.46	7,234.46	83.59	248.70	-90.37	-4,235.59	-8,994.59	7,090.53	6,791.96	298.57	23.748		
9,900.00	7,234.07	7,173.07	7,234.07	86.24	248.69	-90.37	-4,235.59	-8,994.59	7,005.16	6,705.05	300.11	23.342		
10,000.00	7,233.67	7,172.67	7,233.67	88.90	248.67	-90.36	-4,235.59	-8,994.59	6,920.18	6,618.47	301.71	22.936		
10,100.00	7,233.28	7,172.28	7,233.28	91.57	248.66	-90.35	-4,235.59	-8,994.59	6,835.62	6,532.23	303.38	22.531		
10,200.00	7,232.89	7,171.89	7,232.89	94.25	248.65	-90.35	-4,235.59	-8,994.59	6,751.47	6,446.35	305.12	22.127		
10,300.00	7,232.49	7,171.49	7,232.49	96.95	248.63	-90.34	-4,235.59	-8,994.59	6,667.76	6,360.83	306.93	21.724		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,171.10	7,232.10	99.65	248.62	-90.34	-4,235.59	-8,994.59	6,584.50	6,275.70	308.80	21.323		
10,500.00	7,231.71	7,170.71	7,231.71	102.36	248.61	-90.33	-4,235.59	-8,994.59	6,501.72	6,190.98	310.74	20.923		
10,600.00	7,231.32	7,170.32	7,231.32	105.08	248.59	-90.32	-4,235.59	-8,994.59	6,419.43	6,106.67	312.76	20.525		
10,700.00	7,230.92	7,169.92	7,230.92	107.80	248.58	-90.32	-4,235.59	-8,994.59	6,337.64	6,022.80	314.84	20.130		
10,800.00	7,230.53	7,169.53	7,230.53	110.53	248.56	-90.31	-4,235.59	-8,994.59	6,256.39	5,939.39	317.00	19.737		
10,900.00	7,230.14	7,169.14	7,230.14	113.27	248.55	-90.30	-4,235.59	-8,994.59	6,175.68	5,856.46	319.22	19.346		
11,000.00	7,229.74	7,168.74	7,229.74	116.02	248.54	-90.30	-4,235.59	-8,994.59	6,095.55	5,774.03	321.52	18.958		
11,100.00	7,229.35	7,168.35	7,229.35	118.77	248.52	-90.29	-4,235.59	-8,994.59	6,016.02	5,692.12	323.89	18.574		
11,200.00	7,228.96	7,167.96	7,228.96	121.52	248.51	-90.29	-4,235.59	-8,994.59	5,937.10	5,610.76	326.34	18.193		
11,300.00	7,228.56	7,167.56	7,228.56	124.28	248.50	-90.28	-4,235.59	-8,994.59	5,858.82	5,529.96	328.86	17.815		
11,400.00	7,228.17	7,167.17	7,228.17	127.04	248.48	-90.27	-4,235.59	-8,994.59	5,781.22	5,449.76	331.46	17.442		
11,500.00	7,227.78	7,166.78	7,227.78	129.81	248.47	-90.27	-4,235.59	-8,994.59	5,704.31	5,370.18	334.13	17.072		
11,600.00	7,227.38	7,166.38	7,227.38	132.58	248.46	-90.26	-4,235.59	-8,994.59	5,628.13	5,291.24	336.89	16.706		
11,700.00	7,226.99	7,165.99	7,226.99	135.36	248.44	-90.26	-4,235.59	-8,994.59	5,552.70	5,212.99	339.72	16.345		
11,800.00	7,226.60	7,165.60	7,226.60	138.14	248.43	-90.25	-4,235.59	-8,994.59	5,478.06	5,135.44	342.63	15.988		
11,900.00	7,226.20	7,165.20	7,226.20	140.92	248.41	-90.24	-4,235.59	-8,994.59	5,404.25	5,058.63	345.62	15.637		
12,000.00	7,225.81	7,164.81	7,225.81	143.70	248.40	-90.24	-4,235.59	-8,994.59	5,331.28	4,982.59	348.69	15.290		
12,100.00	7,225.42	7,164.42	7,225.42	146.49	248.39	-90.23	-4,235.59	-8,994.59	5,259.20	4,907.37	351.84	14.948		
12,200.00	7,225.02	7,164.02	7,225.02	149.28	248.37	-90.23	-4,235.59	-8,994.59	5,188.05	4,832.99	355.07	14.611		
12,300.00	7,224.63	7,163.63	7,224.63	152.08	248.36	-90.22	-4,235.59	-8,994.59	5,117.87	4,759.49	358.38	14.281		
12,400.00	7,224.24	7,163.24	7,224.24	154.87	248.35	-90.21	-4,235.59	-8,994.59	5,048.69	4,686.91	361.77	13.955		
12,500.00	7,223.84	7,162.84	7,223.84	157.67	248.33	-90.21	-4,235.59	-8,994.59	4,980.55	4,615.31	365.25	13.636		
12,600.00	7,223.45	7,162.45	7,223.45	160.47	248.32	-90.20	-4,235.59	-8,994.59	4,913.51	4,544.71	368.80	13.323		
12,700.00	7,223.06	7,162.06	7,223.06	163.27	248.30	-90.19	-4,235.59	-8,994.59	4,847.60	4,475.17	372.44	13.016		
12,800.00	7,222.66	7,161.66	7,222.66	166.07	248.29	-90.19	-4,235.59	-8,994.59	4,782.88	4,406.73	376.15	12.715		
12,900.00	7,222.27	7,161.27	7,222.27	168.88	248.28	-90.18	-4,235.59	-8,994.59	4,719.39	4,339.44	379.94	12.421		
13,000.00	7,221.88	7,160.88	7,221.88	171.69	248.26	-90.18	-4,235.59	-8,994.59	4,657.18	4,273.36	383.81	12.134		
13,100.00	7,221.48	7,160.48	7,221.48	174.49	248.25	-90.17	-4,235.59	-8,994.59	4,596.30	4,208.55	387.75	11.854		
13,200.00	7,221.09	7,160.09	7,221.09	177.30	248.24	-90.16	-4,235.59	-8,994.59	4,536.81	4,145.04	391.77	11.580		
13,300.00	7,220.70	7,159.70	7,220.70	180.12	248.22	-90.16	-4,235.59	-8,994.59	4,478.76	4,082.92	395.85	11.314		
13,400.00	7,220.30	7,159.30	7,220.30	182.93	248.21	-90.15	-4,235.59	-8,994.59	4,422.22	4,022.23	399.99	11.056		
13,500.00	7,219.91	7,158.91	7,219.91	185.74	248.19	-90.15	-4,235.59	-8,994.59	4,367.23	3,963.03	404.19	10.805		
13,600.00	7,219.52	7,158.52	7,219.52	188.56	248.18	-90.14	-4,235.59	-8,994.59	4,313.85	3,905.40	408.45	10.561		
13,700.00	7,219.12	7,158.12	7,219.12	191.38	248.17	-90.13	-4,235.59	-8,994.59	4,262.16	3,849.40	412.76	10.326		
13,800.00	7,218.73	7,157.73	7,218.73	194.20	248.15	-90.13	-4,235.59	-8,994.59	4,212.21	3,795.09	417.11	10.098		
13,900.00	7,218.34	7,157.34	7,218.34	197.02	248.14	-90.12	-4,235.59	-8,994.59	4,164.05	3,742.55	421.50	9.879		
14,000.00	7,217.94	7,156.94	7,217.94	199.84	248.13	-90.11	-4,235.59	-8,994.59	4,117.77	3,691.85	425.92	9.668		
14,100.00	7,217.55	7,156.55	7,217.55	202.66	248.11	-90.11	-4,235.59	-8,994.59	4,073.41	3,643.05	430.36	9.465		
14,200.00	7,217.16	7,156.16	7,217.16	205.48	248.10	-90.10	-4,235.59	-8,994.59	4,031.05	3,596.23	434.81	9.271		
14,300.00	7,216.76	7,155.76	7,216.76	208.30	248.08	-90.10	-4,235.59	-8,994.59	3,990.74	3,551.47	439.27	9.085		
14,400.00	7,216.37	7,155.37	7,216.37	211.13	248.07	-90.09	-4,235.59	-8,994.59	3,952.56	3,508.84	443.72	8.908		
14,500.00	7,215.98	7,154.98	7,215.98	213.96	248.06	-90.08	-4,235.59	-8,994.59	3,916.55	3,468.40	448.15	8.739		
14,600.00	7,215.58	7,154.58	7,215.58	216.78	248.04	-90.08	-4,235.59	-8,994.59	3,882.79	3,430.24	452.55	8.580		
14,700.00	7,215.19	7,154.19	7,215.19	219.61	248.03	-90.07	-4,235.59	-8,994.59	3,851.32	3,394.42	456.90	8.429		
14,800.00	7,214.80	7,153.80	7,214.80	222.44	248.02	-90.07	-4,235.59	-8,994.59	3,822.22	3,361.01	461.21	8.287		
14,900.00	7,214.40	7,153.40	7,214.40	225.27	248.00	-90.06	-4,235.59	-8,994.59	3,795.53	3,330.08	465.44	8.155		
15,000.00	7,214.01	7,153.01	7,214.01	228.10	247.99	-90.05	-4,235.59	-8,994.59	3,771.30	3,301.70	469.60	8.031		
15,002.44	7,214.00	7,153.00	7,214.00	228.16	247.99	-90.05	-4,235.59	-8,994.59	3,770.74	3,301.04	469.70	8.028	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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	673.49	707.34	3.28	4.33	-108.03	-2,908.88	-8,936.36	9,424.46					
100.00	100.00	724.00	757.32	3.28	4.49	-108.07	-2,913.79	-8,931.00	9,417.27	9,409.53	7.75	1,215.396		
200.00	200.00	724.00	757.32	3.34	4.49	-108.07	-2,913.79	-8,931.00	9,410.82	9,403.03	7.79	1,208.191		
300.00	300.00	724.00	757.32	3.44	4.49	-108.07	-2,913.79	-8,931.00	9,405.43	9,397.54	7.89	1,192.371		
400.00	400.00	764.27	797.12	3.60	4.63	-108.10	-2,918.55	-8,927.15	9,400.51	9,392.34	8.17	1,150.411		
500.00	500.00	778.76	811.42	3.81	4.67	-108.12	-2,920.56	-8,925.92	9,396.74	9,388.33	8.42	1,116.377		
600.00	599.98	818.00	850.05	4.03	4.81	53.74	-2,926.80	-8,923.04	9,393.07	9,384.30	8.78	1,070.072		
700.00	699.84	818.00	850.05	4.29	4.81	53.83	-2,926.80	-8,923.04	9,387.85	9,378.82	9.03	1,040.020		
800.00	799.54	818.00	850.05	4.57	4.81	53.85	-2,926.80	-8,923.04	9,382.21	9,372.90	9.31	1,008.225		
900.00	899.23	818.00	850.05	4.87	4.81	53.85	-2,926.80	-8,923.04	9,377.56	9,367.95	9.61	975.809		
1,000.00	998.92	818.00	850.05	5.20	4.81	53.85	-2,926.80	-8,923.04	9,373.98	9,364.04	9.94	943.388		
1,100.00	1,098.61	866.89	898.08	5.54	4.98	53.82	-2,935.59	-8,920.49	9,370.62	9,360.16	10.46	896.029		
1,200.00	1,198.30	912.00	942.33	5.90	5.15	53.78	-2,944.23	-8,919.33	9,368.90	9,357.91	10.99	852.868		
1,300.00	1,298.00	912.00	942.33	6.27	5.15	53.78	-2,944.23	-8,919.33	9,367.52	9,356.17	11.35	824.988		
1,378.86	1,376.62	912.00	942.33	6.58	5.15	53.78	-2,944.23	-8,919.33	9,367.19	9,355.54	11.65	803.824		
1,400.00	1,397.69	912.00	942.33	6.66	5.15	53.78	-2,944.23	-8,919.33	9,367.21	9,355.48	11.73	798.290		
1,500.00	1,497.38	912.00	942.33	7.05	5.15	53.78	-2,944.23	-8,919.33	9,367.97	9,355.85	12.12	772.845		
1,600.00	1,597.07	912.00	942.33	7.44	5.15	53.78	-2,944.23	-8,919.33	9,369.80	9,357.28	12.52	748.676		
1,700.00	1,696.76	954.47	983.97	7.85	5.31	53.75	-2,952.55	-8,919.38	9,372.03	9,358.95	13.08	716.673		
1,800.00	1,796.45	1,006.00	1,034.51	8.25	5.50	53.71	-2,962.48	-8,921.11	9,375.97	9,362.29	13.68	685.252		
1,900.00	1,896.15	1,006.00	1,034.51	8.67	5.50	53.71	-2,962.48	-8,921.11	9,380.00	9,365.91	14.09	665.820		
2,000.00	1,995.84	1,006.00	1,034.51	9.08	5.50	53.71	-2,962.48	-8,921.11	9,385.09	9,370.60	14.50	647.438		
2,100.00	2,095.53	1,006.00	1,034.51	9.50	5.50	53.71	-2,962.48	-8,921.11	9,391.25	9,376.34	14.91	630.057		
2,200.00	2,195.22	1,006.00	1,034.51	9.92	5.50	53.71	-2,962.48	-8,921.11	9,398.46	9,383.15	15.32	613.627		
2,300.00	2,294.91	1,052.18	1,079.79	10.35	5.67	53.69	-2,971.02	-8,924.06	9,406.15	9,390.24	15.91	591.278		
2,400.00	2,394.60	1,101.00	1,127.68	10.77	5.85	53.67	-2,979.45	-8,928.48	9,415.13	9,398.62	16.51	570.106		
2,500.00	2,494.30	1,101.00	1,127.68	11.20	5.85	53.67	-2,979.45	-8,928.48	9,424.51	9,407.58	16.93	556.795		
2,600.00	2,593.99	1,101.00	1,127.68	11.63	5.85	53.67	-2,979.45	-8,928.48	9,434.94	9,417.60	17.34	544.192		
2,700.00	2,693.68	1,101.00	1,127.68	12.07	5.85	53.67	-2,979.45	-8,928.48	9,446.42	9,428.67	17.75	532.256		
2,800.00	2,793.37	1,144.30	1,170.03	12.50	6.02	53.65	-2,986.98	-8,933.34	9,458.38	9,440.05	18.33	515.895		
2,900.00	2,893.06	1,197.00	1,221.30	12.93	6.23	53.62	-2,997.07	-8,940.22	9,471.76	9,452.80	18.96	499.516		
3,000.00	2,992.76	1,197.00	1,221.30	13.37	6.23	53.62	-2,997.07	-8,940.22	9,485.36	9,465.99	19.37	489.726		
3,100.00	3,092.45	1,197.00	1,221.30	13.81	6.23	53.62	-2,997.07	-8,940.22	9,499.99	9,480.21	19.77	480.435		
3,200.00	3,192.14	1,197.00	1,221.30	14.25	6.23	53.62	-2,997.07	-8,940.22	9,515.64	9,495.46	20.18	471.615		
3,300.00	3,291.83	1,235.63	1,258.66	14.68	6.39	53.60	-3,005.06	-8,945.91	9,531.92	9,511.17	20.75	459.375		
3,400.00	3,391.52	1,254.93	1,277.26	15.12	6.48	53.59	-3,009.22	-8,948.94	9,549.13	9,527.89	21.24	449.667		
3,500.00	3,491.21	1,292.00	1,312.86	15.56	6.64	53.57	-3,017.53	-8,955.11	9,567.23	9,545.43	21.80	438.806		
3,600.00	3,590.91	1,292.00	1,312.86	16.00	6.64	53.57	-3,017.53	-8,955.11	9,585.98	9,563.78	22.20	431.862		
3,700.00	3,690.60	1,292.00	1,312.86	16.45	6.64	53.57	-3,017.53	-8,955.11	9,605.73	9,583.14	22.59	425.259		
3,800.00	3,790.29	1,331.57	1,350.66	16.89	6.84	53.54	-3,026.85	-8,962.20	9,626.07	9,602.90	23.16	415.591		
3,900.00	3,889.98	1,350.58	1,368.74	17.33	6.94	53.53	-3,031.50	-8,965.79	9,647.31	9,623.67	23.65	407.981		
4,000.00	3,989.67	1,387.00	1,403.23	17.77	7.12	53.50	-3,040.70	-8,973.00	9,669.44	9,645.23	24.21	399.322		
4,100.00	4,089.36	1,392.45	1,408.38	18.22	7.15	53.50	-3,042.11	-8,974.11	9,692.20	9,667.57	24.62	393.602		
4,200.00	4,189.06	1,468.60	1,480.17	18.66	7.59	53.44	-3,062.27	-8,989.54	9,715.50	9,690.09	25.41	382.349		
4,300.00	4,288.75	1,510.36	1,519.42	19.10	7.84	53.41	-3,073.75	-8,997.98	9,739.16	9,713.14	26.02	374.263		
4,400.00	4,388.44	1,545.26	1,552.09	19.55	8.07	53.37	-3,083.71	-9,005.13	9,763.44	9,736.84	26.59	367.124		
4,500.00	4,488.13	4,500.00	1,647.61	19.99	31.89	53.27	-3,114.79	-9,025.77	9,788.06	9,735.14	52.92	184.963		
4,600.00	4,587.82	1,730.63	1,724.42	20.44	9.38	53.18	-3,141.39	-9,041.63	9,812.49	9,784.00	28.48	344.499		
4,700.00	4,687.51	1,760.00	1,751.48	20.89	9.60	53.14	-3,151.37	-9,047.17	9,837.47	9,808.43	29.04	338.726		
4,800.00	4,787.21	2,449.91	2,372.35	21.33	15.82	51.96	-3,435.25	-9,140.31	9,862.48	9,827.49	34.99	281.873		
4,900.00	4,886.90	2,479.48	2,399.02	21.78	16.10	51.91	-3,447.68	-9,143.25	9,882.63	9,847.01	35.62	277.452		
5,000.00	4,986.59	2,513.00	2,429.24	22.22	16.42	51.85	-3,461.75	-9,146.83	9,903.48	9,867.20	36.28	272.967		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,086.28	2,547.69	2,460.50	22.67	16.75	51.79	-3,476.24	-9,150.79	9,924.97	9,888.02	36.95	268.619		
5,200.00	5,185.97	2,608.00	2,514.91	23.12	17.33	51.69	-3,501.18	-9,158.19	9,947.09	9,909.26	37.84	262.906		
5,300.00	5,285.66	2,629.76	2,534.54	23.56	17.54	51.65	-3,510.14	-9,161.00	9,969.70	9,931.31	38.39	259.728		
5,400.00	5,385.36	2,673.42	2,573.86	24.01	17.96	51.58	-3,528.24	-9,166.75	9,992.89	9,953.77	39.12	255.422		
7,500.00	7,230.50	7,399.20	6,988.03	34.04	53.62	-64.25	-4,871.96	-9,554.60	9,916.43	9,838.69	77.74	127.562		
7,600.00	7,242.45	7,412.81	7,001.64	35.13	53.66	-81.89	-4,872.12	-9,554.90	9,827.10	9,749.21	77.89	126.174		
7,700.00	7,242.72	7,415.20	7,004.03	36.39	53.66	-87.28	-4,872.14	-9,554.95	9,737.31	9,659.29	78.02	124.804		
7,800.00	7,242.33	7,416.95	7,005.78	37.81	53.67	-87.30	-4,872.16	-9,554.99	9,647.73	9,569.52	78.21	123.357		
7,900.00	7,241.93	7,418.71	7,007.54	39.40	53.67	-87.33	-4,872.18	-9,555.03	9,558.35	9,479.90	78.46	121.830		
8,000.00	7,241.54	7,420.47	7,009.30	41.13	53.68	-87.35	-4,872.20	-9,555.07	9,469.19	9,390.43	78.76	120.223		
8,100.00	7,241.15	7,422.25	7,011.08	42.97	53.68	-87.37	-4,872.22	-9,555.11	9,380.24	9,301.11	79.13	118.541		
8,200.00	7,240.75	7,424.03	7,012.86	44.92	53.69	-87.40	-4,872.24	-9,555.15	9,291.52	9,211.96	79.56	116.786		
8,300.00	7,240.36	7,425.81	7,014.64	46.97	53.69	-87.42	-4,872.26	-9,555.19	9,203.03	9,122.98	80.05	114.962		
8,400.00	7,239.97	7,427.61	7,016.43	49.10	53.70	-87.45	-4,872.28	-9,555.23	9,114.78	9,034.17	80.61	113.076		
8,500.00	7,239.57	7,429.41	7,018.24	51.29	53.70	-87.47	-4,872.29	-9,555.27	9,026.77	8,945.54	81.23	111.131		
8,600.00	7,239.18	7,431.22	7,020.04	53.56	53.71	-87.49	-4,872.31	-9,555.31	8,939.01	8,857.11	81.91	109.134		
8,700.00	7,238.79	7,433.03	7,021.86	55.87	53.71	-87.52	-4,872.33	-9,555.35	8,851.52	8,768.86	82.65	107.091		
8,800.00	7,238.39	7,434.85	7,023.68	58.24	53.72	-87.54	-4,872.35	-9,555.39	8,764.29	8,680.82	83.46	105.008		
8,900.00	7,238.00	7,436.68	7,025.51	60.64	53.72	-87.57	-4,872.37	-9,555.43	8,677.33	8,593.00	84.33	102.891		
9,000.00	7,237.61	7,438.52	7,027.35	63.09	53.73	-87.59	-4,872.39	-9,555.47	8,590.66	8,505.39	85.27	100.747		
9,100.00	7,237.21	7,440.36	7,029.19	65.56	53.73	-87.62	-4,872.41	-9,555.51	8,504.28	8,418.01	86.27	98.582		
9,200.00	7,236.82	7,442.22	7,031.04	68.07	53.74	-87.64	-4,872.43	-9,555.55	8,418.20	8,330.88	87.33	96.401		
9,300.00	7,236.43	7,444.08	7,032.90	70.61	53.74	-87.66	-4,872.44	-9,555.59	8,332.43	8,243.99	88.45	94.210		
9,400.00	7,236.03	7,445.94	7,034.76	73.16	53.75	-87.69	-4,872.46	-9,555.64	8,246.99	8,157.36	89.63	92.015		
9,500.00	7,235.64	7,447.82	7,036.64	75.74	53.75	-87.71	-4,872.48	-9,555.68	8,161.87	8,071.00	90.87	89.821		
9,600.00	7,235.25	7,449.70	7,038.52	78.34	53.76	-87.74	-4,872.50	-9,555.72	8,077.09	7,984.92	92.17	87.633		
9,700.00	7,234.85	7,451.59	7,040.41	80.96	53.76	-87.76	-4,872.52	-9,555.76	7,992.67	7,899.14	93.53	85.456		
9,800.00	7,234.46	7,453.48	7,042.30	83.59	53.77	-87.79	-4,872.54	-9,555.81	7,908.61	7,813.66	94.95	83.292		
9,900.00	7,234.07	7,455.39	7,044.21	86.24	53.77	-87.82	-4,872.56	-9,555.85	7,824.92	7,728.49	96.43	81.147		
10,000.00	7,233.67	7,457.30	7,046.12	88.90	53.78	-87.84	-4,872.57	-9,555.89	7,741.62	7,643.65	97.97	79.023		
10,100.00	7,233.28	7,459.22	7,048.04	91.57	53.78	-87.87	-4,872.59	-9,555.94	7,658.71	7,559.15	99.56	76.923		
10,200.00	7,232.89	7,461.15	7,049.96	94.25	53.79	-87.89	-4,872.61	-9,555.98	7,576.22	7,475.01	101.22	74.850		
10,300.00	7,232.49	7,463.08	7,051.90	96.95	53.79	-87.92	-4,872.63	-9,556.03	7,494.16	7,391.23	102.93	72.807		
10,400.00	7,232.10	7,465.03	7,053.84	99.65	53.80	-87.94	-4,872.65	-9,556.07	7,412.54	7,307.83	104.70	70.796		
10,500.00	7,231.71	7,466.98	7,055.79	102.36	53.80	-87.97	-4,872.67	-9,556.12	7,331.37	7,224.83	106.53	68.818		
10,600.00	7,231.32	7,468.94	7,057.75	105.08	53.81	-88.00	-4,872.68	-9,556.16	7,250.67	7,142.25	108.42	66.875		
10,700.00	7,230.92	7,470.90	7,059.72	107.80	53.82	-88.02	-4,872.70	-9,556.21	7,170.45	7,060.09	110.37	64.968		
10,800.00	7,230.53	7,472.88	7,061.69	110.53	53.82	-88.05	-4,872.72	-9,556.25	7,090.74	6,978.37	112.38	63.099		
10,900.00	7,230.14	7,474.86	7,063.68	113.27	53.83	-88.07	-4,872.74	-9,556.30	7,011.55	6,897.11	114.44	61.268		
11,000.00	7,229.74	7,476.86	7,065.67	116.02	53.83	-88.10	-4,872.75	-9,556.34	6,932.90	6,816.33	116.57	59.476		
11,100.00	7,229.35	7,478.86	7,067.67	118.77	53.84	-88.13	-4,872.77	-9,556.39	6,854.80	6,736.05	118.75	57.724		
11,200.00	7,228.96	7,480.86	7,069.68	121.52	53.84	-88.15	-4,872.79	-9,556.44	6,777.28	6,656.28	121.00	56.012		
11,300.00	7,228.56	7,482.88	7,071.69	124.28	53.85	-88.18	-4,872.81	-9,556.48	6,700.35	6,577.05	123.30	54.341		
11,400.00	7,228.17	7,484.91	7,073.72	127.04	53.85	-88.21	-4,872.83	-9,556.53	6,624.04	6,498.37	125.67	52.710		
11,500.00	7,227.78	7,486.94	7,075.75	129.81	53.86	-88.23	-4,872.84	-9,556.58	6,548.36	6,420.26	128.10	51.119		
11,600.00	7,227.38	7,488.98	7,077.79	132.58	53.87	-88.26	-4,872.86	-9,556.63	6,473.34	6,342.75	130.59	49.570		
11,700.00	7,226.99	7,491.03	7,079.84	135.36	53.87	-88.29	-4,872.88	-9,556.67	6,399.01	6,265.87	133.14	48.061		
11,800.00	7,226.60	7,493.09	7,081.90	138.14	53.88	-88.32	-4,872.90	-9,556.72	6,325.38	6,189.62	135.76	46.592		
11,900.00	7,226.20	7,495.16	7,083.97	140.92	53.88	-88.34	-4,872.91	-9,556.77	6,252.49	6,114.05	138.44	45.164		
12,000.00	7,225.81	7,497.24	7,086.04	143.70	53.89	-88.37	-4,872.93	-9,556.82	6,180.35	6,039.17	141.19	43.775		
12,100.00	7,225.42	7,499.32	7,088.13	146.49	53.89	-88.40	-4,872.95	-9,556.87	6,109.00	5,965.01	143.99	42.426		
12,200.00	7,225.02	7,501.42	7,090.22	149.28	53.90	-88.43	-4,872.96	-9,556.92	6,038.46	5,891.59	146.87	41.116		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,300.00	7,224.63	7,503.52	7,092.32	152.08	53.90	-88.46	-4,872.98	-9,556.97	5,968.76	5,818.96	149.80	39.844		
12,400.00	7,224.24	7,505.63	7,094.44	154.87	53.91	-88.48	-4,873.00	-9,557.02	5,899.93	5,747.13	152.80	38.611		
12,500.00	7,223.84	7,507.75	7,096.56	157.67	53.92	-88.51	-4,873.01	-9,557.07	5,832.01	5,676.13	155.87	37.415		
12,600.00	7,223.45	7,509.88	7,098.69	160.47	53.92	-88.54	-4,873.03	-9,557.12	5,765.01	5,606.01	159.00	36.257		
12,700.00	7,223.06	7,512.02	7,100.83	163.27	53.93	-88.57	-4,873.05	-9,557.17	5,698.99	5,536.79	162.20	35.135		
12,800.00	7,222.66	7,514.17	7,102.97	166.07	53.93	-88.60	-4,873.07	-9,557.22	5,633.96	5,468.50	165.46	34.050		
12,900.00	7,222.27	7,516.33	7,105.13	168.88	53.94	-88.63	-4,873.08	-9,557.28	5,569.97	5,401.18	168.79	33.000		
13,000.00	7,221.88	7,518.50	7,107.30	171.69	53.95	-88.65	-4,873.10	-9,557.33	5,507.05	5,334.87	172.18	31.985		
13,100.00	7,221.48	7,520.67	7,109.47	174.49	53.95	-88.68	-4,873.11	-9,557.38	5,445.24	5,269.61	175.63	31.004		
13,200.00	7,221.09	7,522.86	7,111.66	177.30	53.96	-88.71	-4,873.13	-9,557.43	5,384.58	5,205.43	179.15	30.057		
13,300.00	7,220.70	7,525.06	7,113.85	180.12	53.96	-88.74	-4,873.15	-9,557.49	5,325.10	5,142.38	182.72	29.143		
13,400.00	7,220.30	7,527.26	7,116.06	182.93	53.97	-88.77	-4,873.16	-9,557.54	5,266.85	5,080.49	186.36	28.262		
13,500.00	7,219.91	7,529.48	7,118.27	185.74	53.98	-88.80	-4,873.18	-9,557.59	5,209.87	5,019.81	190.06	27.412		
13,600.00	7,219.52	7,531.70	7,120.50	188.56	53.98	-88.83	-4,873.20	-9,557.65	5,154.19	4,960.39	193.81	26.594		
13,700.00	7,219.12	7,533.93	7,122.73	191.38	53.99	-88.86	-4,873.21	-9,557.70	5,099.87	4,902.26	197.61	25.807		
13,800.00	7,218.73	7,536.18	7,124.97	194.20	53.99	-88.89	-4,873.23	-9,557.76	5,046.95	4,845.48	201.47	25.050		
13,900.00	7,218.34	7,538.43	7,127.23	197.02	54.00	-88.92	-4,873.24	-9,557.81	4,995.46	4,790.08	205.38	24.323		
14,000.00	7,217.94	7,540.70	7,129.49	199.84	54.01	-88.95	-4,873.26	-9,557.87	4,945.46	4,736.13	209.34	23.624		
14,100.00	7,217.55	7,542.97	7,131.76	202.66	54.01	-88.98	-4,873.27	-9,557.92	4,896.99	4,683.66	213.34	22.954		
14,200.00	7,217.16	7,545.25	7,134.05	205.48	54.02	-89.01	-4,873.29	-9,557.98	4,850.10	4,632.73	217.37	22.312		
14,300.00	7,216.76	7,547.55	7,136.34	208.30	54.03	-89.04	-4,873.30	-9,558.03	4,804.83	4,583.38	221.45	21.697		
14,400.00	7,216.37	7,549.85	7,138.64	211.13	54.03	-89.07	-4,873.32	-9,558.09	4,761.23	4,535.68	225.56	21.109		
14,500.00	7,215.98	7,552.17	7,140.96	213.96	54.04	-89.10	-4,873.33	-9,558.15	4,719.35	4,489.66	229.69	20.547		
14,600.00	7,215.58	7,554.49	7,143.28	216.78	54.04	-89.13	-4,873.35	-9,558.21	4,679.23	4,445.38	233.84	20.010		
14,700.00	7,215.19	7,556.83	7,145.61	219.61	54.05	-89.16	-4,873.36	-9,558.26	4,640.91	4,402.90	238.01	19.499		
14,800.00	7,214.80	7,559.17	7,147.96	222.44	54.06	-89.20	-4,873.38	-9,558.32	4,604.45	4,362.25	242.19	19.011		
14,900.00	7,214.40	7,561.53	7,150.31	225.27	54.06	-89.23	-4,873.39	-9,558.38	4,569.88	4,323.50	246.38	18.548		
15,000.00	7,214.01	7,563.90	7,152.68	228.10	54.07	-89.26	-4,873.41	-9,558.44	4,537.25	4,286.69	250.56	18.109		
15,002.44	7,214.00	7,563.95	7,152.74	228.16	54.07	-89.26	-4,873.41	-9,558.44	4,536.48	4,285.82	250.66	18.098	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	64.00	3.28	3.28	-130.26	-4,162.79	-4,916.37	6,442.33					
100.00	100.00	47.87	111.87	3.28	3.28	-130.25	-4,162.64	-4,916.44	6,441.98	6,435.41	6.57	981.043		
200.00	200.00	180.76	244.74	3.34	3.33	-130.24	-4,160.79	-4,917.24	6,441.54	6,434.87	6.67	966.015		
300.00	300.00	276.64	340.60	3.44	3.43	-130.22	-4,158.94	-4,917.92	6,440.83	6,433.96	6.87	937.151		
400.00	400.00	374.44	438.39	3.60	3.57	-130.21	-4,157.38	-4,918.47	6,440.24	6,433.06	7.18	897.594		
500.00	500.00	477.99	541.93	3.81	3.77	-130.19	-4,155.93	-4,918.86	6,439.62	6,432.05	7.57	850.244		
600.00	599.98	596.55	660.48	4.03	4.04	31.69	-4,154.32	-4,919.01	6,437.36	6,429.29	8.08	797.176		
700.00	699.84	685.13	749.05	4.29	4.27	31.77	-4,153.21	-4,918.96	6,432.05	6,423.49	8.56	751.532		
800.00	799.54	786.53	850.45	4.57	4.56	31.83	-4,152.14	-4,918.85	6,424.71	6,415.58	9.13	703.794		
900.00	899.23	875.57	939.48	4.87	4.83	31.87	-4,151.21	-4,918.78	6,417.32	6,407.61	9.70	661.354		
1,000.00	998.92	968.98	1,032.89	5.20	5.13	31.91	-4,150.32	-4,918.85	6,410.08	6,399.76	10.33	620.718		
1,100.00	1,098.61	1,076.48	1,140.38	5.54	5.49	31.96	-4,149.27	-4,918.93	6,402.86	6,391.83	11.03	580.578		
1,200.00	1,198.30	1,169.64	1,233.54	5.90	5.82	32.00	-4,148.31	-4,918.96	6,395.57	6,383.86	11.71	546.289		
1,300.00	1,298.00	1,255.67	1,319.56	6.27	6.13	32.04	-4,147.49	-4,919.15	6,388.46	6,376.08	12.38	515.990		
1,400.00	1,397.69	1,342.66	1,406.54	6.66	6.45	32.08	-4,146.93	-4,919.36	6,381.57	6,368.50	13.07	488.119		
1,500.00	1,497.38	1,440.42	1,504.30	7.05	6.81	32.12	-4,146.53	-4,919.59	6,374.84	6,361.02	13.82	461.267		
1,600.00	1,597.07	1,544.79	1,608.68	7.44	7.21	32.16	-4,146.05	-4,919.74	6,368.01	6,353.40	14.60	436.021		
1,700.00	1,696.76	1,644.57	1,708.45	7.85	7.59	32.20	-4,145.78	-4,919.76	6,361.20	6,345.82	15.38	413.501		
1,800.00	1,796.45	1,744.92	1,808.81	8.25	7.98	32.24	-4,145.41	-4,919.79	6,354.34	6,338.17	16.17	392.860		
1,900.00	1,896.15	1,830.93	1,894.81	8.67	8.32	32.28	-4,145.21	-4,919.81	6,347.58	6,330.67	16.92	375.206		
2,000.00	1,995.84	1,907.86	1,971.74	9.08	8.62	32.31	-4,145.21	-4,920.02	6,341.15	6,323.52	17.63	359.662		
2,100.00	2,095.53	1,996.41	2,060.29	9.50	8.97	32.34	-4,145.32	-4,920.47	6,334.99	6,316.59	18.39	344.406		
2,200.00	2,195.22	2,091.47	2,155.35	9.92	9.35	32.38	-4,145.55	-4,921.02	6,328.95	6,309.76	19.19	329.841		
2,300.00	2,294.91	2,190.82	2,254.70	10.35	9.74	32.42	-4,145.81	-4,921.62	6,322.95	6,302.95	20.00	316.088		
2,400.00	2,394.60	2,282.30	2,346.17	10.77	10.11	32.46	-4,145.97	-4,922.31	6,317.02	6,296.23	20.79	303.805		
2,500.00	2,494.30	2,382.75	2,446.63	11.20	10.52	32.50	-4,146.15	-4,923.17	6,311.17	6,289.55	21.62	291.887		
2,600.00	2,593.99	2,477.44	2,541.31	11.63	10.91	32.54	-4,146.32	-4,923.99	6,305.33	6,282.90	22.43	281.095		
2,700.00	2,693.68	2,570.42	2,634.28	12.07	11.28	32.58	-4,146.49	-4,924.92	6,299.60	6,276.36	23.24	271.101		
2,800.00	2,793.37	2,657.00	2,720.85	12.50	11.64	32.62	-4,146.56	-4,926.02	6,294.01	6,269.99	24.02	262.035		
2,900.00	2,893.06	2,744.06	2,807.91	12.93	12.00	32.66	-4,146.75	-4,927.28	6,288.67	6,263.86	24.81	253.507		
3,000.00	2,992.76	2,835.11	2,898.95	13.37	12.37	32.70	-4,147.10	-4,928.67	6,283.48	6,257.87	25.61	245.334		
3,100.00	3,092.45	2,926.91	2,990.74	13.81	12.75	32.74	-4,147.68	-4,930.04	6,278.43	6,252.01	26.42	237.620		
3,200.00	3,192.14	3,023.50	3,087.31	14.25	13.15	32.78	-4,148.34	-4,931.59	6,273.50	6,246.24	27.25	230.188		
3,300.00	3,291.83	3,204.74	3,268.53	14.68	13.90	32.86	-4,149.25	-4,933.72	6,268.29	6,239.85	28.43	220.467		
3,400.00	3,391.52	3,287.03	3,350.83	15.12	14.25	32.89	-4,149.40	-4,934.17	6,262.23	6,233.02	29.21	214.390		
3,500.00	3,491.21	3,405.12	3,468.91	15.56	14.74	32.94	-4,149.50	-4,934.90	6,256.18	6,226.04	30.13	207.614		
3,600.00	3,590.91	3,494.91	3,558.70	16.00	15.11	32.98	-4,149.61	-4,935.33	6,250.04	6,219.09	30.94	201.976		
3,700.00	3,690.60	3,573.57	3,637.36	16.45	15.44	33.01	-4,149.80	-4,935.86	6,244.13	6,212.42	31.71	196.907		
3,800.00	3,790.29	3,652.59	3,716.38	16.89	15.77	33.05	-4,149.97	-4,936.76	6,238.56	6,206.08	32.48	192.074		
3,900.00	3,889.98	3,735.84	3,799.61	17.33	16.12	33.09	-4,150.16	-4,938.04	6,233.31	6,200.05	33.27	187.372		
4,000.00	3,989.67	3,824.85	3,888.61	17.77	16.50	33.13	-4,150.48	-4,939.54	6,228.27	6,194.19	34.08	182.763		
4,100.00	4,089.36	3,911.25	3,974.99	18.22	16.86	33.17	-4,151.04	-4,940.98	6,223.40	6,188.52	34.88	178.423		
4,200.00	4,189.06	3,979.50	4,043.22	18.66	17.15	33.19	-4,151.73	-4,942.25	6,218.92	6,183.31	35.61	174.655		
4,300.00	4,288.75	4,051.25	4,114.95	19.10	17.45	33.22	-4,152.76	-4,943.80	6,214.93	6,178.58	36.35	170.983		
4,400.00	4,388.44	4,123.65	4,187.32	19.55	17.75	33.25	-4,154.15	-4,945.48	6,211.37	6,174.28	37.09	167.458		
4,500.00	4,488.13	4,200.01	4,263.63	19.99	18.08	33.28	-4,155.94	-4,947.46	6,208.28	6,170.43	37.85	164.011		
4,600.00	4,587.82	4,333.89	4,397.43	20.44	18.64	33.33	-4,158.89	-4,950.88	6,205.09	6,166.24	38.86	159.689		
4,700.00	4,687.51	4,450.37	4,513.87	20.89	19.13	33.38	-4,160.73	-4,953.75	6,201.45	6,161.66	39.79	155.859		
4,800.00	4,787.21	4,594.42	4,657.87	21.33	19.74	33.45	-4,162.33	-4,957.13	6,197.45	6,156.62	40.84	151.766		
4,900.00	4,886.90	4,737.01	4,800.43	21.78	20.34	33.51	-4,163.37	-4,959.43	6,192.61	6,150.74	41.87	147.884		
5,000.00	4,986.59	4,850.27	4,913.69	22.22	20.82	33.56	-4,164.10	-4,960.63	6,187.28	6,144.49	42.79	144.587		
5,100.00	5,086.28	4,953.68	5,017.09	22.67	21.26	33.60	-4,164.69	-4,961.72	6,181.92	6,138.25	43.67	141.556		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,069.01	5,132.41	23.12	21.75	33.65	-4,164.98	-4,962.97	6,176.39	6,131.79	44.60	138.490		
5,300.00	5,285.66	5,174.92	5,238.32	23.56	22.20	33.70	-4,164.85	-4,964.13	6,170.64	6,125.15	45.49	135.658		
5,400.00	5,385.36	5,283.40	5,346.79	24.01	22.66	33.76	-4,164.30	-4,965.54	6,164.82	6,118.43	46.39	132.902		
5,500.00	5,485.05	5,364.85	5,428.23	24.46	23.00	33.80	-4,163.93	-4,966.59	6,159.03	6,111.85	47.18	130.553		
5,600.00	5,584.74	5,489.74	5,553.11	24.90	23.53	33.86	-4,163.61	-4,968.21	6,153.40	6,105.26	48.14	127.816		
5,700.00	5,684.43	5,566.70	5,630.06	25.35	23.86	33.90	-4,163.36	-4,969.03	6,147.54	6,098.62	48.92	125.676		
5,800.00	5,784.12	5,644.53	5,707.89	25.80	24.19	33.94	-4,163.55	-4,969.97	6,142.11	6,092.42	49.69	123.603		
5,900.00	5,883.81	5,733.06	5,796.41	26.25	24.57	33.98	-4,163.81	-4,971.29	6,136.95	6,086.44	50.51	121.493		
6,000.00	5,983.51	5,825.32	5,888.65	26.70	24.96	34.02	-4,164.23	-4,972.66	6,131.89	6,080.54	51.35	119.417		
6,100.00	6,083.20	5,906.54	5,969.85	27.14	25.30	34.06	-4,164.48	-4,974.23	6,127.09	6,074.95	52.14	117.514		
6,200.00	6,182.89	6,006.96	6,070.25	27.59	25.73	34.12	-4,164.56	-4,976.52	6,122.44	6,069.43	53.01	115.498		
6,300.00	6,282.58	6,115.69	6,178.96	28.04	26.19	34.17	-4,164.76	-4,978.74	6,117.66	6,063.75	53.91	113.471		
6,400.00	6,382.27	6,197.53	6,260.77	28.49	26.54	34.22	-4,164.73	-4,980.66	6,113.01	6,058.30	54.71	111.740		
6,500.00	6,481.96	6,275.29	6,338.51	28.94	26.87	34.26	-4,164.77	-4,982.76	6,108.68	6,053.20	55.48	110.097		
6,600.00	6,581.66	6,379.70	6,442.88	29.39	27.32	34.32	-4,165.20	-4,985.56	6,104.57	6,048.20	56.37	108.290		
6,700.00	6,681.21	6,478.58	6,541.72	29.83	27.74	-4.36	-4,165.22	-4,988.36	6,098.28	6,041.04	57.24	106.547		
6,800.00	6,778.96	6,568.17	6,631.27	30.28	28.12	-22.83	-4,165.46	-4,990.83	6,080.83	6,022.78	58.05	104.760		
6,900.00	6,872.51	6,646.98	6,710.05	30.70	28.46	-30.03	-4,166.00	-4,992.93	6,051.62	5,992.84	58.79	102.945		
7,000.00	6,959.55	6,717.02	6,780.06	31.10	28.75	-35.31	-4,166.21	-4,995.27	6,011.52	5,952.07	59.46	101.108		
7,100.00	7,037.93	6,779.45	6,842.43	31.48	29.02	-40.61	-4,166.16	-4,997.80	5,961.58	5,901.52	60.06	99.256		
7,200.00	7,105.74	6,829.52	6,892.45	31.88	29.23	-46.68	-4,166.01	-5,000.10	5,903.10	5,842.51	60.59	97.422		
7,300.00	7,161.29	6,869.06	6,931.94	32.41	29.40	-53.96	-4,165.98	-5,002.04	5,837.63	5,776.56	61.07	95.583		
7,400.00	7,203.22	6,900.01	6,962.86	33.13	29.53	-62.67	-4,166.02	-5,003.63	5,766.84	5,705.30	61.54	93.714		
7,500.00	7,230.50	6,918.25	6,981.07	34.04	29.61	-72.60	-4,166.07	-5,004.60	5,692.53	5,630.54	61.99	91.828		
7,600.00	7,242.45	6,928.08	6,990.88	35.13	29.65	-83.22	-4,166.11	-5,005.13	5,616.59	5,554.12	62.48	89.899		
7,700.00	7,242.72	6,931.39	6,994.18	36.39	29.67	-86.34	-4,166.13	-5,005.32	5,540.81	5,477.79	63.02	87.916		
7,800.00	7,242.33	6,934.36	6,997.15	37.81	29.68	-86.39	-4,166.14	-5,005.48	5,465.81	5,402.11	63.70	85.807		
7,900.00	7,241.93	6,937.37	7,000.16	39.40	29.69	-86.44	-4,166.16	-5,005.65	5,391.61	5,327.10	64.51	83.581		
8,000.00	7,241.54	6,940.42	7,003.20	41.13	29.71	-86.49	-4,166.17	-5,005.82	5,318.25	5,252.80	65.45	81.256		
8,100.00	7,241.15	6,943.50	7,006.28	42.97	29.72	-86.53	-4,166.19	-5,006.00	5,245.77	5,179.24	66.53	78.849		
8,200.00	7,240.75	6,946.63	7,009.40	44.92	29.73	-86.58	-4,166.21	-5,006.18	5,174.20	5,106.46	67.74	76.381		
8,300.00	7,240.36	6,949.80	7,012.56	46.97	29.75	-86.63	-4,166.23	-5,006.36	5,103.59	5,034.50	69.09	73.870		
8,400.00	7,239.97	6,953.01	7,015.77	49.10	29.76	-86.68	-4,166.25	-5,006.55	5,033.97	4,963.40	70.57	71.337		
8,500.00	7,239.57	6,956.26	7,019.01	51.29	29.77	-86.73	-4,166.27	-5,006.73	4,963.38	4,893.21	72.17	68.799		
8,600.00	7,239.18	6,959.55	7,022.30	53.56	29.79	-86.79	-4,166.29	-5,006.93	4,897.87	4,823.97	73.90	66.273		
8,700.00	7,238.79	6,962.89	7,025.63	55.87	29.80	-86.84	-4,166.32	-5,007.12	4,831.49	4,755.73	75.76	63.774		
8,800.00	7,238.39	6,966.27	7,029.01	58.24	29.82	-86.89	-4,166.34	-5,007.32	4,766.27	4,688.54	77.73	61.316		
8,900.00	7,238.00	6,969.69	7,032.43	60.64	29.83	-86.95	-4,166.37	-5,007.53	4,702.27	4,622.45	79.82	58.909		
9,000.00	7,237.61	6,973.17	7,035.89	63.09	29.85	-87.00	-4,166.40	-5,007.74	4,639.54	4,557.52	82.02	56.563		
9,100.00	7,237.21	6,976.69	7,039.41	65.56	29.86	-87.05	-4,166.43	-5,007.95	4,578.14	4,493.80	84.33	54.286		
9,200.00	7,236.82	6,980.26	7,042.97	68.07	29.88	-87.11	-4,166.46	-5,008.17	4,518.10	4,431.35	86.75	52.083		
9,300.00	7,236.43	6,983.88	7,046.58	70.61	29.89	-87.17	-4,166.49	-5,008.39	4,459.50	4,370.23	89.26	49.959		
9,400.00	7,236.03	6,987.54	7,050.24	73.16	29.91	-87.23	-4,166.52	-5,008.61	4,402.38	4,310.51	91.87	47.918		
9,500.00	7,235.64	7,000.01	7,062.69	75.74	29.96	-87.42	-4,166.65	-5,009.39	4,346.82	4,252.21	94.61	45.944		
9,600.00	7,235.25	7,000.01	7,062.69	78.34	29.96	-87.42	-4,166.65	-5,009.39	4,292.85	4,195.46	97.39	44.079		
9,700.00	7,234.85	7,000.01	7,062.69	80.96	29.96	-87.42	-4,166.65	-5,009.39	4,240.54	4,140.29	100.25	42.299		
9,800.00	7,234.46	7,003.46	7,066.13	83.59	29.98	-87.48	-4,166.68	-5,009.61	4,189.97	4,086.76	103.20	40.599		
9,900.00	7,234.07	7,008.37	7,071.02	86.24	30.00	-87.55	-4,166.73	-5,009.92	4,141.19	4,034.95	106.24	38.981		
10,000.00	7,233.67	7,013.28	7,075.93	88.90	30.02	-87.63	-4,166.79	-5,010.23	4,094.26	3,984.92	109.34	37.446		
10,100.00	7,233.28	7,018.20	7,080.84	91.57	30.04	-87.71	-4,166.84	-5,010.54	4,049.25	3,936.75	112.50	35.993		
10,200.00	7,232.89	7,023.12	7,085.75	94.25	30.06	-87.78	-4,166.90	-5,010.85	4,006.23	3,890.51	115.72	34.620		
10,300.00	7,232.49	7,028.05	7,090.66	96.95	30.08	-87.86	-4,166.96	-5,011.16	3,965.25	3,846.26	118.99	33.324		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,032.98	7,095.59	99.65	30.10	-87.94	-4,167.02	-5,011.47	3,926.39	3,804.09	122.30	32.104		
10,500.00	7,231.71	7,037.91	7,100.51	102.36	30.12	-88.02	-4,167.08	-5,011.79	3,889.70	3,764.05	125.65	30.957		
10,600.00	7,231.32	7,042.85	7,105.44	105.08	30.14	-88.10	-4,167.14	-5,012.10	3,855.25	3,726.23	129.03	29.880		
10,700.00	7,230.92	7,047.80	7,110.37	107.80	30.17	-88.17	-4,167.20	-5,012.41	3,823.10	3,690.68	132.42	28.871		
10,800.00	7,230.53	7,052.74	7,115.31	110.53	30.19	-88.25	-4,167.27	-5,012.72	3,793.31	3,657.48	135.82	27.928		
10,900.00	7,230.14	7,057.69	7,120.25	113.27	30.21	-88.33	-4,167.33	-5,013.04	3,765.92	3,626.69	139.23	27.048		
11,000.00	7,229.74	7,062.65	7,125.20	116.02	30.23	-88.41	-4,167.40	-5,013.35	3,741.01	3,598.38	142.63	26.229		
11,100.00	7,229.35	7,067.61	7,130.14	118.77	30.25	-88.48	-4,167.47	-5,013.67	3,718.60	3,572.60	146.01	25.469		
11,200.00	7,228.96	7,072.57	7,135.10	121.52	30.27	-88.56	-4,167.54	-5,013.98	3,698.76	3,549.40	149.36	24.764		
11,300.00	7,228.56	7,077.54	7,140.06	124.28	30.29	-88.64	-4,167.61	-5,014.30	3,681.53	3,528.85	152.68	24.113		
11,400.00	7,228.17	7,082.52	7,145.02	127.04	30.31	-88.72	-4,167.69	-5,014.61	3,666.93	3,510.98	155.95	23.514		
11,500.00	7,227.78	7,087.49	7,149.98	129.81	30.34	-88.80	-4,167.76	-5,014.93	3,655.00	3,495.84	159.16	22.964		
11,600.00	7,227.38	7,092.47	7,154.95	132.58	30.36	-88.88	-4,167.84	-5,015.24	3,645.76	3,483.45	162.31	22.462		
11,700.00	7,226.99	7,097.46	7,159.93	135.36	30.38	-88.95	-4,167.91	-5,015.56	3,639.25	3,473.86	165.38	22.005		
11,800.00	7,226.60	7,102.93	7,165.39	138.14	30.40	-89.04	-4,168.00	-5,015.91	3,635.47	3,467.09	168.38	21.591		
11,888.11	7,226.25	7,108.19	7,170.64	140.59	30.42	-89.12	-4,168.08	-5,016.24	3,634.40	3,463.46	170.95	21.261 CC		
11,900.00	7,226.20	7,108.90	7,171.35	140.92	30.43	-89.13	-4,168.09	-5,016.29	3,634.42	3,463.13	171.29	21.218		
12,000.00	7,225.81	7,114.88	7,177.31	143.70	30.45	-89.23	-4,168.19	-5,016.67	3,636.12	3,462.02	174.10	20.886 ES		
12,100.00	7,225.42	7,120.85	7,183.27	146.49	30.48	-89.32	-4,168.28	-5,017.05	3,640.55	3,463.75	176.80	20.591		
12,200.00	7,225.02	7,126.83	7,189.24	149.28	30.50	-89.42	-4,168.38	-5,017.43	3,647.71	3,468.31	179.40	20.333		
12,300.00	7,224.63	7,132.80	7,195.20	152.08	30.53	-89.51	-4,168.47	-5,017.81	3,657.58	3,475.70	181.88	20.110		
12,400.00	7,224.24	7,138.78	7,201.16	154.87	30.56	-89.60	-4,168.56	-5,018.19	3,670.15	3,485.90	184.25	19.920		
12,500.00	7,223.84	7,144.75	7,207.12	157.67	30.58	-89.70	-4,168.66	-5,018.56	3,685.37	3,498.88	186.49	19.762		
12,600.00	7,223.45	7,150.72	7,213.08	160.47	30.61	-89.79	-4,168.75	-5,018.94	3,703.22	3,514.62	188.61	19.635		
12,700.00	7,223.06	7,156.70	7,219.04	163.27	30.63	-89.89	-4,168.85	-5,019.32	3,723.67	3,533.07	190.60	19.536		
12,800.00	7,222.66	7,162.67	7,225.00	166.07	30.66	-89.98	-4,168.94	-5,019.70	3,746.66	3,554.19	192.47	19.466		
12,900.00	7,222.27	7,168.64	7,230.96	168.88	30.68	-90.07	-4,169.03	-5,020.08	3,772.15	3,577.94	194.21	19.423		
13,000.00	7,221.88	7,174.61	7,236.92	171.69	30.71	-90.17	-4,169.13	-5,020.46	3,800.10	3,604.27	195.83	19.405 SF		
13,100.00	7,221.48	7,180.58	7,242.88	174.49	30.73	-90.26	-4,169.22	-5,020.84	3,830.45	3,633.12	197.33	19.411		
13,200.00	7,221.09	7,186.56	7,248.83	177.30	30.76	-90.36	-4,169.32	-5,021.22	3,863.13	3,664.42	198.71	19.441		
13,300.00	7,220.70	7,192.53	7,254.79	180.12	30.79	-90.45	-4,169.41	-5,021.60	3,898.10	3,698.13	199.97	19.494		
13,400.00	7,220.30	7,198.50	7,260.75	182.93	30.81	-90.54	-4,169.51	-5,021.98	3,935.29	3,734.18	201.12	19.567		
13,500.00	7,219.91	7,204.47	7,266.71	185.74	30.84	-90.64	-4,169.60	-5,022.36	3,974.64	3,772.49	202.15	19.661		
13,600.00	7,219.52	7,210.44	7,272.66	188.56	30.86	-90.73	-4,169.69	-5,022.74	4,016.09	3,813.00	203.09	19.775		
13,700.00	7,219.12	7,216.41	7,278.62	191.38	30.89	-90.83	-4,169.79	-5,023.12	4,059.57	3,855.65	203.92	19.908		
13,800.00	7,218.73	7,222.38	7,284.58	194.20	30.91	-90.92	-4,169.88	-5,023.50	4,105.02	3,900.36	204.65	20.058		
13,900.00	7,218.34	7,228.34	7,290.53	197.02	30.94	-91.01	-4,169.98	-5,023.87	4,152.37	3,947.07	205.30	20.226		
14,000.00	7,217.94	7,234.31	7,296.49	199.84	30.97	-91.11	-4,170.07	-5,024.25	4,201.55	3,995.70	205.85	20.410		
14,100.00	7,217.55	7,240.28	7,302.44	202.66	30.99	-91.20	-4,170.16	-5,024.63	4,252.52	4,046.19	206.33	20.610		
14,200.00	7,217.16	7,246.25	7,308.40	205.48	31.02	-91.29	-4,170.26	-5,025.01	4,305.19	4,098.46	206.73	20.825		
14,300.00	7,216.76	7,252.22	7,314.35	208.30	31.04	-91.39	-4,170.35	-5,025.39	4,359.51	4,152.46	207.05	21.055		
14,400.00	7,216.37	7,258.18	7,320.31	211.13	31.07	-91.48	-4,170.45	-5,025.77	4,415.42	4,208.11	207.31	21.298		
14,500.00	7,215.98	7,264.15	7,326.26	213.96	31.09	-91.58	-4,170.54	-5,026.15	4,472.86	4,265.36	207.51	21.555		
14,600.00	7,215.58	7,270.12	7,332.22	216.78	31.12	-91.67	-4,170.63	-5,026.53	4,531.78	4,324.13	207.65	21.825		
14,700.00	7,215.19	7,276.08	7,338.17	219.61	31.15	-91.76	-4,170.73	-5,026.91	4,592.10	4,384.37	207.73	22.106		
14,800.00	7,214.80	7,282.05	7,344.12	222.44	31.17	-91.86	-4,170.82	-5,027.29	4,653.79	4,446.03	207.76	22.400		
14,900.00	7,214.40	7,288.01	7,350.07	225.27	31.20	-91.95	-4,170.92	-5,027.66	4,716.78	4,509.03	207.75	22.704		
15,000.00	7,214.01	7,293.98	7,356.03	228.10	31.22	-92.04	-4,171.01	-5,028.04	4,781.03	4,573.33	207.69	23.020		
15,002.44	7,214.00	7,294.12	7,356.17	228.16	31.22	-92.05	-4,171.01	-5,028.05	4,782.61	4,574.92	207.69	23.028		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	25.00	73.00	3.28	3.28	-148.11	-5,293.08	-3,293.31	6,234.41					
100.00	100.00	89.66	137.66	3.28	3.28	-148.11	-5,292.93	-3,293.18	6,233.90	6,227.34	6.57	949.139		
200.00	200.00	192.59	240.58	3.34	3.33	-148.11	-5,292.17	-3,292.99	6,233.17	6,226.51	6.67	935.065		
300.00	300.00	263.07	311.06	3.44	3.39	-148.10	-5,291.67	-3,293.21	6,232.74	6,225.90	6.84	911.507		
400.00	400.00	1,469.40	1,504.40	3.60	7.49	-147.18	-5,153.97	-3,323.72	6,231.39	6,220.38	11.01	566.004		
500.00	500.00	1,523.78	1,557.32	3.81	7.78	-147.10	-5,141.60	-3,325.73	6,214.06	6,202.61	11.44	543.124		
600.00	599.98	1,597.55	1,629.19	4.03	8.17	14.94	-5,125.22	-3,328.58	6,195.64	6,183.63	12.01	516.059		
700.00	699.84	1,671.28	1,700.97	4.29	8.58	15.17	-5,108.72	-3,331.93	6,174.21	6,161.60	12.61	489.764		
800.00	799.54	1,732.00	1,760.16	4.57	8.92	15.31	-5,095.44	-3,334.82	6,150.97	6,137.80	13.17	466.973		
900.00	899.23	1,875.03	1,899.39	4.87	9.73	15.56	-5,063.48	-3,341.82	6,127.26	6,113.08	14.18	432.128		
1,000.00	998.92	1,970.48	1,992.26	5.20	10.28	15.73	-5,041.97	-3,346.48	6,103.55	6,088.57	14.97	407.601		
1,100.00	1,098.61	2,065.92	2,085.14	5.54	10.84	15.91	-5,020.47	-3,351.15	6,079.89	6,064.10	15.79	384.969		
1,200.00	1,198.30	2,161.37	2,178.01	5.90	11.41	16.08	-4,998.96	-3,355.81	6,056.29	6,039.65	16.63	364.128		
1,300.00	1,298.00	2,256.81	2,270.88	6.27	11.98	16.26	-4,977.45	-3,360.47	6,032.74	6,015.25	17.49	344.951		
1,400.00	1,397.69	2,352.26	2,363.76	6.66	12.55	16.43	-4,955.94	-3,365.14	6,009.25	5,990.89	18.36	327.302		
1,500.00	1,497.38	2,456.31	2,456.63	7.05	13.18	16.61	-4,934.44	-3,369.80	5,985.81	5,966.52	19.29	310.300		
1,600.00	1,597.07	2,543.15	2,549.50	7.44	13.71	16.79	-4,912.93	-3,374.47	5,962.43	5,942.29	20.14	296.059		
1,700.00	1,696.76	2,638.59	2,642.38	7.85	14.29	16.97	-4,891.42	-3,379.13	5,939.11	5,918.07	21.04	282.218		
1,800.00	1,796.45	2,734.04	2,735.25	8.25	14.87	17.15	-4,869.91	-3,383.79	5,915.85	5,893.89	21.96	269.415		
1,900.00	1,896.15	2,829.48	2,828.12	8.67	15.46	17.34	-4,848.41	-3,388.46	5,892.64	5,869.76	22.88	257.551		
2,000.00	1,995.84	2,924.93	2,921.00	9.08	16.05	17.52	-4,826.90	-3,393.12	5,869.50	5,845.69	23.81	246.536		
2,100.00	2,095.53	3,020.37	3,013.87	9.50	16.64	17.71	-4,805.39	-3,397.79	5,846.42	5,821.68	24.74	236.292		
2,200.00	2,195.22	3,115.82	3,106.74	9.92	17.23	17.90	-4,783.88	-3,402.45	5,823.40	5,797.72	25.68	226.745		
2,300.00	2,294.91	3,211.26	3,199.62	10.35	17.82	18.09	-4,762.38	-3,407.11	5,800.44	5,773.81	26.63	217.833		
2,400.00	2,394.60	3,306.71	3,292.49	10.77	18.41	18.28	-4,740.87	-3,411.78	5,777.54	5,749.96	27.58	209.498		
2,500.00	2,494.30	3,402.15	3,385.36	11.20	19.01	18.47	-4,719.36	-3,416.44	5,754.71	5,726.18	28.53	201.690		
2,600.00	2,593.99	3,497.60	3,478.24	11.63	19.60	18.66	-4,697.85	-3,421.11	5,731.94	5,702.45	29.49	194.363		
2,700.00	2,693.68	3,593.04	3,571.11	12.07	20.20	18.86	-4,676.35	-3,425.77	5,709.24	5,678.79	30.45	187.476		
2,800.00	2,793.37	3,688.49	3,663.98	12.50	20.80	19.05	-4,654.84	-3,430.43	5,686.60	5,655.18	31.42	180.992		
2,900.00	2,893.06	3,783.93	3,756.85	12.93	21.39	19.25	-4,633.33	-3,435.10	5,664.03	5,631.64	32.39	174.880		
3,000.00	2,992.76	10,709.31	7,245.46	13.37	120.49	-21.53	-3,811.86	28.56	5,594.47	5,498.93	95.53	58.561		
3,100.00	3,092.45	10,705.08	7,245.53	13.81	120.36	-21.45	-3,811.88	24.34	5,514.19	5,417.64	96.55	57.112		
3,200.00	3,192.14	10,700.86	7,245.61	14.25	120.23	-21.38	-3,811.89	20.12	5,434.58	5,336.98	97.60	55.682		
3,300.00	3,291.83	10,703.37	7,245.68	14.68	120.31	-21.31	-3,811.91	15.89	5,355.64	5,256.81	98.83	54.191		
3,400.00	3,391.52	10,692.41	7,245.76	15.12	119.96	-21.23	-3,811.92	11.67	5,277.41	5,177.62	99.79	52.888		
3,500.00	3,491.21	10,688.19	7,245.83	15.56	119.82	-21.16	-3,811.93	7.44	5,199.92	5,099.00	100.92	51.524		
3,600.00	3,590.91	10,683.96	7,245.91	16.00	119.69	-21.09	-3,811.95	3.22	5,123.22	5,021.13	102.09	50.184		
3,700.00	3,690.60	10,679.74	7,245.98	16.45	119.56	-21.02	-3,811.96	-1.00	5,047.32	4,944.04	103.28	48.869		
3,800.00	3,790.29	10,675.51	7,246.06	16.89	119.42	-20.94	-3,811.98	-5.23	4,972.27	4,867.77	104.51	47.579		
3,900.00	3,889.98	10,671.29	7,246.13	17.33	119.29	-20.87	-3,811.99	-9.45	4,898.11	4,792.36	105.75	46.316		
4,000.00	3,989.67	10,667.06	7,246.20	17.77	119.16	-20.80	-3,812.00	-13.67	4,824.88	4,717.85	107.03	45.079		
4,100.00	4,089.36	10,662.84	7,246.28	18.22	119.02	-20.72	-3,812.02	-17.90	4,752.62	4,644.29	108.33	43.870		
4,200.00	4,189.06	10,658.62	7,246.35	18.66	118.89	-20.65	-3,812.03	-22.12	4,681.38	4,571.72	109.66	42.690		
4,300.00	4,288.75	10,654.39	7,246.43	19.10	118.75	-20.58	-3,812.05	-26.34	4,611.21	4,500.20	111.01	41.538		
4,400.00	4,388.44	10,653.88	7,246.50	19.55	118.74	-20.51	-3,812.06	-30.57	4,542.14	4,429.67	112.48	40.383		
4,500.00	4,488.13	10,645.94	7,246.58	19.99	118.49	-20.43	-3,812.07	-34.79	4,474.25	4,360.47	113.78	39.325		
4,600.00	4,587.82	10,641.72	7,246.65	20.44	118.35	-20.36	-3,812.09	-39.01	4,407.57	4,292.38	115.19	38.264		
4,700.00	4,687.51	10,637.49	7,246.72	20.89	118.22	-20.29	-3,812.10	-43.24	4,342.16	4,225.54	116.62	37.234		
4,800.00	4,787.21	10,633.27	7,246.80	21.33	118.09	-20.21	-3,812.12	-47.46	4,278.09	4,160.03	118.06	36.235		
4,900.00	4,886.90	10,629.05	7,246.87	21.78	117.95	-20.14	-3,812.13	-51.69	4,215.42	4,095.90	119.52	35.269		
5,000.00	4,986.59	10,624.82	7,246.95	22.22	117.82	-20.07	-3,812.15	-55.91	4,154.20	4,033.21	120.99	34.336		
5,100.00	5,086.28	10,620.60	7,247.02	22.67	117.69	-19.99	-3,812.16	-60.13	4,094.50	3,972.05	122.46	33.436		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	10,616.37	7,247.10	23.12	117.55	-19.92	-3,812.17	-64.36	4,036.40	3,912.47	123.93	32.569		
5,300.00	5,285.66	10,612.15	7,247.17	23.56	117.42	-19.85	-3,812.19	-68.58	3,979.96	3,854.55	125.41	31.737		
5,400.00	5,385.36	10,607.92	7,247.24	24.01	117.29	-19.77	-3,812.20	-72.80	3,925.24	3,798.37	126.87	30.938		
5,500.00	5,485.05	10,603.70	7,247.32	24.46	117.15	-19.70	-3,812.22	-77.03	3,872.33	3,744.00	128.33	30.175		
5,600.00	5,584.74	10,599.48	7,247.39	24.90	117.02	-19.63	-3,812.23	-81.25	3,821.31	3,691.54	129.77	29.446		
5,700.00	5,684.43	10,604.75	7,247.47	25.35	117.18	-19.56	-3,812.24	-85.47	3,772.24	3,640.77	131.47	28.693		
5,800.00	5,784.12	10,591.03	7,247.54	25.80	116.75	-19.48	-3,812.26	-89.70	3,725.20	3,592.61	132.59	28.096		
5,900.00	5,883.81	10,586.80	7,247.62	26.25	116.62	-19.41	-3,812.27	-93.92	3,680.27	3,546.33	133.95	27.476		
6,000.00	5,983.51	10,582.58	7,247.69	26.70	116.48	-19.34	-3,812.29	-98.14	3,637.54	3,502.27	135.27	26.891		
6,100.00	6,083.20	10,578.35	7,247.76	27.14	116.35	-19.26	-3,812.30	-102.37	3,597.07	3,460.53	136.54	26.344		
6,200.00	6,182.89	10,574.13	7,247.84	27.59	116.22	-19.19	-3,812.31	-106.59	3,558.95	3,421.18	137.77	25.833		
6,300.00	6,282.58	10,569.91	7,247.91	28.04	116.08	-19.12	-3,812.33	-110.82	3,523.25	3,384.32	138.93	25.360		
6,400.00	6,382.27	10,565.68	7,247.99	28.49	115.95	-19.04	-3,812.34	-115.04	3,490.05	3,350.02	140.02	24.925		
6,500.00	6,481.96	10,561.46	7,248.06	28.94	115.82	-18.97	-3,812.36	-119.26	3,459.41	3,318.37	141.04	24.527		
6,600.00	6,581.66	10,557.23	7,248.14	29.39	115.68	-18.90	-3,812.37	-123.49	3,431.41	3,289.43	141.98	24.168		
6,700.00	6,681.21	10,553.02	7,248.26	29.83	115.57	-18.83	-3,812.39	-127.72	3,406.14	3,263.29	142.85	23.844		
6,800.00	6,778.96	10,548.80	7,248.38	30.28	115.46	-18.76	-3,812.41	-131.95	3,383.97	3,241.01	143.67	23.561		
6,900.00	6,872.51	10,544.59	7,248.50	30.70	115.36	-18.70	-3,812.43	-136.18	3,365.23	3,222.66	144.45	23.318		
7,000.00	6,969.55	10,540.38	7,248.62	31.10	115.26	-18.64	-3,812.45	-140.41	3,349.98	3,208.35	145.19	23.075		
7,100.00	7,037.93	10,536.17	7,248.74	31.48	115.16	-18.58	-3,812.47	-144.64	3,338.03	3,197.84	145.89	22.832		
7,200.00	7,105.74	10,531.96	7,248.86	31.88	115.07	-18.52	-3,812.49	-148.87	3,329.00	3,190.68	146.55	22.589		
7,300.00	7,161.29	10,527.75	7,248.98	32.24	114.98	-18.46	-3,812.51	-153.10	3,322.49	3,186.16	147.19	22.346		
7,400.00	7,203.22	10,523.54	7,249.10	32.59	114.89	-18.40	-3,812.53	-157.33	3,318.05	3,183.82	147.73	22.103		
7,500.00	7,230.50	10,519.33	7,249.22	32.94	114.80	-18.34	-3,812.55	-161.56	3,315.27	3,183.13	148.27	21.860		
7,600.00	7,242.45	10,515.12	7,249.34	33.29	114.71	-18.28	-3,812.57	-165.79	3,313.85	3,183.70	148.71	21.617		
7,700.00	7,242.72	10,510.91	7,249.46	33.64	114.62	-18.22	-3,812.59	-170.02	3,313.36	3,185.04	149.15	21.374		
7,800.00	7,242.33	10,506.70	7,249.58	33.99	114.53	-18.16	-3,812.61	-174.25	3,312.91	3,186.24	149.59	21.131		
7,900.00	7,241.93	10,502.49	7,249.70	34.34	114.44	-18.10	-3,812.63	-178.48	3,312.46	3,187.27	149.93	20.888		
8,000.00	7,241.54	10,498.28	7,249.82	34.69	114.35	-18.04	-3,812.65	-182.71	3,312.01	3,188.14	150.37	20.645		
8,100.00	7,241.15	10,494.07	7,249.94	35.04	114.26	-17.98	-3,812.67	-186.94	3,311.57	3,188.86	150.81	20.402		
8,200.00	7,240.75	10,489.86	7,250.06	35.39	114.17	-17.92	-3,812.69	-191.17	3,311.12	3,189.45	151.25	20.159		
8,300.00	7,240.36	10,485.65	7,250.18	35.74	114.08	-17.86	-3,812.71	-195.40	3,310.67	3,189.92	151.69	19.916		
8,400.00	7,239.97	10,481.44	7,250.30	36.09	114.00	-17.80	-3,812.73	-199.63	3,310.23	3,190.28	152.13	19.673		
8,500.00	7,239.57	10,477.23	7,250.42	36.44	113.91	-17.74	-3,812.75	-203.86	3,309.78	3,190.53	152.57	19.430		
8,600.00	7,239.18	10,473.02	7,250.54	36.79	113.82	-17.68	-3,812.77	-208.09	3,309.33	3,190.68	153.01	19.187		
8,700.00	7,238.79	10,468.81	7,250.66	37.14	113.73	-17.62	-3,812.79	-212.32	3,308.89	3,190.72	153.45	18.944		
8,800.00	7,238.39	10,464.60	7,250.78	37.49	113.64	-17.56	-3,812.81	-216.55	3,308.44	3,190.66	153.89	18.701		
8,900.00	7,238.00	10,460.39	7,250.90	37.84	113.55	-17.50	-3,812.83	-220.78	3,307.99	3,190.50	154.33	18.458		
9,000.00	7,237.61	10,456.18	7,251.02	38.19	113.46	-17.44	-3,812.85	-225.01	3,307.55	3,190.23	154.77	18.215		
9,100.00	7,237.21	10,451.97	7,251.14	38.54	113.37	-17.38	-3,812.87	-229.24	3,307.10	3,189.85	155.21	17.972		
9,200.00	7,236.82	10,447.76	7,251.26	38.89	113.28	-17.32	-3,812.89	-233.47	3,306.65	3,189.34	155.65	17.729		
9,300.00	7,236.43	10,443.55	7,251.38	39.24	113.19	-17.26	-3,812.91	-237.70	3,306.21	3,188.69	156.09	17.486		
9,400.00	7,236.03	10,439.34	7,251.50	39.59	113.10	-17.20	-3,812.93	-241.93	3,305.76	3,187.90	156.53	17.243		
9,500.00	7,235.64	10,435.13	7,251.62	39.94	113.01	-17.14	-3,812.95	-246.16	3,305.31	3,186.93	156.97	17.000		
9,600.00	7,235.25	10,430.92	7,251.74	40.29	112.92	-17.08	-3,812.97	-250.39	3,304.87	3,185.78	157.41	16.757		
9,700.00	7,234.85	10,426.71	7,251.86	40.64	112.83	-17.02	-3,812.99	-254.62	3,304.42	3,184.42	157.85	16.514		
9,800.00	7,234.46	10,422.50	7,251.98	40.99	112.74	-16.96	-3,813.01	-258.85	3,303.98	3,182.79	158.29	16.271		
9,824.37	7,234.37	10,421.82	7,251.99	41.00	112.73	-16.95	-3,813.02	-259.00	3,303.93	3,182.74	158.24	16.226		
9,900.00	7,234.07	10,418.29	7,252.10	41.35	112.64	-16.90	-3,813.04	-263.23	3,303.42	3,181.00	158.68	16.000		
10,000.00	7,233.67	10,414.08	7,252.22	41.70	112.55	-16.84	-3,813.06	-267.46	3,302.93	3,179.03	159.12	15.773		
10,100.00	7,233.28	10,410.00	7,252.34	42.05	112.46	-16.78	-3,813.08	-271.69	3,302.45	3,176.93	159.56	15.546		
10,200.00	7,232.89	10,405.89	7,252.46	42.40	112.37	-16.72	-3,813.10	-275.92	3,301.97	3,174.73	160.00	15.319		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,509.37	7,212.02	96.95	42.83	-89.63	-3,831.71	-3,166.39	3,322.70	3,190.78	131.92	25.188		
10,400.00	7,232.10	7,472.82	7,198.56	99.65	42.75	-89.40	-3,834.94	-3,200.20	3,331.68	3,197.51	134.17	24.832		
10,500.00	7,231.71	7,434.75	7,182.54	102.36	42.67	-89.12	-3,838.77	-3,234.52	3,342.56	3,206.17	136.39	24.507		
10,600.00	7,231.32	7,400.00	7,166.20	105.08	42.61	-88.85	-3,842.66	-3,264.94	3,355.41	3,216.80	138.60	24.209		
10,700.00	7,230.92	7,365.18	7,148.23	107.80	42.53	-88.54	-3,846.92	-3,294.45	3,370.28	3,229.49	140.79	23.938		
10,800.00	7,230.53	7,333.69	7,130.65	110.53	42.47	-88.24	-3,851.08	-3,320.23	3,387.23	3,244.29	142.94	23.697		
10,900.00	7,230.14	7,300.00	7,110.48	113.27	42.39	-87.90	-3,855.84	-3,346.80	3,406.33	3,261.30	145.02	23.488		
11,000.00	7,229.74	7,276.98	7,095.93	116.02	42.33	-87.65	-3,859.28	-3,364.30	3,427.57	3,280.46	147.11	23.300		
11,100.00	7,229.35	7,252.01	7,079.46	118.77	42.27	-87.37	-3,863.15	-3,382.65	3,451.02	3,301.92	149.10	23.146		
11,200.00	7,228.96	7,227.91	7,062.90	121.52	42.21	-87.10	-3,867.05	-3,399.73	3,476.67	3,325.64	151.02	23.020		
11,300.00	7,228.56	7,208.36	7,049.03	124.28	42.16	-86.86	-3,870.31	-3,413.10	3,504.53	3,351.65	152.88	22.923		
11,400.00	7,228.17	7,200.00	7,042.96	127.04	42.13	-86.76	-3,871.73	-3,418.69	3,534.70	3,380.00	154.70	22.849		
11,500.00	7,227.78	7,152.01	7,006.86	129.81	41.99	-86.16	-3,880.20	-3,449.12	3,566.96	3,410.65	156.31	22.820		
11,600.00	7,227.38	7,152.01	7,006.86	132.58	41.99	-86.16	-3,880.20	-3,449.12	3,601.29	3,443.32	157.98	22.796 SF		
11,700.00	7,226.99	7,132.33	6,991.41	135.36	41.92	-85.90	-3,883.82	-3,460.78	3,637.86	3,478.35	159.51	22.807		
11,800.00	7,226.60	7,100.00	6,965.32	138.14	41.82	-85.47	-3,889.93	-3,478.85	3,676.68	3,515.76	160.92	22.849		
11,900.00	7,226.20	7,100.00	6,965.32	140.92	41.82	-85.47	-3,889.93	-3,478.85	3,717.27	3,554.95	162.32	22.901		
12,000.00	7,225.81	7,100.00	6,965.32	143.70	41.82	-85.47	-3,889.93	-3,478.85	3,760.08	3,596.45	163.63	22.979		
12,100.00	7,225.42	7,076.57	6,945.86	146.49	41.73	-85.15	-3,894.48	-3,491.08	3,804.74	3,639.91	164.82	23.084		
12,200.00	7,225.02	7,052.01	6,925.01	149.28	41.65	-84.80	-3,899.35	-3,503.10	3,851.46	3,685.53	165.93	23.212		
12,300.00	7,224.63	7,052.01	6,925.01	152.08	41.65	-84.80	-3,899.35	-3,503.10	3,899.87	3,732.87	167.00	23.352		
12,400.00	7,224.24	7,049.69	6,923.02	154.87	41.64	-84.77	-3,899.81	-3,504.20	3,950.20	3,782.20	167.99	23.514		
12,500.00	7,223.84	7,033.47	6,908.98	157.67	41.57	-84.54	-3,903.09	-3,511.63	4,002.22	3,833.33	168.89	23.697		
12,600.00	7,223.45	7,010.76	6,889.02	160.47	41.48	-84.21	-3,907.75	-3,521.41	4,056.08	3,886.36	169.71	23.900		
12,700.00	7,223.06	7,010.76	6,889.02	163.27	41.48	-84.21	-3,907.75	-3,521.41	4,111.36	3,940.86	170.50	24.113		
12,800.00	7,222.66	7,010.76	6,889.02	166.07	41.48	-84.21	-3,907.75	-3,521.41	4,168.31	3,997.09	171.22	24.345		
12,900.00	7,222.27	7,000.00	6,879.45	168.88	41.44	-84.06	-3,909.98	-3,525.79	4,226.78	4,054.91	171.87	24.593		
13,000.00	7,221.88	7,000.00	6,879.45	171.69	41.44	-84.06	-3,909.98	-3,525.79	4,286.76	4,114.29	172.47	24.855		
13,100.00	7,221.48	7,000.00	6,879.45	174.49	41.44	-84.06	-3,909.98	-3,525.79	4,348.21	4,175.20	173.01	25.133		
13,200.00	7,221.09	6,978.40	6,860.02	177.30	41.34	-83.74	-3,914.51	-3,534.08	4,410.77	4,237.27	173.49	25.423		
13,300.00	7,220.70	6,972.08	6,854.28	180.12	41.32	-83.65	-3,915.85	-3,536.37	4,474.77	4,300.84	173.94	25.727		
13,400.00	7,220.30	6,952.01	6,835.94	182.93	41.23	-83.35	-3,920.13	-3,543.27	4,540.16	4,365.84	174.32	26.045		
13,500.00	7,219.91	6,952.01	6,835.94	185.74	41.23	-83.35	-3,920.13	-3,543.27	4,606.53	4,431.85	174.68	26.371		
13,600.00	7,219.52	6,952.01	6,835.94	188.56	41.23	-83.35	-3,920.13	-3,543.27	4,674.10	4,499.10	175.00	26.709		
13,700.00	7,219.12	6,952.01	6,835.94	191.38	41.23	-83.35	-3,920.13	-3,543.27	4,742.81	4,567.54	175.28	27.059		
13,800.00	7,218.73	6,952.01	6,835.94	194.20	41.23	-83.35	-3,920.13	-3,543.27	4,812.63	4,637.11	175.52	27.419		
13,900.00	7,218.34	6,952.01	6,835.94	197.02	41.23	-83.35	-3,920.13	-3,543.27	4,883.49	4,707.76	175.73	27.790		
14,000.00	7,217.94	6,952.01	6,835.94	199.84	41.23	-83.35	-3,920.13	-3,543.27	4,955.36	4,779.45	175.90	28.171		
14,100.00	7,217.55	6,952.01	6,835.94	202.66	41.23	-83.35	-3,920.13	-3,543.27	5,028.18	4,852.13	176.05	28.561		
14,200.00	7,217.16	6,926.76	6,812.56	205.48	41.11	-82.97	-3,925.57	-3,551.11	5,101.48	4,925.29	176.19	28.955		
14,300.00	7,216.76	6,922.74	6,808.81	208.30	41.09	-82.91	-3,926.44	-3,552.26	5,175.95	4,999.66	176.29	29.360		
14,400.00	7,216.37	6,900.00	6,787.47	211.13	40.98	-82.57	-3,931.41	-3,558.36	5,251.51	5,075.14	176.37	29.775		
14,500.00	7,215.98	6,900.00	6,787.47	213.96	40.98	-82.57	-3,931.41	-3,558.36	5,327.51	5,151.08	176.43	30.196		
14,600.00	7,215.58	6,900.00	6,787.47	216.78	40.98	-82.57	-3,931.41	-3,558.36	5,404.29	5,227.82	176.47	30.624		
14,700.00	7,215.19	6,900.00	6,787.47	219.61	40.98	-82.57	-3,931.41	-3,558.36	5,481.82	5,305.33	176.49	31.060		
14,800.00	7,214.80	6,900.00	6,787.47	222.44	40.98	-82.57	-3,931.41	-3,558.36	5,560.07	5,383.57	176.50	31.502		
14,900.00	7,214.40	6,900.00	6,787.47	225.27	40.98	-82.57	-3,931.41	-3,558.36	5,639.00	5,462.51	176.49	31.951		
15,000.00	7,214.01	6,900.00	6,787.47	228.10	40.98	-82.57	-3,931.41	-3,558.36	5,718.60	5,542.13	176.47	32.406		
15,002.44	7,214.00	6,900.00	6,787.47	228.16	40.98	-82.57	-3,931.41	-3,558.36	5,720.55	5,544.08	176.47	32.417		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	73.00	3.28	3.28	-148.01	-5,273.04	-3,293.31	6,217.41					
100.00	100.00	1,234.87	1,265.52	3.28	6.94	-146.93	-5,108.20	-3,326.07	6,206.04	6,195.92	10.12	613.147		
200.00	200.00	1,384.17	1,409.41	3.34	7.83	-146.66	-5,069.28	-3,334.61	6,187.07	6,176.14	10.94	565.684		
300.00	300.00	1,449.62	1,472.57	3.44	8.23	-146.55	-5,052.43	-3,337.74	6,167.86	6,156.50	11.36	543.123		
400.00	400.00	1,564.93	1,583.99	3.60	8.94	-146.36	-5,023.14	-3,342.53	6,148.68	6,136.58	12.10	508.165		
500.00	500.00	1,621.96	1,639.18	3.81	9.29	-146.27	-5,008.92	-3,344.68	6,129.76	6,117.19	12.57	487.575		
600.00	599.98	1,717.39	1,731.65	4.03	9.87	15.84	-4,985.62	-3,348.29	6,109.67	6,096.38	13.29	459.788		
700.00	699.84	1,870.49	1,879.43	4.29	10.85	16.26	-4,946.19	-3,355.09	6,085.45	6,071.08	14.37	423.367		
800.00	799.54	1,964.79	1,970.34	4.57	11.47	16.49	-4,921.51	-3,359.47	6,058.86	6,043.70	15.16	399.535		
900.00	899.23	2,059.06	2,061.22	4.87	12.08	16.69	-4,896.83	-3,363.85	6,032.24	6,016.26	15.97	377.617		
1,000.00	998.92	2,153.33	2,152.09	5.20	12.71	16.88	-4,872.16	-3,368.23	6,005.68	5,988.87	16.81	357.260		
1,100.00	1,098.61	2,247.60	2,242.97	5.54	13.33	17.08	-4,847.49	-3,372.61	5,979.19	5,961.53	17.67	338.406		
1,200.00	1,198.30	2,341.86	2,333.84	5.90	13.96	17.28	-4,822.81	-3,376.98	5,952.78	5,934.23	18.55	320.972		
1,300.00	1,298.00	2,436.13	2,424.72	6.27	14.59	17.48	-4,798.14	-3,381.36	5,926.43	5,906.99	19.44	304.857		
1,400.00	1,397.69	2,539.61	2,515.59	6.66	15.28	17.68	-4,773.47	-3,385.74	5,900.15	5,879.75	20.40	289.200		
1,500.00	1,497.38	2,624.66	2,606.47	7.05	15.86	17.88	-4,748.79	-3,390.12	5,873.94	5,852.68	21.27	276.177		
1,600.00	1,597.07	2,718.93	2,697.35	7.44	16.49	18.09	-4,724.12	-3,394.49	5,847.81	5,825.61	22.20	263.412		
1,700.00	1,696.76	2,813.20	2,788.22	7.85	17.13	18.29	-4,699.45	-3,398.87	5,821.75	5,798.61	23.14	251.574		
1,800.00	1,796.45	2,907.47	2,879.10	8.25	17.77	18.50	-4,674.77	-3,403.25	5,795.77	5,771.68	24.09	240.578		
1,900.00	1,896.15	3,001.73	2,969.97	8.67	18.41	18.71	-4,650.10	-3,407.63	5,769.86	5,744.81	25.05	230.348		
2,000.00	1,995.84	3,096.00	3,060.85	9.08	19.05	18.93	-4,625.43	-3,412.01	5,744.03	5,718.02	26.01	220.816		
2,100.00	2,095.53	3,190.27	3,151.72	9.50	19.69	19.14	-4,600.75	-3,416.38	5,718.28	5,691.30	26.98	211.918		
2,200.00	2,195.22	3,284.53	3,242.60	9.92	20.33	19.36	-4,576.08	-3,420.76	5,692.61	5,664.65	27.96	203.598		
2,300.00	2,294.91	3,378.80	3,333.47	10.35	20.97	19.57	-4,551.41	-3,425.14	5,667.01	5,638.07	28.94	195.806		
2,400.00	2,394.60	3,473.07	3,424.35	10.77	21.62	19.79	-4,526.73	-3,429.52	5,641.50	5,611.57	29.93	188.496		
2,500.00	2,494.30	3,567.34	3,515.23	11.20	22.26	20.02	-4,502.06	-3,433.89	5,616.07	5,585.15	30.92	181.629		
2,600.00	2,593.99	3,661.60	3,606.10	11.63	22.90	20.24	-4,477.39	-3,438.27	5,590.73	5,558.81	31.92	175.167		
2,700.00	2,693.68	3,755.87	3,697.96	12.07	23.54	-19.99	-3,452.72	-34.81	5,565.48	5,534.27	32.92	168.737		
2,800.00	2,793.37	3,850.14	3,790.95	12.50	24.18	-19.95	-3,458.06	-66.14	5,540.95	5,510.19	33.92	162.307		
2,900.00	2,893.06	3,944.41	3,884.95	12.93	24.82	-19.91	-3,463.40	-97.47	5,516.42	5,486.64	34.92	155.877		
3,000.00	2,992.76	4,038.68	3,979.95	13.37	25.46	-19.86	-3,468.74	-128.80	5,491.89	5,462.67	35.92	149.447		
3,100.00	3,092.45	4,132.95	4,073.95	13.81	26.10	-19.82	-3,474.08	-160.13	5,467.36	5,438.19	36.92	143.017		
3,200.00	3,192.14	4,227.22	4,173.94	14.25	26.74	-19.77	-3,479.42	-191.46	5,442.83	5,413.72	37.92	136.587		
3,300.00	3,291.83	4,321.49	4,273.94	14.68	27.38	-19.73	-3,484.76	-222.79	5,418.30	5,389.25	38.92	130.157		
3,400.00	3,391.52	4,415.76	4,373.94	15.12	28.02	-19.69	-3,490.10	-254.12	5,393.77	5,364.78	39.92	123.727		
3,500.00	3,491.21	4,510.03	4,473.94	15.56	28.66	-19.64	-3,495.44	-285.45	5,369.24	5,340.31	40.92	117.297		
3,600.00	3,590.91	4,604.30	4,573.93	16.00	29.30	-19.60	-3,500.78	-316.78	5,344.71	5,315.84	41.92	110.867		
3,700.00	3,690.60	4,698.57	4,673.93	16.45	29.94	-19.56	-3,506.12	-348.11	5,320.18	5,291.37	42.92	104.437		
3,800.00	3,790.29	4,792.84	4,773.93	16.89	30.58	-19.51	-3,511.46	-379.44	5,295.65	5,266.86	43.92	98.007		
3,900.00	3,889.98	4,887.11	4,873.93	17.33	31.22	-19.47	-3,516.80	-410.77	5,271.12	5,242.39	44.92	91.577		
4,000.00	3,989.67	4,981.38	4,973.93	17.77	31.86	-19.43	-3,522.14	-442.10	5,246.59	5,217.92	45.92	85.147		
4,100.00	4,089.36	5,075.65	5,073.92	18.22	32.50	-19.38	-3,527.48	-473.43	5,222.06	5,193.45	46.92	78.717		
4,200.00	4,189.06	5,169.92	5,173.92	18.66	33.14	-19.34	-3,532.82	-504.76	5,197.53	5,168.94	47.92	72.287		
4,300.00	4,288.75	5,264.19	5,273.92	19.10	33.78	-19.29	-3,538.16	-536.09	5,173.00	5,144.43	48.92	65.857		
4,400.00	4,388.44	5,358.46	5,373.92	19.55	34.42	-19.25	-3,543.50	-567.42	5,148.47	5,119.92	49.92	59.427		
4,500.00	4,488.13	5,452.73	5,473.91	19.99	35.06	-19.21	-3,548.84	-598.75	5,123.94	5,095.41	50.92	52.997		
4,600.00	4,587.82	5,547.00	5,573.91	20.44	35.70	-19.16	-3,554.18	-630.08	5,099.41	5,070.90	51.92	46.567		
4,700.00	4,687.51	5,641.27	5,673.91	20.89	36.34	-19.12	-3,559.52	-661.41	5,074.88	5,046.39	52.92	40.137		
4,800.00	4,787.21	5,735.54	5,773.91	21.33	36.98	-19.08	-3,564.86	-692.74	5,050.35	5,021.88	53.92	33.707		
4,900.00	4,886.90	5,829.81	5,873.90	21.78	37.62	-19.03	-3,570.20	-724.07	5,025.82	5,002.37	54.92	27.277		
5,000.00	4,986.59	5,924.08	5,973.90	22.22	38.26	-18.99	-3,575.54	-755.40	5,001.29	4,982.86	55.92	20.847		
5,100.00	5,086.28	6,018.35	6,073.90	22.67	38.90	-18.95	-3,580.88	-786.73	4,976.76	4,963.35	56.92	14.417		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	10,425.68	7,077.90	23.12	116.02	-18.90	-3,548.83	-122.02	3,723.32	3,600.37	122.95	30.283		
5,300.00	5,285.66	10,423.35	7,077.90	23.56	115.95	-18.86	-3,548.82	-124.35	3,667.16	3,542.62	124.54	29.447		
5,400.00	5,385.36	10,421.02	7,077.89	24.01	115.88	-18.82	-3,548.82	-126.68	3,612.89	3,486.77	126.11	28.648		
5,500.00	5,485.05	10,418.69	7,077.89	24.46	115.80	-18.77	-3,548.81	-129.01	3,560.59	3,432.92	127.67	27.888		
5,600.00	5,584.74	10,416.37	7,077.89	24.90	115.73	-18.73	-3,548.80	-131.33	3,510.37	3,381.16	129.22	27.167		
5,700.00	5,684.43	10,414.04	7,077.89	25.35	115.66	-18.68	-3,548.80	-133.66	3,462.31	3,331.58	130.73	26.485		
5,800.00	5,784.12	10,411.71	7,077.88	25.80	115.58	-18.64	-3,548.79	-135.99	3,416.50	3,284.29	132.21	25.842		
5,900.00	5,883.81	10,409.38	7,077.88	26.25	115.51	-18.60	-3,548.79	-138.32	3,373.02	3,239.38	133.64	25.239		
6,000.00	5,983.51	10,407.05	7,077.88	26.70	115.44	-18.55	-3,548.78	-140.65	3,331.98	3,196.95	135.03	24.676		
6,100.00	6,083.20	10,404.72	7,077.88	27.14	115.36	-18.51	-3,548.78	-142.98	3,293.47	3,157.12	136.36	24.154		
6,200.00	6,182.89	10,402.40	7,077.87	27.59	115.29	-18.47	-3,548.77	-145.30	3,257.57	3,119.96	137.61	23.672		
6,300.00	6,282.58	10,400.07	7,077.87	28.04	115.22	-18.42	-3,548.76	-147.63	3,224.37	3,085.58	138.79	23.232		
6,400.00	6,382.27	10,402.26	7,077.87	28.49	115.29	-18.38	-3,548.76	-149.96	3,193.96	3,053.93	140.02	22.810		
6,500.00	6,481.96	10,395.41	7,077.87	28.94	115.07	-18.34	-3,548.75	-152.29	3,166.41	3,025.53	140.88	22.476		
6,600.00	6,581.66	10,393.08	7,077.87	29.39	115.00	-18.29	-3,548.75	-154.62	3,141.80	3,000.03	141.77	22.161		
6,700.00	6,681.21	10,388.17	7,077.86	29.83	114.84	-18.25	-3,548.73	-156.95	3,120.21	2,977.74	142.47	21.901		
6,800.00	6,778.96	10,386.09	7,077.84	30.28	114.25	-18.21	-3,548.69	-159.28	3,101.83	2,959.24	142.59	21.754		
6,900.00	6,872.51	10,335.12	7,077.81	30.70	113.18	-18.17	-3,548.60	-161.61	3,086.89	2,944.79	142.10	21.724		
7,000.00	6,969.55	10,286.48	7,077.76	31.10	111.66	-18.13	-3,548.48	-163.94	3,075.32	2,934.30	141.02	21.807		
7,100.00	7,037.93	10,224.97	7,077.70	31.48	109.73	-18.09	-3,548.33	-166.27	3,066.81	2,927.34	139.47	21.989		
7,200.00	7,105.74	10,151.91	7,077.63	31.88	107.46	-18.05	-3,548.15	-168.60	3,060.85	2,923.29	137.56	22.251		
7,300.00	7,161.29	10,069.09	7,077.54	32.41	104.89	-18.01	-3,547.95	-170.93	3,056.85	2,921.41	135.44	22.570		
7,400.00	7,203.22	9,978.55	7,077.45	33.13	102.09	-17.97	-3,547.72	-173.26	3,054.20	2,920.97	133.23	22.924		
7,500.00	7,230.50	9,882.53	7,077.36	34.04	99.13	-17.93	-3,547.48	-175.59	3,052.41	2,921.33	131.08	23.287		
7,600.00	7,242.45	9,783.38	7,077.26	35.13	96.09	-17.89	-3,547.24	-177.92	3,051.10	2,922.04	129.06	23.641		
7,700.00	7,242.72	9,683.39	7,077.16	36.39	93.05	-17.85	-3,546.99	-180.25	3,050.04	2,922.82	127.22	23.974		
7,800.00	7,242.33	9,583.40	7,077.06	37.81	90.03	-17.81	-3,546.74	-182.58	3,048.99	2,923.42	125.58	24.280		
7,900.00	7,241.93	9,483.41	7,076.96	39.40	87.04	-17.77	-3,546.50	-184.91	3,047.95	2,923.84	124.11	24.559		
8,000.00	7,241.54	9,383.41	7,076.86	41.13	84.07	-17.73	-3,546.25	-187.24	3,046.91	2,924.11	122.80	24.813		
8,100.00	7,241.15	9,283.42	7,076.76	42.97	81.13	-17.69	-3,546.00	-189.57	3,045.86	2,924.24	121.63	25.043		
8,200.00	7,240.75	9,184.62	7,076.62	44.92	78.26	-17.65	-3,545.76	-191.90	3,044.83	2,924.20	120.63	25.241		
8,300.00	7,240.36	9,084.62	7,076.59	46.97	75.39	-17.61	-3,545.51	-194.23	3,043.83	2,924.12	119.71	25.426		
8,400.00	7,239.97	8,984.63	7,076.46	49.10	72.57	-17.57	-3,545.26	-196.56	3,042.82	2,923.92	118.91	25.590		
8,500.00	7,239.57	8,884.64	7,076.34	51.29	69.80	-17.53	-3,545.02	-198.89	3,041.82	2,923.61	118.21	25.733		
8,600.00	7,239.18	8,784.64	7,076.21	53.56	67.08	-17.49	-3,544.77	-201.22	3,040.82	2,923.20	117.62	25.854		
8,700.00	7,238.79	8,684.65	7,076.08	55.87	64.44	-17.45	-3,544.52	-203.55	3,039.81	2,922.69	117.12	25.954		
8,800.00	7,238.39	8,584.66	7,075.95	58.24	61.88	-17.41	-3,544.28	-205.88	3,038.81	2,922.07	116.74	26.031		
8,900.00	7,238.00	8,484.66	7,075.82	60.64	59.42	-17.37	-3,544.03	-208.21	3,037.80	2,921.35	116.46	26.085		
9,000.00	7,237.61	8,384.67	7,075.69	63.09	57.08	-17.33	-3,543.78	-210.54	3,036.80	2,920.51	116.29	26.115		
9,100.00	7,237.21	8,284.67	7,075.56	65.56	54.89	-17.29	-3,543.53	-212.87	3,035.80	2,919.56	116.23	26.118		
9,200.00	7,236.82	8,184.68	7,075.43	68.07	52.89	-17.25	-3,543.29	-215.20	3,034.79	2,918.49	116.31	26.093		
9,300.00	7,236.43	8,084.69	7,075.30	70.61	51.13	-17.21	-3,543.04	-217.53	3,033.79	2,917.27	116.52	26.037		
9,400.00	7,236.03	7,984.69	7,075.17	73.16	49.67	-17.17	-3,542.79	-219.86	3,032.78	2,915.90	116.89	25.946		
9,500.00	7,235.64	7,884.70	7,075.04	75.74	48.52	-17.13	-3,542.55	-222.19	3,031.78	2,914.35	117.43	25.818		
9,600.00	7,235.25	7,784.71	7,074.91	78.34	47.68	-17.09	-3,542.30	-224.52	3,030.78	2,912.61	118.16	25.649		
9,700.00	7,234.85	7,684.71	7,074.78	80.96	47.11	-17.05	-3,542.05	-226.85	3,029.77	2,910.66	119.12	25.435		
9,800.00	7,234.46	7,600.00	7,074.65	83.59	46.79	-17.01	-3,541.85	-229.18	3,028.82	2,908.27	120.54	25.126		
9,830.22	7,234.34	7,584.88	7,074.62	84.39	46.74	-17.00	-3,541.89	-229.62	3,028.72	2,907.55	121.18	24.995 CC		
9,900.00	7,234.07	7,550.00	7,074.60	86.24	46.64	-16.96	-3,542.34	-230.06	3,029.23	2,906.61	122.62	24.705 ES		
10,000.00	7,233.67	7,517.61	7,074.58	88.90	46.56	-16.92	-3,543.21	-230.50	3,031.59	2,906.64	124.95	24.262		
10,100.00	7,233.28	7,472.62	7,074.56	91.57	46.45	-16.88	-3,545.12	-230.94	3,036.01	2,908.93	127.08	23.890		
10,200.00	7,232.89	7,442.18	7,074.54	94.25	46.39	-16.84	-3,546.88	-231.38	3,042.45	2,913.05	129.40	23.513		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,400.00	7,030.08	96.95	46.29	-86.16	-3,549.93	-3,143.86	3,050.99	2,919.45	131.54	23.195		
10,400.00	7,232.10	7,368.88	7,019.64	99.65	46.23	-85.97	-3,552.62	-3,173.05	3,061.63	2,927.85	133.78	22.885		
10,500.00	7,231.71	7,335.01	7,006.72	102.36	46.16	-85.73	-3,555.98	-3,204.17	3,074.46	2,938.51	135.95	22.615		
10,600.00	7,231.32	7,300.00	6,991.71	105.08	46.08	-85.46	-3,559.00	-3,235.56	3,089.49	2,951.43	138.06	22.377		
10,700.00	7,230.92	7,271.91	6,978.48	107.80	46.02	-85.22	-3,563.38	-3,260.09	3,106.77	2,966.55	140.22	22.157		
10,800.00	7,230.53	7,242.81	6,963.69	110.53	45.96	-84.95	-3,567.27	-3,284.84	3,126.32	2,984.07	142.25	21.978		
10,900.00	7,230.14	7,221.20	6,952.01	113.27	45.91	-84.74	-3,570.36	-3,302.75	3,148.19	3,003.90	144.29	21.818		
11,000.00	7,229.74	7,189.40	6,933.76	116.02	45.83	-84.41	-3,575.18	-3,328.35	3,172.34	3,026.14	146.19	21.700		
11,100.00	7,229.35	7,165.01	6,918.95	118.77	45.76	-84.14	-3,579.11	-3,347.32	3,198.82	3,050.75	148.07	21.603		
11,200.00	7,228.96	7,142.08	6,904.40	121.52	45.70	-83.88	-3,582.98	-3,364.61	3,227.63	3,077.76	149.87	21.536		
11,300.00	7,228.56	7,121.76	6,891.01	124.28	45.64	-83.64	-3,586.54	-3,379.46	3,258.74	3,107.13	151.61	21.495		
11,400.00	7,228.17	7,100.00	6,876.16	127.04	45.57	-83.37	-3,590.50	-3,394.88	3,292.13	3,138.89	153.25	21.482 SF		
11,500.00	7,227.78	7,081.28	6,862.99	129.81	45.51	-83.14	-3,594.01	-3,407.72	3,327.79	3,172.96	154.82	21.494		
11,600.00	7,227.38	7,050.00	6,840.20	132.58	45.42	-82.74	-3,600.09	-3,428.25	3,365.76	3,209.52	156.24	21.542		
11,700.00	7,226.99	7,050.00	6,840.20	135.36	45.42	-82.74	-3,600.09	-3,428.25	3,405.72	3,248.01	157.72	21.594		
11,800.00	7,226.60	7,035.01	6,828.94	138.14	45.36	-82.54	-3,603.10	-3,437.67	3,447.92	3,288.88	159.04	21.680		
11,900.00	7,226.20	7,016.01	6,814.37	140.92	45.30	-82.28	-3,607.00	-3,449.21	3,492.18	3,331.92	160.26	21.791		
12,000.00	7,225.81	7,000.00	6,801.83	143.70	45.24	-82.06	-3,610.36	-3,458.59	3,538.49	3,377.08	161.41	21.923		
12,100.00	7,225.42	7,000.00	6,801.83	146.49	45.24	-82.06	-3,610.36	-3,458.59	3,586.83	3,424.31	162.52	22.070		
12,200.00	7,225.02	6,976.45	6,782.98	149.28	45.15	-81.73	-3,615.41	-3,471.78	3,636.94	3,473.45	163.49	22.246		
12,300.00	7,224.63	6,950.00	6,761.27	152.08	45.05	-81.36	-3,621.23	-3,485.72	3,689.11	3,524.74	164.37	22.444		
12,400.00	7,224.24	6,950.00	6,761.27	154.87	45.05	-81.36	-3,621.23	-3,485.72	3,742.79	3,577.54	165.25	22.649		
12,500.00	7,223.84	6,943.16	6,755.57	157.67	45.02	-81.26	-3,622.77	-3,489.17	3,798.33	3,632.28	166.04	22.876		
12,600.00	7,223.45	6,935.01	6,748.73	160.47	44.98	-81.14	-3,624.60	-3,493.20	3,855.53	3,688.77	166.76	23.120		
12,700.00	7,223.06	6,935.01	6,748.73	163.27	44.98	-81.14	-3,624.60	-3,493.20	3,914.41	3,746.98	167.43	23.379		
12,800.00	7,222.66	6,914.92	6,731.66	166.07	44.90	-80.85	-3,629.19	-3,502.75	3,974.66	3,806.66	168.00	23.658		
12,900.00	7,222.27	6,900.00	6,718.80	168.88	44.83	-80.63	-3,632.64	-3,509.47	4,036.50	3,867.97	168.53	23.952		
13,000.00	7,221.88	6,900.00	6,718.80	171.69	44.83	-80.63	-3,632.64	-3,509.47	4,099.70	3,930.67	169.02	24.255		
13,100.00	7,221.48	6,900.00	6,718.80	174.49	44.83	-80.63	-3,632.64	-3,509.47	4,164.34	3,994.88	169.46	24.574		
13,200.00	7,221.09	6,900.00	6,718.80	177.30	44.83	-80.63	-3,632.64	-3,509.47	4,230.36	4,060.51	169.85	24.906		
13,300.00	7,220.70	6,876.50	6,698.24	180.12	44.72	-80.28	-3,638.17	-3,519.43	4,297.30	4,127.12	170.18	25.251		
13,400.00	7,220.30	6,850.00	6,674.66	182.93	44.60	-79.88	-3,644.52	-3,529.70	4,365.91	4,195.45	170.46	25.613		
13,500.00	7,219.91	6,850.00	6,674.66	185.74	44.60	-79.88	-3,644.52	-3,529.70	4,435.23	4,264.50	170.73	25.978		
13,600.00	7,219.52	6,850.00	6,674.66	188.56	44.60	-79.88	-3,644.52	-3,529.70	4,505.70	4,334.74	170.96	26.356		
13,700.00	7,219.12	6,850.00	6,674.66	191.38	44.60	-79.88	-3,644.52	-3,529.70	4,577.28	4,406.12	171.15	26.744		
13,800.00	7,218.73	6,850.00	6,674.66	194.20	44.60	-79.88	-3,644.52	-3,529.70	4,649.90	4,478.58	171.31	27.142		
13,900.00	7,218.34	6,835.01	6,661.14	197.02	44.53	-79.65	-3,648.16	-3,535.06	4,723.49	4,552.04	171.44	27.551		
14,000.00	7,217.94	6,835.01	6,661.14	199.84	44.53	-79.65	-3,648.16	-3,535.06	4,797.95	4,626.40	171.55	27.968		
14,100.00	7,217.55	6,835.01	6,661.14	202.66	44.53	-79.65	-3,648.16	-3,535.06	4,873.33	4,701.70	171.63	28.394		
14,200.00	7,217.16	6,835.01	6,661.14	205.48	44.53	-79.65	-3,648.16	-3,535.06	4,949.58	4,777.90	171.69	28.829		
14,300.00	7,216.76	6,835.01	6,661.14	208.30	44.53	-79.65	-3,648.16	-3,535.06	5,026.67	4,854.95	171.72	29.272		
14,400.00	7,216.37	6,817.39	6,645.10	211.13	44.44	-79.38	-3,652.49	-3,540.94	5,104.31	4,932.57	171.75	29.720		
14,500.00	7,215.98	6,800.00	6,629.13	213.96	44.35	-79.11	-3,656.80	-3,546.28	5,182.96	5,011.21	171.75	30.177		
14,600.00	7,215.58	6,800.00	6,629.13	216.78	44.35	-79.11	-3,656.80	-3,546.28	5,262.11	5,090.37	171.74	30.640		
14,700.00	7,215.19	6,800.00	6,629.13	219.61	44.35	-79.11	-3,656.80	-3,546.28	5,341.96	5,170.25	171.71	31.111		
14,800.00	7,214.80	6,800.00	6,629.13	222.44	44.35	-79.11	-3,656.80	-3,546.28	5,422.48	5,250.81	171.66	31.588		
14,900.00	7,214.40	6,800.00	6,629.13	225.27	44.35	-79.11	-3,656.80	-3,546.28	5,503.64	5,332.03	171.61	32.071		
15,000.00	7,214.01	6,800.00	6,629.13	228.10	44.35	-79.11	-3,656.80	-3,546.28	5,585.40	5,413.87	171.54	32.561		
15,002.44	7,214.00	6,800.00	6,629.13	228.16	44.35	-79.11	-3,656.80	-3,546.28	5,587.40	5,415.87	171.54	32.573		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	66.00	3.28	3.28	-124.68	-4,390.51	-6,344.63	7,715.91				
100.00	100.00	34.00	100.00	3.28	3.33	-124.68	-4,390.51	-6,344.63	7,715.63	7,709.01	6.62	1,165.859	
200.00	200.00	134.00	200.00	3.34	4.40	-124.68	-4,390.51	-6,344.63	7,715.63	7,707.89	7.74	997.269	
300.00	300.00	234.00	300.00	3.44	7.21	-124.68	-4,390.51	-6,344.63	7,715.63	7,704.97	10.66	723.974	
400.00	400.00	334.00	400.00	3.60	10.44	-124.68	-4,390.51	-6,344.63	7,715.63	7,701.58	14.05	549.302	
500.00	500.00	434.00	500.00	3.81	13.80	-124.68	-4,390.51	-6,344.63	7,715.63	7,698.02	17.61	438.216	
600.00	599.98	533.98	599.98	4.03	17.21	37.18	-4,390.51	-6,344.63	7,714.24	7,692.99	21.25	363.096	
700.00	699.84	633.84	699.84	4.29	20.64	37.25	-4,390.51	-6,344.63	7,710.07	7,685.14	24.93	309.264	
800.00	799.54	733.54	799.54	4.57	24.09	37.30	-4,390.51	-6,344.63	7,703.91	7,675.25	28.65	268.860	
900.00	899.23	833.23	899.23	4.87	27.54	37.34	-4,390.51	-6,344.63	7,697.66	7,665.25	32.41	237.511	
1,000.00	998.92	932.92	998.92	5.20	31.00	37.37	-4,390.51	-6,344.63	7,691.42	7,655.22	36.19	212.515	
1,100.00	1,098.61	1,032.61	1,098.61	5.54	34.46	37.41	-4,390.51	-6,344.63	7,685.18	7,645.18	40.00	192.147	
1,200.00	1,198.30	1,132.30	1,198.30	5.90	37.93	37.45	-4,390.51	-6,344.63	7,678.94	7,635.12	43.82	175.247	
1,300.00	1,298.00	1,232.00	1,298.00	6.27	41.39	37.48	-4,390.51	-6,344.63	7,672.70	7,625.05	47.65	161.011	
1,400.00	1,397.69	1,331.69	1,397.69	6.66	44.86	37.52	-4,390.51	-6,344.63	7,666.47	7,614.97	51.50	148.862	
1,500.00	1,497.38	1,431.38	1,497.38	7.05	48.34	37.55	-4,390.51	-6,344.63	7,660.24	7,604.88	55.36	138.379	
1,600.00	1,597.07	1,531.07	1,597.07	7.44	51.81	37.59	-4,390.51	-6,344.63	7,654.02	7,594.79	59.22	129.243	
1,700.00	1,696.76	1,630.76	1,696.76	7.85	55.28	37.62	-4,390.51	-6,344.63	7,647.79	7,584.70	63.09	121.214	
1,800.00	1,796.45	1,730.45	1,796.45	8.25	58.76	37.66	-4,390.51	-6,344.63	7,641.57	7,574.60	66.97	114.103	
1,900.00	1,896.15	1,830.15	1,896.15	8.67	62.23	37.70	-4,390.51	-6,344.63	7,635.35	7,564.50	70.85	107.763	
2,000.00	1,995.84	1,929.84	1,995.84	9.08	65.71	37.73	-4,390.51	-6,344.63	7,629.14	7,554.40	74.74	102.076	
2,100.00	2,095.53	2,029.53	2,095.53	9.50	69.18	37.77	-4,390.51	-6,344.63	7,622.93	7,544.30	78.63	96.947	
2,200.00	2,195.22	2,129.22	2,195.22	9.92	72.66	37.80	-4,390.51	-6,344.63	7,616.72	7,534.20	82.52	92.297	
2,300.00	2,294.91	2,228.91	2,294.91	10.35	76.14	37.84	-4,390.51	-6,344.63	7,610.52	7,524.10	86.42	88.064	
2,400.00	2,394.60	2,328.60	2,394.60	10.77	79.61	37.88	-4,390.51	-6,344.63	7,604.31	7,514.00	90.32	84.194	
2,500.00	2,494.30	2,428.30	2,494.30	11.20	83.09	37.91	-4,390.51	-6,344.63	7,598.12	7,503.90	94.22	80.642	
2,600.00	2,593.99	2,527.99	2,593.99	11.63	86.57	37.95	-4,390.51	-6,344.63	7,591.92	7,493.80	98.12	77.371	
2,700.00	2,693.68	2,627.68	2,693.68	12.07	90.05	37.99	-4,390.51	-6,344.63	7,585.73	7,483.70	102.03	74.349	
2,800.00	2,793.37	2,727.37	2,793.37	12.50	93.52	38.02	-4,390.51	-6,344.63	7,579.54	7,473.60	105.93	71.549	
2,900.00	2,893.06	2,827.06	2,893.06	12.93	97.00	38.06	-4,390.51	-6,344.63	7,573.35	7,463.51	109.84	68.948	
3,000.00	2,992.76	2,926.76	2,992.76	13.37	100.48	38.10	-4,390.51	-6,344.63	7,567.17	7,453.41	113.75	66.524	
3,100.00	3,092.45	3,026.45	3,092.45	13.81	103.96	38.13	-4,390.51	-6,344.63	7,560.99	7,443.32	117.66	64.260	
3,200.00	3,192.14	3,126.14	3,192.14	14.25	107.44	38.17	-4,390.51	-6,344.63	7,554.81	7,433.24	121.57	62.142	
3,300.00	3,291.83	3,225.83	3,291.83	14.68	110.92	38.21	-4,390.51	-6,344.63	7,548.63	7,423.15	125.49	60.156	
3,400.00	3,391.52	3,325.52	3,391.52	15.12	114.40	38.24	-4,390.51	-6,344.63	7,542.46	7,413.06	129.40	58.289	
3,500.00	3,491.21	3,425.21	3,491.21	15.56	117.87	38.28	-4,390.51	-6,344.63	7,536.29	7,402.98	133.31	56.531	
3,600.00	3,590.91	3,524.91	3,590.91	16.00	121.35	38.32	-4,390.51	-6,344.63	7,530.13	7,392.90	137.23	54.874	
3,700.00	3,690.60	3,624.60	3,690.60	16.45	124.83	38.35	-4,390.51	-6,344.63	7,523.97	7,382.82	141.14	53.308	
3,800.00	3,790.29	3,724.29	3,790.29	16.89	128.31	38.39	-4,390.51	-6,344.63	7,517.81	7,372.75	145.06	51.826	
3,900.00	3,889.98	3,823.98	3,889.98	17.33	131.79	38.43	-4,390.51	-6,344.63	7,511.65	7,362.68	148.97	50.422	
4,000.00	3,989.67	3,923.67	3,989.67	17.77	135.27	38.46	-4,390.51	-6,344.63	7,505.50	7,352.61	152.89	49.090	
4,100.00	4,089.36	4,023.36	4,089.36	18.22	138.75	38.50	-4,390.51	-6,344.63	7,499.35	7,342.54	156.81	47.825	
4,200.00	4,189.06	4,123.06	4,189.06	18.66	142.23	38.54	-4,390.51	-6,344.63	7,493.20	7,332.48	160.73	46.620	
4,300.00	4,288.75	4,222.75	4,288.75	19.10	145.71	38.58	-4,390.51	-6,344.63	7,487.06	7,322.42	164.65	45.474	
4,400.00	4,388.44	4,322.44	4,388.44	19.55	149.19	38.61	-4,390.51	-6,344.63	7,480.92	7,312.36	168.57	44.380	
4,500.00	4,488.13	4,422.13	4,488.13	19.99	152.67	38.65	-4,390.51	-6,344.63	7,474.79	7,302.30	172.48	43.336	
4,600.00	4,587.82	4,521.82	4,587.82	20.44	156.15	38.69	-4,390.51	-6,344.63	7,468.65	7,292.25	176.40	42.338	
4,700.00	4,687.51	4,621.51	4,687.51	20.89	159.63	38.73	-4,390.51	-6,344.63	7,462.52	7,282.20	180.32	41.384	
4,800.00	4,787.21	4,721.21	4,787.21	21.33	163.11	38.76	-4,390.51	-6,344.63	7,456.39	7,272.15	184.24	40.470	
4,900.00	4,886.90	4,820.90	4,886.90	21.78	166.58	38.80	-4,390.51	-6,344.63	7,450.27	7,262.11	188.17	39.594	
5,000.00	4,986.59	4,920.59	4,986.59	22.22	170.06	38.84	-4,390.51	-6,344.63	7,444.15	7,252.06	192.09	38.754	
5,100.00	5,086.28	5,020.28	5,086.28	22.67	173.54	38.88	-4,390.51	-6,344.63	7,438.03	7,242.03	196.01	37.948	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,119.97	5,185.97	23.12	177.02	38.92	-4,390.51	-6,344.63	7,431.92	7,231.99	199.93	37.173		
5,300.00	5,285.66	5,219.66	5,285.66	23.56	180.50	38.95	-4,390.51	-6,344.63	7,425.81	7,221.96	203.85	36.428		
5,400.00	5,385.36	5,319.36	5,385.36	24.01	183.98	38.99	-4,390.51	-6,344.63	7,419.70	7,211.93	207.77	35.711		
5,500.00	5,485.05	5,419.05	5,485.05	24.46	187.46	39.03	-4,390.51	-6,344.63	7,413.60	7,201.90	211.69	35.020		
5,600.00	5,584.74	5,518.74	5,584.74	24.90	190.94	39.07	-4,390.51	-6,344.63	7,407.50	7,191.88	215.62	34.355		
5,700.00	5,684.43	5,618.43	5,684.43	25.35	194.42	39.11	-4,390.51	-6,344.63	7,401.40	7,181.86	219.54	33.713		
5,800.00	5,784.12	5,718.12	5,784.12	25.80	197.90	39.14	-4,390.51	-6,344.63	7,395.30	7,171.84	223.46	33.094		
5,900.00	5,883.81	5,817.81	5,883.81	26.25	201.38	39.18	-4,390.51	-6,344.63	7,389.21	7,161.83	227.38	32.497		
6,000.00	5,983.51	5,917.51	5,983.51	26.70	204.86	39.22	-4,390.51	-6,344.63	7,383.12	7,151.82	231.31	31.919		
6,100.00	6,083.20	6,017.20	6,083.20	27.14	208.34	39.26	-4,390.51	-6,344.63	7,377.04	7,141.81	235.23	31.361		
6,200.00	6,182.89	6,116.89	6,182.89	27.59	211.82	39.30	-4,390.51	-6,344.63	7,370.96	7,131.81	239.15	30.821		
6,300.00	6,282.58	6,216.58	6,282.58	28.04	215.30	39.34	-4,390.51	-6,344.63	7,364.88	7,121.80	243.08	30.299		
6,400.00	6,382.27	6,316.27	6,382.27	28.49	218.78	39.38	-4,390.51	-6,344.63	7,358.81	7,111.81	247.00	29.793		
6,500.00	6,481.96	6,415.96	6,481.96	28.94	222.26	39.41	-4,390.51	-6,344.63	7,352.74	7,101.81	250.92	29.303		
6,600.00	6,581.66	6,515.66	6,581.66	29.39	225.74	39.45	-4,390.51	-6,344.63	7,346.67	7,091.82	254.85	28.828		
6,700.00	6,681.21	6,615.21	6,681.21	29.83	229.22	0.73	-4,390.51	-6,344.63	7,338.41	7,079.65	258.77	28.359		
6,800.00	6,778.96	6,712.96	6,778.96	30.28	232.63	-17.76	-4,390.51	-6,344.63	7,318.23	7,055.62	262.61	27.868		
6,900.00	6,872.51	6,806.51	6,872.51	30.70	235.89	-24.96	-4,390.51	-6,344.63	7,285.42	7,019.15	266.27	27.361		
7,000.00	6,959.55	6,906.45	6,959.55	31.10	239.38	-30.29	-4,390.51	-6,344.63	7,240.83	6,970.71	270.12	26.805		
7,100.00	7,037.93	6,971.93	7,037.93	31.48	241.67	-35.77	-4,390.51	-6,344.63	7,185.63	6,912.90	272.74	26.346		
7,200.00	7,105.74	7,039.74	7,105.74	31.88	244.03	-42.29	-4,390.51	-6,344.63	7,121.27	6,845.88	275.39	25.859		
7,300.00	7,161.29	7,104.71	7,161.29	32.41	246.30	-50.51	-4,390.51	-6,344.63	7,049.42	6,771.50	277.93	25.364		
7,400.00	7,203.22	7,137.22	7,203.22	33.13	247.44	-60.84	-4,390.51	-6,344.63	6,971.97	6,692.64	279.32	24.960		
7,500.00	7,230.50	7,164.50	7,230.50	34.04	248.39	-73.16	-4,390.51	-6,344.63	6,890.91	6,610.35	280.56	24.561		
7,600.00	7,242.45	7,176.45	7,242.45	35.13	248.81	-86.50	-4,390.51	-6,344.63	6,808.33	6,527.04	281.30	24.203		
7,700.00	7,242.72	7,176.72	7,242.72	36.39	248.82	-90.32	-4,390.51	-6,344.63	6,726.03	6,444.34	281.69	23.877		
7,800.00	7,242.33	7,176.33	7,242.33	37.81	248.80	-90.32	-4,390.51	-6,344.63	6,644.24	6,362.08	282.16	23.548		
7,900.00	7,241.93	7,175.93	7,241.93	39.40	248.79	-90.31	-4,390.51	-6,344.63	6,562.95	6,280.22	282.73	23.212		
8,000.00	7,241.54	7,175.54	7,241.54	41.13	248.77	-90.31	-4,390.51	-6,344.63	6,482.19	6,198.78	283.41	22.872		
8,100.00	7,241.15	7,175.15	7,241.15	42.97	248.76	-90.30	-4,390.51	-6,344.63	6,401.97	6,117.77	284.20	22.526		
8,200.00	7,240.75	7,174.75	7,240.75	44.92	248.75	-90.29	-4,390.51	-6,344.63	6,322.31	6,037.22	285.09	22.177		
8,300.00	7,240.36	7,174.36	7,240.36	46.97	248.73	-90.29	-4,390.51	-6,344.63	6,243.24	5,957.15	286.09	21.823		
8,400.00	7,239.97	7,173.97	7,239.97	49.10	248.72	-90.28	-4,390.51	-6,344.63	6,164.77	5,877.58	287.19	21.465		
8,500.00	7,239.57	7,173.57	7,239.57	51.29	248.71	-90.28	-4,390.51	-6,344.63	6,086.94	5,798.53	288.41	21.105		
8,600.00	7,239.18	7,173.18	7,239.18	53.56	248.69	-90.27	-4,390.51	-6,344.63	6,009.77	5,720.04	289.73	20.743		
8,700.00	7,238.79	7,172.79	7,238.79	55.87	248.68	-90.26	-4,390.51	-6,344.63	5,933.27	5,642.12	291.15	20.379		
8,800.00	7,238.39	7,172.39	7,238.39	58.24	248.66	-90.26	-4,390.51	-6,344.63	5,857.48	5,564.81	292.67	20.014		
8,900.00	7,238.00	7,172.00	7,238.00	60.64	248.65	-90.25	-4,390.51	-6,344.63	5,782.43	5,488.13	294.30	19.648		
9,000.00	7,237.61	7,171.61	7,237.61	63.09	248.64	-90.25	-4,390.51	-6,344.63	5,708.15	5,412.12	296.03	19.282		
9,100.00	7,237.21	7,171.21	7,237.21	65.56	248.62	-90.24	-4,390.51	-6,344.63	5,634.66	5,336.80	297.85	18.918		
9,200.00	7,236.82	7,170.82	7,236.82	68.07	248.61	-90.24	-4,390.51	-6,344.63	5,561.99	5,262.22	299.78	18.554		
9,300.00	7,236.43	7,170.43	7,236.43	70.61	248.60	-90.23	-4,390.51	-6,344.63	5,490.19	5,188.40	301.79	18.192		
9,400.00	7,236.03	7,170.03	7,236.03	73.16	248.58	-90.22	-4,390.51	-6,344.63	5,419.28	5,115.38	303.90	17.832		
9,500.00	7,235.64	7,169.64	7,235.64	75.74	248.57	-90.22	-4,390.51	-6,344.63	5,349.30	5,043.19	306.11	17.475		
9,600.00	7,235.25	7,169.25	7,235.25	78.34	248.56	-90.21	-4,390.51	-6,344.63	5,280.29	4,971.89	308.40	17.122		
9,700.00	7,234.85	7,168.85	7,234.85	80.96	248.54	-90.21	-4,390.51	-6,344.63	5,212.28	4,901.49	310.78	16.771		
9,800.00	7,234.46	7,168.46	7,234.46	83.59	248.53	-90.20	-4,390.51	-6,344.63	5,145.31	4,832.06	313.25	16.425		
9,900.00	7,234.07	7,168.07	7,234.07	86.24	248.51	-90.19	-4,390.51	-6,344.63	5,079.44	4,763.62	315.81	16.084		
10,000.00	7,233.67	7,167.67	7,233.67	88.90	248.50	-90.19	-4,390.51	-6,344.63	5,014.69	4,696.23	318.45	15.747		
10,100.00	7,233.28	7,167.28	7,233.28	91.57	248.49	-90.18	-4,390.51	-6,344.63	4,951.11	4,629.93	321.18	15.415		
10,200.00	7,232.89	7,166.89	7,232.89	94.25	248.47	-90.18	-4,390.51	-6,344.63	4,888.75	4,564.77	323.98	15.089		
10,300.00	7,232.49	7,166.49	7,232.49	96.95	248.46	-90.17	-4,390.51	-6,344.63	4,827.66	4,500.79	326.87	14.769		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,166.10	7,232.10	99.65	248.45	-90.17	-4,390.51	-6,344.63	4,767.88	4,438.05	329.83	14.455		
10,500.00	7,231.71	7,165.71	7,231.71	102.36	248.43	-90.16	-4,390.51	-6,344.63	4,709.47	4,376.60	332.87	14.148		
10,600.00	7,231.32	7,165.32	7,231.32	105.08	248.42	-90.15	-4,390.51	-6,344.63	4,652.48	4,316.49	335.98	13.847		
10,700.00	7,230.92	7,164.92	7,230.92	107.80	248.40	-90.15	-4,390.51	-6,344.63	4,596.95	4,257.79	339.16	13.554		
10,800.00	7,230.53	7,164.53	7,230.53	110.53	248.39	-90.14	-4,390.51	-6,344.63	4,542.95	4,200.53	342.41	13.267		
10,900.00	7,230.14	7,164.14	7,230.14	113.27	248.38	-90.14	-4,390.51	-6,344.63	4,490.52	4,144.80	345.72	12.989		
11,000.00	7,229.74	7,163.74	7,229.74	116.02	248.36	-90.13	-4,390.51	-6,344.63	4,439.73	4,090.64	349.09	12.718		
11,100.00	7,229.35	7,163.35	7,229.35	118.77	248.35	-90.12	-4,390.51	-6,344.63	4,390.63	4,038.11	352.52	12.455		
11,200.00	7,228.96	7,162.96	7,228.96	121.52	248.34	-90.12	-4,390.51	-6,344.63	4,343.27	3,987.28	355.99	12.200		
11,300.00	7,228.56	7,162.56	7,228.56	124.28	248.32	-90.11	-4,390.51	-6,344.63	4,297.72	3,938.21	359.51	11.954		
11,400.00	7,228.17	7,162.17	7,228.17	127.04	248.31	-90.11	-4,390.51	-6,344.63	4,254.04	3,890.96	363.08	11.717		
11,500.00	7,227.78	7,161.78	7,227.78	129.81	248.29	-90.10	-4,390.51	-6,344.63	4,212.27	3,845.60	366.67	11.488		
11,600.00	7,227.38	7,161.38	7,227.38	132.58	248.28	-90.09	-4,390.51	-6,344.63	4,172.49	3,802.19	370.29	11.268		
11,700.00	7,226.99	7,160.99	7,226.99	135.36	248.27	-90.09	-4,390.51	-6,344.63	4,134.74	3,760.80	373.93	11.057		
11,800.00	7,226.60	7,160.60	7,226.60	138.14	248.25	-90.08	-4,390.51	-6,344.63	4,099.08	3,721.49	377.59	10.856		
11,900.00	7,226.20	7,160.20	7,226.20	140.92	248.24	-90.08	-4,390.51	-6,344.63	4,065.57	3,684.32	381.25	10.664		
12,000.00	7,225.81	7,159.81	7,225.81	143.70	248.23	-90.07	-4,390.51	-6,344.63	4,034.26	3,649.35	384.91	10.481		
12,100.00	7,225.42	7,159.42	7,225.42	146.49	248.21	-90.07	-4,390.51	-6,344.63	4,005.21	3,616.65	388.55	10.308		
12,200.00	7,225.02	7,159.02	7,225.02	149.28	248.20	-90.06	-4,390.51	-6,344.63	3,978.45	3,586.27	392.18	10.144		
12,300.00	7,224.63	7,158.63	7,224.63	152.08	248.18	-90.05	-4,390.51	-6,344.63	3,954.05	3,558.27	395.78	9.991		
12,400.00	7,224.24	7,158.24	7,224.24	154.87	248.17	-90.05	-4,390.51	-6,344.63	3,932.03	3,532.70	399.33	9.846		
12,500.00	7,223.84	7,157.84	7,223.84	157.67	248.16	-90.04	-4,390.51	-6,344.63	3,912.45	3,509.61	402.84	9.712		
12,600.00	7,223.45	7,157.45	7,223.45	160.47	248.14	-90.04	-4,390.51	-6,344.63	3,895.34	3,489.04	406.30	9.587		
12,700.00	7,223.06	7,157.06	7,223.06	163.27	248.13	-90.03	-4,390.51	-6,344.63	3,880.73	3,471.05	409.69	9.472		
12,800.00	7,222.66	7,156.66	7,222.66	166.07	248.12	-90.02	-4,390.51	-6,344.63	3,868.66	3,455.66	413.00	9.367		
12,900.00	7,222.27	7,156.27	7,222.27	168.88	248.10	-90.02	-4,390.51	-6,344.63	3,859.13	3,442.90	416.23	9.272		
13,000.00	7,221.88	7,155.88	7,221.88	171.69	248.09	-90.01	-4,390.51	-6,344.63	3,852.18	3,432.82	419.37	9.186		
13,100.00	7,221.48	7,155.48	7,221.48	174.49	248.07	-90.01	-4,390.51	-6,344.63	3,847.82	3,425.41	422.41	9.109		
13,200.00	7,221.09	7,155.09	7,221.09	177.30	248.06	-90.00	-4,390.51	-6,344.63	3,846.05	3,420.71	425.34	9.042		
13,217.99	7,221.02	7,155.02	7,221.02	177.81	248.06	-90.00	-4,390.51	-6,344.63	3,846.01	3,420.16	425.85	9.031 CC		
13,300.00	7,220.70	7,154.70	7,220.70	180.12	248.05	-90.00	-4,390.51	-6,344.63	3,846.88	3,418.73	428.16	8.985 ES		
13,400.00	7,220.30	7,154.30	7,220.30	182.93	248.03	-89.99	-4,390.51	-6,344.63	3,850.31	3,419.46	430.86	8.936		
13,500.00	7,219.91	7,153.91	7,219.91	185.74	248.02	-89.98	-4,390.51	-6,344.63	3,856.34	3,422.90	433.43	8.897		
13,600.00	7,219.52	7,153.52	7,219.52	188.56	248.01	-89.98	-4,390.51	-6,344.63	3,864.94	3,429.05	435.88	8.867		
13,700.00	7,219.12	7,153.12	7,219.12	191.38	247.99	-89.97	-4,390.51	-6,344.63	3,876.10	3,437.90	438.20	8.846		
13,800.00	7,218.73	7,152.73	7,218.73	194.20	247.98	-89.97	-4,390.51	-6,344.63	3,889.80	3,449.42	440.38	8.833		
13,900.00	7,218.34	7,152.34	7,218.34	197.02	247.96	-89.96	-4,390.51	-6,344.63	3,906.01	3,463.58	442.43	8.829 SF		
14,000.00	7,217.94	7,151.94	7,217.94	199.84	247.95	-89.95	-4,390.51	-6,344.63	3,924.71	3,480.37	444.34	8.833		
14,100.00	7,217.55	7,151.55	7,217.55	202.66	247.94	-89.95	-4,390.51	-6,344.63	3,945.85	3,499.74	446.11	8.845		
14,200.00	7,217.16	7,151.16	7,217.16	205.48	247.92	-89.94	-4,390.51	-6,344.63	3,969.40	3,521.65	447.75	8.865		
14,300.00	7,216.76	7,150.76	7,216.76	208.30	247.91	-89.94	-4,390.51	-6,344.63	3,995.31	3,546.06	449.25	8.893		
14,400.00	7,216.37	7,150.37	7,216.37	211.13	247.90	-89.93	-4,390.51	-6,344.63	4,023.55	3,572.93	450.62	8.929		
14,500.00	7,215.98	7,149.98	7,215.98	213.96	247.88	-89.92	-4,390.51	-6,344.63	4,054.05	3,602.19	451.86	8.972		
14,600.00	7,215.58	7,149.58	7,215.58	216.78	247.87	-89.92	-4,390.51	-6,344.63	4,086.77	3,633.80	452.97	9.022		
14,700.00	7,215.19	7,149.19	7,215.19	219.61	247.85	-89.91	-4,390.51	-6,344.63	4,121.66	3,667.70	453.96	9.079		
14,800.00	7,214.80	7,148.80	7,214.80	222.44	247.84	-89.91	-4,390.51	-6,344.63	4,158.67	3,703.83	454.84	9.143		
14,900.00	7,214.40	7,148.40	7,214.40	225.27	247.83	-89.90	-4,390.51	-6,344.63	4,197.73	3,742.13	455.59	9.214		
15,000.00	7,214.01	7,148.01	7,214.01	228.10	247.81	-89.90	-4,390.51	-6,344.63	4,238.79	3,782.54	456.24	9.291		
15,002.44	7,214.00	7,148.00	7,214.00	228.16	247.81	-89.90	-4,390.51	-6,344.63	4,239.81	3,783.55	456.26	9.293		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	19.00	3.28	3.28	-69.25	2,408.52	-6,357.07	6,798.06					
100.00	100.00	81.00	100.00	3.28	3.57	-69.25	2,408.52	-6,357.07	6,798.03	6,791.18	6.86	991.478		
200.00	200.00	181.00	200.00	3.34	5.63	-69.25	2,408.52	-6,357.07	6,798.03	6,789.07	8.96	758.296		
300.00	300.00	281.00	300.00	3.44	8.71	-69.25	2,408.52	-6,357.07	6,798.03	6,785.88	12.15	559.479		
400.00	400.00	381.00	400.00	3.60	12.01	-69.25	2,408.52	-6,357.07	6,798.03	6,782.42	15.62	435.351		
500.00	500.00	481.00	500.00	3.81	15.40	-69.25	2,408.52	-6,357.07	6,798.03	6,778.83	19.21	353.961		
600.00	599.98	580.98	599.98	4.03	18.82	92.60	2,408.52	-6,357.07	6,798.11	6,775.25	22.86	297.398		
700.00	699.84	680.84	699.84	4.29	22.27	92.64	2,408.52	-6,357.07	6,798.35	6,771.80	26.55	256.062		
800.00	799.54	780.54	799.54	4.57	25.71	92.70	2,408.52	-6,357.07	6,798.71	6,768.43	30.28	224.544		
900.00	899.23	880.23	899.23	4.87	29.17	92.77	2,408.52	-6,357.07	6,799.09	6,765.05	34.04	199.742		
1,000.00	998.92	979.92	998.92	5.20	32.63	92.83	2,408.52	-6,357.07	6,799.47	6,761.64	37.83	179.749		
1,100.00	1,098.61	1,079.61	1,098.61	5.54	36.09	92.90	2,408.52	-6,357.07	6,799.87	6,758.23	41.64	163.313		
1,200.00	1,198.30	1,179.30	1,198.30	5.90	39.56	92.97	2,408.52	-6,357.07	6,800.27	6,754.80	45.46	149.576		
1,300.00	1,298.00	1,279.00	1,298.00	6.27	43.03	93.03	2,408.52	-6,357.07	6,800.68	6,751.38	49.30	137.933		
1,400.00	1,397.69	1,378.69	1,397.69	6.66	46.50	93.10	2,408.52	-6,357.07	6,801.10	6,747.94	53.16	127.944		
1,500.00	1,497.38	1,478.38	1,497.38	7.05	49.97	93.16	2,408.52	-6,357.07	6,801.53	6,744.51	57.02	119.286		
1,600.00	1,597.07	1,578.07	1,597.07	7.44	53.45	93.23	2,408.52	-6,357.07	6,801.97	6,741.08	60.89	111.712		
1,700.00	1,696.76	1,677.76	1,696.76	7.85	56.92	93.29	2,408.52	-6,357.07	6,802.42	6,737.65	64.77	105.032		
1,800.00	1,796.45	1,777.45	1,796.45	8.25	60.39	93.36	2,408.52	-6,357.07	6,802.87	6,734.23	68.65	99.098		
1,900.00	1,896.15	1,877.15	1,896.15	8.67	63.87	93.43	2,408.52	-6,357.07	6,803.34	6,730.80	72.54	93.793		
2,000.00	1,995.84	1,976.84	1,995.84	9.08	67.35	93.49	2,408.52	-6,357.07	6,803.81	6,727.39	76.43	89.023		
2,100.00	2,095.53	2,076.53	2,095.53	9.50	70.82	93.56	2,408.52	-6,357.07	6,804.30	6,723.97	80.32	84.712		
2,200.00	2,195.22	2,176.22	2,195.22	9.92	74.30	93.62	2,408.52	-6,357.07	6,804.79	6,720.57	84.22	80.796		
2,300.00	2,294.91	2,275.91	2,294.91	10.35	77.78	93.69	2,408.52	-6,357.07	6,805.29	6,717.17	88.12	77.225		
2,400.00	2,394.60	2,375.60	2,394.60	10.77	81.25	93.75	2,408.52	-6,357.07	6,805.80	6,713.78	92.03	73.954		
2,500.00	2,494.30	2,475.30	2,494.30	11.20	84.73	93.82	2,408.52	-6,357.07	6,806.32	6,710.39	95.93	70.948		
2,600.00	2,593.99	2,574.99	2,593.99	11.63	88.21	93.89	2,408.52	-6,357.07	6,806.85	6,707.01	99.84	68.176		
2,700.00	2,693.68	2,674.68	2,693.68	12.07	91.69	93.95	2,408.52	-6,357.07	6,807.39	6,703.64	103.75	65.612		
2,800.00	2,793.37	2,774.37	2,793.37	12.50	95.16	94.02	2,408.52	-6,357.07	6,807.94	6,700.27	107.66	63.234		
2,900.00	2,893.06	2,874.06	2,893.06	12.93	98.64	94.08	2,408.52	-6,357.07	6,808.49	6,696.92	111.58	61.021		
3,000.00	2,992.76	2,973.76	2,992.76	13.37	102.12	94.15	2,408.52	-6,357.07	6,809.06	6,693.57	115.49	58.958		
3,100.00	3,092.45	3,073.45	3,092.45	13.81	105.60	94.21	2,408.52	-6,357.07	6,809.63	6,690.23	119.41	57.029		
3,200.00	3,192.14	3,173.14	3,192.14	14.25	109.08	94.28	2,408.52	-6,357.07	6,810.21	6,686.89	123.32	55.223		
3,300.00	3,291.83	3,272.83	3,291.83	14.68	112.56	94.35	2,408.52	-6,357.07	6,810.81	6,683.57	127.24	53.528		
3,400.00	3,391.52	3,372.52	3,391.52	15.12	116.04	94.41	2,408.52	-6,357.07	6,811.41	6,680.25	131.16	51.933		
3,500.00	3,491.21	3,472.21	3,491.21	15.56	119.51	94.48	2,408.52	-6,357.07	6,812.02	6,676.94	135.08	50.431		
3,600.00	3,590.91	3,571.91	3,590.91	16.00	122.99	94.54	2,408.52	-6,357.07	6,812.64	6,673.64	139.00	49.013		
3,700.00	3,690.60	3,671.60	3,690.60	16.45	126.47	94.61	2,408.52	-6,357.07	6,813.26	6,670.35	142.92	47.673		
3,800.00	3,790.29	3,771.29	3,790.29	16.89	129.95	94.67	2,408.52	-6,357.07	6,813.90	6,667.06	146.84	46.404		
3,900.00	3,889.98	3,870.98	3,889.98	17.33	133.43	94.74	2,408.52	-6,357.07	6,814.55	6,663.79	150.76	45.202		
4,000.00	3,989.67	3,970.67	3,989.67	17.77	136.91	94.80	2,408.52	-6,357.07	6,815.20	6,660.52	154.68	44.060		
4,100.00	4,089.36	4,070.36	4,089.36	18.22	140.39	94.87	2,408.52	-6,357.07	6,815.86	6,657.26	158.60	42.974		
4,200.00	4,189.06	4,170.06	4,189.06	18.66	143.87	94.94	2,408.52	-6,357.07	6,816.54	6,654.01	162.53	41.941		
4,300.00	4,288.75	4,269.75	4,288.75	19.10	147.35	95.00	2,408.52	-6,357.07	6,817.22	6,650.77	166.45	40.957		
4,400.00	4,388.44	4,369.44	4,388.44	19.55	150.83	95.07	2,408.52	-6,357.07	6,817.91	6,647.54	170.37	40.017		
4,500.00	4,488.13	4,469.13	4,488.13	19.99	154.31	95.13	2,408.52	-6,357.07	6,818.61	6,644.31	174.30	39.121		
4,600.00	4,587.82	4,568.82	4,587.82	20.44	157.79	95.20	2,408.52	-6,357.07	6,819.32	6,641.09	178.22	38.263		
4,700.00	4,687.51	4,668.51	4,687.51	20.89	161.27	95.26	2,408.52	-6,357.07	6,820.03	6,637.89	182.15	37.443		
4,800.00	4,787.21	4,768.21	4,787.21	21.33	164.75	95.33	2,408.52	-6,357.07	6,820.76	6,634.69	186.07	36.657		
4,900.00	4,886.90	4,867.90	4,886.90	21.78	168.23	95.39	2,408.52	-6,357.07	6,821.50	6,631.50	190.00	35.903		
5,000.00	4,986.59	4,967.59	4,986.59	22.22	171.70	95.46	2,408.52	-6,357.07	6,822.24	6,628.32	193.92	35.180		
5,100.00	5,086.28	5,067.28	5,086.28	22.67	175.18	95.52	2,408.52	-6,357.07	6,822.99	6,625.14	197.85	34.486		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,166.97	5,185.97	23.12	178.66	95.59	2,408.52	-6,357.07	6,823.76	6,621.98	201.77	33.819		
5,300.00	5,285.66	5,266.66	5,285.66	23.56	182.14	95.66	2,408.52	-6,357.07	6,824.53	6,618.83	205.70	33.177		
5,400.00	5,385.36	5,366.36	5,385.36	24.01	185.62	95.72	2,408.52	-6,357.07	6,825.31	6,615.68	209.63	32.559		
5,500.00	5,485.05	5,466.05	5,485.05	24.46	189.10	95.79	2,408.52	-6,357.07	6,826.10	6,612.54	213.55	31.964		
5,600.00	5,584.74	5,565.74	5,584.74	24.90	192.58	95.85	2,408.52	-6,357.07	6,826.89	6,609.41	217.48	31.391		
5,700.00	5,684.43	5,665.43	5,684.43	25.35	196.06	95.92	2,408.52	-6,357.07	6,827.70	6,606.29	221.41	30.838		
5,800.00	5,784.12	5,765.12	5,784.12	25.80	199.54	95.98	2,408.52	-6,357.07	6,828.52	6,603.18	225.33	30.304		
5,900.00	5,883.81	5,864.81	5,883.81	26.25	203.02	96.05	2,408.52	-6,357.07	6,829.34	6,600.08	229.26	29.788		
6,000.00	5,983.51	5,964.51	5,983.51	26.70	206.50	96.11	2,408.52	-6,357.07	6,830.17	6,596.98	233.19	29.290		
6,100.00	6,083.20	6,064.20	6,083.20	27.14	209.98	96.18	2,408.52	-6,357.07	6,831.02	6,593.90	237.12	28.809		
6,200.00	6,182.89	6,163.89	6,182.89	27.59	213.46	96.24	2,408.52	-6,357.07	6,831.87	6,590.82	241.04	28.343		
6,300.00	6,282.58	6,263.58	6,282.58	28.04	216.94	96.31	2,408.52	-6,357.07	6,832.73	6,587.76	244.97	27.892		
6,400.00	6,382.27	6,363.27	6,382.27	28.49	220.42	96.37	2,408.52	-6,357.07	6,833.60	6,584.70	248.90	27.455		
6,500.00	6,481.96	6,462.96	6,481.96	28.94	223.90	96.44	2,408.52	-6,357.07	6,834.48	6,581.65	252.83	27.032		
6,600.00	6,581.66	6,562.66	6,581.66	29.39	227.38	96.50	2,408.52	-6,357.07	6,835.36	6,578.61	256.76	26.622		
6,700.00	6,681.21	6,662.21	6,681.21	29.83	230.86	96.57	2,408.52	-6,357.07	6,836.24	6,575.53	260.68	26.216		
6,800.00	6,778.96	6,759.96	6,778.96	30.28	234.27	96.64	2,408.52	-6,357.07	6,837.12	6,572.45	264.53	25.780		
6,900.00	6,872.51	6,853.51	6,872.51	30.70	237.53	96.71	2,408.52	-6,357.07	6,838.00	6,569.37	268.39	25.321		
7,000.00	6,959.55	6,940.55	6,959.55	31.10	240.57	96.78	2,408.52	-6,357.07	6,838.88	6,566.29	272.26	24.849		
7,100.00	7,037.93	7,018.93	7,037.93	31.48	243.31	96.85	2,408.52	-6,357.07	6,839.76	6,563.21	276.12	24.375		
7,200.00	7,105.74	7,086.74	7,105.74	31.88	245.67	96.92	2,408.52	-6,357.07	6,840.64	6,560.13	280.00	23.906		
7,300.00	7,161.29	7,142.29	7,161.29	32.41	247.61	97.00	2,408.52	-6,357.07	6,841.52	6,557.05	283.87	23.452		
7,400.00	7,203.22	7,184.22	7,203.22	33.13	249.08	97.07	2,408.52	-6,357.07	6,842.40	6,553.97	287.74	23.019		
7,500.00	7,230.50	7,211.50	7,230.50	34.04	250.03	97.14	2,408.52	-6,357.07	6,843.28	6,550.89	291.61	22.614		
7,600.00	7,242.45	7,223.45	7,242.45	35.13	250.45	97.21	2,408.52	-6,357.07	6,844.16	6,547.81	295.48	22.243		
7,700.00	7,242.72	7,223.72	7,242.72	36.39	250.46	97.28	2,408.52	-6,357.07	6,845.04	6,544.73	299.35	21.899		
7,800.00	7,242.33	7,223.33	7,242.33	37.81	250.44	97.35	2,408.52	-6,357.07	6,845.92	6,541.65	303.22	21.554		
7,900.00	7,241.93	7,222.93	7,241.93	39.40	250.43	97.42	2,408.52	-6,357.07	6,846.80	6,538.57	307.10	21.207		
8,000.00	7,241.54	7,222.54	7,241.54	41.13	250.42	97.49	2,408.52	-6,357.07	6,847.68	6,535.49	310.97	20.856		
8,100.00	7,241.15	7,222.15	7,241.15	42.97	250.40	97.56	2,408.52	-6,357.07	6,848.56	6,532.41	314.85	20.503		
8,200.00	7,240.75	7,221.75	7,240.75	44.92	250.39	97.63	2,408.52	-6,357.07	6,849.44	6,529.33	318.72	20.147		
8,300.00	7,240.36	7,221.36	7,240.36	46.97	250.37	97.70	2,408.52	-6,357.07	6,850.32	6,526.25	322.60	19.789		
8,400.00	7,239.97	7,220.97	7,239.97	49.10	250.36	97.77	2,408.52	-6,357.07	6,851.20	6,523.17	326.47	19.430		
8,500.00	7,239.57	7,220.57	7,239.57	51.29	250.35	97.84	2,408.52	-6,357.07	6,852.08	6,520.09	330.35	19.068		
8,600.00	7,239.18	7,220.18	7,239.18	53.56	250.33	97.91	2,408.52	-6,357.07	6,852.96	6,517.01	334.22	18.705		
8,700.00	7,238.79	7,219.79	7,238.79	55.87	250.32	97.98	2,408.52	-6,357.07	6,853.84	6,513.93	338.10	18.342		
8,800.00	7,238.39	7,219.39	7,238.39	58.24	250.31	98.05	2,408.52	-6,357.07	6,854.72	6,510.85	341.97	17.977		
8,900.00	7,238.00	7,219.00	7,238.00	60.64	250.29	98.12	2,408.52	-6,357.07	6,855.60	6,507.77	345.85	17.613		
9,000.00	7,237.61	7,218.61	7,237.61	63.09	250.28	98.19	2,408.52	-6,357.07	6,856.48	6,504.69	349.72	17.249		
9,100.00	7,237.21	7,218.21	7,237.21	65.56	250.26	98.26	2,408.52	-6,357.07	6,857.36	6,501.61	353.60	16.885		
9,200.00	7,236.82	7,217.82	7,236.82	68.07	250.25	98.33	2,408.52	-6,357.07	6,858.24	6,498.53	357.47	16.522		
9,300.00	7,236.43	7,217.43	7,236.43	70.61	250.24	98.40	2,408.52	-6,357.07	6,859.12	6,495.45	361.35	16.160		
9,400.00	7,236.03	7,217.03	7,236.03	73.16	250.22	98.47	2,408.52	-6,357.07	6,860.00	6,492.37	365.22	15.800		
9,500.00	7,235.64	7,216.64	7,235.64	75.74	250.21	98.54	2,408.52	-6,357.07	6,860.88	6,489.29	369.10	15.443		
9,600.00	7,235.25	7,216.25	7,235.25	78.34	250.20	98.61	2,408.52	-6,357.07	6,861.76	6,486.21	372.97	15.087		
9,700.00	7,234.85	7,215.85	7,234.85	80.96	250.18	98.68	2,408.52	-6,357.07	6,862.64	6,483.13	376.85	14.735		
9,800.00	7,234.46	7,215.46	7,234.46	83.59	250.17	98.75	2,408.52	-6,357.07	6,863.52	6,480.05	380.72	14.385		
9,900.00	7,234.07	7,215.07	7,234.07	86.24	250.15	98.82	2,408.52	-6,357.07	6,864.40	6,476.97	384.60	14.040		
10,000.00	7,233.67	7,214.67	7,233.67	88.90	250.14	98.89	2,408.52	-6,357.07	6,865.28	6,473.89	388.47	13.698		
10,100.00	7,233.28	7,214.28	7,233.28	91.57	250.13	98.96	2,408.52	-6,357.07	6,866.16	6,470.81	392.35	13.361		
10,200.00	7,232.89	7,213.89	7,232.89	94.25	250.11	99.03	2,408.52	-6,357.07	6,867.04	6,467.73	396.22	13.028		
10,300.00	7,232.49	7,213.49	7,232.49	96.95	250.10	99.10	2,408.52	-6,357.07	6,867.92	6,464.65	400.10	12.701		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,213.10	7,232.10	99.65	250.09	90.21	2,408.52	-6,357.07	4,053.71	3,726.24	327.47	12.379		
10,500.00	7,231.71	7,212.71	7,231.71	102.36	250.07	90.20	2,408.52	-6,357.07	3,985.87	3,655.44	330.43	12.063		
10,600.00	7,231.32	7,212.32	7,231.32	105.08	250.06	90.20	2,408.52	-6,357.07	3,919.40	3,585.92	333.49	11.753		
10,700.00	7,230.92	7,211.92	7,230.92	107.80	250.04	90.19	2,408.52	-6,357.07	3,854.38	3,517.74	336.64	11.449		
10,800.00	7,230.53	7,211.53	7,230.53	110.53	250.03	90.18	2,408.52	-6,357.07	3,790.89	3,450.99	339.90	11.153		
10,900.00	7,230.14	7,211.14	7,230.14	113.27	250.02	90.17	2,408.52	-6,357.07	3,728.99	3,385.75	343.24	10.864		
11,000.00	7,229.74	7,210.74	7,229.74	116.02	250.00	90.17	2,408.52	-6,357.07	3,668.78	3,322.10	346.68	10.583		
11,100.00	7,229.35	7,210.35	7,229.35	118.77	249.99	90.16	2,408.52	-6,357.07	3,610.34	3,260.13	350.20	10.309		
11,200.00	7,228.96	7,209.96	7,228.96	121.52	249.98	90.15	2,408.52	-6,357.07	3,553.74	3,199.93	353.81	10.044		
11,300.00	7,228.56	7,209.56	7,228.56	124.28	249.96	90.14	2,408.52	-6,357.07	3,499.09	3,141.60	357.49	9.788		
11,400.00	7,228.17	7,209.17	7,228.17	127.04	249.95	90.14	2,408.52	-6,357.07	3,446.48	3,085.23	361.25	9.540		
11,500.00	7,227.78	7,208.78	7,227.78	129.81	249.93	90.13	2,408.52	-6,357.07	3,395.99	3,030.92	365.07	9.302		
11,600.00	7,227.38	7,208.38	7,227.38	132.58	249.92	90.12	2,408.52	-6,357.07	3,347.73	2,978.80	368.94	9.074		
11,700.00	7,226.99	7,207.99	7,226.99	135.36	249.91	90.11	2,408.52	-6,357.07	3,301.80	2,928.95	372.85	8.856		
11,800.00	7,226.60	7,207.60	7,226.60	138.14	249.89	90.11	2,408.52	-6,357.07	3,258.29	2,881.49	376.80	8.647		
11,900.00	7,226.20	7,207.20	7,226.20	140.92	249.88	90.10	2,408.52	-6,357.07	3,217.29	2,836.53	380.76	8.450		
12,000.00	7,225.81	7,206.81	7,225.81	143.70	249.87	90.09	2,408.52	-6,357.07	3,178.92	2,794.19	384.73	8.263		
12,100.00	7,225.42	7,206.42	7,225.42	146.49	249.85	90.08	2,408.52	-6,357.07	3,143.26	2,754.56	388.70	8.087		
12,200.00	7,225.02	7,206.02	7,225.02	149.28	249.84	90.07	2,408.52	-6,357.07	3,110.41	2,717.77	392.64	7.922		
12,300.00	7,224.63	7,205.63	7,224.63	152.08	249.83	90.07	2,408.52	-6,357.07	3,080.45	2,683.92	396.54	7.768		
12,400.00	7,224.24	7,205.24	7,224.24	154.87	249.81	90.06	2,408.52	-6,357.07	3,053.48	2,653.10	400.38	7.626		
12,500.00	7,223.84	7,204.84	7,223.84	157.67	249.80	90.05	2,408.52	-6,357.07	3,029.57	2,625.43	404.14	7.496		
12,600.00	7,223.45	7,204.45	7,223.45	160.47	249.78	90.04	2,408.52	-6,357.07	3,008.80	2,600.98	407.82	7.378		
12,700.00	7,223.06	7,204.06	7,223.06	163.27	249.77	90.04	2,408.52	-6,357.07	2,991.22	2,579.84	411.38	7.271		
12,800.00	7,222.66	7,203.66	7,222.66	166.07	249.76	90.03	2,408.52	-6,357.07	2,976.91	2,562.09	414.81	7.176		
12,900.00	7,222.27	7,203.27	7,222.27	168.88	249.74	90.02	2,408.52	-6,357.07	2,965.89	2,547.79	418.11	7.094		
13,000.00	7,221.88	7,202.88	7,221.88	171.69	249.73	90.01	2,408.52	-6,357.07	2,958.22	2,536.99	421.24	7.023		
13,100.00	7,221.48	7,202.48	7,221.48	174.49	249.72	90.01	2,408.52	-6,357.07	2,953.92	2,529.72	424.20	6.964		
13,177.24	7,221.18	7,202.18	7,221.18	176.66	249.70	90.00	2,408.52	-6,357.07	2,952.91	2,526.55	426.35	6.926 CC		
13,200.00	7,221.09	7,202.09	7,221.09	177.30	249.70	90.00	2,408.52	-6,357.07	2,953.00	2,526.03	426.97	6.916		
13,300.00	7,220.70	7,201.70	7,220.70	180.12	249.69	89.99	2,408.52	-6,357.07	2,955.46	2,525.91	429.55	6.880 ES		
13,400.00	7,220.30	7,201.30	7,220.30	182.93	249.67	89.98	2,408.52	-6,357.07	2,961.30	2,529.38	431.92	6.856		
13,500.00	7,219.91	7,200.91	7,219.91	185.74	249.66	89.98	2,408.52	-6,357.07	2,970.49	2,536.41	434.09	6.843		
13,600.00	7,219.52	7,200.52	7,219.52	188.56	249.65	89.97	2,408.52	-6,357.07	2,983.02	2,546.98	436.04	6.841 SF		
13,700.00	7,219.12	7,200.12	7,219.12	191.38	249.63	89.96	2,408.52	-6,357.07	2,998.82	2,561.05	437.77	6.850		
13,800.00	7,218.73	7,200.27	7,218.73	194.20	249.64	89.95	2,408.52	-6,357.07	3,017.86	2,578.55	439.31	6.869		
13,900.00	7,218.34	7,200.66	7,218.34	197.02	249.65	89.94	2,408.52	-6,357.07	3,040.07	2,599.42	440.65	6.899		
14,000.00	7,217.94	7,201.06	7,217.94	199.84	249.67	89.94	2,408.52	-6,357.07	3,065.39	2,623.60	441.78	6.939		
14,100.00	7,217.55	7,201.45	7,217.55	202.66	249.68	89.93	2,408.52	-6,357.07	3,093.73	2,651.01	442.71	6.988		
14,200.00	7,217.16	7,201.84	7,217.16	205.48	249.69	89.92	2,408.52	-6,357.07	3,125.01	2,681.56	443.45	7.047		
14,300.00	7,216.76	7,202.24	7,216.76	208.30	249.71	89.91	2,408.52	-6,357.07	3,159.15	2,715.15	444.00	7.115		
14,400.00	7,216.37	7,202.63	7,216.37	211.13	249.72	89.91	2,408.52	-6,357.07	3,196.06	2,751.68	444.38	7.192		
14,500.00	7,215.98	7,203.02	7,215.98	213.96	249.73	89.90	2,408.52	-6,357.07	3,235.64	2,791.04	444.60	7.278		
14,600.00	7,215.58	7,203.42	7,215.58	216.78	249.75	89.89	2,408.52	-6,357.07	3,277.79	2,833.13	444.66	7.371		
14,700.00	7,215.19	7,203.81	7,215.19	219.61	249.76	89.88	2,408.52	-6,357.07	3,322.41	2,877.83	444.58	7.473		
14,800.00	7,214.80	7,204.20	7,214.80	222.44	249.78	89.88	2,408.52	-6,357.07	3,369.42	2,925.04	444.37	7.582		
14,900.00	7,214.40	7,204.60	7,214.40	225.27	249.79	89.87	2,408.52	-6,357.07	3,418.70	2,974.66	444.05	7.699		
15,000.00	7,214.01	7,204.99	7,214.01	228.10	249.80	89.86	2,408.52	-6,357.07	3,470.17	3,026.56	443.61	7.823		
15,002.44	7,214.00	7,205.00	7,214.00	228.16	249.80	89.86	2,408.52	-6,357.07	3,471.45	3,027.85	443.60	7.826		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	16.00	3.28	3.28	-73.39	2,343.37	-7,853.33	8,195.51					
100.00	100.00	84.00	100.00	3.28	3.59	-73.39	2,343.37	-7,853.33	8,195.49	8,188.62	6.88	1,191.637		
200.00	200.00	184.00	200.00	3.34	5.71	-73.39	2,343.37	-7,853.33	8,195.49	8,186.44	9.05	905.548		
300.00	300.00	284.00	300.00	3.44	8.80	-73.39	2,343.37	-7,853.33	8,195.49	8,183.25	12.25	669.143		
400.00	400.00	384.00	400.00	3.60	12.11	-73.39	2,343.37	-7,853.33	8,195.49	8,179.78	15.72	521.480		
500.00	500.00	484.00	500.00	3.81	15.50	-73.39	2,343.37	-7,853.33	8,195.49	8,176.19	19.31	424.462		
600.00	599.98	583.98	599.98	4.03	18.93	88.46	2,343.37	-7,853.33	8,195.45	8,172.48	22.96	356.918		
700.00	699.84	683.84	699.84	4.29	22.37	88.50	2,343.37	-7,853.33	8,195.31	8,168.65	26.65	307.479		
800.00	799.54	783.54	799.54	4.57	25.82	88.56	2,343.37	-7,853.33	8,195.11	8,164.73	30.38	269.740		
900.00	899.23	883.23	899.23	4.87	29.27	88.61	2,343.37	-7,853.33	8,194.91	8,160.77	34.14	240.015		
1,000.00	998.92	982.92	998.92	5.20	32.73	88.67	2,343.37	-7,853.33	8,194.73	8,156.80	37.93	216.040		
1,100.00	1,098.61	1,082.61	1,098.61	5.54	36.20	88.72	2,343.37	-7,853.33	8,194.55	8,152.81	41.74	196.318		
1,200.00	1,198.30	1,182.30	1,198.30	5.90	39.66	88.78	2,343.37	-7,853.33	8,194.38	8,148.81	45.57	179.828		
1,300.00	1,298.00	1,282.00	1,298.00	6.27	43.13	88.83	2,343.37	-7,853.33	8,194.21	8,144.80	49.41	165.845		
1,400.00	1,397.69	1,381.69	1,397.69	6.66	46.60	88.89	2,343.37	-7,853.33	8,194.06	8,140.79	53.26	153.847		
1,500.00	1,497.38	1,481.38	1,497.38	7.05	50.08	88.94	2,343.37	-7,853.33	8,193.91	8,136.78	57.12	143.443		
1,600.00	1,597.07	1,581.07	1,597.07	7.44	53.55	89.00	2,343.37	-7,853.33	8,193.76	8,132.77	60.99	134.339		
1,700.00	1,696.76	1,680.76	1,696.76	7.85	57.02	89.05	2,343.37	-7,853.33	8,193.63	8,128.76	64.87	126.308		
1,800.00	1,796.45	1,780.45	1,796.45	8.25	60.50	89.10	2,343.37	-7,853.33	8,193.50	8,124.75	68.75	119.173		
1,900.00	1,896.15	1,880.15	1,896.15	8.67	63.97	89.16	2,343.37	-7,853.33	8,193.38	8,120.74	72.64	112.794		
2,000.00	1,995.84	1,979.84	1,995.84	9.08	67.45	89.21	2,343.37	-7,853.33	8,193.27	8,116.74	76.53	107.056		
2,100.00	2,095.53	2,079.53	2,095.53	9.50	70.93	89.27	2,343.37	-7,853.33	8,193.17	8,112.74	80.43	101.870		
2,200.00	2,195.22	2,179.22	2,195.22	9.92	74.40	89.32	2,343.37	-7,853.33	8,193.07	8,108.74	84.33	97.159		
2,300.00	2,294.91	2,278.91	2,294.91	10.35	77.88	89.38	2,343.37	-7,853.33	8,192.98	8,104.75	88.23	92.861		
2,400.00	2,394.60	2,378.60	2,394.60	10.77	81.36	89.43	2,343.37	-7,853.33	8,192.90	8,100.77	92.13	88.925		
2,500.00	2,494.30	2,478.30	2,494.30	11.20	84.84	89.49	2,343.37	-7,853.33	8,192.83	8,096.79	96.04	85.307		
2,600.00	2,593.99	2,577.99	2,593.99	11.63	88.31	89.54	2,343.37	-7,853.33	8,192.76	8,092.81	99.95	81.971		
2,700.00	2,693.68	2,677.68	2,693.68	12.07	91.79	89.60	2,343.37	-7,853.33	8,192.70	8,088.84	103.86	78.884		
2,800.00	2,793.37	2,777.37	2,793.37	12.50	95.27	89.65	2,343.37	-7,853.33	8,192.65	8,084.88	107.77	76.021		
2,900.00	2,893.06	2,877.06	2,893.06	12.93	98.75	89.71	2,343.37	-7,853.33	8,192.61	8,080.92	111.68	73.357		
3,000.00	2,992.76	2,976.76	2,992.76	13.37	102.23	89.76	2,343.37	-7,853.33	8,192.57	8,076.97	115.60	70.872		
3,100.00	3,092.45	3,076.45	3,092.45	13.81	105.70	89.82	2,343.37	-7,853.33	8,192.54	8,073.03	119.51	68.550		
3,200.00	3,192.14	3,176.14	3,192.14	14.25	109.18	89.87	2,343.37	-7,853.33	8,192.52	8,069.09	123.43	66.375		
3,300.00	3,291.83	3,275.83	3,291.83	14.68	112.66	89.93	2,343.37	-7,853.33	8,192.50	8,065.16	127.35	64.333		
3,400.00	3,391.52	3,375.52	3,391.52	15.12	116.14	89.98	2,343.37	-7,853.33	8,192.50	8,061.23	131.26	62.412		
3,436.51	3,427.92	3,411.92	3,427.92	15.28	117.41	90.00	2,343.37	-7,853.33	8,192.50	8,059.80	132.69	61.739		
3,500.00	3,491.21	3,475.21	3,491.21	15.56	119.62	90.03	2,343.37	-7,853.33	8,192.50	8,057.32	135.18	60.603		
3,600.00	3,590.91	3,574.91	3,590.91	16.00	123.10	90.09	2,343.37	-7,853.33	8,192.51	8,053.40	139.10	58.895		
3,700.00	3,690.60	3,674.60	3,690.60	16.45	126.58	90.14	2,343.37	-7,853.33	8,192.52	8,049.50	143.02	57.281		
3,800.00	3,790.29	3,774.29	3,790.29	16.89	130.06	90.20	2,343.37	-7,853.33	8,192.55	8,045.60	146.94	55.753		
3,900.00	3,889.98	3,873.98	3,889.98	17.33	133.54	90.25	2,343.37	-7,853.33	8,192.58	8,041.71	150.87	54.304		
4,000.00	3,989.67	3,973.67	3,989.67	17.77	137.01	90.31	2,343.37	-7,853.33	8,192.62	8,037.83	154.79	52.928		
4,100.00	4,089.36	4,073.36	4,089.36	18.22	140.49	90.36	2,343.37	-7,853.33	8,192.66	8,033.95	158.71	51.620		
4,200.00	4,189.06	4,173.06	4,189.06	18.66	143.97	90.42	2,343.37	-7,853.33	8,192.72	8,030.08	162.63	50.375		
4,300.00	4,288.75	4,272.75	4,288.75	19.10	147.45	90.47	2,343.37	-7,853.33	8,192.78	8,026.22	166.56	49.189		
4,400.00	4,388.44	4,372.44	4,388.44	19.55	150.93	90.53	2,343.37	-7,853.33	8,192.85	8,022.36	170.48	48.057		
4,500.00	4,488.13	4,472.13	4,488.13	19.99	154.41	90.58	2,343.37	-7,853.33	8,192.92	8,018.52	174.41	46.976		
4,600.00	4,587.82	4,571.82	4,587.82	20.44	157.89	90.64	2,343.37	-7,853.33	8,193.01	8,014.68	178.33	45.943		
4,700.00	4,687.51	4,671.51	4,687.51	20.89	161.37	90.69	2,343.37	-7,853.33	8,193.10	8,010.84	182.26	44.954		
4,800.00	4,787.21	4,771.21	4,787.21	21.33	164.85	90.75	2,343.37	-7,853.33	8,193.20	8,007.02	186.18	44.007		
4,900.00	4,886.90	4,870.90	4,886.90	21.78	168.33	90.80	2,343.37	-7,853.33	8,193.30	8,003.20	190.11	43.099		
5,000.00	4,986.59	4,970.59	4,986.59	22.22	171.81	90.86	2,343.37	-7,853.33	8,193.42	7,999.38	194.03	42.227		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	5,086.28	5,070.28	5,086.28	22.67	175.29	90.91	2,343.37	-7,853.33	8,193.54	7,995.58	197.96	41.390		
5,200.00	5,185.97	5,169.97	5,185.97	23.12	178.77	90.96	2,343.37	-7,853.33	8,193.67	7,991.78	201.88	40.586		
5,300.00	5,285.66	5,269.66	5,285.66	23.56	182.25	91.02	2,343.37	-7,853.33	8,193.80	7,987.99	205.81	39.812		
5,400.00	5,385.36	5,369.36	5,385.36	24.01	185.73	91.07	2,343.37	-7,853.33	8,193.95	7,984.21	209.74	39.068		
5,500.00	5,485.05	5,469.05	5,485.05	24.46	189.21	91.13	2,343.37	-7,853.33	8,194.10	7,980.43	213.66	38.350		
5,600.00	5,584.74	5,568.74	5,584.74	24.90	192.69	91.18	2,343.37	-7,853.33	8,194.26	7,976.66	217.59	37.659		
5,700.00	5,684.43	5,668.43	5,684.43	25.35	196.17	91.24	2,343.37	-7,853.33	8,194.42	7,972.90	221.52	36.992		
5,800.00	5,784.12	5,768.12	5,784.12	25.80	199.65	91.29	2,343.37	-7,853.33	8,194.60	7,969.15	225.45	36.348		
5,900.00	5,883.81	5,867.81	5,883.81	26.25	203.13	91.35	2,343.37	-7,853.33	8,194.78	7,965.40	229.37	35.727		
6,000.00	5,983.51	5,967.51	5,983.51	26.70	206.61	91.40	2,343.37	-7,853.33	8,194.97	7,961.66	233.30	35.126		
6,100.00	6,083.20	6,067.20	6,083.20	27.14	210.09	91.46	2,343.37	-7,853.33	8,195.16	7,957.93	237.23	34.545		
6,200.00	6,182.89	6,166.89	6,182.89	27.59	213.57	91.51	2,343.37	-7,853.33	8,195.37	7,954.21	241.16	33.984		
6,300.00	6,282.58	6,266.58	6,282.58	28.04	217.05	91.57	2,343.37	-7,853.33	8,195.58	7,950.49	245.09	33.440		
6,400.00	6,382.27	6,366.27	6,382.27	28.49	220.53	91.62	2,343.37	-7,853.33	8,195.80	7,946.78	249.01	32.913		
6,500.00	6,481.96	6,465.96	6,481.96	28.94	224.01	91.68	2,343.37	-7,853.33	8,196.02	7,943.08	252.94	32.403		
6,600.00	6,581.66	6,565.66	6,581.66	29.39	227.49	91.73	2,343.37	-7,853.33	8,196.26	7,939.39	256.87	31.908		
6,700.00	6,681.21	6,665.21	6,681.21	29.83	230.96	91.79	2,343.37	-7,853.33	8,196.50	7,935.70	260.79	31.420		
6,800.00	6,778.96	6,762.96	6,778.96	30.28	234.44	91.85	2,343.37	-7,853.33	8,196.75	7,932.01	264.71	30.938		
6,900.00	6,876.71	6,860.71	6,876.71	30.73	237.92	91.91	2,343.37	-7,853.33	8,197.00	7,928.32	268.63	30.460		
7,000.00	6,974.46	6,958.46	6,974.46	31.18	241.40	91.97	2,343.37	-7,853.33	8,197.25	7,924.63	272.55	29.982		
7,100.00	7,072.21	7,056.21	7,072.21	31.63	244.88	92.03	2,343.37	-7,853.33	8,197.50	7,920.94	276.47	29.504		
7,200.00	7,169.96	7,153.96	7,169.96	32.08	248.36	92.09	2,343.37	-7,853.33	8,197.75	7,917.25	280.39	29.026		
7,300.00	7,267.71	7,251.71	7,267.71	32.53	251.84	92.15	2,343.37	-7,853.33	8,198.00	7,913.56	284.31	28.548		
7,400.00	7,365.46	7,349.46	7,365.46	32.98	255.32	92.21	2,343.37	-7,853.33	8,198.25	7,909.87	288.23	28.070		
7,500.00	7,463.21	7,447.21	7,463.21	33.43	258.80	92.27	2,343.37	-7,853.33	8,198.50	7,906.18	292.15	27.592		
7,600.00	7,560.96	7,544.96	7,560.96	33.88	262.28	92.33	2,343.37	-7,853.33	8,198.75	7,902.49	296.07	27.114		
7,700.00	7,658.71	7,642.71	7,658.71	34.33	265.76	92.39	2,343.37	-7,853.33	8,199.00	7,898.80	300.00	26.636		
7,800.00	7,756.46	7,740.46	7,756.46	34.78	269.24	92.45	2,343.37	-7,853.33	8,199.25	7,895.11	303.92	26.158		
7,900.00	7,854.21	7,838.21	7,854.21	35.23	272.72	92.51	2,343.37	-7,853.33	8,199.50	7,891.42	307.84	25.680		
8,000.00	7,951.96	7,935.96	7,951.96	35.68	276.20	92.57	2,343.37	-7,853.33	8,200.00	7,887.73	311.76	25.202		
8,100.00	8,049.71	8,033.71	8,049.71	36.13	279.68	92.63	2,343.37	-7,853.33	8,200.25	7,884.04	315.68	24.724		
8,200.00	8,147.46	8,131.46	8,147.46	36.58	283.16	92.69	2,343.37	-7,853.33	8,200.50	7,880.35	319.60	24.246		
8,300.00	8,245.21	8,229.21	8,245.21	37.03	286.64	92.75	2,343.37	-7,853.33	8,200.75	7,876.66	323.52	23.768		
8,400.00	8,342.96	8,326.96	8,342.96	37.48	290.12	92.81	2,343.37	-7,853.33	8,201.00	7,872.97	327.44	23.290		
8,500.00	8,440.71	8,424.71	8,440.71	37.93	293.60	92.87	2,343.37	-7,853.33	8,201.25	7,869.28	331.36	22.812		
8,600.00	8,538.46	8,522.46	8,538.46	38.38	297.08	92.93	2,343.37	-7,853.33	8,201.50	7,865.59	335.28	22.334		
8,700.00	8,636.21	8,620.21	8,636.21	38.83	300.56	92.99	2,343.37	-7,853.33	8,201.75	7,861.90	339.20	21.856		
8,800.00	8,733.96	8,717.96	8,733.96	39.28	304.04	93.05	2,343.37	-7,853.33	8,202.00	7,858.21	343.12	21.378		
8,900.00	8,831.71	8,815.71	8,831.71	39.73	307.52	93.11	2,343.37	-7,853.33	8,202.25	7,854.52	347.04	20.900		
9,000.00	8,929.46	8,913.46	8,929.46	40.18	311.00	93.17	2,343.37	-7,853.33	8,202.50	7,850.83	350.96	20.422		
9,100.00	9,027.21	9,011.21	9,027.21	40.63	314.48	93.23	2,343.37	-7,853.33	8,202.75	7,847.14	354.88	19.944		
9,200.00	9,124.96	9,108.96	9,124.96	41.08	317.96	93.29	2,343.37	-7,853.33	8,203.00	7,843.45	358.80	19.466		
9,300.00	9,222.71	9,206.71	9,222.71	41.53	321.44	93.35	2,343.37	-7,853.33	8,203.25	7,839.76	362.72	18.988		
9,400.00	9,320.46	9,304.46	9,320.46	41.98	324.92	93.41	2,343.37	-7,853.33	8,203.50	7,836.07	366.64	18.510		
9,500.00	9,418.21	9,402.21	9,418.21	42.43	328.40	93.47	2,343.37	-7,853.33	8,203.75	7,832.38	370.56	18.032		
9,600.00	9,515.96	9,499.96	9,515.96	42.88	331.88	93.53	2,343.37	-7,853.33	8,204.00	7,828.69	374.48	17.554		
9,700.00	9,613.71	9,597.71	9,613.71	43.33	335.36	93.59	2,343.37	-7,853.33	8,204.25	7,825.00	378.40	17.076		
9,800.00	9,711.46	9,695.46	9,711.46	43.78	338.84	93.65	2,343.37	-7,853.33	8,204.50	7,821.31	382.32	16.598		
9,900.00	9,809.21	9,793.21	9,809.21	44.23	342.32	93.71	2,343.37	-7,853.33	8,204.75	7,817.62	386.24	16.120		
10,000.00	9,906.96	9,890.96	9,906.96	44.68	345.80	93.77	2,343.37	-7,853.33	8,205.00	7,813.93	390.16	15.642		
10,100.00	10,004.71	9,988.71	10,004.71	45.13	349.28	93.83	2,343.37	-7,853.33	8,205.25	7,810.24	394.08	15.164		
10,200.00	10,102.46	10,086.46	10,102.46	45.58	352.76	93.89	2,343.37	-7,853.33	8,205.50	7,806.55	398.00	14.686		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	7,216.49	7,232.49	96.95	250.20	90.34	2,343.37	-7,853.33	5,247.69	4,935.78	311.91	16.824		
10,400.00	7,232.10	7,216.10	7,232.10	99.65	250.19	90.33	2,343.37	-7,853.33	5,164.64	4,850.67	313.96	16.450		
10,500.00	7,231.71	7,215.71	7,231.71	102.36	250.18	90.32	2,343.37	-7,853.33	5,082.20	4,766.09	316.10	16.078		
10,600.00	7,231.32	7,215.32	7,231.32	105.08	250.16	90.32	2,343.37	-7,853.33	5,000.39	4,682.07	318.32	15.708		
10,700.00	7,230.92	7,214.92	7,230.92	107.80	250.15	90.31	2,343.37	-7,853.33	4,919.26	4,598.63	320.64	15.342		
10,800.00	7,230.53	7,214.53	7,230.53	110.53	250.14	90.30	2,343.37	-7,853.33	4,838.84	4,515.80	323.04	14.979		
10,900.00	7,230.14	7,214.14	7,230.14	113.27	250.12	90.29	2,343.37	-7,853.33	4,759.16	4,433.62	325.53	14.620		
11,000.00	7,229.74	7,213.74	7,229.74	116.02	250.11	90.29	2,343.37	-7,853.33	4,680.26	4,352.13	328.12	14.264		
11,100.00	7,229.35	7,213.35	7,229.35	118.77	250.09	90.28	2,343.37	-7,853.33	4,602.17	4,271.37	330.81	13.912		
11,200.00	7,228.96	7,212.96	7,228.96	121.52	250.08	90.27	2,343.37	-7,853.33	4,524.96	4,191.37	333.59	13.564		
11,300.00	7,228.56	7,212.56	7,228.56	124.28	250.07	90.26	2,343.37	-7,853.33	4,448.65	4,112.18	336.47	13.222		
11,400.00	7,228.17	7,212.17	7,228.17	127.04	250.05	90.25	2,343.37	-7,853.33	4,373.29	4,033.84	339.45	12.884		
11,500.00	7,227.78	7,211.78	7,227.78	129.81	250.04	90.25	2,343.37	-7,853.33	4,298.94	3,956.41	342.53	12.551		
11,600.00	7,227.38	7,211.38	7,227.38	132.58	250.03	90.24	2,343.37	-7,853.33	4,225.65	3,879.93	345.71	12.223		
11,700.00	7,226.99	7,210.99	7,226.99	135.36	250.01	90.23	2,343.37	-7,853.33	4,153.47	3,804.47	349.00	11.901		
11,800.00	7,226.60	7,210.60	7,226.60	138.14	250.00	90.22	2,343.37	-7,853.33	4,082.47	3,730.07	352.39	11.585		
11,900.00	7,226.20	7,210.20	7,226.20	140.92	249.98	90.22	2,343.37	-7,853.33	4,012.70	3,656.81	355.89	11.275		
12,000.00	7,225.81	7,209.81	7,225.81	143.70	249.97	90.21	2,343.37	-7,853.33	3,944.23	3,584.74	359.49	10.972		
12,100.00	7,225.42	7,209.42	7,225.42	146.49	249.96	90.20	2,343.37	-7,853.33	3,877.13	3,513.95	363.19	10.675		
12,200.00	7,225.02	7,209.02	7,225.02	149.28	249.94	90.19	2,343.37	-7,853.33	3,811.48	3,444.49	366.99	10.386		
12,300.00	7,224.63	7,208.63	7,224.63	152.08	249.93	90.18	2,343.37	-7,853.33	3,747.34	3,376.45	370.89	10.104		
12,400.00	7,224.24	7,208.24	7,224.24	154.87	249.92	90.18	2,343.37	-7,853.33	3,684.81	3,309.92	374.89	9.829		
12,500.00	7,223.84	7,207.84	7,223.84	157.67	249.90	90.17	2,343.37	-7,853.33	3,623.95	3,244.97	378.98	9.562		
12,600.00	7,223.45	7,207.45	7,223.45	160.47	249.89	90.16	2,343.37	-7,853.33	3,564.86	3,181.71	383.15	9.304		
12,700.00	7,223.06	7,207.06	7,223.06	163.27	249.87	90.15	2,343.37	-7,853.33	3,507.63	3,120.21	387.41	9.054		
12,800.00	7,222.66	7,206.66	7,222.66	166.07	249.86	90.15	2,343.37	-7,853.33	3,452.34	3,060.60	391.74	8.813		
12,900.00	7,222.27	7,206.27	7,222.27	168.88	249.85	90.14	2,343.37	-7,853.33	3,399.10	3,002.96	396.14	8.581		
13,000.00	7,221.88	7,205.88	7,221.88	171.69	249.83	90.13	2,343.37	-7,853.33	3,347.99	2,947.40	400.59	8.358		
13,100.00	7,221.48	7,205.48	7,221.48	174.49	249.82	90.12	2,343.37	-7,853.33	3,299.13	2,894.05	405.09	8.144		
13,200.00	7,221.09	7,205.09	7,221.09	177.30	249.81	90.11	2,343.37	-7,853.33	3,252.61	2,843.00	409.62	7.941		
13,300.00	7,220.70	7,204.70	7,220.70	180.12	249.79	90.11	2,343.37	-7,853.33	3,208.54	2,794.37	414.16	7.747		
13,400.00	7,220.30	7,204.30	7,220.30	182.93	249.78	90.10	2,343.37	-7,853.33	3,167.00	2,748.29	418.71	7.564		
13,500.00	7,219.91	7,203.91	7,219.91	185.74	249.77	90.09	2,343.37	-7,853.33	3,128.12	2,704.88	423.24	7.391		
13,600.00	7,219.52	7,203.52	7,219.52	188.56	249.75	90.08	2,343.37	-7,853.33	3,091.98	2,664.24	427.74	7.229		
13,700.00	7,219.12	7,203.12	7,219.12	191.38	249.74	90.08	2,343.37	-7,853.33	3,058.68	2,626.50	432.19	7.077		
13,800.00	7,218.73	7,202.73	7,218.73	194.20	249.72	90.07	2,343.37	-7,853.33	3,028.32	2,591.76	436.56	6.937		
13,900.00	7,218.34	7,202.34	7,218.34	197.02	249.71	90.06	2,343.37	-7,853.33	3,000.99	2,560.16	440.84	6.807		
14,000.00	7,217.94	7,201.94	7,217.94	199.84	249.70	90.05	2,343.37	-7,853.33	2,976.77	2,531.77	445.00	6.689		
14,100.00	7,217.55	7,201.55	7,217.55	202.66	249.68	90.04	2,343.37	-7,853.33	2,955.73	2,506.71	449.02	6.583		
14,200.00	7,217.16	7,201.16	7,217.16	205.48	249.67	90.04	2,343.37	-7,853.33	2,937.95	2,485.07	452.89	6.487		
14,300.00	7,216.76	7,200.76	7,216.76	208.30	249.66	90.03	2,343.37	-7,853.33	2,923.49	2,466.92	456.57	6.403		
14,400.00	7,216.37	7,200.37	7,216.37	211.13	249.64	90.02	2,343.37	-7,853.33	2,912.39	2,452.33	460.06	6.330		
14,500.00	7,215.98	7,200.02	7,215.98	213.96	249.63	90.01	2,343.37	-7,853.33	2,904.68	2,441.35	463.33	6.269		
14,600.00	7,215.58	7,200.42	7,215.58	216.78	249.64	90.01	2,343.37	-7,853.33	2,900.41	2,434.01	466.40	6.219		
14,673.97	7,215.29	7,200.71	7,215.29	218.87	249.65	90.00	2,343.37	-7,853.33	2,899.47	2,430.96	468.51	6.189 CC		
14,700.00	7,215.19	7,200.81	7,215.19	219.61	249.66	90.00	2,343.37	-7,853.33	2,899.59	2,430.36	469.23	6.180 ES		
14,800.00	7,214.80	7,201.20	7,214.80	222.44	249.67	89.99	2,343.37	-7,853.33	2,902.21	2,430.41	471.79	6.151		
14,900.00	7,214.40	7,201.60	7,214.40	225.27	249.68	89.98	2,343.37	-7,853.33	2,908.27	2,434.17	474.10	6.134		
15,000.00	7,214.01	7,201.99	7,214.01	228.10	249.70	89.97	2,343.37	-7,853.33	2,917.74	2,441.60	476.14	6.128		
15,002.44	7,214.00	7,202.00	7,214.00	228.16	249.70	89.97	2,343.37	-7,853.33	2,918.02	2,441.83	476.18	6.128 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-55.88	2,458.97	-3,628.79	4,383.45					
100.00	100.00	101.00	100.00	3.28	3.73	-55.88	2,458.97	-3,628.79	4,383.45	4,376.43	7.02	624.712		
200.00	200.00	201.00	200.00	3.34	6.21	-55.88	2,458.97	-3,628.79	4,383.45	4,373.90	9.55	459.212		
300.00	300.00	301.00	300.00	3.44	9.36	-55.88	2,458.97	-3,628.79	4,383.45	4,370.65	12.80	342.427		
400.00	400.00	401.00	400.00	3.60	12.68	-55.88	2,458.97	-3,628.79	4,383.45	4,367.16	16.29	269.119		
500.00	500.00	501.00	500.00	3.81	16.08	-55.88	2,458.97	-3,628.79	4,383.45	4,363.56	19.89	220.402		
600.00	599.98	600.98	599.98	4.03	19.51	105.97	2,458.97	-3,628.79	4,383.93	4,360.38	23.55	186.181		
700.00	699.84	700.84	699.84	4.29	22.96	106.01	2,458.97	-3,628.79	4,385.37	4,358.13	27.24	160.984		
800.00	799.54	800.54	799.54	4.57	26.41	106.10	2,458.97	-3,628.79	4,387.52	4,356.55	30.97	141.665		
900.00	899.23	900.23	899.23	4.87	29.86	106.19	2,458.97	-3,628.79	4,389.70	4,354.97	34.73	126.381		
1,000.00	998.92	1,000.08	998.92	5.20	33.33	106.29	2,458.97	-3,628.79	4,391.91	4,353.38	38.53	113.993		
1,100.00	1,098.61	1,100.39	1,098.61	5.54	36.82	106.39	2,458.97	-3,628.79	4,394.12	4,351.76	42.36	103.735		
1,200.00	1,198.30	1,200.70	1,198.30	5.90	40.30	106.49	2,458.97	-3,628.79	4,396.35	4,350.14	46.21	95.144		
1,300.00	1,298.00	1,301.00	1,298.00	6.27	43.80	106.59	2,458.97	-3,628.79	4,398.59	4,348.52	50.07	87.850		
1,400.00	1,397.69	1,401.31	1,397.69	6.66	47.29	106.68	2,458.97	-3,628.79	4,400.84	4,346.90	53.94	81.584		
1,500.00	1,497.38	1,501.62	1,497.38	7.05	50.78	106.78	2,458.97	-3,628.79	4,403.10	4,345.28	57.83	76.145		
1,600.00	1,597.07	1,601.93	1,597.07	7.44	54.28	106.88	2,458.97	-3,628.79	4,405.38	4,343.67	61.72	71.381		
1,700.00	1,696.76	1,702.24	1,696.76	7.85	57.77	106.98	2,458.97	-3,628.79	4,407.67	4,342.06	65.61	67.176		
1,800.00	1,796.45	1,802.55	1,796.45	8.25	61.27	107.07	2,458.97	-3,628.79	4,409.98	4,340.46	69.52	63.437		
1,900.00	1,896.15	1,902.85	1,896.15	8.67	64.77	107.17	2,458.97	-3,628.79	4,412.29	4,338.87	73.43	60.092		
2,000.00	1,995.84	2,003.16	1,995.84	9.08	68.26	107.27	2,458.97	-3,628.79	4,414.62	4,337.28	77.34	57.082		
2,100.00	2,095.53	2,103.47	2,095.53	9.50	71.76	107.36	2,458.97	-3,628.79	4,416.96	4,335.71	81.25	54.360		
2,200.00	2,195.22	2,203.78	2,195.22	9.92	75.26	107.46	2,458.97	-3,628.79	4,419.32	4,334.14	85.17	51.886		
2,300.00	2,294.91	2,304.09	2,294.91	10.35	78.76	107.56	2,458.97	-3,628.79	4,421.69	4,332.59	89.10	49.628		
2,400.00	2,394.60	2,404.40	2,394.60	10.77	82.26	107.65	2,458.97	-3,628.79	4,424.07	4,331.04	93.02	47.560		
2,500.00	2,494.30	2,504.70	2,494.30	11.20	85.76	107.75	2,458.97	-3,628.79	4,426.46	4,329.51	96.95	45.658		
2,600.00	2,593.99	2,605.01	2,593.99	11.63	89.26	107.85	2,458.97	-3,628.79	4,428.86	4,327.99	100.88	43.904		
2,700.00	2,693.68	2,705.32	2,693.68	12.07	92.76	107.94	2,458.97	-3,628.79	4,431.28	4,326.47	104.81	42.280		
2,800.00	2,793.37	2,805.63	2,793.37	12.50	96.26	108.04	2,458.97	-3,628.79	4,433.71	4,324.97	108.74	40.774		
2,900.00	2,893.06	2,905.94	2,893.06	12.93	99.75	108.14	2,458.97	-3,628.79	4,436.15	4,323.48	112.67	39.372		
3,000.00	2,992.76	3,006.25	2,992.76	13.37	103.25	108.23	2,458.97	-3,628.79	4,438.61	4,322.00	116.61	38.065		
3,100.00	3,092.45	3,106.55	3,092.45	13.81	106.75	108.33	2,458.97	-3,628.79	4,441.08	4,320.53	120.54	36.842		
3,200.00	3,192.14	3,206.86	3,192.14	14.25	110.26	108.42	2,458.97	-3,628.79	4,443.56	4,319.08	124.48	35.697		
3,300.00	3,291.83	3,307.17	3,291.83	14.68	113.76	108.52	2,458.97	-3,628.79	4,446.05	4,317.63	128.42	34.622		
3,400.00	3,391.52	3,407.48	3,391.52	15.12	117.26	108.61	2,458.97	-3,628.79	4,448.56	4,316.20	132.36	33.611		
3,500.00	3,491.21	3,507.79	3,491.21	15.56	120.76	108.71	2,458.97	-3,628.79	4,451.07	4,314.78	136.29	32.658		
3,600.00	3,590.91	3,608.09	3,590.91	16.00	124.26	108.81	2,458.97	-3,628.79	4,453.60	4,313.37	140.23	31.758		
3,700.00	3,690.60	3,708.40	3,690.60	16.45	127.76	108.90	2,458.97	-3,628.79	4,456.15	4,311.97	144.18	30.908		
3,800.00	3,790.29	3,808.71	3,790.29	16.89	131.26	109.00	2,458.97	-3,628.79	4,458.70	4,310.58	148.12	30.103		
3,900.00	3,889.98	3,909.02	3,889.98	17.33	134.76	109.09	2,458.97	-3,628.79	4,461.27	4,309.21	152.06	29.339		
4,000.00	3,989.67	4,009.33	3,989.67	17.77	138.26	109.19	2,458.97	-3,628.79	4,463.85	4,307.85	156.00	28.614		
4,100.00	4,089.36	4,109.64	4,089.36	18.22	141.76	109.28	2,458.97	-3,628.79	4,466.44	4,306.50	159.94	27.925		
4,200.00	4,189.06	4,209.94	4,189.06	18.66	145.26	109.38	2,458.97	-3,628.79	4,469.04	4,305.16	163.89	27.269		
4,300.00	4,288.75	4,289.75	4,288.75	19.10	148.05	109.47	2,458.97	-3,628.79	4,471.66	4,304.54	167.11	26.758		
4,400.00	4,388.44	4,389.44	4,388.44	19.55	151.53	109.56	2,458.97	-3,628.79	4,474.29	4,303.25	171.04	26.160		
4,500.00	4,488.13	4,489.13	4,488.13	19.99	155.01	109.66	2,458.97	-3,628.79	4,476.93	4,301.97	174.96	25.588		
4,600.00	4,587.82	4,588.82	4,587.82	20.44	158.48	109.75	2,458.97	-3,628.79	4,479.58	4,300.70	178.88	25.042		
4,700.00	4,687.51	4,688.51	4,687.51	20.89	161.96	109.85	2,458.97	-3,628.79	4,482.25	4,299.44	182.81	24.519		
4,800.00	4,787.21	4,788.21	4,787.21	21.33	165.44	109.94	2,458.97	-3,628.79	4,484.92	4,298.19	186.73	24.018		
4,900.00	4,886.90	4,887.90	4,886.90	21.78	168.92	110.03	2,458.97	-3,628.79	4,487.61	4,296.96	190.65	23.538		
5,000.00	4,986.59	4,987.59	4,986.59	22.22	172.40	110.13	2,458.97	-3,628.79	4,490.31	4,295.74	194.58	23.077		
5,100.00	5,086.28	5,087.28	5,086.28	22.67	175.88	110.22	2,458.97	-3,628.79	4,493.03	4,294.53	198.50	22.635		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,186.97	5,185.97	23.12	179.36	110.32	2,458.97	-3,628.79	4,495.75	4,293.33	202.43	22.209	
5,300.00	5,285.66	5,286.66	5,285.66	23.56	182.84	110.41	2,458.97	-3,628.79	4,498.49	4,292.14	206.35	21.800	
5,400.00	5,385.36	5,386.36	5,385.36	24.01	186.32	110.50	2,458.97	-3,628.79	4,501.24	4,290.96	210.28	21.406	
5,500.00	5,485.05	5,486.05	5,485.05	24.46	189.80	110.60	2,458.97	-3,628.79	4,504.00	4,289.80	214.20	21.027	
5,600.00	5,584.74	5,585.74	5,584.74	24.90	193.28	110.69	2,458.97	-3,628.79	4,506.78	4,288.65	218.13	20.661	
5,700.00	5,684.43	5,685.43	5,684.43	25.35	196.76	110.78	2,458.97	-3,628.79	4,509.56	4,287.51	222.05	20.309	
5,800.00	5,784.12	5,785.12	5,784.12	25.80	200.24	110.87	2,458.97	-3,628.79	4,512.36	4,286.38	225.98	19.968	
5,900.00	5,883.81	5,884.81	5,883.81	26.25	203.72	110.97	2,458.97	-3,628.79	4,515.17	4,285.26	229.90	19.639	
6,000.00	5,983.51	5,984.51	5,983.51	26.70	207.20	111.06	2,458.97	-3,628.79	4,517.99	4,284.16	233.83	19.322	
6,100.00	6,083.20	6,084.20	6,083.20	27.14	210.68	111.15	2,458.97	-3,628.79	4,520.82	4,283.07	237.76	19.015	
6,200.00	6,182.89	6,183.89	6,182.89	27.59	214.16	111.25	2,458.97	-3,628.79	4,523.67	4,281.99	241.68	18.717	
6,300.00	6,282.58	6,283.58	6,282.58	28.04	217.64	111.34	2,458.97	-3,628.79	4,526.52	4,280.92	245.61	18.430	
6,400.00	6,382.27	6,383.27	6,382.27	28.49	221.12	111.43	2,458.97	-3,628.79	4,529.39	4,279.86	249.53	18.151	
6,500.00	6,481.96	6,482.96	6,481.96	28.94	224.60	111.52	2,458.97	-3,628.79	4,532.27	4,278.81	253.46	17.882	
6,600.00	6,581.66	6,582.66	6,581.66	29.39	228.08	111.61	2,458.97	-3,628.79	4,535.17	4,277.78	257.39	17.620	
6,700.00	6,681.21	6,682.21	6,681.21	29.83	231.55	73.27	2,458.97	-3,628.79	4,536.09	4,274.78	261.31	17.359	
6,800.00	6,778.96	6,779.96	6,778.96	30.28	234.97	56.62	2,458.97	-3,628.79	4,526.20	4,261.04	265.16	17.070	
6,900.00	6,872.51	6,873.51	6,872.51	30.70	238.23	52.95	2,458.97	-3,628.79	4,504.77	4,235.91	268.86	16.755	
7,000.00	6,959.55	6,960.55	6,959.55	31.10	241.27	53.07	2,458.97	-3,628.79	4,472.50	4,200.19	272.31	16.424	
7,100.00	7,037.93	7,038.93	7,037.93	31.48	244.01	55.31	2,458.97	-3,628.79	4,430.41	4,154.95	275.46	16.084	
7,200.00	7,105.74	7,106.74	7,105.74	31.88	246.37	59.22	2,458.97	-3,628.79	4,379.77	4,101.51	278.26	15.740	
7,300.00	7,161.29	7,162.29	7,161.29	32.41	248.31	64.65	2,458.97	-3,628.79	4,322.09	4,041.42	280.66	15.400	
7,400.00	7,203.22	7,204.22	7,203.22	33.13	249.78	71.44	2,458.97	-3,628.79	4,259.03	3,976.37	282.67	15.067	
7,500.00	7,230.50	7,231.50	7,230.50	34.04	250.73	79.30	2,458.97	-3,628.79	4,192.37	3,908.13	284.25	14.749	
7,600.00	7,242.45	7,243.45	7,242.45	35.13	251.15	87.74	2,458.97	-3,628.79	4,123.91	3,838.51	285.40	14.450	
7,700.00	7,242.72	7,243.72	7,242.72	36.39	251.15	90.21	2,458.97	-3,628.79	4,055.52	3,769.26	286.26	14.167	
7,800.00	7,242.33	7,243.33	7,242.33	37.81	251.14	90.20	2,458.97	-3,628.79	3,988.43	3,701.18	287.24	13.885	
7,900.00	7,241.93	7,242.93	7,241.93	39.40	251.13	90.19	2,458.97	-3,628.79	3,922.73	3,634.35	288.38	13.603	
8,000.00	7,241.54	7,242.54	7,241.54	41.13	251.11	90.19	2,458.97	-3,628.79	3,858.51	3,568.83	289.68	13.320	
8,100.00	7,241.15	7,242.15	7,241.15	42.97	251.10	90.18	2,458.97	-3,628.79	3,795.84	3,504.71	291.12	13.039	
8,200.00	7,240.75	7,241.75	7,240.75	44.92	251.09	90.17	2,458.97	-3,628.79	3,734.79	3,442.07	292.72	12.759	
8,300.00	7,240.36	7,241.36	7,240.36	46.97	251.07	90.16	2,458.97	-3,628.79	3,675.45	3,380.99	294.47	12.482	
8,400.00	7,239.97	7,240.97	7,239.97	49.10	251.06	90.15	2,458.97	-3,628.79	3,617.90	3,321.55	296.35	12.208	
8,500.00	7,239.57	7,240.57	7,239.57	51.29	251.04	90.15	2,458.97	-3,628.79	3,562.23	3,263.86	298.37	11.939	
8,600.00	7,239.18	7,240.18	7,239.18	53.56	251.03	90.14	2,458.97	-3,628.79	3,508.53	3,208.01	300.53	11.675	
8,700.00	7,238.79	7,239.79	7,238.79	55.87	251.02	90.13	2,458.97	-3,628.79	3,456.89	3,154.09	302.80	11.416	
8,800.00	7,238.39	7,239.39	7,238.39	58.24	251.00	90.12	2,458.97	-3,628.79	3,407.40	3,102.21	305.19	11.165	
8,900.00	7,238.00	7,239.00	7,238.00	60.64	250.99	90.12	2,458.97	-3,628.79	3,360.15	3,052.47	307.69	10.921	
9,000.00	7,237.61	7,238.61	7,237.61	63.09	250.98	90.11	2,458.97	-3,628.79	3,315.25	3,004.97	310.28	10.685	
9,100.00	7,237.21	7,238.21	7,237.21	65.56	250.96	90.10	2,458.97	-3,628.79	3,272.80	2,959.83	312.96	10.457	
9,200.00	7,236.82	7,237.82	7,236.82	68.07	250.95	90.09	2,458.97	-3,628.79	3,232.87	2,917.15	315.72	10.240	
9,300.00	7,236.43	7,237.43	7,236.43	70.61	250.94	90.09	2,458.97	-3,628.79	3,195.58	2,877.03	318.55	10.032	
9,400.00	7,236.03	7,237.03	7,236.03	73.16	250.92	90.08	2,458.97	-3,628.79	3,161.02	2,839.58	321.43	9.834	
9,500.00	7,235.64	7,236.64	7,235.64	75.74	250.91	90.07	2,458.97	-3,628.79	3,129.26	2,804.91	324.36	9.648	
9,600.00	7,235.25	7,236.25	7,235.25	78.34	250.89	90.06	2,458.97	-3,628.79	3,100.42	2,773.10	327.31	9.472	
9,700.00	7,234.85	7,235.85	7,234.85	80.96	250.88	90.06	2,458.97	-3,628.79	3,074.55	2,744.26	330.29	9.309	
9,800.00	7,234.46	7,235.46	7,234.46	83.59	250.87	90.05	2,458.97	-3,628.79	3,051.74	2,718.48	333.27	9.157	
9,900.00	7,234.07	7,235.07	7,234.07	86.24	250.85	90.04	2,458.97	-3,628.79	3,032.06	2,695.83	336.23	9.018	
10,000.00	7,233.67	7,234.67	7,233.67	88.90	250.84	90.03	2,458.97	-3,628.79	3,015.57	2,676.40	339.17	8.891	
10,100.00	7,233.28	7,234.28	7,233.28	91.57	250.83	90.03	2,458.97	-3,628.79	3,002.33	2,660.25	342.08	8.777	
10,200.00	7,232.89	7,233.89	7,232.89	94.25	250.81	90.02	2,458.97	-3,628.79	2,992.36	2,647.43	344.93	8.675	
10,300.00	7,232.49	7,233.49	7,232.49	96.95	250.80	90.01	2,458.97	-3,628.79	2,985.72	2,638.00	347.72	8.587	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,233.10	7,232.10	99.65	250.78	90.00	2,458.97	-3,628.79	2,982.41	2,631.98	350.43	8.511		
10,448.63	7,231.91	7,232.91	7,231.91	100.97	250.78	90.00	2,458.97	-3,628.79	2,982.02	2,630.30	351.72	8.478 CC		
10,500.00	7,231.71	7,232.71	7,231.71	102.36	250.77	90.00	2,458.97	-3,628.79	2,982.46	2,629.41	353.05	8.448 ES		
10,600.00	7,231.32	7,232.32	7,231.32	105.08	250.76	89.99	2,458.97	-3,628.79	2,985.86	2,630.28	355.57	8.397		
10,700.00	7,230.92	7,231.92	7,230.92	107.80	250.74	89.98	2,458.97	-3,628.79	2,992.59	2,634.60	357.99	8.359		
10,800.00	7,230.53	7,231.53	7,230.53	110.53	250.73	89.97	2,458.97	-3,628.79	3,002.65	2,642.36	360.29	8.334		
10,900.00	7,230.14	7,231.14	7,230.14	113.27	250.72	89.97	2,458.97	-3,628.79	3,015.98	2,653.52	362.47	8.321		
11,000.00	7,229.74	7,230.74	7,229.74	116.02	250.70	89.96	2,458.97	-3,628.79	3,032.56	2,668.04	364.52	8.319 SF		
11,100.00	7,229.35	7,230.35	7,229.35	118.77	250.69	89.95	2,458.97	-3,628.79	3,052.33	2,685.89	366.44	8.330		
11,200.00	7,228.96	7,229.96	7,228.96	121.52	250.67	89.94	2,458.97	-3,628.79	3,075.22	2,706.99	368.23	8.351		
11,300.00	7,228.56	7,229.56	7,228.56	124.28	250.66	89.94	2,458.97	-3,628.79	3,101.17	2,731.29	369.88	8.384		
11,400.00	7,228.17	7,229.17	7,228.17	127.04	250.65	89.93	2,458.97	-3,628.79	3,130.10	2,758.69	371.41	8.428		
11,500.00	7,227.78	7,228.78	7,227.78	129.81	250.63	89.92	2,458.97	-3,628.79	3,161.93	2,789.13	372.80	8.482		
11,600.00	7,227.38	7,228.38	7,227.38	132.58	250.62	89.91	2,458.97	-3,628.79	3,196.57	2,822.50	374.07	8.545		
11,700.00	7,226.99	7,227.99	7,226.99	135.36	250.61	89.91	2,458.97	-3,628.79	3,233.93	2,858.73	375.21	8.619		
11,800.00	7,226.60	7,227.60	7,226.60	138.14	250.59	89.90	2,458.97	-3,628.79	3,273.93	2,897.69	376.23	8.702		
11,900.00	7,226.20	7,227.20	7,226.20	140.92	250.58	89.89	2,458.97	-3,628.79	3,316.45	2,939.31	377.14	8.794		
12,000.00	7,225.81	7,226.81	7,225.81	143.70	250.56	89.88	2,458.97	-3,628.79	3,361.42	2,983.48	377.94	8.894		
12,100.00	7,225.42	7,226.42	7,225.42	146.49	250.55	89.88	2,458.97	-3,628.79	3,408.72	3,030.08	378.64	9.003		
12,200.00	7,225.02	7,226.02	7,225.02	149.28	250.54	89.87	2,458.97	-3,628.79	3,458.28	3,079.03	379.24	9.119		
12,300.00	7,224.63	7,225.63	7,224.63	152.08	250.52	89.86	2,458.97	-3,628.79	3,509.98	3,130.22	379.75	9.243		
12,400.00	7,224.24	7,225.24	7,224.24	154.87	250.51	89.85	2,458.97	-3,628.79	3,563.74	3,183.55	380.18	9.374		
12,500.00	7,223.84	7,224.84	7,223.84	157.67	250.50	89.84	2,458.97	-3,628.79	3,619.46	3,238.93	380.53	9.512		
12,600.00	7,223.45	7,224.45	7,223.45	160.47	250.48	89.84	2,458.97	-3,628.79	3,677.06	3,296.25	380.81	9.656		
12,700.00	7,223.06	7,224.06	7,223.06	163.27	250.47	89.83	2,458.97	-3,628.79	3,736.44	3,355.43	381.02	9.807		
12,800.00	7,222.66	7,223.66	7,222.66	166.07	250.45	89.82	2,458.97	-3,628.79	3,797.54	3,416.37	381.17	9.963		
12,900.00	7,222.27	7,223.27	7,222.27	168.88	250.44	89.81	2,458.97	-3,628.79	3,860.25	3,478.99	381.26	10.125		
13,000.00	7,221.88	7,222.88	7,221.88	171.69	250.43	89.81	2,458.97	-3,628.79	3,924.51	3,543.21	381.30	10.292		
13,100.00	7,221.48	7,222.48	7,221.48	174.49	250.41	89.80	2,458.97	-3,628.79	3,990.25	3,608.95	381.30	10.465		
13,200.00	7,221.09	7,222.09	7,221.09	177.30	250.40	89.79	2,458.97	-3,628.79	4,057.38	3,676.13	381.25	10.642		
13,300.00	7,220.70	7,221.70	7,220.70	180.12	250.39	89.78	2,458.97	-3,628.79	4,125.85	3,744.67	381.17	10.824		
13,400.00	7,220.30	7,221.30	7,220.30	182.93	250.37	89.78	2,458.97	-3,628.79	4,195.58	3,814.52	381.06	11.010		
13,500.00	7,219.91	7,220.91	7,219.91	185.74	250.36	89.77	2,458.97	-3,628.79	4,266.51	3,885.60	380.91	11.201		
13,600.00	7,219.52	7,220.52	7,219.52	188.56	250.34	89.76	2,458.97	-3,628.79	4,338.60	3,957.86	380.74	11.395		
13,700.00	7,219.12	7,220.12	7,219.12	191.38	250.33	89.75	2,458.97	-3,628.79	4,411.77	4,031.22	380.54	11.593		
13,800.00	7,218.73	7,219.73	7,218.73	194.20	250.32	89.75	2,458.97	-3,628.79	4,485.97	4,105.65	380.33	11.795		
13,900.00	7,218.34	7,219.34	7,218.34	197.02	250.30	89.74	2,458.97	-3,628.79	4,561.16	4,181.07	380.09	12.000		
14,000.00	7,217.94	7,218.94	7,217.94	199.84	250.29	89.73	2,458.97	-3,628.79	4,637.29	4,257.45	379.84	12.209		
14,100.00	7,217.55	7,218.55	7,217.55	202.66	250.28	89.72	2,458.97	-3,628.79	4,714.31	4,334.74	379.57	12.420		
14,200.00	7,217.16	7,218.16	7,217.16	205.48	250.26	89.72	2,458.97	-3,628.79	4,792.18	4,412.89	379.29	12.634		
14,300.00	7,216.76	7,217.76	7,216.76	208.30	250.25	89.71	2,458.97	-3,628.79	4,870.86	4,491.85	379.01	12.852		
14,400.00	7,216.37	7,217.37	7,216.37	211.13	250.23	89.70	2,458.97	-3,628.79	4,950.30	4,571.59	378.71	13.071		
14,500.00	7,215.98	7,216.98	7,215.98	213.96	250.22	89.69	2,458.97	-3,628.79	5,030.49	4,652.08	378.41	13.294		
14,600.00	7,215.58	7,216.58	7,215.58	216.78	250.21	89.69	2,458.97	-3,628.79	5,111.36	4,733.27	378.10	13.519		
14,700.00	7,215.19	7,216.19	7,215.19	219.61	250.19	89.68	2,458.97	-3,628.79	5,192.91	4,815.13	377.78	13.746		
14,800.00	7,214.80	7,215.80	7,214.80	222.44	250.18	89.67	2,458.97	-3,628.79	5,275.09	4,897.63	377.46	13.975		
14,900.00	7,214.40	7,215.40	7,214.40	225.27	250.17	89.66	2,458.97	-3,628.79	5,357.88	4,980.73	377.14	14.206		
15,000.00	7,214.01	7,215.01	7,214.01	228.10	250.15	89.66	2,458.97	-3,628.79	5,441.24	5,064.42	376.82	14.440		
15,002.44	7,214.00	7,215.00	7,214.00	228.16	250.15	89.66	2,458.97	-3,628.79	5,443.28	5,066.47	376.81	14.446		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	39.00	3.28	3.28	-63.36	2,430.03	-4,844.14	5,419.62					
100.00	100.00	61.00	100.00	3.28	3.45	-63.36	2,430.03	-4,844.14	5,419.47	5,412.74	6.73	804.887		
200.00	200.00	161.00	200.00	3.34	5.08	-63.36	2,430.03	-4,844.14	5,419.47	5,411.06	8.41	644.113		
300.00	300.00	261.00	300.00	3.44	8.06	-63.36	2,430.03	-4,844.14	5,419.47	5,407.97	11.51	470.923		
400.00	400.00	361.00	400.00	3.60	11.34	-63.36	2,430.03	-4,844.14	5,419.47	5,404.53	14.94	362.628		
500.00	500.00	461.00	500.00	3.81	14.72	-63.36	2,430.03	-4,844.14	5,419.47	5,400.95	18.52	292.562		
600.00	599.98	560.98	599.98	4.03	18.14	98.49	2,430.03	-4,844.14	5,419.73	5,397.56	22.17	244.446		
700.00	699.84	660.84	699.84	4.29	21.58	98.53	2,430.03	-4,844.14	5,420.51	5,394.65	25.86	209.614		
800.00	799.54	760.54	799.54	4.57	25.02	98.60	2,430.03	-4,844.14	5,421.66	5,392.08	29.59	183.253		
900.00	899.23	860.23	899.23	4.87	28.47	98.69	2,430.03	-4,844.14	5,422.85	5,389.50	33.35	162.624		
1,000.00	998.92	959.92	998.92	5.20	31.93	98.77	2,430.03	-4,844.14	5,424.04	5,386.91	37.13	146.070		
1,100.00	1,098.61	1,059.61	1,098.61	5.54	35.40	98.85	2,430.03	-4,844.14	5,425.25	5,384.30	40.94	132.511		
1,200.00	1,198.30	1,159.30	1,198.30	5.90	38.86	98.93	2,430.03	-4,844.14	5,426.46	5,381.69	44.77	121.213		
1,300.00	1,298.00	1,259.00	1,298.00	6.27	42.33	99.01	2,430.03	-4,844.14	5,427.69	5,379.08	48.61	111.663		
1,400.00	1,397.69	1,358.69	1,397.69	6.66	45.80	99.09	2,430.03	-4,844.14	5,428.93	5,376.47	52.46	103.487		
1,500.00	1,497.38	1,458.38	1,497.38	7.05	49.28	99.18	2,430.03	-4,844.14	5,430.18	5,373.86	56.32	96.414		
1,600.00	1,597.07	1,558.07	1,597.07	7.44	52.75	99.26	2,430.03	-4,844.14	5,431.44	5,371.25	60.19	90.237		
1,700.00	1,696.76	1,657.76	1,696.76	7.85	56.22	99.34	2,430.03	-4,844.14	5,432.71	5,368.64	64.07	84.797		
1,800.00	1,796.45	1,757.45	1,796.45	8.25	59.70	99.42	2,430.03	-4,844.14	5,433.99	5,366.04	67.95	79.971		
1,900.00	1,896.15	1,857.15	1,896.15	8.67	63.17	99.50	2,430.03	-4,844.14	5,435.28	5,363.45	71.84	75.662		
2,000.00	1,995.84	1,956.84	1,995.84	9.08	66.65	99.58	2,430.03	-4,844.14	5,436.59	5,360.86	75.73	71.791		
2,100.00	2,095.53	2,056.53	2,095.53	9.50	70.12	99.66	2,430.03	-4,844.14	5,437.90	5,358.28	79.62	68.295		
2,200.00	2,195.22	2,156.22	2,195.22	9.92	73.60	99.74	2,430.03	-4,844.14	5,439.23	5,355.71	83.52	65.124		
2,300.00	2,294.91	2,255.91	2,294.91	10.35	77.08	99.83	2,430.03	-4,844.14	5,440.57	5,353.15	87.42	62.233		
2,400.00	2,394.60	2,355.60	2,394.60	10.77	80.56	99.91	2,430.03	-4,844.14	5,441.92	5,350.59	91.33	59.588		
2,500.00	2,494.30	2,455.30	2,494.30	11.20	84.03	99.99	2,430.03	-4,844.14	5,443.28	5,348.04	95.23	57.158		
2,600.00	2,593.99	2,554.99	2,593.99	11.63	87.51	100.07	2,430.03	-4,844.14	5,444.65	5,345.51	99.14	54.919		
2,700.00	2,693.68	2,654.68	2,693.68	12.07	90.99	100.15	2,430.03	-4,844.14	5,446.03	5,342.98	103.05	52.849		
2,800.00	2,793.37	2,754.37	2,793.37	12.50	94.47	100.23	2,430.03	-4,844.14	5,447.42	5,340.46	106.96	50.929		
2,900.00	2,893.06	2,854.06	2,893.06	12.93	97.94	100.31	2,430.03	-4,844.14	5,448.82	5,337.95	110.87	49.145		
3,000.00	2,992.76	2,953.76	2,992.76	13.37	101.42	100.39	2,430.03	-4,844.14	5,450.24	5,335.45	114.79	47.481		
3,100.00	3,092.45	3,053.45	3,092.45	13.81	104.90	100.47	2,430.03	-4,844.14	5,451.66	5,332.96	118.70	45.927		
3,200.00	3,192.14	3,153.14	3,192.14	14.25	108.38	100.55	2,430.03	-4,844.14	5,453.10	5,330.48	122.62	44.472		
3,300.00	3,291.83	3,252.83	3,291.83	14.68	111.86	100.64	2,430.03	-4,844.14	5,454.55	5,328.01	126.53	43.107		
3,400.00	3,391.52	3,352.52	3,391.52	15.12	115.34	100.72	2,430.03	-4,844.14	5,456.00	5,325.55	130.45	41.824		
3,500.00	3,491.21	3,452.21	3,491.21	15.56	118.82	100.80	2,430.03	-4,844.14	5,457.47	5,323.10	134.37	40.615		
3,600.00	3,590.91	3,551.91	3,590.91	16.00	122.30	100.88	2,430.03	-4,844.14	5,458.95	5,320.66	138.29	39.475		
3,700.00	3,690.60	3,651.60	3,690.60	16.45	125.77	100.96	2,430.03	-4,844.14	5,460.44	5,318.23	142.21	38.397		
3,800.00	3,790.29	3,751.29	3,790.29	16.89	129.25	101.04	2,430.03	-4,844.14	5,461.95	5,315.81	146.13	37.377		
3,900.00	3,889.98	3,850.98	3,889.98	17.33	132.73	101.12	2,430.03	-4,844.14	5,463.46	5,313.41	150.05	36.410		
4,000.00	3,989.67	3,950.67	3,989.67	17.77	136.21	101.20	2,430.03	-4,844.14	5,464.98	5,311.01	153.97	35.493		
4,100.00	4,089.36	4,050.36	4,089.36	18.22	139.69	101.28	2,430.03	-4,844.14	5,466.51	5,308.62	157.90	34.621		
4,200.00	4,189.06	4,150.06	4,189.06	18.66	143.17	101.36	2,430.03	-4,844.14	5,468.06	5,306.24	161.82	33.791		
4,300.00	4,288.75	4,249.75	4,288.75	19.10	146.65	101.44	2,430.03	-4,844.14	5,469.61	5,303.87	165.74	33.001		
4,400.00	4,388.44	4,349.44	4,388.44	19.55	150.13	101.52	2,430.03	-4,844.14	5,471.18	5,301.52	169.66	32.247		
4,500.00	4,488.13	4,449.13	4,488.13	19.99	153.61	101.60	2,430.03	-4,844.14	5,472.76	5,299.17	173.59	31.527		
4,600.00	4,587.82	4,548.82	4,587.82	20.44	157.09	101.68	2,430.03	-4,844.14	5,474.35	5,296.83	177.51	30.839		
4,700.00	4,687.51	4,648.51	4,687.51	20.89	160.57	101.76	2,430.03	-4,844.14	5,475.95	5,294.51	181.44	30.181		
4,800.00	4,787.21	4,748.21	4,787.21	21.33	164.05	101.84	2,430.03	-4,844.14	5,477.55	5,292.19	185.36	29.551		
4,900.00	4,886.90	4,847.90	4,886.90	21.78	167.53	101.92	2,430.03	-4,844.14	5,479.17	5,289.89	189.29	28.947		
5,000.00	4,986.59	4,947.59	4,986.59	22.22	171.01	102.00	2,430.03	-4,844.14	5,480.81	5,287.60	193.21	28.367		
5,100.00	5,086.28	5,047.28	5,086.28	22.67	174.49	102.08	2,430.03	-4,844.14	5,482.45	5,285.31	197.14	27.811		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,146.97	5,185.97	23.12	177.97	102.16	2,430.03	-4,844.14	5,484.10	5,283.04	201.06	27.276		
5,300.00	5,285.66	5,246.66	5,285.66	23.56	181.45	102.24	2,430.03	-4,844.14	5,485.76	5,280.78	204.99	26.762		
5,400.00	5,385.36	5,346.36	5,385.36	24.01	184.93	102.32	2,430.03	-4,844.14	5,487.44	5,278.52	208.91	26.267		
5,500.00	5,485.05	5,446.05	5,485.05	24.46	188.40	102.40	2,430.03	-4,844.14	5,489.12	5,276.28	212.84	25.790		
5,600.00	5,584.74	5,545.74	5,584.74	24.90	191.88	102.48	2,430.03	-4,844.14	5,490.82	5,274.05	216.77	25.331		
5,700.00	5,684.43	5,645.43	5,684.43	25.35	195.36	102.56	2,430.03	-4,844.14	5,492.52	5,271.83	220.69	24.888		
5,800.00	5,784.12	5,745.12	5,784.12	25.80	198.84	102.64	2,430.03	-4,844.14	5,494.24	5,269.62	224.62	24.460		
5,900.00	5,883.81	5,844.81	5,883.81	26.25	202.32	102.72	2,430.03	-4,844.14	5,495.97	5,267.42	228.55	24.048		
6,000.00	5,983.51	5,944.51	5,983.51	26.70	205.80	102.80	2,430.03	-4,844.14	5,497.71	5,265.23	232.47	23.649		
6,100.00	6,083.20	6,044.20	6,083.20	27.14	209.28	102.88	2,430.03	-4,844.14	5,499.45	5,263.06	236.40	23.263		
6,200.00	6,182.89	6,143.89	6,182.89	27.59	212.76	102.96	2,430.03	-4,844.14	5,501.21	5,260.89	240.33	22.891		
6,300.00	6,282.58	6,243.58	6,282.58	28.04	216.24	103.04	2,430.03	-4,844.14	5,502.98	5,258.73	244.25	22.530		
6,400.00	6,382.27	6,343.27	6,382.27	28.49	219.72	103.12	2,430.03	-4,844.14	5,504.76	5,256.58	248.18	22.180		
6,500.00	6,481.96	6,442.96	6,481.96	28.94	223.20	103.20	2,430.03	-4,844.14	5,506.56	5,254.45	252.11	21.842		
6,600.00	6,581.66	6,542.66	6,581.66	29.39	226.68	103.28	2,430.03	-4,844.14	5,508.36	5,252.32	256.04	21.514		
6,700.00	6,681.21	6,642.21	6,681.21	29.83	230.16	64.95	2,430.03	-4,844.14	5,507.97	5,248.01	259.96	21.188		
6,800.00	6,778.96	6,739.96	6,778.96	30.28	233.57	48.27	2,430.03	-4,844.14	5,495.55	5,231.73	263.81	20.831		
6,900.00	6,872.51	6,833.51	6,872.51	30.70	236.84	44.49	2,430.03	-4,844.14	5,470.26	5,202.75	267.51	20.449		
7,000.00	6,969.55	6,920.55	6,969.55	31.10	239.87	44.46	2,430.03	-4,844.14	5,432.83	5,161.88	270.95	20.051		
7,100.00	7,037.93	7,001.07	7,037.93	31.48	242.68	46.61	2,430.03	-4,844.14	5,384.31	5,110.15	274.16	19.639		
7,200.00	7,105.74	7,066.74	7,105.74	31.88	244.98	50.64	2,430.03	-4,844.14	5,326.03	5,049.18	276.84	19.238		
7,300.00	7,161.29	7,122.29	7,161.29	32.41	246.92	56.63	2,430.03	-4,844.14	5,259.55	4,980.36	279.19	18.839		
7,400.00	7,203.22	7,164.22	7,203.22	33.13	248.38	64.76	2,430.03	-4,844.14	5,186.65	4,905.57	281.08	18.452		
7,500.00	7,230.50	7,208.50	7,230.50	34.04	249.93	74.99	2,430.03	-4,844.14	5,109.24	4,826.13	283.11	18.047		
7,600.00	7,242.45	7,203.45	7,242.45	35.13	249.75	86.76	2,430.03	-4,844.14	5,029.30	4,745.83	283.47	17.742		
7,700.00	7,242.72	7,203.72	7,242.72	36.39	249.76	90.30	2,430.03	-4,844.14	4,948.88	4,664.79	284.09	17.420		
7,800.00	7,242.33	7,203.33	7,242.33	37.81	249.74	90.29	2,430.03	-4,844.14	4,869.14	4,584.35	284.79	17.097		
7,900.00	7,241.93	7,202.93	7,241.93	39.40	249.73	90.29	2,430.03	-4,844.14	4,790.17	4,504.57	285.60	16.772		
8,000.00	7,241.54	7,202.54	7,241.54	41.13	249.72	90.28	2,430.03	-4,844.14	4,712.00	4,425.46	286.53	16.445		
8,100.00	7,241.15	7,202.15	7,241.15	42.97	249.70	90.27	2,430.03	-4,844.14	4,634.66	4,347.08	287.58	16.116		
8,200.00	7,240.75	7,201.75	7,240.75	44.92	249.69	90.26	2,430.03	-4,844.14	4,558.21	4,269.46	288.75	15.786		
8,300.00	7,240.36	7,201.36	7,240.36	46.97	249.68	90.26	2,430.03	-4,844.14	4,482.68	4,192.64	290.04	15.456		
8,400.00	7,239.97	7,200.97	7,239.97	49.10	249.66	90.25	2,430.03	-4,844.14	4,408.13	4,116.68	291.45	15.125		
8,500.00	7,239.57	7,200.57	7,239.57	51.29	249.65	90.24	2,430.03	-4,844.14	4,334.60	4,041.63	292.98	14.795		
8,600.00	7,239.18	7,200.18	7,239.18	53.56	249.63	90.23	2,430.03	-4,844.14	4,262.15	3,967.52	294.63	14.466		
8,700.00	7,238.79	7,200.21	7,238.79	55.87	249.64	90.23	2,430.03	-4,844.14	4,190.84	3,894.42	296.42	14.138		
8,800.00	7,238.39	7,200.61	7,238.39	58.24	249.65	90.22	2,430.03	-4,844.14	4,120.72	3,822.38	298.34	13.812		
8,900.00	7,238.00	7,201.00	7,238.00	60.64	249.66	90.21	2,430.03	-4,844.14	4,051.85	3,751.47	300.38	13.489		
9,000.00	7,237.61	7,201.39	7,237.61	63.09	249.68	90.20	2,430.03	-4,844.14	3,984.30	3,681.77	302.53	13.170		
9,100.00	7,237.21	7,201.79	7,237.21	65.56	249.69	90.20	2,430.03	-4,844.14	3,918.14	3,613.34	304.80	12.855		
9,200.00	7,236.82	7,202.18	7,236.82	68.07	249.70	90.19	2,430.03	-4,844.14	3,853.44	3,546.25	307.19	12.544		
9,300.00	7,236.43	7,202.57	7,236.43	70.61	249.72	90.18	2,430.03	-4,844.14	3,790.27	3,480.59	309.68	12.239		
9,400.00	7,236.03	7,202.97	7,236.03	73.16	249.73	90.17	2,430.03	-4,844.14	3,728.72	3,416.43	312.29	11.940		
9,500.00	7,235.64	7,203.36	7,235.64	75.74	249.75	90.16	2,430.03	-4,844.14	3,668.86	3,353.86	315.00	11.647		
9,600.00	7,235.25	7,203.75	7,235.25	78.34	249.76	90.16	2,430.03	-4,844.14	3,610.77	3,292.96	317.81	11.361		
9,700.00	7,234.85	7,204.15	7,234.85	80.96	249.77	90.15	2,430.03	-4,844.14	3,554.55	3,233.84	320.72	11.083		
9,800.00	7,234.46	7,204.54	7,234.46	83.59	249.79	90.14	2,430.03	-4,844.14	3,500.29	3,176.57	323.71	10.813		
9,900.00	7,234.07	7,204.93	7,234.07	86.24	249.80	90.13	2,430.03	-4,844.14	3,448.07	3,121.27	326.80	10.551		
10,000.00	7,233.67	7,205.33	7,233.67	88.90	249.81	90.13	2,430.03	-4,844.14	3,397.99	3,068.03	329.96	10.298		
10,100.00	7,233.28	7,205.72	7,233.28	91.57	249.83	90.12	2,430.03	-4,844.14	3,350.15	3,016.96	333.20	10.055		
10,200.00	7,232.89	7,206.11	7,232.89	94.25	249.84	90.11	2,430.03	-4,844.14	3,304.65	2,968.15	336.50	9.821		
10,300.00	7,232.49	7,206.51	7,232.49	96.95	249.86	90.10	2,430.03	-4,844.14	3,261.58	2,921.73	339.85	9.597		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	7,206.90	7,232.10	99.65	249.87	90.10	2,430.03	-4,844.14	3,221.03	2,877.79	343.25	9.384		
10,500.00	7,231.71	7,207.29	7,231.71	102.36	249.88	90.09	2,430.03	-4,844.14	3,183.11	2,836.44	346.67	9.182		
10,600.00	7,231.32	7,207.69	7,231.32	105.08	249.90	90.08	2,430.03	-4,844.14	3,147.92	2,797.79	350.12	8.991		
10,700.00	7,230.92	7,208.08	7,230.92	107.80	249.91	90.07	2,430.03	-4,844.14	3,115.53	2,761.95	353.58	8.811		
10,800.00	7,230.53	7,208.47	7,230.53	110.53	249.92	90.07	2,430.03	-4,844.14	3,086.05	2,729.02	357.03	8.644		
10,900.00	7,230.14	7,208.87	7,230.14	113.27	249.94	90.06	2,430.03	-4,844.14	3,059.56	2,699.10	360.46	8.488		
11,000.00	7,229.74	7,209.26	7,229.74	116.02	249.95	90.05	2,430.03	-4,844.14	3,036.12	2,672.27	363.85	8.344		
11,100.00	7,229.35	7,209.65	7,229.35	118.77	249.97	90.04	2,430.03	-4,844.14	3,015.83	2,648.64	367.19	8.213		
11,200.00	7,228.96	7,189.96	7,228.96	121.52	249.28	90.04	2,430.03	-4,844.14	2,998.73	2,628.96	369.77	8.110		
11,300.00	7,228.56	7,189.56	7,228.56	124.28	249.26	90.03	2,430.03	-4,844.14	2,984.89	2,611.95	372.93	8.004		
11,400.00	7,228.17	7,189.17	7,228.17	127.04	249.25	90.02	2,430.03	-4,844.14	2,974.34	2,598.34	376.00	7.910		
11,500.00	7,227.78	7,188.78	7,227.78	129.81	249.24	90.01	2,430.03	-4,844.14	2,967.13	2,588.17	378.97	7.830		
11,600.00	7,227.38	7,188.38	7,227.38	132.58	249.22	90.00	2,430.03	-4,844.14	2,963.28	2,581.48	381.81	7.761		
11,664.18	7,227.13	7,188.13	7,227.13	134.36	249.21	90.00	2,430.03	-4,844.14	2,962.59	2,579.03	383.56	7.724 CC		
11,700.00	7,226.99	7,187.99	7,226.99	135.36	249.21	90.00	2,430.03	-4,844.14	2,962.80	2,578.29	384.51	7.705 ES		
11,800.00	7,226.60	7,187.60	7,226.60	138.14	249.20	89.99	2,430.03	-4,844.14	2,965.70	2,578.62	387.08	7.662		
11,900.00	7,226.20	7,187.20	7,226.20	140.92	249.18	89.98	2,430.03	-4,844.14	2,971.96	2,582.47	389.49	7.630		
12,000.00	7,225.81	7,186.81	7,225.81	143.70	249.17	89.97	2,430.03	-4,844.14	2,981.56	2,589.82	391.74	7.611		
12,100.00	7,225.42	7,186.42	7,225.42	146.49	249.15	89.97	2,430.03	-4,844.14	2,994.47	2,600.65	393.83	7.604 SF		
12,200.00	7,225.02	7,186.02	7,225.02	149.28	249.14	89.96	2,430.03	-4,844.14	3,010.65	2,614.91	395.75	7.608		
12,300.00	7,224.63	7,185.63	7,224.63	152.08	249.13	89.95	2,430.03	-4,844.14	3,030.05	2,632.55	397.50	7.623		
12,400.00	7,224.24	7,185.24	7,224.24	154.87	249.11	89.94	2,430.03	-4,844.14	3,052.60	2,653.52	399.08	7.649		
12,500.00	7,223.84	7,184.84	7,223.84	157.67	249.10	89.94	2,430.03	-4,844.14	3,078.23	2,677.73	400.50	7.686		
12,600.00	7,223.45	7,184.45	7,223.45	160.47	249.09	89.93	2,430.03	-4,844.14	3,106.88	2,705.12	401.75	7.733		
12,700.00	7,223.06	7,184.06	7,223.06	163.27	249.07	89.92	2,430.03	-4,844.14	3,138.45	2,735.60	402.85	7.791		
12,800.00	7,222.66	7,183.66	7,222.66	166.07	249.06	89.91	2,430.03	-4,844.14	3,172.85	2,769.07	403.79	7.858		
12,900.00	7,222.27	7,183.27	7,222.27	168.88	249.04	89.91	2,430.03	-4,844.14	3,210.01	2,805.43	404.58	7.934		
13,000.00	7,221.88	7,182.88	7,221.88	171.69	249.03	89.90	2,430.03	-4,844.14	3,249.82	2,844.58	405.24	8.020		
13,100.00	7,221.48	7,182.48	7,221.48	174.49	249.02	89.89	2,430.03	-4,844.14	3,292.19	2,886.43	405.76	8.114		
13,200.00	7,221.09	7,182.09	7,221.09	177.30	249.00	89.88	2,430.03	-4,844.14	3,337.01	2,930.85	406.16	8.216		
13,300.00	7,220.70	7,181.70	7,220.70	180.12	248.99	89.88	2,430.03	-4,844.14	3,384.20	2,977.75	406.45	8.326		
13,400.00	7,220.30	7,181.30	7,220.30	182.93	248.98	89.87	2,430.03	-4,844.14	3,433.65	3,027.03	406.62	8.444		
13,500.00	7,219.91	7,180.91	7,219.91	185.74	248.96	89.86	2,430.03	-4,844.14	3,485.27	3,078.57	406.70	8.570		
13,600.00	7,219.52	7,180.52	7,219.52	188.56	248.95	89.85	2,430.03	-4,844.14	3,538.97	3,132.27	406.69	8.702		
13,700.00	7,219.12	7,180.12	7,219.12	191.38	248.93	89.85	2,430.03	-4,844.14	3,594.64	3,188.04	406.60	8.841		
13,800.00	7,218.73	7,179.73	7,218.73	194.20	248.92	89.84	2,430.03	-4,844.14	3,652.20	3,245.77	406.43	8.986		
13,900.00	7,218.34	7,179.34	7,218.34	197.02	248.91	89.83	2,430.03	-4,844.14	3,711.57	3,305.37	406.20	9.137		
14,000.00	7,217.94	7,178.94	7,217.94	199.84	248.89	89.82	2,430.03	-4,844.14	3,772.65	3,366.75	405.91	9.294		
14,100.00	7,217.55	7,178.55	7,217.55	202.66	248.88	89.81	2,430.03	-4,844.14	3,835.37	3,429.81	405.56	9.457		
14,200.00	7,217.16	7,178.16	7,217.16	205.48	248.87	89.81	2,430.03	-4,844.14	3,899.65	3,494.48	405.16	9.625		
14,300.00	7,216.76	7,177.76	7,216.76	208.30	248.85	89.80	2,430.03	-4,844.14	3,965.40	3,560.67	404.73	9.798		
14,400.00	7,216.37	7,177.37	7,216.37	211.13	248.84	89.79	2,430.03	-4,844.14	4,032.56	3,628.31	404.25	9.975		
14,500.00	7,215.98	7,176.98	7,215.98	213.96	248.82	89.78	2,430.03	-4,844.14	4,101.06	3,697.31	403.75	10.158		
14,600.00	7,215.58	7,176.58	7,215.58	216.78	248.81	89.78	2,430.03	-4,844.14	4,170.83	3,767.62	403.21	10.344		
14,700.00	7,215.19	7,176.19	7,215.19	219.61	248.80	89.77	2,430.03	-4,844.14	4,241.82	3,839.16	402.66	10.535		
14,800.00	7,214.80	7,175.80	7,214.80	222.44	248.78	89.76	2,430.03	-4,844.14	4,313.95	3,911.87	402.08	10.729		
14,900.00	7,214.40	7,175.40	7,214.40	225.27	248.77	89.75	2,430.03	-4,844.14	4,387.18	3,985.69	401.49	10.927		
15,000.00	7,214.01	7,175.01	7,214.01	228.10	248.76	89.75	2,430.03	-4,844.14	4,461.44	4,060.56	400.88	11.129		
15,002.44	7,214.00	7,175.00	7,214.00	228.16	248.76	89.75	2,430.03	-4,844.14	4,463.27	4,062.40	400.87	11.134		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	66.00	3.28	3.28	-123.42	-4,191.60	-6,351.26	7,610.02					
100.00	100.00	34.00	100.00	3.28	3.33	-123.42	-4,191.60	-6,351.26	7,609.73	7,603.11	6.62	1,149.857		
200.00	200.00	134.00	200.00	3.34	4.40	-123.42	-4,191.60	-6,351.26	7,609.73	7,601.99	7.74	983.581		
300.00	300.00	234.00	300.00	3.44	7.21	-123.42	-4,191.60	-6,351.26	7,609.73	7,599.07	10.66	714.037		
400.00	400.00	334.00	400.00	3.60	10.44	-123.42	-4,191.60	-6,351.26	7,609.73	7,595.68	14.05	541.762		
500.00	500.00	434.00	500.00	3.81	13.80	-123.42	-4,191.60	-6,351.26	7,609.73	7,592.12	17.61	432.202		
600.00	599.98	533.98	599.98	4.03	17.21	38.44	-4,191.60	-6,351.26	7,608.36	7,587.12	21.25	358.113		
700.00	699.84	633.84	699.84	4.29	20.64	38.51	-4,191.60	-6,351.26	7,604.26	7,579.33	24.93	305.021		
800.00	799.54	733.54	799.54	4.57	24.09	38.57	-4,191.60	-6,351.26	7,598.20	7,569.55	28.65	265.172		
900.00	899.23	833.23	899.23	4.87	27.54	38.60	-4,191.60	-6,351.26	7,592.06	7,559.65	32.41	234.254		
1,000.00	998.92	932.92	998.92	5.20	31.00	38.64	-4,191.60	-6,351.26	7,585.93	7,549.73	36.19	209.600		
1,100.00	1,098.61	1,032.61	1,098.61	5.54	34.46	38.68	-4,191.60	-6,351.26	7,579.79	7,539.80	40.00	189.511		
1,200.00	1,198.30	1,132.30	1,198.30	5.90	37.93	38.72	-4,191.60	-6,351.26	7,573.66	7,529.84	43.82	172.843		
1,300.00	1,298.00	1,232.00	1,298.00	6.27	41.39	38.75	-4,191.60	-6,351.26	7,567.53	7,519.88	47.65	158.802		
1,400.00	1,397.69	1,331.69	1,397.69	6.66	44.86	38.79	-4,191.60	-6,351.26	7,561.41	7,509.91	51.50	146.820		
1,500.00	1,497.38	1,431.38	1,497.38	7.05	48.34	38.83	-4,191.60	-6,351.26	7,555.29	7,499.93	55.36	136.481		
1,600.00	1,597.07	1,531.07	1,597.07	7.44	51.81	38.86	-4,191.60	-6,351.26	7,549.17	7,489.95	59.22	127.470		
1,700.00	1,696.76	1,630.76	1,696.76	7.85	55.28	38.90	-4,191.60	-6,351.26	7,543.05	7,479.96	63.09	119.551		
1,800.00	1,796.45	1,730.45	1,796.45	8.25	58.76	38.94	-4,191.60	-6,351.26	7,536.94	7,469.97	66.97	112.538		
1,900.00	1,896.15	1,830.15	1,896.15	8.67	62.23	38.98	-4,191.60	-6,351.26	7,530.83	7,459.98	70.85	106.285		
2,000.00	1,995.84	1,929.84	1,995.84	9.08	65.71	39.01	-4,191.60	-6,351.26	7,524.73	7,449.99	74.74	100.677		
2,100.00	2,095.53	2,029.53	2,095.53	9.50	69.18	39.05	-4,191.60	-6,351.26	7,518.62	7,439.99	78.63	95.618		
2,200.00	2,195.22	2,129.22	2,195.22	9.92	72.66	39.09	-4,191.60	-6,351.26	7,512.53	7,430.00	82.53	91.032		
2,300.00	2,294.91	2,228.91	2,294.91	10.35	76.14	39.13	-4,191.60	-6,351.26	7,506.43	7,420.01	86.42	86.857		
2,400.00	2,394.60	2,328.60	2,394.60	10.77	79.61	39.16	-4,191.60	-6,351.26	7,500.34	7,410.02	90.32	83.040		
2,500.00	2,494.30	2,428.30	2,494.30	11.20	83.09	39.20	-4,191.60	-6,351.26	7,494.25	7,400.03	94.22	79.538		
2,600.00	2,593.99	2,527.99	2,593.99	11.63	86.57	39.24	-4,191.60	-6,351.26	7,488.16	7,390.04	98.13	76.312		
2,700.00	2,693.68	2,627.68	2,693.68	12.07	90.05	39.28	-4,191.60	-6,351.26	7,482.08	7,380.05	102.03	73.331		
2,800.00	2,793.37	2,727.37	2,793.37	12.50	93.52	39.32	-4,191.60	-6,351.26	7,476.00	7,370.06	105.94	70.570		
2,900.00	2,893.06	2,827.06	2,893.06	12.93	97.00	39.35	-4,191.60	-6,351.26	7,469.92	7,360.08	109.85	68.004		
3,000.00	2,992.76	2,926.76	2,992.76	13.37	100.48	39.39	-4,191.60	-6,351.26	7,463.85	7,350.10	113.76	65.613		
3,100.00	3,092.45	3,026.45	3,092.45	13.81	103.96	39.43	-4,191.60	-6,351.26	7,457.78	7,340.12	117.67	63.381		
3,200.00	3,192.14	3,126.14	3,192.14	14.25	107.44	39.47	-4,191.60	-6,351.26	7,451.72	7,330.14	121.58	61.292		
3,300.00	3,291.83	3,225.83	3,291.83	14.68	110.92	39.51	-4,191.60	-6,351.26	7,445.65	7,320.16	125.49	59.333		
3,400.00	3,391.52	3,325.52	3,391.52	15.12	114.40	39.55	-4,191.60	-6,351.26	7,439.59	7,310.19	129.40	57.492		
3,500.00	3,491.21	3,425.21	3,491.21	15.56	117.87	39.58	-4,191.60	-6,351.26	7,433.54	7,300.22	133.32	55.758		
3,600.00	3,590.91	3,524.91	3,590.91	16.00	121.35	39.62	-4,191.60	-6,351.26	7,427.48	7,290.25	137.23	54.124		
3,700.00	3,690.60	3,624.60	3,690.60	16.45	124.83	39.66	-4,191.60	-6,351.26	7,421.43	7,280.29	141.15	52.579		
3,800.00	3,790.29	3,724.29	3,790.29	16.89	128.31	39.70	-4,191.60	-6,351.26	7,415.39	7,270.32	145.06	51.118		
3,900.00	3,889.98	3,823.98	3,889.98	17.33	131.79	39.74	-4,191.60	-6,351.26	7,409.35	7,260.36	148.98	49.734		
4,000.00	3,989.67	3,923.67	3,989.67	17.77	135.27	39.78	-4,191.60	-6,351.26	7,403.31	7,250.41	152.90	48.420		
4,100.00	4,089.36	4,023.36	4,089.36	18.22	138.75	39.82	-4,191.60	-6,351.26	7,397.27	7,240.45	156.82	47.172		
4,200.00	4,189.06	4,123.06	4,189.06	18.66	142.23	39.86	-4,191.60	-6,351.26	7,391.24	7,230.50	160.73	45.984		
4,300.00	4,288.75	4,222.75	4,288.75	19.10	145.71	39.89	-4,191.60	-6,351.26	7,385.21	7,220.56	164.65	44.853		
4,400.00	4,388.44	4,322.44	4,388.44	19.55	149.19	39.93	-4,191.60	-6,351.26	7,379.18	7,210.61	168.57	43.775		
4,500.00	4,488.13	4,422.13	4,488.13	19.99	152.67	39.97	-4,191.60	-6,351.26	7,373.16	7,200.67	172.49	42.745		
4,600.00	4,587.82	4,452.00	4,518.00	20.44	153.71	39.98	-4,191.60	-6,351.26	7,367.47	7,193.50	173.98	42.348		
4,700.00	4,687.51	4,452.00	4,518.00	20.89	153.71	39.98	-4,191.60	-6,351.26	7,363.08	7,188.68	174.39	42.221		
4,800.00	4,787.21	4,452.00	4,518.00	21.33	153.71	39.98	-4,191.60	-6,351.26	7,360.04	7,185.26	174.78	42.111		
4,900.00	4,886.90	4,452.00	4,518.00	21.78	153.71	39.98	-4,191.60	-6,351.26	7,358.36	7,183.22	175.13	42.016		
4,973.69	4,960.36	4,452.00	4,518.00	22.11	153.71	39.98	-4,191.60	-6,351.26	7,357.99	7,182.62	175.37	41.956		
5,000.00	4,986.59	4,452.00	4,518.00	22.22	153.71	39.98	-4,191.60	-6,351.26	7,358.04	7,182.58	175.45	41.937		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,086.28	4,452.00	4,518.00	22.67	153.71	39.98	-4,191.60	-6,351.26	7,359.07	7,183.33	175.74	41.874		
5,200.00	5,185.97	4,452.00	4,518.00	23.12	153.71	39.98	-4,191.60	-6,351.26	7,361.47	7,185.47	176.00	41.826		
5,300.00	5,285.66	4,452.00	4,518.00	23.56	153.71	39.98	-4,191.60	-6,351.26	7,365.22	7,188.99	176.23	41.794		
5,400.00	5,385.36	4,452.00	4,518.00	24.01	153.71	39.98	-4,191.60	-6,351.26	7,370.33	7,193.91	176.42	41.777		
5,500.00	5,485.05	4,452.00	4,518.00	24.46	153.71	39.98	-4,191.60	-6,351.26	7,376.79	7,200.21	176.58	41.776		
5,600.00	5,584.74	4,452.00	4,518.00	24.90	153.71	39.98	-4,191.60	-6,351.26	7,384.60	7,207.89	176.71	41.789		
5,700.00	5,684.43	4,452.00	4,518.00	25.35	153.71	39.98	-4,191.60	-6,351.26	7,393.75	7,216.94	176.81	41.818		
5,800.00	5,784.12	4,452.00	4,518.00	25.80	153.71	39.98	-4,191.60	-6,351.26	7,404.24	7,227.37	176.87	41.863		
5,900.00	5,883.81	4,452.00	4,518.00	26.25	153.71	39.98	-4,191.60	-6,351.26	7,416.07	7,239.16	176.90	41.922		
6,000.00	5,983.51	4,452.00	4,518.00	26.70	153.71	39.98	-4,191.60	-6,351.26	7,429.22	7,252.32	176.90	41.996		
6,100.00	6,083.20	4,452.00	4,518.00	27.14	153.71	39.98	-4,191.60	-6,351.26	7,443.69	7,266.82	176.87	42.085		
6,200.00	6,182.89	4,452.00	4,518.00	27.59	153.71	39.98	-4,191.60	-6,351.26	7,459.48	7,282.66	176.81	42.188		
6,300.00	6,282.58	4,452.00	4,518.00	28.04	153.71	39.98	-4,191.60	-6,351.26	7,476.57	7,299.85	176.72	42.306		
6,400.00	6,382.27	4,452.00	4,518.00	28.49	153.71	39.98	-4,191.60	-6,351.26	7,494.96	7,318.35	176.60	42.439		
6,500.00	6,481.96	4,452.00	4,518.00	28.94	153.71	39.98	-4,191.60	-6,351.26	7,514.63	7,338.17	176.46	42.587		
6,600.00	6,581.66	4,452.00	4,518.00	29.39	153.71	39.98	-4,191.60	-6,351.26	7,535.57	7,359.30	176.28	42.748		
6,700.00	6,681.21	4,452.00	4,518.00	29.83	153.71	2.02	-4,191.60	-6,351.26	7,555.62	7,379.55	176.07	42.914		
6,800.00	6,778.96	4,452.00	4,518.00	30.28	153.71	-15.01	-4,191.60	-6,351.26	7,564.83	7,389.02	175.81	43.029		
6,900.00	6,872.51	4,452.00	4,518.00	30.70	153.71	-20.49	-4,191.60	-6,351.26	7,561.86	7,386.35	175.51	43.084		
7,000.00	6,959.55	4,452.00	4,518.00	31.10	153.71	-23.68	-4,191.60	-6,351.26	7,546.76	7,371.57	175.19	43.077		
7,100.00	7,037.93	4,452.00	4,518.00	31.48	153.71	-26.40	-4,191.60	-6,351.26	7,519.83	7,344.98	174.85	43.007		
7,200.00	7,105.74	4,452.00	4,518.00	31.88	153.71	-29.32	-4,191.60	-6,351.26	7,481.62	7,307.10	174.52	42.869		
7,300.00	7,161.29	4,452.00	4,518.00	32.41	153.71	-32.84	-4,191.60	-6,351.26	7,432.90	7,258.67	174.22	42.663		
7,400.00	7,203.22	4,452.00	4,518.00	33.13	153.71	-37.31	-4,191.60	-6,351.26	7,374.66	7,200.68	173.99	42.386		
7,500.00	7,230.50	4,452.00	4,518.00	34.04	153.71	-43.15	-4,191.60	-6,351.26	7,308.15	7,134.30	173.85	42.037		
7,600.00	7,242.45	4,452.00	4,518.00	35.13	153.71	-50.82	-4,191.60	-6,351.26	7,234.79	7,060.95	173.84	41.619		
7,700.00	7,242.72	4,452.00	4,518.00	36.39	153.71	-53.46	-4,191.60	-6,351.26	7,157.43	6,983.48	173.94	41.148		
7,800.00	7,242.33	4,452.00	4,518.00	37.81	153.71	-53.46	-4,191.60	-6,351.26	7,080.40	6,906.27	174.13	40.662		
7,900.00	7,241.93	4,452.00	4,518.00	39.40	153.71	-53.46	-4,191.60	-6,351.26	7,003.95	6,829.56	174.39	40.162		
8,000.00	7,241.54	4,452.00	4,518.00	41.13	153.71	-53.46	-4,191.60	-6,351.26	6,928.10	6,753.36	174.74	39.649		
8,100.00	7,241.15	4,452.00	4,518.00	42.97	153.71	-53.46	-4,191.60	-6,351.26	6,852.87	6,677.71	175.16	39.123		
8,200.00	7,240.75	4,452.00	4,518.00	44.92	153.71	-53.46	-4,191.60	-6,351.26	6,778.28	6,602.61	175.67	38.585		
8,300.00	7,240.36	4,452.00	4,518.00	46.97	153.71	-53.46	-4,191.60	-6,351.26	6,704.35	6,528.09	176.26	38.037		
8,400.00	7,239.97	4,452.00	4,518.00	49.10	153.71	-53.46	-4,191.60	-6,351.26	6,631.11	6,454.18	176.93	37.479		
8,500.00	7,239.57	4,452.00	4,518.00	51.29	153.71	-53.46	-4,191.60	-6,351.26	6,558.57	6,380.90	177.68	36.913		
8,600.00	7,239.18	4,452.00	4,518.00	53.56	153.71	-53.46	-4,191.60	-6,351.26	6,486.77	6,308.26	178.50	36.340		
8,700.00	7,238.79	4,452.00	4,518.00	55.87	153.71	-53.46	-4,191.60	-6,351.26	6,415.72	6,236.31	179.41	35.760		
8,800.00	7,238.39	4,452.00	4,518.00	58.24	153.71	-53.46	-4,191.60	-6,351.26	6,345.44	6,165.06	180.39	35.177		
8,900.00	7,238.00	4,452.00	4,518.00	60.64	153.71	-53.46	-4,191.60	-6,351.26	6,275.98	6,094.54	181.44	34.590		
9,000.00	7,237.61	4,452.00	4,518.00	63.09	153.71	-53.46	-4,191.60	-6,351.26	6,207.35	6,024.79	182.56	34.001		
9,100.00	7,237.21	4,452.00	4,518.00	65.56	153.71	-53.46	-4,191.60	-6,351.26	6,139.58	5,955.82	183.76	33.411		
9,200.00	7,236.82	4,452.00	4,518.00	68.07	153.71	-53.46	-4,191.60	-6,351.26	6,072.70	5,887.68	185.02	32.822		
9,300.00	7,236.43	4,452.00	4,518.00	70.61	153.71	-53.46	-4,191.60	-6,351.26	6,006.74	5,820.40	186.35	32.234		
9,400.00	7,236.03	4,452.00	4,518.00	73.16	153.71	-53.46	-4,191.60	-6,351.26	5,941.74	5,754.00	187.74	31.649		
9,500.00	7,235.64	4,452.00	4,518.00	75.74	153.71	-53.46	-4,191.60	-6,351.26	5,877.71	5,688.52	189.20	31.067		
9,600.00	7,235.25	4,452.00	4,518.00	78.34	153.71	-53.46	-4,191.60	-6,351.26	5,814.70	5,623.99	190.71	30.489		
9,700.00	7,234.85	4,452.00	4,518.00	80.96	153.71	-53.46	-4,191.60	-6,351.26	5,752.74	5,560.45	192.29	29.917		
9,800.00	7,234.46	4,452.00	4,518.00	83.59	153.71	-53.46	-4,191.60	-6,351.26	5,691.86	5,497.94	193.93	29.351		
9,900.00	7,234.07	4,452.00	4,518.00	86.24	153.71	-53.46	-4,191.60	-6,351.26	5,632.10	5,436.48	195.62	28.791		
10,000.00	7,233.67	4,452.00	4,518.00	88.90	153.71	-53.46	-4,191.60	-6,351.26	5,573.49	5,376.13	197.36	28.240		
10,100.00	7,233.28	4,452.00	4,518.00	91.57	153.71	-53.46	-4,191.60	-6,351.26	5,516.07	5,316.91	199.16	27.696		
10,200.00	7,232.89	4,452.00	4,518.00	94.25	153.71	-53.46	-4,191.60	-6,351.26	5,459.88	5,258.87	201.02	27.161		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.49	4,452.00	4,518.00	96.95	153.71	-53.46	-4,191.60	-6,351.26	5,404.96	5,202.04	202.92	26.636		
10,400.00	7,232.10	4,452.00	4,518.00	99.65	153.71	-53.46	-4,191.60	-6,351.26	5,351.34	5,146.47	204.87	26.120		
10,500.00	7,231.71	4,452.00	4,518.00	102.36	153.71	-53.46	-4,191.60	-6,351.26	5,299.07	5,092.20	206.87	25.615		
10,600.00	7,231.32	4,452.00	4,518.00	105.08	153.71	-53.46	-4,191.60	-6,351.26	5,248.18	5,039.26	208.92	25.121		
10,700.00	7,230.92	4,452.00	4,518.00	107.80	153.71	-53.46	-4,191.60	-6,351.26	5,198.72	4,987.71	211.01	24.637		
10,800.00	7,230.53	4,452.00	4,518.00	110.53	153.71	-53.46	-4,191.60	-6,351.26	5,150.72	4,937.58	213.14	24.166		
10,900.00	7,230.14	4,452.00	4,518.00	113.27	153.71	-53.46	-4,191.60	-6,351.26	5,104.23	4,888.91	215.32	23.706		
11,000.00	7,229.74	4,452.00	4,518.00	116.02	153.71	-53.46	-4,191.60	-6,351.26	5,059.29	4,841.76	217.53	23.258		
11,100.00	7,229.35	4,452.00	4,518.00	118.77	153.71	-53.46	-4,191.60	-6,351.26	5,015.94	4,796.16	219.78	22.822		
11,200.00	7,228.96	4,452.00	4,518.00	121.52	153.71	-53.46	-4,191.60	-6,351.26	4,974.23	4,752.16	222.07	22.400		
11,300.00	7,228.56	4,452.00	4,518.00	124.28	153.71	-53.46	-4,191.60	-6,351.26	4,934.19	4,709.80	224.39	21.990		
11,400.00	7,228.17	4,452.00	4,518.00	127.04	153.71	-53.46	-4,191.60	-6,351.26	4,895.86	4,669.13	226.74	21.593		
11,500.00	7,227.78	4,452.00	4,518.00	129.81	153.71	-53.46	-4,191.60	-6,351.26	4,859.30	4,630.18	229.12	21.209		
11,600.00	7,227.38	4,452.00	4,518.00	132.58	153.71	-53.46	-4,191.60	-6,351.26	4,824.52	4,593.00	231.52	20.838		
11,700.00	7,226.99	4,452.00	4,518.00	135.36	153.71	-53.46	-4,191.60	-6,351.26	4,791.58	4,557.63	233.95	20.481		
11,800.00	7,226.60	4,452.00	4,518.00	138.14	153.71	-53.46	-4,191.60	-6,351.26	4,760.52	4,524.12	236.40	20.138		
11,900.00	7,226.20	4,452.00	4,518.00	140.92	153.71	-53.46	-4,191.60	-6,351.26	4,731.36	4,492.50	238.87	19.808		
12,000.00	7,225.81	4,452.00	4,518.00	143.70	153.71	-53.46	-4,191.60	-6,351.26	4,704.15	4,462.81	241.35	19.491		
12,100.00	7,225.42	4,452.00	4,518.00	146.49	153.71	-53.46	-4,191.60	-6,351.26	4,678.92	4,435.08	243.84	19.188		
12,200.00	7,225.02	4,452.00	4,518.00	149.28	153.71	-53.46	-4,191.60	-6,351.26	4,655.71	4,409.36	246.34	18.899		
12,300.00	7,224.63	4,452.00	4,518.00	152.08	153.71	-53.46	-4,191.60	-6,351.26	4,634.53	4,385.68	248.85	18.624		
12,400.00	7,224.24	4,452.00	4,518.00	154.87	153.71	-53.46	-4,191.60	-6,351.26	4,615.42	4,364.07	251.35	18.362		
12,500.00	7,223.84	4,452.00	4,518.00	157.67	153.71	-53.46	-4,191.60	-6,351.26	4,598.41	4,344.55	253.86	18.114		
12,600.00	7,223.45	4,452.00	4,518.00	160.47	153.71	-53.46	-4,191.60	-6,351.26	4,583.52	4,327.16	256.36	17.880		
12,700.00	7,223.06	4,452.00	4,518.00	163.27	153.71	-53.46	-4,191.60	-6,351.26	4,570.77	4,311.92	258.84	17.658		
12,800.00	7,222.66	4,452.00	4,518.00	166.07	153.71	-53.46	-4,191.60	-6,351.26	4,560.17	4,298.85	261.32	17.451		
12,900.00	7,222.27	4,452.00	4,518.00	168.88	153.71	-53.46	-4,191.60	-6,351.26	4,551.75	4,287.97	263.78	17.256		
13,000.00	7,221.88	4,452.00	4,518.00	171.69	153.71	-53.46	-4,191.60	-6,351.26	4,545.51	4,279.30	266.21	17.075		
13,100.00	7,221.48	4,452.00	4,518.00	174.49	153.71	-53.46	-4,191.60	-6,351.26	4,541.47	4,272.85	268.62	16.906		
13,200.00	7,221.09	4,452.00	4,518.00	177.30	153.71	-53.46	-4,191.60	-6,351.26	4,539.63	4,268.62	271.01	16.751		
13,233.69	7,220.96	4,452.00	4,518.00	178.25	153.71	-53.46	-4,191.60	-6,351.26	4,539.50	4,267.70	271.80	16.701 CC		
13,300.00	7,220.70	4,452.00	4,518.00	180.12	153.71	-53.46	-4,191.60	-6,351.26	4,539.99	4,266.63	273.36	16.608 ES		
13,400.00	7,220.30	4,452.00	4,518.00	182.93	153.71	-53.46	-4,191.60	-6,351.26	4,542.55	4,266.88	275.67	16.478		
13,500.00	7,219.91	4,452.00	4,518.00	185.74	153.71	-53.46	-4,191.60	-6,351.26	4,547.31	4,269.36	277.94	16.360		
13,600.00	7,219.52	4,452.00	4,518.00	188.56	153.71	-53.46	-4,191.60	-6,351.26	4,554.26	4,274.08	280.18	16.255		
13,700.00	7,219.12	4,452.00	4,518.00	191.38	153.71	-53.46	-4,191.60	-6,351.26	4,563.39	4,281.03	282.36	16.162		
13,800.00	7,218.73	4,452.00	4,518.00	194.20	153.71	-53.46	-4,191.60	-6,351.26	4,574.69	4,290.19	284.50	16.080		
13,900.00	7,218.34	4,452.00	4,518.00	197.02	153.71	-53.46	-4,191.60	-6,351.26	4,588.14	4,301.56	286.58	16.010		
14,000.00	7,217.94	4,452.00	4,518.00	199.84	153.71	-53.46	-4,191.60	-6,351.26	4,603.73	4,315.12	288.61	15.952		
14,100.00	7,217.55	4,452.00	4,518.00	202.66	153.71	-53.46	-4,191.60	-6,351.26	4,621.43	4,330.85	290.58	15.904		
14,200.00	7,217.16	4,452.00	4,518.00	205.48	153.71	-53.46	-4,191.60	-6,351.26	4,641.21	4,348.72	292.49	15.868		
14,300.00	7,216.76	4,452.00	4,518.00	208.30	153.71	-53.46	-4,191.60	-6,351.26	4,663.06	4,368.72	294.34	15.842		
14,400.00	7,216.37	4,452.00	4,518.00	211.13	153.71	-53.46	-4,191.60	-6,351.26	4,686.94	4,390.81	296.13	15.827		
14,500.00	7,215.98	4,452.00	4,518.00	213.96	153.71	-53.46	-4,191.60	-6,351.26	4,712.82	4,414.96	297.85	15.823 SF		
14,600.00	7,215.58	4,452.00	4,518.00	216.78	153.71	-53.46	-4,191.60	-6,351.26	4,740.66	4,441.15	299.51	15.828		
14,700.00	7,215.19	4,452.00	4,518.00	219.61	153.71	-53.46	-4,191.60	-6,351.26	4,770.45	4,469.34	301.10	15.843		
14,800.00	7,214.80	4,452.00	4,518.00	222.44	153.71	-53.46	-4,191.60	-6,351.26	4,802.13	4,499.50	302.63	15.868		
14,900.00	7,214.40	4,452.00	4,518.00	225.27	153.71	-53.46	-4,191.60	-6,351.26	4,835.67	4,531.58	304.09	15.902		
15,000.00	7,214.01	4,452.00	4,518.00	228.10	153.71	-53.46	-4,191.60	-6,351.26	4,871.03	4,565.55	305.48	15.945		
15,002.44	7,214.00	4,452.00	4,518.00	228.16	153.71	-53.46	-4,191.60	-6,351.26	4,871.91	4,566.40	305.51	15.947		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1,377.00	1,307.28	3.28	7.39	-107.44	-2,768.95	-8,814.89	9,331.58					
100.00	100.00	1,407.70	1,337.61	3.28	7.54	-107.42	-2,765.42	-8,811.65	9,317.97	9,307.70	10.26	907.881		
200.00	200.00	1,471.00	1,400.14	3.34	7.85	-107.39	-2,757.68	-8,805.65	9,305.08	9,294.51	10.57	880.207		
300.00	300.00	1,507.15	1,435.87	3.44	8.02	-107.37	-2,753.13	-8,802.46	9,292.64	9,281.82	10.82	859.095		
400.00	400.00	1,660.00	1,586.91	3.60	8.77	-107.29	-2,735.13	-8,787.55	9,279.59	9,267.95	11.64	797.509		
500.00	500.00	1,705.11	1,631.51	3.81	8.99	-107.27	-2,730.27	-8,782.81	9,266.74	9,254.72	12.02	771.210		
600.00	599.98	1,755.00	1,680.96	4.03	9.23	54.81	-2,725.22	-8,778.63	9,254.25	9,241.80	12.45	743.453		
700.00	699.84	1,924.15	1,848.34	4.29	10.06	55.19	-2,705.98	-8,763.71	9,239.59	9,226.15	13.45	687.020		
800.00	799.54	2,266.03	2,185.44	4.57	11.85	55.61	-2,660.23	-8,729.93	9,222.52	9,207.20	15.32	601.993		
900.00	899.23	2,321.00	2,239.53	4.87	12.15	55.67	-2,652.61	-8,723.79	9,203.33	9,187.46	15.87	579.988		
1,000.00	998.92	2,510.00	2,425.38	5.20	13.19	55.87	-2,626.46	-8,701.53	9,183.35	9,166.27	17.08	537.706		
1,100.00	1,098.61	2,561.66	2,476.18	5.54	13.47	55.92	-2,619.69	-8,695.09	9,163.44	9,145.79	17.65	519.147		
1,200.00	1,198.30	2,740.23	2,652.02	5.90	14.45	56.09	-2,597.22	-8,673.62	9,144.17	9,125.34	18.83	485.516		
1,300.00	1,298.00	2,792.00	2,702.94	6.27	14.74	56.14	-2,590.43	-8,667.19	9,124.15	9,104.71	19.44	469.357		
1,400.00	1,397.69	2,792.00	2,702.94	6.66	14.74	56.14	-2,590.43	-8,667.19	9,104.93	9,085.12	19.81	459.518		
1,500.00	1,497.38	2,792.00	2,702.94	7.05	14.74	56.14	-2,590.43	-8,667.19	9,086.78	9,066.58	20.20	449.867		
1,600.00	1,597.07	2,844.46	2,754.68	7.44	15.01	56.19	-2,584.07	-8,661.35	9,068.83	9,047.99	20.83	435.322		
1,700.00	1,696.76	2,887.00	2,796.81	7.85	15.23	56.23	-2,579.61	-8,657.49	9,052.35	9,030.92	21.43	422.454		
1,800.00	1,796.45	3,029.44	2,937.69	8.25	15.97	56.37	-2,563.26	-8,644.31	9,036.01	9,013.52	22.49	401.798		
1,900.00	1,896.15	1,900.00	3,045.76	8.67	10.07	56.48	-2,549.58	-8,633.91	9,019.05	9,001.44	17.62	511.965		
2,000.00	1,995.84	3,233.57	3,139.24	9.08	17.05	56.58	-2,537.57	-8,624.70	9,001.86	8,977.59	24.27	370.863		
2,100.00	2,095.53	2,100.00	3,249.03	9.50	11.13	56.69	-2,524.28	-8,613.75	8,984.77	8,965.37	19.40	463.050		
2,200.00	2,195.22	3,424.37	3,327.71	9.92	18.06	56.77	-2,514.57	-8,605.84	8,967.61	8,941.61	26.01	344.815		
2,300.00	2,294.91	3,555.53	3,457.27	10.35	18.75	56.90	-2,498.65	-8,593.09	8,950.70	8,923.65	27.04	330.956		
2,400.00	2,394.60	4,109.00	4,000.00	10.77	21.92	57.56	-2,415.50	-8,528.38	8,931.70	8,901.58	30.12	296.537		
2,500.00	2,494.30	4,522.79	4,402.24	11.20	24.52	58.07	-2,346.09	-8,461.51	8,906.28	8,873.73	32.55	273.607		
2,600.00	2,593.99	4,549.33	4,428.03	11.63	24.69	58.10	-2,341.84	-8,456.88	8,881.15	8,848.01	33.14	268.017		
2,700.00	2,693.68	4,583.00	4,460.81	12.07	24.90	58.14	-2,336.59	-8,451.28	8,856.80	8,823.04	33.76	262.365		
2,800.00	2,793.37	4,583.00	4,460.81	12.50	24.90	58.14	-2,336.59	-8,451.28	8,833.29	8,799.07	34.22	258.115		
2,900.00	2,893.06	4,583.00	4,460.81	12.93	24.90	58.14	-2,336.59	-8,451.28	8,810.85	8,776.16	34.69	254.006		
3,000.00	2,992.76	4,628.41	4,505.20	13.37	25.17	58.19	-2,330.00	-8,444.38	8,788.81	8,753.45	35.36	248.548		
3,100.00	3,092.45	4,678.00	4,553.95	13.81	25.46	58.24	-2,323.64	-8,437.91	8,768.30	8,732.25	36.05	243.198		
3,200.00	3,192.14	4,678.00	4,553.95	14.25	25.46	58.24	-2,323.64	-8,437.91	8,748.08	8,711.56	36.52	239.533		
3,300.00	3,291.83	4,678.00	4,553.95	14.68	25.46	58.24	-2,323.64	-8,437.91	8,728.95	8,691.96	36.99	235.997		
3,400.00	3,391.52	4,718.90	4,594.30	15.12	25.68	58.29	-2,318.91	-8,433.16	8,710.69	8,673.06	37.63	231.454		
3,500.00	3,491.21	4,772.00	4,646.77	15.56	25.96	58.34	-2,313.23	-8,427.30	8,693.14	8,654.80	38.34	226.758		
3,600.00	3,590.91	4,804.93	4,679.35	16.00	26.13	58.37	-2,309.93	-8,423.82	8,676.18	8,637.23	38.95	222.778		
3,700.00	3,690.60	4,867.00	4,740.81	16.45	26.45	58.42	-2,304.00	-8,417.50	8,659.80	8,620.12	39.68	218.232		
3,800.00	3,790.29	4,895.61	4,769.16	16.89	26.60	58.45	-2,301.40	-8,414.72	8,644.01	8,603.74	40.27	214.655		
3,900.00	3,889.98	4,931.37	4,804.64	17.33	26.77	58.48	-2,298.27	-8,411.47	8,628.94	8,588.05	40.89	211.042		
4,000.00	3,989.67	4,961.00	4,834.06	17.77	26.92	58.51	-2,295.78	-8,408.94	8,614.61	8,573.13	41.48	207.691		
4,100.00	4,089.36	5,031.95	4,904.55	18.22	27.26	58.57	-2,290.11	-8,403.23	8,600.80	8,558.55	42.24	203.596		
4,200.00	4,189.06	5,056.00	4,928.46	18.66	27.37	58.58	-2,288.28	-8,401.36	8,587.57	8,544.77	42.81	200.607		
4,300.00	4,288.75	5,099.06	4,971.29	19.10	27.57	58.62	-2,285.15	-8,398.30	8,575.05	8,531.60	43.45	197.358		
4,400.00	4,388.44	5,150.00	5,022.04	19.55	27.80	58.66	-2,281.80	-8,395.35	8,563.54	8,519.41	44.12	194.080		
4,500.00	4,488.13	5,150.00	5,022.04	19.99	27.80	58.66	-2,281.80	-8,395.35	8,552.63	8,508.05	44.58	191.863		
4,600.00	4,587.82	5,226.11	5,097.93	20.44	28.13	58.72	-2,277.43	-8,391.57	8,542.38	8,497.03	45.35	188.362		
4,700.00	4,687.51	5,243.00	5,114.77	20.89	28.20	58.73	-2,276.57	-8,390.75	8,532.73	8,486.86	45.87	186.013		
4,800.00	4,787.21	5,299.23	5,170.89	21.33	28.44	58.77	-2,273.96	-8,388.37	8,523.65	8,477.10	46.55	183.091		
4,900.00	4,886.90	5,336.00	5,207.61	21.78	28.59	58.79	-2,272.48	-8,387.19	8,515.47	8,468.32	47.15	180.592		
5,000.00	4,986.59	5,381.96	5,253.53	22.22	28.77	58.82	-2,270.95	-8,385.96	8,507.98	8,460.20	47.78	178.051		
5,100.00	5,086.28	5,430.00	5,301.54	22.67	28.95	58.85	-2,269.81	-8,384.80	8,501.05	8,452.62	48.42	175.562		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,503.44	5,374.95	23.12	29.23	58.89	-2,268.27	-8,383.32	8,494.55	8,445.39	49.16	172.780		
5,300.00	5,285.66	5,569.77	5,441.25	23.56	29.48	58.93	-2,266.61	-8,382.32	8,488.46	8,438.59	49.88	170.191		
5,400.00	5,385.36	5,636.07	5,507.52	24.01	29.73	58.97	-2,264.71	-8,381.65	8,482.77	8,432.18	50.59	167.684		
5,500.00	5,485.05	5,711.00	5,582.41	24.46	30.01	59.02	-2,262.26	-8,381.28	8,477.48	8,426.14	51.34	165.138		
5,600.00	5,584.74	5,771.91	5,643.29	24.90	30.24	59.06	-2,260.17	-8,381.23	8,472.56	8,420.53	52.02	162.856		
5,700.00	5,684.43	5,842.01	5,713.35	25.35	30.50	59.11	-2,257.86	-8,381.39	8,468.00	8,415.25	52.75	160.523		
5,800.00	5,784.12	5,912.14	5,783.45	25.80	30.76	59.16	-2,255.64	-8,381.77	8,463.80	8,410.32	53.48	158.261		
5,900.00	5,883.81	5,995.00	5,866.26	26.25	31.07	59.21	-2,253.13	-8,382.52	8,459.97	8,405.70	54.26	155.910		
6,000.00	5,983.51	6,085.50	5,956.72	26.70	31.40	59.27	-2,250.53	-8,383.45	8,456.30	8,401.23	55.07	153.544		
6,100.00	6,083.20	6,196.03	6,067.20	27.14	31.81	59.34	-2,247.50	-8,384.41	8,452.54	8,396.57	55.97	151.013		
6,200.00	6,182.89	6,306.58	6,177.71	27.59	32.21	59.41	-2,244.66	-8,385.18	8,448.66	8,391.79	56.87	148.561		
6,300.00	6,282.58	6,399.89	6,270.97	28.04	32.57	59.48	-2,241.68	-8,385.96	8,444.79	8,387.08	57.71	146.336		
6,400.00	6,382.27	6,496.56	6,367.56	28.49	32.94	59.55	-2,237.86	-8,386.96	8,440.96	8,382.40	58.56	144.147		
6,500.00	6,481.96	6,614.76	6,485.61	28.94	33.40	59.64	-2,232.13	-8,388.38	8,437.13	8,377.62	59.51	141.767		
6,600.00	6,581.66	6,780.35	6,650.87	29.39	34.07	59.79	-2,221.84	-8,389.87	8,432.73	8,372.03	60.70	138.921		
6,700.00	6,681.21	6,888.93	6,759.15	29.83	34.52	21.32	-2,213.71	-8,390.51	8,425.24	8,363.61	61.63	136.700		
6,800.00	6,778.96	6,959.09	6,829.09	30.28	34.81	3.52	-2,208.18	-8,391.15	8,404.18	8,341.80	62.38	134.726		
6,900.00	6,872.51	7,026.43	6,896.20	30.70	35.09	-2.51	-2,202.74	-8,392.00	8,368.72	8,305.64	63.09	132.654		
7,000.00	6,959.55	7,089.41	6,958.96	31.10	35.36	-6.13	-2,197.52	-8,393.02	8,319.69	8,255.96	63.73	130.538		
7,100.00	7,037.93	7,149.36	7,018.68	31.48	35.61	-9.30	-2,192.49	-8,394.17	8,258.21	8,193.90	64.32	128.402		
7,200.00	7,105.74	7,207.15	7,076.28	31.88	35.84	-12.97	-2,187.94	-8,395.30	8,185.69	8,120.86	64.83	126.272		
7,300.00	7,161.29	7,254.95	7,123.95	32.41	36.04	-18.15	-2,184.51	-8,396.23	8,103.84	8,038.61	65.23	124.235		
7,400.00	7,203.22	7,291.51	7,160.42	33.13	36.18	-26.79	-2,182.08	-8,396.94	8,014.67	7,949.14	65.52	122.318		
7,500.00	7,230.50	7,315.89	7,184.75	34.04	36.28	-43.62	-2,180.56	-8,397.41	7,920.33	7,854.63	65.71	120.535		
7,600.00	7,242.45	7,327.48	7,196.32	35.13	36.33	-77.10	-2,179.86	-8,397.63	7,823.17	7,757.37	65.80	118.895		
7,700.00	7,242.72	7,329.28	7,198.11	36.39	36.34	-89.47	-2,179.75	-8,397.66	7,725.36	7,659.53	65.83	117.356		
7,800.00	7,242.33	7,330.52	7,199.35	37.81	36.34	-89.52	-2,179.68	-8,397.69	7,627.61	7,561.74	65.87	115.802		
7,900.00	7,241.93	7,331.76	7,200.59	39.40	36.35	-89.56	-2,179.61	-8,397.71	7,529.92	7,464.00	65.92	114.224		
8,000.00	7,241.54	7,333.00	7,201.83	41.13	36.35	-89.60	-2,179.53	-8,397.73	7,432.29	7,366.30	65.99	112.621		
8,100.00	7,241.15	7,334.24	7,203.06	42.97	36.36	-89.65	-2,179.46	-8,397.76	7,334.72	7,268.64	66.08	110.993		
8,200.00	7,240.75	7,335.48	7,204.30	44.92	36.36	-89.69	-2,179.39	-8,397.78	7,237.22	7,171.03	66.19	109.340		
8,300.00	7,240.36	7,336.71	7,205.53	46.97	36.37	-89.74	-2,179.32	-8,397.81	7,139.79	7,073.48	66.32	107.661		
8,400.00	7,239.97	7,337.95	7,206.77	49.10	36.37	-89.78	-2,179.24	-8,397.83	7,042.43	6,975.97	66.47	105.956		
8,500.00	7,239.57	7,339.19	7,208.00	51.29	36.38	-89.82	-2,179.17	-8,397.85	6,945.15	6,878.51	66.64	104.225		
8,600.00	7,239.18	7,340.42	7,209.24	53.56	36.38	-89.87	-2,179.10	-8,397.88	6,847.94	6,781.11	66.83	102.467		
8,700.00	7,238.79	7,341.66	7,210.47	55.87	36.39	-89.91	-2,179.03	-8,397.90	6,750.82	6,683.77	67.05	100.683		
8,800.00	7,238.39	7,342.89	7,211.70	58.24	36.39	-89.95	-2,178.96	-8,397.92	6,653.78	6,586.48	67.30	98.873		
8,900.00	7,238.00	7,344.13	7,212.93	60.64	36.40	-90.00	-2,178.89	-8,397.95	6,556.82	6,489.25	67.57	97.038		
9,000.00	7,237.61	7,345.36	7,214.17	63.09	36.40	-90.04	-2,178.82	-8,397.97	6,459.97	6,392.09	67.87	95.176		
9,100.00	7,237.21	7,346.59	7,215.40	65.56	36.41	-90.08	-2,178.75	-8,397.99	6,363.20	6,294.99	68.21	93.290		
9,200.00	7,236.82	7,347.83	7,216.63	68.07	36.41	-90.13	-2,178.68	-8,398.02	6,266.54	6,197.97	68.58	91.380		
9,300.00	7,236.43	7,349.06	7,217.86	70.61	36.42	-90.17	-2,178.61	-8,398.04	6,169.99	6,101.01	68.98	89.447		
9,400.00	7,236.03	7,350.29	7,219.08	73.16	36.42	-90.22	-2,178.54	-8,398.06	6,073.54	6,004.13	69.42	87.492		
9,500.00	7,235.64	7,351.52	7,220.31	75.74	36.43	-90.26	-2,178.47	-8,398.09	5,977.22	5,907.32	69.90	85.516		
9,600.00	7,235.25	7,352.75	7,221.54	78.34	36.43	-90.30	-2,178.40	-8,398.11	5,881.01	5,810.60	70.41	83.520		
9,700.00	7,234.85	7,353.98	7,222.77	80.96	36.44	-90.35	-2,178.33	-8,398.13	5,784.94	5,713.96	70.97	81.507		
9,800.00	7,234.46	7,355.21	7,223.99	83.59	36.44	-90.39	-2,178.26	-8,398.16	5,689.00	5,617.42	71.58	79.478		
9,900.00	7,234.07	7,356.44	7,225.22	86.24	36.45	-90.43	-2,178.19	-8,398.18	5,593.20	5,520.97	72.23	77.434		
10,000.00	7,233.67	7,357.66	7,226.45	88.90	36.45	-90.48	-2,178.12	-8,398.20	5,497.55	5,424.62	72.93	75.379		
10,100.00	7,233.28	7,358.89	7,227.67	91.57	36.46	-90.52	-2,178.05	-8,398.23	5,402.05	5,328.37	73.68	73.314		
10,200.00	7,232.89	7,360.12	7,228.89	94.25	36.46	-90.56	-2,177.99	-8,398.25	5,306.73	5,232.24	74.49	71.241		
10,300.00	7,232.49	7,361.34	7,230.12	96.95	36.47	-90.61	-2,177.92	-8,398.27	5,211.58	5,136.22	75.35	69.163		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,362.57	7,231.34	99.65	36.47	-90.65	-2,177.85	-8,398.30	5,116.61	5,040.33	76.27	67.083		
10,500.00	7,231.71	7,363.79	7,232.56	102.36	36.48	-90.69	-2,177.78	-8,398.32	5,021.84	4,944.58	77.26	65.002		
10,600.00	7,231.32	7,365.02	7,233.78	105.08	36.48	-90.74	-2,177.72	-8,398.34	4,927.27	4,848.96	78.30	62.925		
10,700.00	7,230.92	7,366.24	7,235.01	107.80	36.49	-90.78	-2,177.65	-8,398.37	4,832.92	4,753.50	79.42	60.853		
10,800.00	7,230.53	7,367.46	7,236.23	110.53	36.49	-90.82	-2,177.58	-8,398.39	4,738.80	4,658.20	80.61	58.789		
10,900.00	7,230.14	7,368.68	7,237.45	113.27	36.50	-90.87	-2,177.52	-8,398.41	4,644.93	4,563.07	81.87	56.737		
11,000.00	7,229.74	7,369.90	7,238.67	116.02	36.50	-90.91	-2,177.45	-8,398.44	4,551.32	4,468.12	83.21	54.698		
11,100.00	7,229.35	7,371.13	7,239.89	118.77	36.51	-90.95	-2,177.38	-8,398.46	4,457.99	4,373.36	84.63	52.677		
11,200.00	7,228.96	7,372.35	7,241.10	121.52	36.51	-91.00	-2,177.32	-8,398.48	4,364.95	4,278.81	86.14	50.674		
11,300.00	7,228.56	7,373.57	7,242.32	124.28	36.52	-91.04	-2,177.25	-8,398.51	4,272.23	4,184.49	87.74	48.694		
11,400.00	7,228.17	7,374.78	7,243.54	127.04	36.52	-91.08	-2,177.19	-8,398.53	4,179.84	4,090.41	89.43	46.739		
11,500.00	7,227.78	7,376.00	7,244.75	129.81	36.53	-91.12	-2,177.12	-8,398.55	4,087.81	3,996.58	91.22	44.810		
11,600.00	7,227.38	7,377.22	7,245.97	132.58	36.53	-91.17	-2,177.06	-8,398.57	3,996.16	3,903.03	93.12	42.912		
11,700.00	7,226.99	7,386.26	7,246.49	135.36	36.57	-91.19	-2,177.03	-8,398.58	3,904.92	3,809.75	95.17	41.031		
11,800.00	7,226.60	7,384.81	7,247.94	138.14	36.56	-91.24	-2,176.95	-8,398.61	3,814.12	3,716.83	97.29	39.205		
11,900.00	7,226.20	7,383.35	7,249.39	140.92	36.56	-91.29	-2,176.88	-8,398.64	3,723.79	3,624.26	99.53	37.415		
12,000.00	7,225.81	7,382.10	7,250.85	143.70	36.55	-91.34	-2,176.80	-8,398.67	3,633.96	3,532.07	101.90	35.663		
12,100.00	7,225.42	7,383.56	7,252.30	146.49	36.56	-91.39	-2,176.72	-8,398.69	3,544.68	3,440.27	104.42	33.947		
12,200.00	7,225.02	7,385.01	7,253.75	149.28	36.56	-91.44	-2,176.65	-8,398.72	3,455.99	3,348.91	107.09	32.273		
12,300.00	7,224.63	7,386.47	7,255.20	152.08	36.57	-91.50	-2,176.57	-8,398.75	3,367.93	3,258.03	109.91	30.644		
12,400.00	7,224.24	7,387.92	7,256.66	154.87	36.58	-91.55	-2,176.49	-8,398.78	3,280.56	3,167.67	112.89	29.060		
12,500.00	7,223.84	7,389.38	7,258.11	157.67	36.58	-91.60	-2,176.42	-8,398.80	3,193.92	3,077.88	116.04	27.524		
12,600.00	7,223.45	7,390.83	7,259.56	160.47	36.59	-91.65	-2,176.34	-8,398.83	3,108.09	2,988.71	119.38	26.036		
12,700.00	7,223.06	7,392.29	7,261.02	163.27	36.59	-91.70	-2,176.26	-8,398.86	3,023.12	2,900.22	122.91	24.597		
12,800.00	7,222.66	7,393.74	7,262.47	166.07	36.60	-91.75	-2,176.19	-8,398.89	2,939.11	2,812.47	126.63	23.209		
12,900.00	7,222.27	7,395.20	7,263.92	168.88	36.60	-91.80	-2,176.11	-8,398.91	2,856.12	2,725.54	130.58	21.873		
13,000.00	7,221.88	7,396.65	7,265.37	171.69	36.61	-91.86	-2,176.04	-8,398.94	2,774.25	2,639.51	134.74	20.590		
13,100.00	7,221.48	7,398.11	7,266.83	174.49	36.62	-91.91	-2,175.96	-8,398.97	2,693.61	2,554.47	139.14	19.359		
13,200.00	7,221.09	7,399.56	7,268.28	177.30	36.62	-91.96	-2,175.88	-8,399.00	2,614.30	2,470.52	143.78	18.183		
13,300.00	7,220.70	7,401.02	7,269.73	180.12	36.63	-92.01	-2,175.81	-8,399.02	2,536.46	2,387.78	148.67	17.061		
13,400.00	7,220.30	7,402.47	7,271.19	182.93	36.63	-92.06	-2,175.73	-8,399.05	2,460.21	2,306.38	153.83	15.993		
13,500.00	7,219.91	7,403.93	7,272.64	185.74	36.64	-92.11	-2,175.65	-8,399.08	2,385.72	2,226.47	159.25	14.981		
13,600.00	7,219.52	7,405.39	7,274.09	188.56	36.65	-92.17	-2,175.58	-8,399.11	2,313.16	2,148.22	164.95	14.024		
13,700.00	7,219.12	7,406.84	7,275.54	191.38	36.65	-92.22	-2,175.50	-8,399.13	2,242.71	2,071.80	170.91	13.122		
13,800.00	7,218.73	7,408.30	7,277.00	194.20	36.66	-92.27	-2,175.42	-8,399.16	2,174.57	1,997.43	177.14	12.276		
13,900.00	7,218.34	7,409.75	7,278.45	197.02	36.66	-92.32	-2,175.35	-8,399.19	2,108.98	1,925.35	183.63	11.485		
14,000.00	7,217.94	7,411.21	7,279.90	199.84	36.67	-92.37	-2,175.27	-8,399.22	2,046.17	1,855.81	190.35	10.749		
14,100.00	7,217.55	7,412.66	7,281.36	202.66	36.67	-92.42	-2,175.19	-8,399.24	1,986.41	1,789.12	197.29	10.068		
14,200.00	7,217.16	7,414.12	7,282.81	205.48	36.68	-92.48	-2,175.12	-8,399.27	1,929.98	1,725.58	204.40	9.442		
14,300.00	7,216.76	7,415.57	7,284.26	208.30	36.69	-92.53	-2,175.04	-8,399.30	1,877.18	1,665.56	211.63	8.870		
14,400.00	7,216.37	7,417.03	7,285.71	211.13	36.69	-92.58	-2,174.97	-8,399.33	1,828.34	1,609.43	218.91	8.352		
14,500.00	7,215.98	7,418.48	7,287.17	213.96	36.70	-92.63	-2,174.89	-8,399.35	1,783.76	1,557.59	226.17	7.887		
14,600.00	7,215.58	7,419.94	7,288.62	216.78	36.70	-92.68	-2,174.81	-8,399.38	1,743.79	1,510.47	233.32	7.474		
14,700.00	7,215.19	7,421.39	7,290.07	219.61	36.71	-92.73	-2,174.74	-8,399.41	1,708.74	1,468.49	240.25	7.112		
14,800.00	7,214.80	7,422.85	7,291.53	222.44	36.71	-92.78	-2,174.66	-8,399.44	1,678.92	1,432.08	246.84	6.802		
14,900.00	7,214.40	7,424.30	7,292.98	225.27	36.72	-92.84	-2,174.58	-8,399.46	1,654.61	1,401.64	252.98	6.541		
15,000.00	7,214.01	7,425.76	7,294.43	228.10	36.73	-92.89	-2,174.51	-8,399.49	1,636.07	1,377.53	258.54	6.328		
15,002.44	7,214.00	7,425.79	7,294.47	228.16	36.73	-92.89	-2,174.51	-8,399.49	1,635.69	1,377.02	258.67	6.324 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	30.00	3.28	3.28	-82.41	1,218.11	-9,144.18	9,225.01				
100.00	100.00	70.00	100.00	3.28	3.50	-82.41	1,218.11	-9,144.18	9,224.96	9,218.17	6.78	1,359.629	
200.00	200.00	170.00	200.00	3.34	5.32	-82.41	1,218.11	-9,144.18	9,224.96	9,216.30	8.66	1,065.540	
300.00	300.00	270.00	300.00	3.44	8.35	-82.41	1,218.11	-9,144.18	9,224.96	9,213.16	11.80	782.029	
400.00	400.00	370.00	400.00	3.60	11.64	-82.41	1,218.11	-9,144.18	9,224.96	9,209.71	15.25	605.070	
500.00	500.00	470.00	500.00	3.81	15.02	-82.41	1,218.11	-9,144.18	9,224.96	9,206.13	18.83	489.892	
600.00	599.98	569.98	599.98	4.03	18.45	79.44	1,218.11	-9,144.18	9,224.64	9,202.16	22.48	410.338	
700.00	699.84	669.84	699.84	4.29	21.89	79.49	1,218.11	-9,144.18	9,223.68	9,197.51	26.17	352.454	
800.00	799.54	769.54	799.54	4.57	25.33	79.55	1,218.11	-9,144.18	9,222.27	9,192.37	29.90	308.470	
900.00	899.23	869.23	899.23	4.87	28.79	79.59	1,218.11	-9,144.18	9,220.84	9,187.19	33.66	273.961	
1,000.00	998.92	968.92	998.92	5.20	32.25	79.64	1,218.11	-9,144.18	9,219.43	9,181.98	37.44	246.213	
1,100.00	1,098.61	1,068.61	1,098.61	5.54	35.71	79.69	1,218.11	-9,144.18	9,218.01	9,176.76	41.25	223.446	
1,200.00	1,198.30	1,168.30	1,198.30	5.90	39.18	79.74	1,218.11	-9,144.18	9,216.61	9,171.53	45.08	204.450	
1,300.00	1,298.00	1,268.00	1,298.00	6.27	42.65	79.78	1,218.11	-9,144.18	9,215.21	9,166.29	48.92	188.372	
1,400.00	1,397.69	1,367.69	1,397.69	6.66	46.12	79.83	1,218.11	-9,144.18	9,213.82	9,161.04	52.77	174.595	
1,500.00	1,497.38	1,467.38	1,497.38	7.05	49.59	79.88	1,218.11	-9,144.18	9,212.43	9,155.80	56.63	162.666	
1,600.00	1,597.07	1,567.07	1,597.07	7.44	53.06	79.93	1,218.11	-9,144.18	9,211.05	9,150.55	60.50	152.239	
1,700.00	1,696.76	1,666.76	1,696.76	7.85	56.54	79.98	1,218.11	-9,144.18	9,209.68	9,145.30	64.38	143.051	
1,800.00	1,796.45	1,766.45	1,796.45	8.25	60.01	80.02	1,218.11	-9,144.18	9,208.31	9,140.05	68.26	134.895	
1,900.00	1,896.15	1,866.15	1,896.15	8.67	63.49	80.07	1,218.11	-9,144.18	9,206.95	9,134.80	72.15	127.608	
2,000.00	1,995.84	1,965.84	1,995.84	9.08	66.96	80.12	1,218.11	-9,144.18	9,205.60	9,129.56	76.04	121.060	
2,100.00	2,095.53	2,065.53	2,095.53	9.50	70.44	80.17	1,218.11	-9,144.18	9,204.25	9,124.31	79.94	115.143	
2,200.00	2,195.22	2,165.22	2,195.22	9.92	73.92	80.22	1,218.11	-9,144.18	9,202.91	9,119.07	83.84	109.773	
2,300.00	2,294.91	2,264.91	2,294.91	10.35	77.39	80.26	1,218.11	-9,144.18	9,201.58	9,113.84	87.74	104.876	
2,400.00	2,394.60	2,364.60	2,394.60	10.77	80.87	80.31	1,218.11	-9,144.18	9,200.25	9,108.61	91.64	100.394	
2,500.00	2,494.30	2,464.30	2,494.30	11.20	84.35	80.36	1,218.11	-9,144.18	9,198.93	9,103.38	95.55	96.276	
2,600.00	2,593.99	2,563.99	2,593.99	11.63	87.82	80.41	1,218.11	-9,144.18	9,197.61	9,098.16	99.46	92.479	
2,700.00	2,693.68	2,663.68	2,693.68	12.07	91.30	80.46	1,218.11	-9,144.18	9,196.31	9,092.94	103.37	88.969	
2,800.00	2,793.37	2,763.37	2,793.37	12.50	94.78	80.50	1,218.11	-9,144.18	9,195.00	9,087.73	107.28	85.713	
2,900.00	2,893.06	2,863.06	2,893.06	12.93	98.26	80.55	1,218.11	-9,144.18	9,193.71	9,082.52	111.19	82.685	
3,000.00	2,992.76	2,962.76	2,992.76	13.37	101.74	80.60	1,218.11	-9,144.18	9,192.42	9,077.32	115.10	79.862	
3,100.00	3,092.45	3,062.45	3,092.45	13.81	105.22	80.65	1,218.11	-9,144.18	9,191.14	9,072.12	119.02	77.224	
3,200.00	3,192.14	3,162.14	3,192.14	14.25	108.69	80.70	1,218.11	-9,144.18	9,189.86	9,066.93	122.94	74.753	
3,300.00	3,291.83	3,261.83	3,291.83	14.68	112.17	80.74	1,218.11	-9,144.18	9,188.59	9,061.74	126.85	72.435	
3,400.00	3,391.52	3,361.52	3,391.52	15.12	115.65	80.79	1,218.11	-9,144.18	9,187.33	9,056.56	130.77	70.255	
3,500.00	3,491.21	3,461.21	3,491.21	15.56	119.13	80.84	1,218.11	-9,144.18	9,186.07	9,051.38	134.69	68.201	
3,600.00	3,590.91	3,560.91	3,590.91	16.00	122.61	80.89	1,218.11	-9,144.18	9,184.83	9,046.21	138.61	66.264	
3,700.00	3,690.60	3,660.60	3,690.60	16.45	126.09	80.94	1,218.11	-9,144.18	9,183.58	9,041.05	142.53	64.432	
3,800.00	3,790.29	3,760.29	3,790.29	16.89	129.57	80.99	1,218.11	-9,144.18	9,182.35	9,035.89	146.45	62.699	
3,900.00	3,889.98	3,859.98	3,889.98	17.33	133.05	81.03	1,218.11	-9,144.18	9,181.12	9,030.74	150.37	61.055	
4,000.00	3,989.67	3,959.67	3,989.67	17.77	136.53	81.08	1,218.11	-9,144.18	9,179.89	9,025.60	154.30	59.496	
4,100.00	4,089.36	4,059.36	4,089.36	18.22	140.01	81.13	1,218.11	-9,144.18	9,178.68	9,020.46	158.22	58.013	
4,200.00	4,189.06	4,159.06	4,189.06	18.66	143.48	81.18	1,218.11	-9,144.18	9,177.47	9,015.32	162.14	56.602	
4,300.00	4,288.75	4,258.75	4,288.75	19.10	146.96	81.23	1,218.11	-9,144.18	9,176.26	9,010.20	166.06	55.257	
4,400.00	4,388.44	4,358.44	4,388.44	19.55	150.44	81.27	1,218.11	-9,144.18	9,175.07	9,005.08	169.99	53.975	
4,500.00	4,488.13	4,458.13	4,488.13	19.99	153.92	81.32	1,218.11	-9,144.18	9,173.87	8,999.96	173.91	52.750	
4,600.00	4,587.82	4,557.82	4,587.82	20.44	157.40	81.37	1,218.11	-9,144.18	9,172.69	8,994.85	177.84	51.579	
4,700.00	4,687.51	4,657.51	4,687.51	20.89	160.88	81.42	1,218.11	-9,144.18	9,171.51	8,989.75	181.76	50.459	
4,800.00	4,787.21	4,757.21	4,787.21	21.33	164.36	81.47	1,218.11	-9,144.18	9,170.34	8,984.65	185.69	49.386	
4,900.00	4,886.90	4,856.90	4,886.90	21.78	167.84	81.52	1,218.11	-9,144.18	9,169.18	8,979.56	189.61	48.357	
5,000.00	4,986.59	4,956.59	4,986.59	22.22	171.32	81.56	1,218.11	-9,144.18	9,168.02	8,974.48	193.54	47.370	
5,100.00	5,086.28	5,056.28	5,086.28	22.67	174.80	81.61	1,218.11	-9,144.18	9,166.87	8,969.40	197.46	46.423	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,155.97	5,185.97	23.12	178.28	81.66	1,218.11	-9,144.18	9,165.72	8,964.33	201.39	45.512		
5,300.00	5,285.66	5,255.66	5,285.66	23.56	181.76	81.71	1,218.11	-9,144.18	9,164.59	8,959.27	205.32	44.636		
5,400.00	5,385.36	5,355.36	5,385.36	24.01	185.24	81.76	1,218.11	-9,144.18	9,163.46	8,954.21	209.24	43.793		
5,500.00	5,485.05	5,455.05	5,485.05	24.46	188.72	81.81	1,218.11	-9,144.18	9,162.33	8,949.16	213.17	42.981		
5,600.00	5,584.74	5,554.74	5,584.74	24.90	192.20	81.86	1,218.11	-9,144.18	9,161.21	8,944.11	217.10	42.198		
5,700.00	5,684.43	5,654.43	5,684.43	25.35	195.68	81.90	1,218.11	-9,144.18	9,160.10	8,939.07	221.03	41.444		
5,800.00	5,784.12	5,754.12	5,784.12	25.80	199.16	81.95	1,218.11	-9,144.18	9,159.00	8,934.04	224.95	40.715		
5,900.00	5,883.81	5,853.81	5,883.81	26.25	202.64	82.00	1,218.11	-9,144.18	9,157.90	8,929.02	228.88	40.012		
6,000.00	5,983.51	5,953.51	5,983.51	26.70	206.12	82.05	1,218.11	-9,144.18	9,156.80	8,924.00	232.81	39.332		
6,100.00	6,083.20	6,053.20	6,083.20	27.14	209.60	82.10	1,218.11	-9,144.18	9,155.72	8,918.98	236.74	38.675		
6,200.00	6,182.89	6,152.89	6,182.89	27.59	213.08	82.15	1,218.11	-9,144.18	9,154.64	8,913.98	240.66	38.039		
6,300.00	6,282.58	6,252.58	6,282.58	28.04	216.56	82.19	1,218.11	-9,144.18	9,153.57	8,908.98	244.59	37.424		
6,400.00	6,382.27	6,352.27	6,382.27	28.49	220.04	82.24	1,218.11	-9,144.18	9,152.50	8,903.98	248.52	36.828		
6,500.00	6,481.96	6,451.96	6,481.96	28.94	223.52	82.29	1,218.11	-9,144.18	9,151.44	8,898.99	252.45	36.251		
6,600.00	6,581.66	6,551.66	6,581.66	29.39	227.00	82.34	1,218.11	-9,144.18	9,150.39	8,894.01	256.38	35.691		
6,700.00	6,681.21	6,651.21	6,681.21	29.83	230.47	82.39	1,218.11	-9,144.18	9,149.34	8,889.02	260.30	35.139		
6,800.00	6,778.96	6,748.96	6,778.96	30.28	233.88	82.44	1,218.11	-9,144.18	9,148.29	8,884.03	264.23	34.591		
6,900.00	6,872.51	6,842.51	6,872.51	30.70	237.15	82.49	1,218.11	-9,144.18	9,147.24	8,879.04	268.16	34.043		
7,000.00	6,969.55	6,939.55	6,969.55	31.10	240.19	82.54	1,218.11	-9,144.18	9,146.19	8,874.05	272.09	33.495		
7,100.00	7,037.93	7,007.93	7,037.93	31.48	242.92	82.59	1,218.11	-9,144.18	9,145.14	8,869.06	276.02	32.947		
7,200.00	7,105.74	7,075.74	7,105.74	31.88	245.29	82.64	1,218.11	-9,144.18	9,144.09	8,864.07	280.00	32.400		
7,300.00	7,161.29	7,131.29	7,161.29	32.41	247.23	82.69	1,218.11	-9,144.18	9,143.04	8,859.08	284.00	31.853		
7,400.00	7,203.22	7,173.22	7,203.22	33.13	248.69	82.74	1,218.11	-9,144.18	9,141.99	8,854.09	288.00	31.306		
7,500.00	7,230.50	7,200.50	7,230.50	34.04	249.65	82.79	1,218.11	-9,144.18	9,140.94	8,849.10	292.00	30.759		
7,600.00	7,242.45	7,212.45	7,242.45	35.13	250.06	82.84	1,218.11	-9,144.18	9,139.89	8,844.11	296.00	30.212		
7,700.00	7,242.72	7,212.72	7,242.72	36.39	250.07	91.04	1,218.11	-9,144.18	9,138.84	8,839.12	296.68	29.941		
7,800.00	7,242.33	7,212.33	7,242.33	37.81	250.06	91.03	1,218.11	-9,144.18	9,137.79	8,834.13	296.80	29.583		
7,900.00	7,241.93	7,211.93	7,241.93	39.40	250.05	91.02	1,218.11	-9,144.18	9,136.74	8,829.14	296.92	29.225		
8,000.00	7,241.54	7,211.54	7,241.54	41.13	250.03	91.01	1,218.11	-9,144.18	9,135.69	8,824.15	297.04	28.867		
8,100.00	7,241.15	7,211.15	7,241.15	42.97	250.02	90.99	1,218.11	-9,144.18	9,134.64	8,819.16	297.16	28.509		
8,200.00	7,240.75	7,210.75	7,240.75	44.92	250.00	90.98	1,218.11	-9,144.18	9,133.59	8,814.17	297.28	28.151		
8,300.00	7,240.36	7,210.36	7,240.36	46.97	249.99	90.97	1,218.11	-9,144.18	9,132.54	8,809.18	297.40	27.793		
8,400.00	7,239.97	7,209.97	7,239.97	49.10	249.98	90.96	1,218.11	-9,144.18	9,131.49	8,804.19	297.52	27.435		
8,500.00	7,239.57	7,209.57	7,239.57	51.29	249.96	90.94	1,218.11	-9,144.18	9,130.44	8,799.20	297.64	27.077		
8,600.00	7,239.18	7,209.18	7,239.18	53.56	249.95	90.93	1,218.11	-9,144.18	9,129.39	8,794.21	297.76	26.719		
8,700.00	7,238.79	7,208.79	7,238.79	55.87	249.94	90.92	1,218.11	-9,144.18	9,128.34	8,789.22	297.88	26.361		
8,800.00	7,238.39	7,208.39	7,238.39	58.24	249.92	90.91	1,218.11	-9,144.18	9,127.29	8,784.23	298.00	25.999		
8,900.00	7,238.00	7,208.00	7,238.00	60.64	249.91	90.89	1,218.11	-9,144.18	9,126.24	8,779.24	298.12	25.641		
9,000.00	7,237.61	7,207.61	7,237.61	63.09	249.89	90.88	1,218.11	-9,144.18	9,125.19	8,774.25	298.24	25.283		
9,100.00	7,237.21	7,207.21	7,237.21	65.56	249.88	90.87	1,218.11	-9,144.18	9,124.14	8,769.26	298.36	24.925		
9,200.00	7,236.82	7,206.82	7,236.82	68.07	249.87	90.86	1,218.11	-9,144.18	9,123.09	8,764.27	298.48	24.567		
9,300.00	7,236.43	7,206.43	7,236.43	70.61	249.85	90.84	1,218.11	-9,144.18	9,122.04	8,759.28	298.60	24.209		
9,400.00	7,236.03	7,206.03	7,236.03	73.16	249.84	90.83	1,218.11	-9,144.18	9,120.99	8,754.29	298.72	23.851		
9,500.00	7,235.64	7,205.64	7,235.64	75.74	249.83	90.82	1,218.11	-9,144.18	9,119.94	8,749.30	298.84	23.493		
9,600.00	7,235.25	7,205.25	7,235.25	78.34	249.81	90.80	1,218.11	-9,144.18	9,118.89	8,744.31	298.96	23.135		
9,700.00	7,234.85	7,204.85	7,234.85	80.96	249.80	90.79	1,218.11	-9,144.18	9,117.84	8,739.32	299.08	22.777		
9,800.00	7,234.46	7,204.46	7,234.46	83.59	249.78	90.78	1,218.11	-9,144.18	9,116.79	8,734.33	299.20	22.419		
9,900.00	7,234.07	7,204.07	7,234.07	86.24	249.77	90.77	1,218.11	-9,144.18	9,115.74	8,729.34	299.32	22.061		
10,000.00	7,233.67	7,203.67	7,233.67	88.90	249.76	90.75	1,218.11	-9,144.18	9,114.69	8,724.35	299.44	21.703		
10,100.00	7,233.28	7,203.28	7,233.28	91.57	249.74	90.74	1,218.11	-9,144.18	9,113.64	8,719.36	299.56	21.345		
10,200.00	7,232.89	7,202.89	7,232.89	94.25	249.73	90.73	1,218.11	-9,144.18	9,112.59	8,714.37	299.68	20.987		
10,300.00	7,232.49	7,202.49	7,232.49	96.95	249.72	90.72	1,218.11	-9,144.18	9,111.54	8,709.38	299.80	20.629		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,232.10	7,202.10	7,232.10	99.65	249.70	90.70	1,218.11	-9,144.18	5,852.22	5,557.52	294.69	19.859		
10,500.00	7,231.71	7,201.71	7,231.71	102.36	249.69	90.69	1,218.11	-9,144.18	5,757.06	5,461.41	295.65	19.473		
10,600.00	7,231.32	7,201.32	7,231.32	105.08	249.67	90.68	1,218.11	-9,144.18	5,662.07	5,365.42	296.65	19.086		
10,700.00	7,230.92	7,200.92	7,230.92	107.80	249.66	90.67	1,218.11	-9,144.18	5,567.26	5,269.54	297.71	18.700		
10,800.00	7,230.53	7,200.53	7,230.53	110.53	249.65	90.65	1,218.11	-9,144.18	5,472.63	5,173.80	298.83	18.314		
10,900.00	7,230.14	7,200.14	7,230.14	113.27	249.63	90.64	1,218.11	-9,144.18	5,378.19	5,078.19	300.00	17.927		
11,000.00	7,229.74	7,200.26	7,229.74	116.02	249.64	90.63	1,218.11	-9,144.18	5,283.96	4,982.70	301.26	17.540		
11,100.00	7,229.35	7,200.65	7,229.35	118.77	249.65	90.62	1,218.11	-9,144.18	5,189.94	4,887.36	302.58	17.152		
11,200.00	7,228.96	7,201.05	7,228.96	121.52	249.67	90.60	1,218.11	-9,144.18	5,096.16	4,792.18	303.98	16.765		
11,300.00	7,228.56	7,201.44	7,228.56	124.28	249.68	90.59	1,218.11	-9,144.18	5,002.61	4,697.17	305.44	16.378		
11,400.00	7,228.17	7,201.83	7,228.17	127.04	249.69	90.58	1,218.11	-9,144.18	4,909.32	4,602.35	306.97	15.993		
11,500.00	7,227.78	7,202.22	7,227.78	129.81	249.71	90.56	1,218.11	-9,144.18	4,816.29	4,507.71	308.58	15.608		
11,600.00	7,227.38	7,202.62	7,227.38	132.58	249.72	90.55	1,218.11	-9,144.18	4,723.56	4,413.28	310.27	15.224		
11,700.00	7,226.99	7,203.01	7,226.99	135.36	249.73	90.54	1,218.11	-9,144.18	4,631.12	4,319.08	312.04	14.841		
11,800.00	7,226.60	7,203.40	7,226.60	138.14	249.75	90.53	1,218.11	-9,144.18	4,539.00	4,225.10	313.90	14.460		
11,900.00	7,226.20	7,203.80	7,226.20	140.92	249.76	90.51	1,218.11	-9,144.18	4,447.23	4,131.38	315.85	14.080		
12,000.00	7,225.81	7,204.19	7,225.81	143.70	249.77	90.50	1,218.11	-9,144.18	4,355.82	4,037.92	317.90	13.702		
12,100.00	7,225.42	7,204.58	7,225.42	146.49	249.79	90.49	1,218.11	-9,144.18	4,264.79	3,944.75	320.04	13.326		
12,200.00	7,225.02	7,204.98	7,225.02	149.28	249.80	90.48	1,218.11	-9,144.18	4,174.17	3,851.88	322.29	12.952		
12,300.00	7,224.63	7,205.37	7,224.63	152.08	249.82	90.46	1,218.11	-9,144.18	4,084.00	3,759.34	324.65	12.580		
12,400.00	7,224.24	7,205.76	7,224.24	154.87	249.83	90.45	1,218.11	-9,144.18	3,994.29	3,667.16	327.13	12.210		
12,500.00	7,223.84	7,206.16	7,223.84	157.67	249.84	90.44	1,218.11	-9,144.18	3,905.07	3,575.35	329.73	11.843		
12,600.00	7,223.45	7,206.55	7,223.45	160.47	249.86	90.43	1,218.11	-9,144.18	3,816.40	3,483.94	332.45	11.479		
12,700.00	7,223.06	7,206.94	7,223.06	163.27	249.87	90.41	1,218.11	-9,144.18	3,728.30	3,392.98	335.32	11.119		
12,800.00	7,222.66	7,207.34	7,222.66	166.07	249.88	90.40	1,218.11	-9,144.18	3,640.81	3,302.49	338.32	10.761		
12,900.00	7,222.27	7,207.73	7,222.27	168.88	249.90	90.39	1,218.11	-9,144.18	3,553.98	3,212.51	341.47	10.408		
13,000.00	7,221.88	7,208.12	7,221.88	171.69	249.91	90.38	1,218.11	-9,144.18	3,467.86	3,123.08	344.78	10.058		
13,100.00	7,221.48	7,208.52	7,221.48	174.49	249.93	90.36	1,218.11	-9,144.18	3,382.51	3,034.26	348.25	9.713		
13,200.00	7,221.09	7,208.91	7,221.09	177.30	249.94	90.35	1,218.11	-9,144.18	3,297.97	2,946.08	351.89	9.372		
13,300.00	7,220.70	7,209.30	7,220.70	180.12	249.95	90.34	1,218.11	-9,144.18	3,214.33	2,858.62	355.71	9.036		
13,400.00	7,220.30	7,209.70	7,220.30	182.93	249.97	90.33	1,218.11	-9,144.18	3,131.65	2,771.92	359.72	8.706		
13,500.00	7,219.91	7,189.91	7,219.91	185.74	249.28	90.31	1,218.11	-9,144.18	3,050.00	2,686.77	363.22	8.397		
13,600.00	7,219.52	7,189.52	7,219.52	188.56	249.26	90.30	1,218.11	-9,144.18	2,969.47	2,601.87	367.61	8.078		
13,700.00	7,219.12	7,189.12	7,219.12	191.38	249.25	90.29	1,218.11	-9,144.18	2,890.17	2,517.97	372.20	7.765		
13,800.00	7,218.73	7,188.73	7,218.73	194.20	249.24	90.27	1,218.11	-9,144.18	2,812.18	2,435.17	377.01	7.459		
13,900.00	7,218.34	7,188.34	7,218.34	197.02	249.22	90.26	1,218.11	-9,144.18	2,735.62	2,353.57	382.05	7.160		
14,000.00	7,217.94	7,187.94	7,217.94	199.84	249.21	90.25	1,218.11	-9,144.18	2,660.62	2,273.31	387.31	6.869		
14,100.00	7,217.55	7,187.55	7,217.55	202.66	249.19	90.24	1,218.11	-9,144.18	2,587.32	2,194.51	392.81	6.587		
14,200.00	7,217.16	7,187.16	7,217.16	205.48	249.18	90.22	1,218.11	-9,144.18	2,515.85	2,117.32	398.53	6.313		
14,300.00	7,216.76	7,186.76	7,216.76	208.30	249.17	90.21	1,218.11	-9,144.18	2,446.38	2,041.90	404.48	6.048		
14,400.00	7,216.37	7,186.37	7,216.37	211.13	249.15	90.20	1,218.11	-9,144.18	2,379.09	1,968.44	410.65	5.793		
14,500.00	7,215.98	7,185.98	7,215.98	213.96	249.14	90.19	1,218.11	-9,144.18	2,314.16	1,897.13	417.03	5.549		
14,600.00	7,215.58	7,185.58	7,215.58	216.78	249.13	90.17	1,218.11	-9,144.18	2,251.81	1,828.21	423.59	5.316		
14,700.00	7,215.19	7,185.19	7,215.19	219.61	249.11	90.16	1,218.11	-9,144.18	2,192.24	1,761.92	430.32	5.094		
14,800.00	7,214.80	7,184.80	7,214.80	222.44	249.10	90.15	1,218.11	-9,144.18	2,135.70	1,698.52	437.17	4.885		
14,900.00	7,214.40	7,184.40	7,214.40	225.27	249.08	90.14	1,218.11	-9,144.18	2,082.42	1,638.31	444.11	4.689		
15,000.00	7,214.01	7,184.01	7,214.01	228.10	249.07	90.12	1,218.11	-9,144.18	2,032.67	1,581.59	451.08	4.506		
15,002.44	7,214.00	7,184.00	7,214.00	228.16	249.07	90.12	1,218.11	-9,144.18	2,031.51	1,580.25	451.25	4.502	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	14.21	1.21	3.28	3.28	2.98	2,264.51	117.91	2,267.58					
100.00	100.00	124.26	111.26	3.28	3.30	2.97	2,264.24	117.54	2,267.32	2,260.74	6.58	344.559		
200.00	200.00	233.03	220.03	3.34	3.37	2.97	2,263.44	117.40	2,266.57	2,259.86	6.71	337.777		
300.00	300.00	330.48	317.47	3.44	3.49	2.97	2,262.59	117.38	2,265.70	2,258.76	6.94	326.521		
400.00	400.00	421.29	408.28	3.60	3.65	2.96	2,262.09	116.84	2,265.12	2,257.87	7.25	312.461		
478.80	478.80	491.81	478.80	3.76	3.79	2.94	2,261.99	116.23	2,264.98	2,257.43	7.55	300.109 CC		
500.00	500.00	511.09	498.08	3.81	3.83	2.94	2,262.01	116.05	2,264.99	2,257.35	7.64	296.641 ES		
600.00	599.98	603.11	590.10	4.03	4.05	164.75	2,262.30	115.17	2,266.93	2,258.85	8.08	280.505		
700.00	699.84	693.44	680.42	4.29	4.29	164.74	2,262.90	114.74	2,272.63	2,264.05	8.57	265.127		
800.00	799.54	813.61	800.59	4.57	4.63	164.79	2,263.43	114.78	2,280.54	2,271.34	9.20	247.931		
900.00	899.23	895.76	882.73	4.87	4.88	164.84	2,263.80	114.95	2,288.55	2,278.80	9.76	234.597		
1,000.00	998.92	1,016.28	1,003.25	5.20	5.28	164.91	2,264.14	115.28	2,296.43	2,285.96	10.47	219.322		
1,100.00	1,098.61	1,111.27	1,098.25	5.54	5.60	164.97	2,264.10	115.75	2,303.99	2,292.85	11.13	206.935		
1,200.00	1,198.30	1,206.02	1,192.99	5.90	5.93	165.03	2,264.20	116.50	2,311.71	2,299.89	11.82	195.573		
1,300.00	1,298.00	1,316.88	1,303.84	6.27	6.33	165.11	2,264.07	117.17	2,319.21	2,306.63	12.59	184.271		
1,400.00	1,397.69	1,411.09	1,398.06	6.66	6.68	165.16	2,263.98	117.25	2,326.70	2,313.40	13.31	174.842		
1,500.00	1,497.38	1,523.09	1,510.05	7.05	7.10	165.22	2,263.63	117.49	2,333.99	2,319.88	14.11	165.394		
1,600.00	1,597.07	1,628.48	1,615.44	7.44	7.50	165.27	2,262.89	117.63	2,340.88	2,325.98	14.90	157.063		
1,700.00	1,696.76	1,729.45	1,716.41	7.85	7.89	165.31	2,262.12	117.22	2,347.69	2,332.00	15.69	149.629		
1,800.00	1,796.45	1,829.04	1,815.99	8.25	8.28	165.34	2,261.25	116.41	2,354.36	2,337.88	16.48	142.864		
1,900.00	1,896.15	1,921.46	1,908.41	8.67	8.65	165.37	2,260.77	115.63	2,361.38	2,344.13	17.25	136.909		
2,000.00	1,995.84	2,028.36	2,015.30	9.08	9.07	165.40	2,259.97	114.82	2,368.17	2,350.09	18.08	130.971		
2,100.00	2,095.53	2,117.51	2,104.44	9.50	9.43	165.42	2,259.52	113.75	2,375.19	2,356.34	18.85	126.018		
2,200.00	2,195.22	2,209.07	2,196.00	9.92	9.80	165.44	2,259.38	112.70	2,382.55	2,362.93	19.63	121.383		
2,300.00	2,294.91	2,290.33	2,277.25	10.35	10.12	165.46	2,259.71	112.02	2,390.50	2,370.14	20.37	117.367		
2,400.00	2,394.60	2,378.68	2,365.60	10.77	10.48	165.48	2,260.64	111.16	2,399.09	2,377.95	21.14	113.486		
2,500.00	2,494.30	2,464.57	2,451.47	11.20	10.83	165.49	2,261.99	109.89	2,408.16	2,386.25	21.90	109.941		
2,600.00	2,593.99	2,551.13	2,537.99	11.63	11.19	165.50	2,263.87	108.60	2,417.81	2,395.14	22.67	106.638		
2,700.00	2,693.68	2,655.66	2,642.48	12.07	11.62	165.50	2,266.48	106.94	2,427.81	2,404.28	23.53	103.196		
2,800.00	2,793.37	2,759.29	2,746.07	12.50	12.04	165.51	2,268.53	105.33	2,437.26	2,412.88	24.38	99.977		
2,900.00	2,893.06	2,863.65	2,850.40	12.93	12.48	165.51	2,270.71	103.30	2,446.81	2,421.58	25.24	96.954		
3,000.00	2,992.76	2,970.71	2,957.41	13.37	12.92	165.49	2,272.53	100.83	2,455.95	2,429.84	26.11	94.061		
3,100.00	3,092.45	3,061.65	3,048.31	13.81	13.30	165.49	2,274.05	98.99	2,465.08	2,438.17	26.91	91.601		
3,200.00	3,192.14	3,161.99	3,148.62	14.25	13.72	165.49	2,276.08	97.11	2,474.58	2,446.82	27.76	89.152		
3,300.00	3,291.83	3,252.32	3,238.92	14.68	14.09	165.50	2,277.79	95.67	2,483.97	2,455.41	28.56	86.983		
3,400.00	3,391.52	3,332.26	3,318.82	15.12	14.43	165.50	2,279.90	94.42	2,494.09	2,464.78	29.31	85.100		
3,500.00	3,491.21	3,423.47	3,409.97	15.56	14.81	165.51	2,282.95	93.35	2,504.92	2,474.81	30.11	83.185		
3,600.00	3,590.91	3,540.55	3,527.01	16.00	15.30	165.55	2,286.10	92.93	2,515.13	2,484.09	31.04	81.018		
3,700.00	3,690.60	3,656.40	3,642.82	16.45	15.78	165.58	2,289.10	92.27	2,525.31	2,493.34	31.97	78.989		
3,800.00	3,790.29	3,768.96	3,755.36	16.89	16.25	165.61	2,290.70	91.22	2,534.24	2,501.36	32.88	77.071		
3,900.00	3,889.98	3,876.36	3,862.75	17.33	16.70	165.62	2,292.22	89.86	2,543.16	2,509.39	33.77	75.308		
4,000.00	3,989.67	4,001.26	3,987.60	17.77	17.23	165.61	2,293.17	88.91	2,551.38	2,516.64	34.74	73.441		
4,100.00	4,089.36	4,103.33	4,089.64	18.22	17.66	165.59	2,293.40	84.10	2,559.02	2,523.41	35.61	71.870		
4,200.00	4,189.06	4,188.78	4,175.06	18.66	18.02	165.58	2,293.78	81.97	2,566.90	2,530.50	36.39	70.530		
4,300.00	4,288.75	4,284.18	4,270.44	19.10	18.42	165.58	2,294.52	80.18	2,575.15	2,537.92	37.23	69.170		
4,400.00	4,388.44	4,369.61	4,355.86	19.55	18.78	165.59	2,295.41	78.94	2,583.69	2,545.68	38.02	67.962		
4,500.00	4,488.13	4,460.33	4,446.56	19.99	19.16	165.61	2,296.82	78.14	2,592.78	2,553.95	38.83	66.775		
4,600.00	4,587.82	4,547.84	4,534.05	20.44	19.53	165.62	2,298.44	77.05	2,602.15	2,562.52	39.62	65.669		
4,700.00	4,687.51	4,646.84	4,633.01	20.89	19.95	165.62	2,300.82	75.41	2,612.02	2,571.55	40.48	64.528		
4,800.00	4,787.21	4,765.69	4,751.82	21.33	20.45	165.62	2,302.94	73.19	2,621.26	2,579.83	41.43	63.267		
4,900.00	4,886.90	4,887.48	4,873.56	21.78	20.96	165.61	2,304.32	70.32	2,629.85	2,587.45	42.40	62.029		
5,000.00	4,986.59	4,976.22	4,962.27	22.22	21.34	165.59	2,305.05	67.91	2,638.09	2,594.88	43.20	61.061		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,086.28	5,083.18	5,069.18	22.67	21.79	165.57	2,306.20	64.95	2,646.59	2,602.49	44.10	60.015		
5,200.00	5,185.97	5,175.21	5,161.19	23.12	22.18	165.57	2,306.98	63.22	2,654.91	2,609.99	44.92	59.101		
5,300.00	5,285.66	5,267.20	5,253.16	23.56	22.57	165.59	2,308.07	62.11	2,663.61	2,617.86	45.74	58.230		
5,400.00	5,385.36	5,364.96	5,350.91	24.01	22.99	165.60	2,309.40	60.95	2,672.49	2,625.89	46.59	57.357		
5,500.00	5,485.05	5,463.03	5,448.97	24.46	23.40	165.63	2,310.71	60.56	2,681.39	2,633.94	47.45	56.515		
5,600.00	5,584.74	5,551.89	5,537.82	24.90	23.78	165.66	2,312.04	60.40	2,690.47	2,642.22	48.25	55.759		
5,700.00	5,684.43	5,650.08	5,635.99	25.35	24.19	165.71	2,313.91	60.78	2,699.99	2,650.89	49.11	54.984		
5,800.00	5,784.12	5,774.41	5,760.31	25.80	24.72	165.78	2,315.55	61.85	2,708.98	2,658.89	50.09	54.082		
5,900.00	5,883.81	5,890.36	5,876.25	26.25	25.21	165.83	2,316.16	62.08	2,717.12	2,666.09	51.03	53.244		
6,000.00	5,983.51	6,017.84	6,003.73	26.70	25.75	165.88	2,315.85	61.73	2,724.47	2,672.44	52.02	52.369		
6,100.00	6,083.20	6,125.31	6,111.19	27.14	26.21	165.91	2,314.92	61.19	2,731.17	2,678.25	52.92	51.609		
6,200.00	6,182.89	6,225.55	6,211.42	27.59	26.63	165.94	2,313.88	60.68	2,737.72	2,683.94	53.78	50.902		
6,300.00	6,282.58	6,319.10	6,304.97	28.04	27.03	165.96	2,313.06	59.96	2,744.40	2,689.79	54.62	50.248		
6,400.00	6,382.27	6,409.79	6,395.65	28.49	27.41	165.98	2,312.52	58.87	2,751.34	2,695.91	55.44	49.631		
6,500.00	6,481.96	6,488.30	6,474.16	28.94	27.75	165.99	2,312.52	57.76	2,758.85	2,702.66	56.20	49.093		
6,600.00	6,581.66	6,602.35	6,588.20	29.39	28.23	166.00	2,312.75	56.32	2,766.59	2,709.46	57.13	48.427		
6,700.00	6,681.21	6,707.85	6,693.68	29.83	28.68	127.20	2,312.51	54.81	2,774.07	2,716.05	58.02	47.813		
6,800.00	6,778.96	6,811.30	6,797.12	30.28	29.12	109.35	2,312.06	53.13	2,782.44	2,723.55	58.89	47.248		
6,900.00	6,872.51	6,904.07	6,889.88	30.70	29.52	103.77	2,311.61	51.66	2,792.04	2,732.34	59.70	46.769		
7,000.00	6,959.55	6,988.54	6,974.34	31.10	29.87	101.09	2,311.22	50.64	2,803.25	2,742.79	60.46	46.362		
7,100.00	7,037.93	7,072.30	7,058.10	31.48	30.23	99.55	2,310.77	50.19	2,816.42	2,755.17	61.25	45.985		
7,200.00	7,105.74	7,161.87	7,147.66	31.88	30.61	98.64	2,309.86	50.08	2,831.75	2,769.64	62.11	45.592		
7,300.00	7,161.29	7,229.62	7,215.40	32.41	30.90	97.61	2,308.65	50.03	2,849.49	2,786.52	62.97	45.255		
7,400.00	7,203.22	7,271.67	7,257.45	33.13	31.08	96.12	2,307.84	50.00	2,870.42	2,806.60	63.83	44.972		
7,500.00	7,230.50	7,299.06	7,284.83	34.04	31.19	94.21	2,307.31	49.98	2,894.63	2,829.88	64.76	44.701		
7,600.00	7,242.45	7,311.11	7,296.88	35.13	31.24	91.83	2,307.08	49.98	2,921.87	2,856.14	65.74	44.449		
7,700.00	7,242.72	7,311.46	7,297.23	36.39	31.25	91.04	2,307.08	49.98	2,951.84	2,885.07	66.76	44.215		
7,800.00	7,242.33	7,311.15	7,296.91	37.81	31.24	91.03	2,307.08	49.98	2,984.82	2,916.92	67.89	43.963		
7,900.00	7,241.93	7,310.83	7,296.60	39.40	31.24	91.03	2,307.09	49.98	3,020.75	2,951.64	69.11	43.708		
8,000.00	7,241.54	7,310.52	7,296.29	41.13	31.24	91.02	2,307.09	49.98	3,059.54	2,989.15	70.39	43.466		
8,100.00	7,241.15	7,310.21	7,295.97	42.97	31.24	91.01	2,307.10	49.98	3,101.06	3,029.35	71.71	43.245		
8,200.00	7,240.75	7,309.89	7,295.66	44.92	31.24	91.01	2,307.11	49.98	3,145.22	3,072.17	73.05	43.055		
8,300.00	7,240.36	7,309.58	7,295.35	46.97	31.24	91.00	2,307.11	49.98	3,191.90	3,117.49	74.40	42.900		
8,400.00	7,239.97	7,309.26	7,295.03	49.10	31.24	91.00	2,307.12	49.98	3,240.99	3,165.24	75.75	42.785		
8,500.00	7,239.57	7,308.95	7,294.72	51.29	31.23	90.99	2,307.12	49.98	3,292.39	3,215.30	77.08	42.712		
8,600.00	7,239.18	7,308.64	7,294.41	53.56	31.23	90.98	2,307.13	49.98	3,345.99	3,267.59	78.40	42.680 SF		
8,700.00	7,238.79	7,308.32	7,294.09	55.87	31.23	90.98	2,307.14	49.98	3,401.68	3,322.00	79.68	42.690		
8,800.00	7,238.39	7,308.01	7,293.78	58.24	31.23	90.97	2,307.14	49.98	3,459.37	3,378.44	80.94	42.742		
8,900.00	7,238.00	7,307.70	7,293.46	60.64	31.23	90.96	2,307.15	49.98	3,518.96	3,436.80	82.15	42.834		
9,000.00	7,237.61	7,307.38	7,293.15	63.09	31.23	90.96	2,307.15	49.98	3,580.35	3,497.01	83.33	42.964		
9,100.00	7,237.21	7,307.07	7,292.84	65.56	31.23	90.95	2,307.16	49.98	3,643.44	3,558.97	84.47	43.131		
9,200.00	7,236.82	7,306.76	7,292.52	68.07	31.23	90.94	2,307.17	49.98	3,708.17	3,622.59	85.57	43.333		
9,300.00	7,236.43	7,306.44	7,292.21	70.61	31.22	90.94	2,307.17	49.98	3,774.43	3,687.80	86.63	43.568		
9,400.00	7,236.03	7,306.13	7,291.90	73.16	31.22	90.93	2,307.18	49.98	3,842.15	3,754.50	87.65	43.835		
9,500.00	7,235.64	7,305.81	7,291.58	75.74	31.22	90.92	2,307.18	49.98	3,911.26	3,822.63	88.63	44.131		
9,600.00	7,235.25	7,305.50	7,291.27	78.34	31.22	90.92	2,307.19	49.98	3,981.68	3,892.11	89.57	44.454		
9,700.00	7,234.85	7,305.19	7,290.96	80.96	31.22	90.91	2,307.20	49.98	4,053.34	3,962.87	90.47	44.804		
9,800.00	7,234.46	7,304.87	7,290.64	83.59	31.22	90.91	2,307.20	49.98	4,126.18	4,034.85	91.33	45.179		
9,900.00	7,234.07	7,304.56	7,290.33	86.24	31.22	90.90	2,307.21	49.98	4,200.14	4,107.98	92.16	45.576		
10,000.00	7,233.67	7,304.25	7,290.02	88.90	31.21	90.89	2,307.21	49.98	4,275.16	4,182.21	92.95	45.995		
10,100.00	7,233.28	7,303.93	7,289.70	91.57	31.21	90.89	2,307.22	49.98	4,351.18	4,257.48	93.71	46.434		
10,200.00	7,232.89	7,303.62	7,289.39	94.25	31.21	90.88	2,307.23	49.98	4,428.16	4,333.73	94.43	46.893		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,303.31	7,289.07	96.95	31.21	90.87	2,307.23	49.98	4,506.04	4,410.91	95.13	47.369		
10,400.00	7,232.10	7,302.99	7,288.76	99.65	31.21	90.87	2,307.24	49.98	4,584.78	4,488.99	95.79	47.862		
10,500.00	7,231.71	7,302.68	7,288.45	102.36	31.21	90.86	2,307.24	49.98	4,664.33	4,567.90	96.43	48.370		
10,600.00	7,231.32	7,302.36	7,288.13	105.08	31.21	90.85	2,307.25	49.98	4,744.66	4,647.62	97.04	48.894		
10,700.00	7,230.92	7,302.05	7,287.82	107.80	31.21	90.85	2,307.26	49.98	4,825.73	4,728.10	97.63	49.431		
10,800.00	7,230.53	7,301.74	7,287.51	110.53	31.20	90.84	2,307.26	49.98	4,907.49	4,809.30	98.19	49.981		
10,900.00	7,230.14	7,301.42	7,287.19	113.27	31.20	90.83	2,307.27	49.98	4,989.91	4,891.19	98.72	50.544		
11,000.00	7,229.74	7,301.11	7,286.88	116.02	31.20	90.83	2,307.27	49.98	5,072.97	4,973.73	99.24	51.118		
11,100.00	7,229.35	7,300.80	7,286.57	118.77	31.20	90.82	2,307.28	49.98	5,156.63	5,056.90	99.74	51.703		
11,200.00	7,228.96	7,300.48	7,286.25	121.52	31.20	90.82	2,307.29	49.98	5,240.86	5,140.65	100.21	52.299		
11,300.00	7,228.56	7,300.17	7,285.94	124.28	31.20	90.81	2,307.29	49.98	5,325.64	5,224.98	100.67	52.904		
11,400.00	7,228.17	7,299.86	7,285.63	127.04	31.20	90.80	2,307.30	49.98	5,410.94	5,309.83	101.11	53.518		
11,500.00	7,227.78	7,299.54	7,285.31	129.81	31.19	90.80	2,307.30	49.98	5,496.73	5,395.21	101.53	54.140		
11,600.00	7,227.38	7,299.23	7,285.00	132.58	31.19	90.79	2,307.31	49.98	5,583.00	5,481.07	101.93	54.771		
11,700.00	7,226.99	7,298.91	7,284.68	135.36	31.19	90.78	2,307.32	49.98	5,669.72	5,567.39	102.32	55.410		
11,800.00	7,226.60	7,298.60	7,284.37	138.14	31.19	90.78	2,307.32	49.98	5,756.86	5,654.17	102.70	56.055		
11,900.00	7,226.20	7,298.29	7,284.06	140.92	31.19	90.77	2,307.33	49.99	5,844.42	5,741.36	103.06	56.708		
12,000.00	7,225.81	7,297.97	7,283.74	143.70	31.19	90.76	2,307.33	49.99	5,932.38	5,828.97	103.41	57.367		
12,100.00	7,225.42	7,297.66	7,283.43	146.49	31.19	90.76	2,307.34	49.99	6,020.71	5,916.96	103.75	58.032		
12,200.00	7,225.02	7,297.35	7,283.12	149.28	31.19	90.75	2,307.35	49.99	6,109.40	6,005.32	104.07	58.703		
12,300.00	7,224.63	7,297.03	7,282.80	152.08	31.18	90.74	2,307.35	49.99	6,198.43	6,094.04	104.39	59.380		
12,400.00	7,224.24	7,296.72	7,282.49	154.87	31.18	90.74	2,307.36	49.99	6,287.79	6,183.10	104.69	60.061		
12,500.00	7,223.84	7,296.41	7,282.18	157.67	31.18	90.73	2,307.36	49.99	6,377.47	6,272.49	104.98	60.748		
12,600.00	7,223.45	7,296.09	7,281.86	160.47	31.18	90.73	2,307.37	49.99	6,467.45	6,362.19	105.27	61.439		
12,700.00	7,223.06	7,295.78	7,281.55	163.27	31.18	90.72	2,307.38	49.99	6,557.72	6,452.18	105.54	62.135		
12,800.00	7,222.66	7,295.46	7,281.24	166.07	31.18	90.71	2,307.38	49.99	6,648.27	6,542.47	105.81	62.835		
12,900.00	7,222.27	7,295.15	7,280.92	168.88	31.18	90.71	2,307.39	49.99	6,739.09	6,633.03	106.06	63.539		
13,000.00	7,221.88	7,294.84	7,280.61	171.69	31.17	90.70	2,307.39	49.99	6,830.16	6,723.85	106.31	64.246		
13,100.00	7,221.48	7,294.52	7,280.29	174.49	31.17	90.69	2,307.40	49.99	6,921.48	6,814.93	106.55	64.957		
13,200.00	7,221.09	7,294.21	7,279.98	177.30	31.17	90.69	2,307.41	49.99	7,013.04	6,906.25	106.79	65.672		
13,300.00	7,220.70	7,293.90	7,279.67	180.12	31.17	90.68	2,307.41	49.99	7,104.83	6,997.81	107.02	66.390		
13,400.00	7,220.30	7,293.58	7,279.35	182.93	31.17	90.67	2,307.42	49.99	7,196.83	7,089.59	107.24	67.110		
13,500.00	7,219.91	7,293.27	7,279.04	185.74	31.17	90.67	2,307.42	49.99	7,289.04	7,181.59	107.45	67.834		
13,600.00	7,219.52	7,292.96	7,278.73	188.56	31.17	90.66	2,307.43	49.99	7,381.46	7,273.80	107.66	68.560		
13,700.00	7,219.12	7,292.64	7,278.41	191.38	31.17	90.66	2,307.44	49.99	7,474.07	7,366.20	107.87	69.289		
13,800.00	7,218.73	7,292.33	7,278.10	194.20	31.16	90.65	2,307.44	49.99	7,566.87	7,458.81	108.07	70.021		
13,900.00	7,218.34	7,292.02	7,277.79	197.02	31.16	90.64	2,307.45	49.99	7,659.85	7,551.59	108.26	70.754		
14,000.00	7,217.94	7,291.70	7,277.47	199.84	31.16	90.64	2,307.45	49.99	7,753.01	7,644.56	108.45	71.490		
14,100.00	7,217.55	7,291.39	7,277.16	202.66	31.16	90.63	2,307.46	49.99	7,846.33	7,737.70	108.63	72.228		
14,200.00	7,217.16	7,291.07	7,276.85	205.48	31.16	90.62	2,307.47	49.99	7,939.82	7,831.01	108.81	72.968		
14,300.00	7,216.76	7,290.76	7,276.53	208.30	31.16	90.62	2,307.47	49.99	8,033.46	7,924.48	108.99	73.710		
14,400.00	7,216.37	7,290.45	7,276.22	211.13	31.16	90.61	2,307.48	49.99	8,127.26	8,018.10	109.16	74.453		
14,500.00	7,215.98	7,290.13	7,275.90	213.96	31.15	90.60	2,307.48	49.99	8,221.20	8,111.87	109.33	75.199		
14,600.00	7,215.58	7,289.82	7,275.59	216.78	31.15	90.60	2,307.49	49.99	8,315.28	8,205.79	109.49	75.945		
14,700.00	7,215.19	7,289.51	7,275.28	219.61	31.15	90.59	2,307.50	49.99	8,409.50	8,299.85	109.65	76.694		
14,800.00	7,214.80	7,289.19	7,274.96	222.44	31.15	90.58	2,307.50	49.99	8,503.85	8,394.05	109.81	77.443		
14,900.00	7,214.40	7,288.88	7,274.65	225.27	31.15	90.58	2,307.51	49.99	8,598.33	8,488.37	109.96	78.194		
15,000.00	7,214.01	7,288.57	7,274.34	228.10	31.15	90.57	2,307.51	49.99	8,692.94	8,582.82	110.11	78.946		
15,002.44	7,214.00	7,288.56	7,274.33	228.16	31.15	90.57	2,307.51	49.99	8,695.24	8,585.13	110.12	78.965		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	60.00	3.28	3.28	-165.89	-4,159.61	-1,045.98	4,289.52					
100.00	100.00	40.00	100.00	3.28	3.35	-165.89	-4,159.61	-1,045.98	4,289.11	4,282.47	6.64	646.124		
200.00	200.00	140.00	200.00	3.34	4.54	-165.89	-4,159.61	-1,045.98	4,289.11	4,281.23	7.88	544.368		
300.00	300.00	240.00	300.00	3.44	7.40	-165.89	-4,159.61	-1,045.98	4,289.11	4,278.26	10.84	395.510		
400.00	400.00	340.00	400.00	3.60	10.64	-165.89	-4,159.61	-1,045.98	4,289.11	4,274.86	14.25	301.089		
500.00	500.00	440.00	500.00	3.81	14.00	-165.89	-4,159.61	-1,045.98	4,289.11	4,271.29	17.81	240.820		
600.00	599.98	539.98	599.98	4.03	17.42	-4.05	-4,159.61	-1,045.98	4,287.36	4,265.91	21.45	199.860		
700.00	699.84	639.84	699.84	4.29	20.85	-4.07	-4,159.61	-1,045.98	4,282.14	4,257.01	25.14	170.338		
800.00	799.54	739.54	799.54	4.57	24.29	-4.08	-4,159.61	-1,045.98	4,274.43	4,245.56	28.86	148.087		
900.00	899.23	839.23	899.23	4.87	27.75	-4.08	-4,159.61	-1,045.98	4,266.60	4,233.98	32.62	130.800		
1,000.00	998.92	938.92	998.92	5.20	31.21	-4.09	-4,159.61	-1,045.98	4,258.77	4,222.37	36.40	116.997		
1,100.00	1,098.61	1,038.61	1,098.61	5.54	34.67	-4.10	-4,159.61	-1,045.98	4,250.95	4,210.74	40.20	105.737		
1,200.00	1,198.30	1,138.30	1,198.30	5.90	38.13	-4.11	-4,159.61	-1,045.98	4,243.12	4,199.10	44.02	96.386		
1,300.00	1,298.00	1,238.00	1,298.00	6.27	41.60	-4.11	-4,159.61	-1,045.98	4,235.29	4,187.44	47.86	88.502		
1,400.00	1,397.69	1,337.69	1,397.69	6.66	45.07	-4.12	-4,159.61	-1,045.98	4,227.47	4,175.77	51.70	81.770		
1,500.00	1,497.38	1,437.38	1,497.38	7.05	48.54	-4.13	-4,159.61	-1,045.98	4,219.64	4,164.09	55.55	75.957		
1,600.00	1,597.07	1,537.07	1,597.07	7.44	52.02	-4.14	-4,159.61	-1,045.98	4,211.82	4,152.40	59.41	70.888		
1,700.00	1,696.76	1,636.76	1,696.76	7.85	55.49	-4.14	-4,159.61	-1,045.98	4,203.99	4,140.71	63.28	66.431		
1,800.00	1,796.45	1,736.45	1,796.45	8.25	58.97	-4.15	-4,159.61	-1,045.98	4,196.16	4,129.01	67.16	62.482		
1,900.00	1,896.15	1,836.15	1,896.15	8.67	62.44	-4.16	-4,159.61	-1,045.98	4,188.34	4,117.30	71.04	58.960		
2,000.00	1,995.84	1,935.84	1,995.84	9.08	65.92	-4.17	-4,159.61	-1,045.98	4,180.51	4,105.59	74.92	55.800		
2,100.00	2,095.53	2,035.53	2,095.53	9.50	69.39	-4.18	-4,159.61	-1,045.98	4,172.69	4,093.88	78.81	52.949		
2,200.00	2,195.22	2,135.22	2,195.22	9.92	72.87	-4.18	-4,159.61	-1,045.98	4,164.86	4,082.17	82.70	50.363		
2,300.00	2,294.91	2,234.91	2,294.91	10.35	76.35	-4.19	-4,159.61	-1,045.98	4,157.04	4,070.45	86.59	48.009		
2,400.00	2,394.60	2,334.60	2,394.60	10.77	79.82	-4.20	-4,159.61	-1,045.98	4,149.21	4,058.73	90.48	45.855		
2,500.00	2,494.30	2,434.30	2,494.30	11.20	83.30	-4.21	-4,159.61	-1,045.98	4,141.39	4,047.00	94.38	43.879		
2,600.00	2,593.99	2,533.99	2,593.99	11.63	86.78	-4.21	-4,159.61	-1,045.98	4,133.56	4,035.28	98.28	42.058		
2,700.00	2,693.68	2,633.68	2,693.68	12.07	90.26	-4.22	-4,159.61	-1,045.98	4,125.74	4,023.55	102.18	40.376		
2,800.00	2,793.37	2,733.37	2,793.37	12.50	93.73	-4.23	-4,159.61	-1,045.98	4,117.91	4,011.83	106.09	38.817		
2,900.00	2,893.06	2,833.06	2,893.06	12.93	97.21	-4.24	-4,159.61	-1,045.98	4,110.09	4,000.10	109.99	37.368		
3,000.00	2,992.76	2,932.76	2,992.76	13.37	100.69	-4.25	-4,159.61	-1,045.98	4,102.26	3,988.37	113.89	36.018		
3,100.00	3,092.45	3,032.45	3,092.45	13.81	104.17	-4.25	-4,159.61	-1,045.98	4,094.44	3,976.63	117.80	34.757		
3,200.00	3,192.14	3,132.14	3,192.14	14.25	107.65	-4.26	-4,159.61	-1,045.98	4,086.61	3,964.90	121.71	33.577		
3,300.00	3,291.83	3,231.83	3,291.83	14.68	111.13	-4.27	-4,159.61	-1,045.98	4,078.79	3,953.17	125.62	32.470		
3,400.00	3,391.52	3,331.52	3,391.52	15.12	114.61	-4.28	-4,159.61	-1,045.98	4,070.96	3,941.44	129.53	31.430		
3,500.00	3,491.21	3,431.21	3,491.21	15.56	118.08	-4.29	-4,159.61	-1,045.98	4,063.14	3,929.70	133.44	30.450		
3,600.00	3,590.91	3,530.91	3,590.91	16.00	121.56	-4.30	-4,159.61	-1,045.98	4,055.31	3,917.97	137.35	29.526		
3,700.00	3,690.60	3,630.60	3,690.60	16.45	125.04	-4.30	-4,159.61	-1,045.98	4,047.49	3,906.23	141.26	28.653		
3,800.00	3,790.29	3,730.29	3,790.29	16.89	128.52	-4.31	-4,159.61	-1,045.98	4,039.66	3,894.49	145.17	27.827		
3,900.00	3,889.98	3,829.98	3,889.98	17.33	132.00	-4.32	-4,159.61	-1,045.98	4,031.84	3,882.76	149.08	27.044		
4,000.00	3,989.67	3,929.67	3,989.67	17.77	135.48	-4.33	-4,159.61	-1,045.98	4,024.02	3,871.02	153.00	26.301		
4,100.00	4,089.36	4,029.36	4,089.36	18.22	138.96	-4.34	-4,159.61	-1,045.98	4,016.19	3,859.28	156.91	25.596		
4,200.00	4,189.06	4,129.06	4,189.06	18.66	142.44	-4.35	-4,159.61	-1,045.98	4,008.37	3,847.54	160.82	24.924		
4,300.00	4,288.75	4,228.75	4,288.75	19.10	145.92	-4.36	-4,159.61	-1,045.98	4,000.54	3,835.81	164.74	24.284		
4,400.00	4,388.44	4,328.44	4,388.44	19.55	149.40	-4.36	-4,159.61	-1,045.98	3,992.72	3,824.07	168.65	23.674		
4,500.00	4,488.13	4,428.13	4,488.13	19.99	152.88	-4.37	-4,159.61	-1,045.98	3,984.90	3,812.33	172.57	23.092		
4,600.00	4,587.82	4,527.82	4,587.82	20.44	156.36	-4.38	-4,159.61	-1,045.98	3,977.07	3,800.59	176.48	22.535		
4,700.00	4,687.51	4,627.51	4,687.51	20.89	159.83	-4.39	-4,159.61	-1,045.98	3,969.25	3,788.85	180.40	22.003		
4,800.00	4,787.21	4,727.21	4,787.21	21.33	163.31	-4.40	-4,159.61	-1,045.98	3,961.43	3,777.11	184.32	21.493		
4,900.00	4,886.90	4,826.90	4,886.90	21.78	166.79	-4.41	-4,159.61	-1,045.98	3,953.60	3,765.37	188.23	21.004		
5,000.00	4,986.59	4,926.59	4,986.59	22.22	170.27	-4.42	-4,159.61	-1,045.98	3,945.78	3,753.63	192.15	20.535		
5,100.00	5,086.28	5,026.28	5,086.28	22.67	173.75	-4.42	-4,159.61	-1,045.98	3,937.96	3,741.89	196.07	20.085		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,125.97	5,185.97	23.12	177.23	-4.43	-4,159.61	-1,045.98	3,930.13	3,730.15	199.98	19.652	
5,300.00	5,285.66	5,225.66	5,285.66	23.56	180.71	-4.44	-4,159.61	-1,045.98	3,922.31	3,718.41	203.90	19.236	
5,400.00	5,385.36	5,325.36	5,385.36	24.01	184.19	-4.45	-4,159.61	-1,045.98	3,914.49	3,706.67	207.82	18.836	
5,500.00	5,485.05	5,425.05	5,485.05	24.46	187.67	-4.46	-4,159.61	-1,045.98	3,906.67	3,694.93	211.74	18.451	
5,600.00	5,584.74	5,524.74	5,584.74	24.90	191.15	-4.47	-4,159.61	-1,045.98	3,898.84	3,683.19	215.65	18.079	
5,700.00	5,684.43	5,624.43	5,684.43	25.35	194.63	-4.48	-4,159.61	-1,045.98	3,891.02	3,671.45	219.57	17.721	
5,800.00	5,784.12	5,724.12	5,784.12	25.80	198.11	-4.49	-4,159.61	-1,045.98	3,883.20	3,659.71	223.49	17.375	
5,900.00	5,883.81	5,823.81	5,883.81	26.25	201.59	-4.50	-4,159.61	-1,045.98	3,875.38	3,647.97	227.41	17.041	
6,000.00	5,983.51	5,923.51	5,983.51	26.70	205.07	-4.51	-4,159.61	-1,045.98	3,867.55	3,636.23	231.33	16.719	
6,100.00	6,083.20	6,023.20	6,083.20	27.14	208.55	-4.51	-4,159.61	-1,045.98	3,859.73	3,624.48	235.25	16.407	
6,200.00	6,182.89	6,122.89	6,182.89	27.59	212.03	-4.52	-4,159.61	-1,045.98	3,851.91	3,612.74	239.17	16.106	
6,300.00	6,282.58	6,222.58	6,282.58	28.04	215.51	-4.53	-4,159.61	-1,045.98	3,844.09	3,601.00	243.09	15.814	
6,400.00	6,382.27	6,322.27	6,382.27	28.49	218.99	-4.54	-4,159.61	-1,045.98	3,836.27	3,589.26	247.01	15.531	
6,500.00	6,481.96	6,421.96	6,481.96	28.94	222.47	-4.55	-4,159.61	-1,045.98	3,828.44	3,577.52	250.92	15.257	
6,600.00	6,581.66	6,521.66	6,581.66	29.39	225.95	-4.56	-4,159.61	-1,045.98	3,820.62	3,565.78	254.84	14.992	
6,700.00	6,681.21	6,621.21	6,681.21	29.83	229.42	-43.53	-4,159.61	-1,045.98	3,812.18	3,553.42	258.76	14.733	
6,800.00	6,778.96	6,718.96	6,778.96	30.28	232.84	-62.27	-4,159.61	-1,045.98	3,800.48	3,537.88	262.60	14.473	
6,900.00	6,872.51	6,812.51	6,872.51	30.70	236.10	-69.39	-4,159.61	-1,045.98	3,785.66	3,519.38	266.28	14.217	
7,000.00	6,959.55	6,900.45	6,959.55	31.10	239.17	-74.05	-4,159.61	-1,045.98	3,768.44	3,498.68	269.76	13.970	
7,100.00	7,037.93	6,977.93	7,037.93	31.48	241.88	-77.87	-4,159.61	-1,045.98	3,749.74	3,476.85	272.89	13.741	
7,200.00	7,105.74	7,045.74	7,105.74	31.88	244.24	-81.23	-4,159.61	-1,045.98	3,730.61	3,454.87	275.74	13.530	
7,300.00	7,161.29	7,101.29	7,161.29	32.41	246.18	-84.18	-4,159.61	-1,045.98	3,712.13	3,433.87	278.27	13.340	
7,400.00	7,203.22	7,143.22	7,203.22	33.13	247.65	-86.64	-4,159.61	-1,045.98	3,695.36	3,414.88	280.48	13.175	
7,500.00	7,230.50	7,170.50	7,230.50	34.04	248.60	-88.54	-4,159.61	-1,045.98	3,681.20	3,398.83	282.37	13.037	
7,600.00	7,242.45	7,182.45	7,242.45	35.13	249.02	-89.78	-4,159.61	-1,045.98	3,670.38	3,386.46	283.92	12.928	
7,700.00	7,242.72	7,182.72	7,242.72	36.39	249.03	-90.01	-4,159.61	-1,045.98	3,663.03	3,377.81	285.22	12.843	
7,800.00	7,242.33	7,182.33	7,242.33	37.81	249.01	-90.01	-4,159.61	-1,045.98	3,658.45	3,371.77	286.68	12.761	
7,900.00	7,241.93	7,181.93	7,241.93	39.40	249.00	-90.00	-4,159.61	-1,045.98	3,656.60	3,368.30	288.30	12.683	
7,917.65	7,241.86	7,181.86	7,241.86	39.70	249.00	-90.00	-4,159.61	-1,045.98	3,656.56	3,367.95	288.61	12.669 CC	
8,000.00	7,241.54	7,181.54	7,241.54	41.13	248.98	-89.99	-4,159.61	-1,045.98	3,657.49	3,367.43	290.06	12.609 ES	
8,100.00	7,241.15	7,181.15	7,241.15	42.97	248.97	-89.99	-4,159.61	-1,045.98	3,661.10	3,369.18	291.93	12.541	
8,200.00	7,240.75	7,180.75	7,240.75	44.92	248.96	-89.98	-4,159.61	-1,045.98	3,667.45	3,373.56	293.88	12.479	
8,300.00	7,240.36	7,180.36	7,240.36	46.97	248.94	-89.98	-4,159.61	-1,045.98	3,676.50	3,380.60	295.90	12.425	
8,400.00	7,239.97	7,179.97	7,239.97	49.10	248.93	-89.97	-4,159.61	-1,045.98	3,688.24	3,390.27	297.97	12.378	
8,500.00	7,239.57	7,179.57	7,239.57	51.29	248.92	-89.96	-4,159.61	-1,045.98	3,702.64	3,402.58	300.07	12.339	
8,600.00	7,239.18	7,179.18	7,239.18	53.56	248.90	-89.96	-4,159.61	-1,045.98	3,719.68	3,417.50	302.18	12.310	
8,700.00	7,238.79	7,178.79	7,238.79	55.87	248.89	-89.95	-4,159.61	-1,045.98	3,739.32	3,435.02	304.30	12.288	
8,800.00	7,238.39	7,178.39	7,238.39	58.24	248.87	-89.95	-4,159.61	-1,045.98	3,761.51	3,455.11	306.41	12.276	
8,900.00	7,238.00	7,178.00	7,238.00	60.64	248.86	-89.94	-4,159.61	-1,045.98	3,786.22	3,477.72	308.50	12.273 SF	
9,000.00	7,237.61	7,177.61	7,237.61	63.09	248.85	-89.93	-4,159.61	-1,045.98	3,813.38	3,502.82	310.56	12.279	
9,100.00	7,237.21	7,177.21	7,237.21	65.56	248.83	-89.93	-4,159.61	-1,045.98	3,842.96	3,530.37	312.59	12.294	
9,200.00	7,236.82	7,176.82	7,236.82	68.07	248.82	-89.92	-4,159.61	-1,045.98	3,874.90	3,560.31	314.58	12.318	
9,300.00	7,236.43	7,176.43	7,236.43	70.61	248.81	-89.91	-4,159.61	-1,045.98	3,909.13	3,592.60	316.53	12.350	
9,400.00	7,236.03	7,176.03	7,236.03	73.16	248.79	-89.91	-4,159.61	-1,045.98	3,945.60	3,627.17	318.43	12.391	
9,500.00	7,235.64	7,175.64	7,235.64	75.74	248.78	-89.90	-4,159.61	-1,045.98	3,984.25	3,663.97	320.27	12.440	
9,600.00	7,235.25	7,175.25	7,235.25	78.34	248.76	-89.90	-4,159.61	-1,045.98	4,025.01	3,702.95	322.06	12.498	
9,700.00	7,234.85	7,174.85	7,234.85	80.96	248.75	-89.89	-4,159.61	-1,045.98	4,067.82	3,744.02	323.80	12.563	
9,800.00	7,234.46	7,174.46	7,234.46	83.59	248.74	-89.88	-4,159.61	-1,045.98	4,112.62	3,787.14	325.47	12.636	
9,900.00	7,234.07	7,174.07	7,234.07	86.24	248.72	-89.88	-4,159.61	-1,045.98	4,159.34	3,832.25	327.09	12.716	
10,000.00	7,233.67	7,173.67	7,233.67	88.90	248.71	-89.87	-4,159.61	-1,045.98	4,207.92	3,879.27	328.65	12.804	
10,100.00	7,233.28	7,173.28	7,233.28	91.57	248.70	-89.87	-4,159.61	-1,045.98	4,258.29	3,928.14	330.15	12.898	
10,200.00	7,232.89	7,172.89	7,232.89	94.25	248.68	-89.86	-4,159.61	-1,045.98	4,310.39	3,978.80	331.59	12.999	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,172.49	7,232.49	96.95	248.67	-89.85	-4,159.61	-1,045.98	4,364.17	4,031.19	332.98	13.107		
10,400.00	7,232.10	7,172.10	7,232.10	99.65	248.65	-89.85	-4,159.61	-1,045.98	4,419.55	4,085.24	334.30	13.220		
10,500.00	7,231.71	7,171.71	7,231.71	102.36	248.64	-89.84	-4,159.61	-1,045.98	4,476.48	4,140.90	335.58	13.340		
10,600.00	7,231.32	7,171.32	7,231.32	105.08	248.63	-89.83	-4,159.61	-1,045.98	4,534.90	4,198.11	336.79	13.465		
10,700.00	7,230.92	7,170.92	7,230.92	107.80	248.61	-89.83	-4,159.61	-1,045.98	4,594.76	4,256.80	337.96	13.596		
10,800.00	7,230.53	7,170.53	7,230.53	110.53	248.60	-89.82	-4,159.61	-1,045.98	4,655.99	4,316.92	339.08	13.731		
10,900.00	7,230.14	7,170.14	7,230.14	113.27	248.59	-89.82	-4,159.61	-1,045.98	4,718.55	4,378.41	340.14	13.872		
11,000.00	7,229.74	7,169.74	7,229.74	116.02	248.57	-89.81	-4,159.61	-1,045.98	4,782.38	4,441.22	341.16	14.018		
11,100.00	7,229.35	7,169.35	7,229.35	118.77	248.56	-89.80	-4,159.61	-1,045.98	4,847.44	4,505.31	342.13	14.168		
11,200.00	7,228.96	7,168.96	7,228.96	121.52	248.54	-89.80	-4,159.61	-1,045.98	4,913.66	4,570.61	343.06	14.323		
11,300.00	7,228.56	7,168.56	7,228.56	124.28	248.53	-89.79	-4,159.61	-1,045.98	4,981.02	4,637.08	343.94	14.482		
11,400.00	7,228.17	7,168.17	7,228.17	127.04	248.52	-89.79	-4,159.61	-1,045.98	5,049.46	4,704.67	344.79	14.645		
11,500.00	7,227.78	7,167.78	7,227.78	129.81	248.50	-89.78	-4,159.61	-1,045.98	5,118.93	4,773.34	345.60	14.812		
11,600.00	7,227.38	7,167.38	7,227.38	132.58	248.49	-89.77	-4,159.61	-1,045.98	5,189.41	4,843.04	346.36	14.982		
11,700.00	7,226.99	7,166.99	7,226.99	135.36	248.48	-89.77	-4,159.61	-1,045.98	5,260.84	4,913.74	347.10	15.157		
11,800.00	7,226.60	7,166.60	7,226.60	138.14	248.46	-89.76	-4,159.61	-1,045.98	5,333.18	4,985.39	347.80	15.334		
11,900.00	7,226.20	7,166.20	7,226.20	140.92	248.45	-89.75	-4,159.61	-1,045.98	5,406.41	5,057.95	348.46	15.515		
12,000.00	7,225.81	7,165.81	7,225.81	143.70	248.44	-89.75	-4,159.61	-1,045.98	5,480.49	5,131.39	349.10	15.699		
12,100.00	7,225.42	7,165.42	7,225.42	146.49	248.42	-89.74	-4,159.61	-1,045.98	5,555.38	5,205.67	349.71	15.886		
12,200.00	7,225.02	7,165.02	7,225.02	149.28	248.41	-89.74	-4,159.61	-1,045.98	5,631.05	5,280.76	350.29	16.076		
12,300.00	7,224.63	7,164.63	7,224.63	152.08	248.39	-89.73	-4,159.61	-1,045.98	5,707.46	5,356.63	350.84	16.268		
12,400.00	7,224.24	7,164.24	7,224.24	154.87	248.38	-89.72	-4,159.61	-1,045.98	5,784.60	5,433.24	351.36	16.463		
12,500.00	7,223.84	7,163.84	7,223.84	157.67	248.37	-89.72	-4,159.61	-1,045.98	5,862.43	5,510.56	351.87	16.661		
12,600.00	7,223.45	7,163.45	7,223.45	160.47	248.35	-89.71	-4,159.61	-1,045.98	5,940.92	5,588.57	352.35	16.861		
12,700.00	7,223.06	7,163.06	7,223.06	163.27	248.34	-89.71	-4,159.61	-1,045.98	6,020.05	5,667.24	352.80	17.063		
12,800.00	7,222.66	7,162.66	7,222.66	166.07	248.33	-89.70	-4,159.61	-1,045.98	6,099.79	5,746.55	353.24	17.268		
12,900.00	7,222.27	7,162.27	7,222.27	168.88	248.31	-89.69	-4,159.61	-1,045.98	6,180.12	5,826.46	353.66	17.475		
13,000.00	7,221.88	7,161.88	7,221.88	171.69	248.30	-89.69	-4,159.61	-1,045.98	6,261.02	5,906.96	354.06	17.684		
13,100.00	7,221.48	7,161.48	7,221.48	174.49	248.28	-89.68	-4,159.61	-1,045.98	6,342.46	5,988.02	354.44	17.894		
13,200.00	7,221.09	7,161.09	7,221.09	177.30	248.27	-89.67	-4,159.61	-1,045.98	6,424.43	6,069.63	354.80	18.107		
13,300.00	7,220.70	7,160.70	7,220.70	180.12	248.26	-89.67	-4,159.61	-1,045.98	6,506.90	6,151.75	355.15	18.322		
13,400.00	7,220.30	7,160.30	7,220.30	182.93	248.24	-89.66	-4,159.61	-1,045.98	6,589.85	6,234.37	355.48	18.538		
13,500.00	7,219.91	7,159.91	7,219.91	185.74	248.23	-89.66	-4,159.61	-1,045.98	6,673.28	6,317.48	355.80	18.756		
13,600.00	7,219.52	7,159.52	7,219.52	188.56	248.22	-89.65	-4,159.61	-1,045.98	6,757.15	6,401.05	356.10	18.975		
13,700.00	7,219.12	7,159.12	7,219.12	191.38	248.20	-89.64	-4,159.61	-1,045.98	6,841.46	6,485.06	356.39	19.196		
13,800.00	7,218.73	7,158.73	7,218.73	194.20	248.19	-89.64	-4,159.61	-1,045.98	6,926.18	6,569.51	356.67	19.419		
13,900.00	7,218.34	7,158.34	7,218.34	197.02	248.17	-89.63	-4,159.61	-1,045.98	7,011.31	6,654.37	356.94	19.643		
14,000.00	7,217.94	7,157.94	7,217.94	199.84	248.16	-89.63	-4,159.61	-1,045.98	7,096.82	6,739.63	357.19	19.868		
14,100.00	7,217.55	7,157.55	7,217.55	202.66	248.15	-89.62	-4,159.61	-1,045.98	7,182.71	6,825.27	357.44	20.095		
14,200.00	7,217.16	7,157.16	7,217.16	205.48	248.13	-89.61	-4,159.61	-1,045.98	7,268.96	6,911.29	357.67	20.323		
14,300.00	7,216.76	7,156.76	7,216.76	208.30	248.12	-89.61	-4,159.61	-1,045.98	7,355.56	6,997.66	357.90	20.552		
14,400.00	7,216.37	7,156.37	7,216.37	211.13	248.11	-89.60	-4,159.61	-1,045.98	7,442.49	7,084.38	358.11	20.782		
14,500.00	7,215.98	7,155.98	7,215.98	213.96	248.09	-89.59	-4,159.61	-1,045.98	7,529.75	7,171.43	358.32	21.014		
14,600.00	7,215.58	7,155.58	7,215.58	216.78	248.08	-89.59	-4,159.61	-1,045.98	7,617.32	7,258.80	358.52	21.247		
14,700.00	7,215.19	7,155.19	7,215.19	219.61	248.06	-89.58	-4,159.61	-1,045.98	7,705.19	7,346.48	358.71	21.480		
14,800.00	7,214.80	7,154.80	7,214.80	222.44	248.05	-89.58	-4,159.61	-1,045.98	7,793.36	7,434.47	358.89	21.715		
14,900.00	7,214.40	7,154.40	7,214.40	225.27	248.04	-89.57	-4,159.61	-1,045.98	7,881.81	7,522.74	359.07	21.951		
15,000.00	7,214.01	7,154.01	7,214.01	228.10	248.02	-89.56	-4,159.61	-1,045.98	7,970.53	7,611.29	359.24	22.187		
15,002.44	7,214.00	7,154.00	7,214.00	228.16	248.02	-89.56	-4,159.61	-1,045.98	7,972.70	7,613.45	359.24	22.193		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	5.00	0.00	3.28	3.28	-43.35	1,231.02	-1,162.00	1,692.82					
100.00	100.00	105.00	100.00	3.28	3.80	-43.35	1,231.02	-1,162.00	1,692.82	1,685.74	7.09	238.919		
200.00	200.00	205.00	200.00	3.34	6.33	-43.35	1,231.02	-1,162.00	1,692.82	1,683.16	9.66	175.157		
300.00	300.00	305.00	300.00	3.44	9.49	-43.35	1,231.02	-1,162.00	1,692.82	1,679.89	12.93	130.902		
400.00	400.00	405.00	400.00	3.60	12.82	-43.35	1,231.02	-1,162.00	1,692.82	1,676.40	16.42	103.076		
500.00	500.00	505.00	500.00	3.81	16.22	-43.35	1,231.02	-1,162.00	1,692.82	1,672.80	20.03	84.535 CC		
600.00	599.98	605.02	599.98	4.03	19.65	118.53	1,231.02	-1,162.00	1,693.66	1,669.97	23.69	71.505		
700.00	699.84	705.16	699.84	4.29	23.11	118.64	1,231.02	-1,162.00	1,696.16	1,668.77	27.39	61.924		
800.00	799.54	805.46	799.54	4.57	26.58	118.85	1,231.02	-1,162.00	1,699.89	1,668.75	31.14	54.584		
900.00	899.23	905.77	899.23	4.87	30.05	119.08	1,231.02	-1,162.00	1,703.70	1,668.77	34.93	48.779		
1,000.00	998.92	1,006.08	998.92	5.20	33.54	119.31	1,231.02	-1,162.00	1,707.54	1,668.80	38.74	44.081		
1,100.00	1,098.61	1,106.39	1,098.61	5.54	37.02	119.54	1,231.02	-1,162.00	1,711.40	1,668.83	42.57	40.205		
1,200.00	1,198.30	1,206.70	1,198.30	5.90	40.51	119.77	1,231.02	-1,162.00	1,715.29	1,668.88	46.41	36.957		
1,300.00	1,298.00	1,307.00	1,298.00	6.27	44.00	119.99	1,231.02	-1,162.00	1,719.21	1,668.93	50.27	34.196		
1,400.00	1,397.69	1,407.31	1,397.69	6.66	47.50	120.22	1,231.02	-1,162.00	1,723.15	1,669.01	54.15	31.824		
1,500.00	1,497.38	1,507.62	1,497.38	7.05	50.99	120.44	1,231.02	-1,162.00	1,727.13	1,669.10	58.03	29.763		
1,600.00	1,597.07	1,607.93	1,597.07	7.44	54.49	120.66	1,231.02	-1,162.00	1,731.12	1,669.20	61.92	27.958		
1,700.00	1,696.76	1,708.24	1,696.76	7.85	57.98	120.89	1,231.02	-1,162.00	1,735.15	1,669.33	65.81	26.364		
1,800.00	1,796.45	1,808.55	1,796.45	8.25	61.48	121.11	1,231.02	-1,162.00	1,739.20	1,669.48	69.72	24.947		
1,900.00	1,896.15	1,908.85	1,896.15	8.67	64.98	121.33	1,231.02	-1,162.00	1,743.27	1,669.65	73.62	23.679		
2,000.00	1,995.84	2,009.16	1,995.84	9.08	68.47	121.55	1,231.02	-1,162.00	1,747.37	1,669.84	77.53	22.537		
2,100.00	2,095.53	2,109.47	2,095.53	9.50	71.97	121.77	1,231.02	-1,162.00	1,751.50	1,670.05	81.45	21.505		
2,200.00	2,195.22	2,209.78	2,195.22	9.92	75.47	121.98	1,231.02	-1,162.00	1,755.65	1,670.29	85.36	20.567		
2,300.00	2,294.91	2,289.91	2,294.91	10.35	78.26	122.20	1,231.02	-1,162.00	1,759.83	1,671.25	88.58	19.867		
2,400.00	2,394.60	2,389.60	2,394.60	10.77	81.74	122.41	1,231.02	-1,162.00	1,764.03	1,671.55	92.48	19.074		
2,500.00	2,494.30	2,489.30	2,494.30	11.20	85.22	122.63	1,231.02	-1,162.00	1,768.26	1,671.88	96.39	18.346		
2,600.00	2,593.99	2,588.99	2,593.99	11.63	88.70	122.84	1,231.02	-1,162.00	1,772.51	1,672.22	100.29	17.674		
2,700.00	2,693.68	2,688.68	2,693.68	12.07	92.17	123.05	1,231.02	-1,162.00	1,776.79	1,672.59	104.20	17.052		
2,800.00	2,793.37	2,788.37	2,793.37	12.50	95.65	123.27	1,231.02	-1,162.00	1,781.09	1,672.99	108.11	16.476		
2,900.00	2,893.06	2,888.06	2,893.06	12.93	99.13	123.48	1,231.02	-1,162.00	1,785.42	1,673.40	112.01	15.939		
3,000.00	2,992.76	2,987.76	2,992.76	13.37	102.61	123.68	1,231.02	-1,162.00	1,789.77	1,673.84	115.93	15.439		
3,100.00	3,092.45	3,087.45	3,092.45	13.81	106.09	123.89	1,231.02	-1,162.00	1,794.14	1,674.30	119.84	14.971		
3,200.00	3,192.14	3,187.14	3,192.14	14.25	109.57	124.10	1,231.02	-1,162.00	1,798.54	1,674.79	123.75	14.534		
3,300.00	3,291.83	3,286.83	3,291.83	14.68	113.05	124.31	1,231.02	-1,162.00	1,802.96	1,675.29	127.66	14.123		
3,400.00	3,391.52	3,386.52	3,391.52	15.12	116.52	124.51	1,231.02	-1,162.00	1,807.40	1,675.82	131.58	13.736		
3,500.00	3,491.21	3,486.21	3,491.21	15.56	120.00	124.71	1,231.02	-1,162.00	1,811.87	1,676.37	135.49	13.372		
3,600.00	3,590.91	3,585.91	3,590.91	16.00	123.48	124.92	1,231.02	-1,162.00	1,816.35	1,676.94	139.41	13.029		
3,700.00	3,690.60	3,685.60	3,690.60	16.45	126.96	125.12	1,231.02	-1,162.00	1,820.87	1,677.54	143.33	12.704		
3,800.00	3,790.29	3,785.29	3,790.29	16.89	130.44	125.32	1,231.02	-1,162.00	1,825.40	1,678.16	147.24	12.397		
3,900.00	3,889.98	3,884.98	3,889.98	17.33	133.92	125.52	1,231.02	-1,162.00	1,829.96	1,678.80	151.16	12.106		
4,000.00	3,989.67	3,984.67	3,989.67	17.77	137.40	125.72	1,231.02	-1,162.00	1,834.54	1,679.46	155.08	11.830		
4,100.00	4,089.36	4,084.36	4,089.36	18.22	140.88	125.92	1,231.02	-1,162.00	1,839.14	1,680.14	159.00	11.567		
4,200.00	4,189.06	4,184.06	4,189.06	18.66	144.36	126.12	1,231.02	-1,162.00	1,843.76	1,680.85	162.92	11.317		
4,300.00	4,288.75	4,283.75	4,288.75	19.10	147.84	126.31	1,231.02	-1,162.00	1,848.41	1,681.57	166.83	11.079		
4,400.00	4,388.44	4,383.44	4,388.44	19.55	151.32	126.51	1,231.02	-1,162.00	1,853.07	1,682.32	170.75	10.852		
4,500.00	4,488.13	4,483.13	4,488.13	19.99	154.80	126.70	1,231.02	-1,162.00	1,857.76	1,683.09	174.67	10.636		
4,600.00	4,587.82	4,582.82	4,587.82	20.44	158.28	126.89	1,231.02	-1,162.00	1,862.47	1,683.87	178.59	10.429		
4,700.00	4,687.51	4,682.51	4,687.51	20.89	161.75	127.09	1,231.02	-1,162.00	1,867.20	1,684.68	182.51	10.230		
4,800.00	4,787.21	4,782.21	4,787.21	21.33	165.23	127.28	1,231.02	-1,162.00	1,871.95	1,685.52	186.44	10.041		
4,900.00	4,886.90	4,881.90	4,886.90	21.78	168.71	127.47	1,231.02	-1,162.00	1,876.72	1,686.37	190.36	9.859		
5,000.00	4,986.59	4,981.59	4,986.59	22.22	172.19	127.66	1,231.02	-1,162.00	1,881.51	1,687.24	194.28	9.685		
5,100.00	5,086.28	5,081.28	5,086.28	22.67	175.67	127.84	1,231.02	-1,162.00	1,886.33	1,688.13	198.20	9.517		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,180.97	5,185.97	23.12	179.15	128.03	1,231.02	-1,162.00	1,891.16	1,689.04	202.12	9.357		
5,300.00	5,285.66	5,280.66	5,285.66	23.56	182.63	128.22	1,231.02	-1,162.00	1,896.01	1,689.97	206.04	9.202		
5,400.00	5,385.36	5,380.36	5,385.36	24.01	186.11	128.40	1,231.02	-1,162.00	1,900.89	1,690.92	209.96	9.053		
5,500.00	5,485.05	5,480.05	5,485.05	24.46	189.59	128.59	1,231.02	-1,162.00	1,905.78	1,691.90	213.88	8.910		
5,600.00	5,584.74	5,579.74	5,584.74	24.90	193.07	128.77	1,231.02	-1,162.00	1,910.69	1,692.89	217.81	8.772		
5,700.00	5,684.43	5,679.43	5,684.43	25.35	196.55	128.95	1,231.02	-1,162.00	1,915.63	1,693.90	221.73	8.640		
5,800.00	5,784.12	5,779.12	5,784.12	25.80	200.03	129.14	1,231.02	-1,162.00	1,920.58	1,694.93	225.65	8.511		
5,900.00	5,883.81	5,878.81	5,883.81	26.25	203.51	129.32	1,231.02	-1,162.00	1,925.55	1,695.98	229.57	8.388		
6,000.00	5,983.51	5,978.51	5,983.51	26.70	206.99	129.50	1,231.02	-1,162.00	1,930.54	1,697.04	233.50	8.268		
6,100.00	6,083.20	6,078.20	6,083.20	27.14	210.47	129.68	1,231.02	-1,162.00	1,935.55	1,698.13	237.42	8.152		
6,200.00	6,182.89	6,177.89	6,182.89	27.59	213.95	129.85	1,231.02	-1,162.00	1,940.58	1,699.24	241.34	8.041		
6,300.00	6,282.58	6,277.58	6,282.58	28.04	217.43	130.03	1,231.02	-1,162.00	1,945.62	1,700.36	245.26	7.933		
6,400.00	6,382.27	6,377.27	6,382.27	28.49	220.91	130.21	1,231.02	-1,162.00	1,950.69	1,701.50	249.19	7.828		
6,500.00	6,481.96	6,476.96	6,481.96	28.94	224.39	130.38	1,231.02	-1,162.00	1,955.77	1,702.66	253.11	7.727		
6,600.00	6,581.66	6,576.66	6,581.66	29.39	227.87	130.56	1,231.02	-1,162.00	1,960.87	1,703.84	257.03	7.629		
6,700.00	6,681.21	6,676.21	6,681.21	29.83	231.34	92.19	1,231.02	-1,162.00	1,964.67	1,703.72	260.95	7.529		
6,800.00	6,778.96	6,773.96	6,778.96	30.28	234.76	75.58	1,231.02	-1,162.00	1,961.29	1,696.49	264.80	7.407		
6,900.00	6,872.51	6,867.51	6,872.51	30.70	238.02	72.02	1,231.02	-1,162.00	1,950.51	1,682.02	268.49	7.265		
7,000.00	6,959.55	6,954.55	6,959.55	31.10	241.06	72.16	1,231.02	-1,162.00	1,933.23	1,661.29	271.94	7.109		
7,100.00	7,037.93	7,032.93	7,037.93	31.48	243.80	74.09	1,231.02	-1,162.00	1,910.74	1,635.63	275.11	6.945		
7,200.00	7,105.74	7,100.74	7,105.74	31.88	246.16	77.03	1,231.02	-1,162.00	1,884.62	1,606.65	277.96	6.780		
7,300.00	7,161.29	7,156.29	7,161.29	32.41	248.10	80.44	1,231.02	-1,162.00	1,856.60	1,576.11	280.49	6.619		
7,400.00	7,203.22	7,201.78	7,203.22	33.13	249.69	83.89	1,231.02	-1,162.00	1,828.47	1,545.66	282.82	6.465		
7,500.00	7,230.50	7,225.50	7,230.50	34.04	250.52	86.99	1,231.02	-1,162.00	1,801.93	1,517.37	284.56	6.332		
7,600.00	7,242.45	7,237.45	7,242.45	35.13	250.94	89.47	1,231.02	-1,162.00	1,778.39	1,492.32	286.07	6.217		
7,700.00	7,242.72	7,237.72	7,242.72	36.39	250.95	90.04	1,231.02	-1,162.00	1,759.13	1,471.80	287.33	6.122		
7,800.00	7,242.33	7,237.33	7,242.33	37.81	250.93	90.02	1,231.02	-1,162.00	1,745.35	1,456.60	288.74	6.045		
7,900.00	7,241.93	7,236.93	7,241.93	39.40	250.92	90.01	1,231.02	-1,162.00	1,737.22	1,446.93	290.29	5.984		
7,991.51	7,241.57	7,236.57	7,241.57	40.98	250.91	90.00	1,231.02	-1,162.00	1,734.81	1,443.00	291.80	5.945		
8,000.00	7,241.54	7,236.54	7,241.54	41.13	250.90	90.00	1,231.02	-1,162.00	1,734.83	1,442.89	291.94	5.942 ES		
8,100.00	7,241.15	7,236.15	7,241.15	42.97	250.89	89.99	1,231.02	-1,162.00	1,738.20	1,444.55	293.64	5.919		
8,200.00	7,240.75	7,235.75	7,240.75	44.92	250.88	89.97	1,231.02	-1,162.00	1,747.29	1,451.93	295.37	5.916 SF		
8,300.00	7,240.36	7,235.36	7,240.36	46.97	250.86	89.96	1,231.02	-1,162.00	1,762.02	1,464.95	297.07	5.931		
8,400.00	7,239.97	7,234.97	7,239.97	49.10	250.85	89.95	1,231.02	-1,162.00	1,782.25	1,483.53	298.72	5.966		
8,500.00	7,239.57	7,234.57	7,239.57	51.29	250.84	89.93	1,231.02	-1,162.00	1,807.79	1,507.49	300.30	6.020		
8,600.00	7,239.18	7,234.18	7,239.18	53.56	250.82	89.92	1,231.02	-1,162.00	1,838.43	1,536.64	301.79	6.092		
8,700.00	7,238.79	7,233.79	7,238.79	55.87	250.81	89.91	1,231.02	-1,162.00	1,873.90	1,570.73	303.17	6.181		
8,800.00	7,238.39	7,233.39	7,238.39	58.24	250.79	89.89	1,231.02	-1,162.00	1,913.95	1,609.51	304.44	6.287		
8,900.00	7,238.00	7,233.00	7,238.00	60.64	250.78	89.88	1,231.02	-1,162.00	1,958.29	1,652.70	305.60	6.408		
9,000.00	7,237.61	7,232.61	7,237.61	63.09	250.77	89.87	1,231.02	-1,162.00	2,006.64	1,700.00	306.64	6.544		
9,100.00	7,237.21	7,232.21	7,237.21	65.56	250.75	89.86	1,231.02	-1,162.00	2,058.71	1,751.14	307.57	6.693		
9,200.00	7,236.82	7,231.82	7,236.82	68.07	250.74	89.84	1,231.02	-1,162.00	2,114.24	1,805.83	308.40	6.855		
9,300.00	7,236.43	7,231.43	7,236.43	70.61	250.73	89.83	1,231.02	-1,162.00	2,172.94	1,863.81	309.14	7.029		
9,400.00	7,236.03	7,231.03	7,236.03	73.16	250.71	89.82	1,231.02	-1,162.00	2,234.59	1,924.81	309.78	7.213		
9,500.00	7,235.64	7,230.64	7,235.64	75.74	250.70	89.80	1,231.02	-1,162.00	2,298.93	1,988.58	310.34	7.408		
9,600.00	7,235.25	7,230.25	7,235.25	78.34	250.68	89.79	1,231.02	-1,162.00	2,365.75	2,054.91	310.84	7.611		
9,700.00	7,234.85	7,229.85	7,234.85	80.96	250.67	89.78	1,231.02	-1,162.00	2,434.84	2,123.58	311.26	7.823		
9,800.00	7,234.46	7,229.46	7,234.46	83.59	250.66	89.77	1,231.02	-1,162.00	2,506.02	2,194.40	311.63	8.042		
9,900.00	7,234.07	7,229.07	7,234.07	86.24	250.64	89.75	1,231.02	-1,162.00	2,579.12	2,267.17	311.95	8.268		
10,000.00	7,233.67	7,228.67	7,233.67	88.90	250.63	89.74	1,231.02	-1,162.00	2,653.97	2,341.75	312.22	8.500		
10,100.00	7,233.28	7,228.28	7,233.28	91.57	250.62	89.73	1,231.02	-1,162.00	2,730.43	2,417.98	312.45	8.739		
10,200.00	7,232.89	7,227.89	7,232.89	94.25	250.60	89.71	1,231.02	-1,162.00	2,808.37	2,495.73	312.64	8.983		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,227.49	7,232.49	96.95	250.59	89.70	1,231.02	-1,162.00	2,887.67	2,574.86	312.81	9.231		
10,400.00	7,232.10	7,227.10	7,232.10	99.65	250.57	89.69	1,231.02	-1,162.00	2,968.22	2,655.27	312.94	9.485		
10,500.00	7,231.71	7,226.71	7,231.71	102.36	250.56	89.67	1,231.02	-1,162.00	3,049.92	2,736.86	313.06	9.742		
10,600.00	7,231.32	7,226.32	7,231.32	105.08	250.55	89.66	1,231.02	-1,162.00	3,132.68	2,819.53	313.15	10.004		
10,700.00	7,230.92	7,225.92	7,230.92	107.80	250.53	89.65	1,231.02	-1,162.00	3,216.42	2,903.20	313.23	10.269		
10,800.00	7,230.53	7,225.53	7,230.53	110.53	250.52	89.64	1,231.02	-1,162.00	3,301.07	2,987.78	313.29	10.537		
10,900.00	7,230.14	7,225.14	7,230.14	113.27	250.51	89.62	1,231.02	-1,162.00	3,386.56	3,073.22	313.34	10.808		
11,000.00	7,229.74	7,224.74	7,229.74	116.02	250.49	89.61	1,231.02	-1,162.00	3,472.82	3,159.44	313.37	11.082		
11,100.00	7,229.35	7,224.35	7,229.35	118.77	250.48	89.60	1,231.02	-1,162.00	3,559.80	3,246.40	313.40	11.359		
11,200.00	7,228.96	7,223.96	7,228.96	121.52	250.46	89.58	1,231.02	-1,162.00	3,647.44	3,334.03	313.42	11.638		
11,300.00	7,228.56	7,223.56	7,228.56	124.28	250.45	89.57	1,231.02	-1,162.00	3,735.71	3,422.28	313.43	11.919		
11,400.00	7,228.17	7,223.17	7,228.17	127.04	250.44	89.56	1,231.02	-1,162.00	3,824.55	3,511.12	313.43	12.202		
11,500.00	7,227.78	7,222.78	7,227.78	129.81	250.42	89.54	1,231.02	-1,162.00	3,913.94	3,600.51	313.43	12.487		
11,600.00	7,227.38	7,222.38	7,227.38	132.58	250.41	89.53	1,231.02	-1,162.00	4,003.82	3,690.40	313.42	12.774		
11,700.00	7,226.99	7,221.99	7,226.99	135.36	250.40	89.52	1,231.02	-1,162.00	4,094.18	3,780.76	313.41	13.063		
11,800.00	7,226.60	7,221.60	7,226.60	138.14	250.38	89.51	1,231.02	-1,162.00	4,184.97	3,871.57	313.40	13.353		
11,900.00	7,226.20	7,221.20	7,226.20	140.92	250.37	89.49	1,231.02	-1,162.00	4,276.17	3,962.79	313.39	13.645		
12,000.00	7,225.81	7,220.81	7,225.81	143.70	250.35	89.48	1,231.02	-1,162.00	4,367.76	4,054.39	313.37	13.938		
12,100.00	7,225.42	7,220.42	7,225.42	146.49	250.34	89.47	1,231.02	-1,162.00	4,459.71	4,146.36	313.35	14.232		
12,200.00	7,225.02	7,220.02	7,225.02	149.28	250.33	89.45	1,231.02	-1,162.00	4,552.00	4,238.67	313.33	14.528		
12,300.00	7,224.63	7,219.63	7,224.63	152.08	250.31	89.44	1,231.02	-1,162.00	4,644.61	4,331.30	313.31	14.824		
12,400.00	7,224.24	7,219.24	7,224.24	154.87	250.30	89.43	1,231.02	-1,162.00	4,737.52	4,424.23	313.29	15.122		
12,500.00	7,223.84	7,218.84	7,223.84	157.67	250.29	89.41	1,231.02	-1,162.00	4,830.71	4,517.45	313.26	15.421		
12,600.00	7,223.45	7,218.45	7,223.45	160.47	250.27	89.40	1,231.02	-1,162.00	4,924.17	4,610.93	313.24	15.720		
12,700.00	7,223.06	7,218.06	7,223.06	163.27	250.26	89.39	1,231.02	-1,162.00	5,017.88	4,704.66	313.22	16.020		
12,800.00	7,222.66	7,217.66	7,222.66	166.07	250.25	89.38	1,231.02	-1,162.00	5,111.83	4,798.63	313.20	16.322		
12,900.00	7,222.27	7,217.27	7,222.27	168.88	250.23	89.36	1,231.02	-1,162.00	5,206.01	4,892.83	313.17	16.623		
13,000.00	7,221.88	7,216.88	7,221.88	171.69	250.22	89.35	1,231.02	-1,162.00	5,300.39	4,987.24	313.15	16.926		
13,100.00	7,221.48	7,216.48	7,221.48	174.49	250.20	89.34	1,231.02	-1,162.00	5,394.99	5,081.86	313.13	17.229		
13,200.00	7,221.09	7,216.09	7,221.09	177.30	250.19	89.32	1,231.02	-1,162.00	5,489.77	5,176.66	313.11	17.533		
13,300.00	7,220.70	7,215.70	7,220.70	180.12	250.18	89.31	1,231.02	-1,162.00	5,584.73	5,271.64	313.09	17.838		
13,400.00	7,220.30	7,215.30	7,220.30	182.93	250.16	89.30	1,231.02	-1,162.00	5,679.87	5,366.80	313.07	18.143		
13,500.00	7,219.91	7,214.91	7,219.91	185.74	250.15	89.28	1,231.02	-1,162.00	5,775.17	5,462.12	313.05	18.448		
13,600.00	7,219.52	7,214.52	7,219.52	188.56	250.14	89.27	1,231.02	-1,162.00	5,870.63	5,557.60	313.03	18.754		
13,700.00	7,219.12	7,214.12	7,219.12	191.38	250.12	89.26	1,231.02	-1,162.00	5,966.23	5,653.22	313.02	19.060		
13,800.00	7,218.73	7,213.73	7,218.73	194.20	250.11	89.25	1,231.02	-1,162.00	6,061.98	5,748.98	313.00	19.367		
13,900.00	7,218.34	7,213.34	7,218.34	197.02	250.09	89.23	1,231.02	-1,162.00	6,157.87	5,844.88	312.98	19.675		
14,000.00	7,217.94	7,212.94	7,217.94	199.84	250.08	89.22	1,231.02	-1,162.00	6,253.88	5,940.91	312.97	19.982		
14,100.00	7,217.55	7,212.55	7,217.55	202.66	250.07	89.21	1,231.02	-1,162.00	6,350.01	6,037.06	312.96	20.290		
14,200.00	7,217.16	7,212.16	7,217.16	205.48	250.05	89.19	1,231.02	-1,162.00	6,446.27	6,133.32	312.95	20.599		
14,300.00	7,216.76	7,211.76	7,216.76	208.30	250.04	89.18	1,231.02	-1,162.00	6,542.63	6,229.70	312.93	20.907		
14,400.00	7,216.37	7,211.37	7,216.37	211.13	250.03	89.17	1,231.02	-1,162.00	6,639.11	6,326.18	312.92	21.216		
14,500.00	7,215.98	7,210.98	7,215.98	213.96	250.01	89.15	1,231.02	-1,162.00	6,735.68	6,422.76	312.92	21.526		
14,600.00	7,215.58	7,210.58	7,215.58	216.78	250.00	89.14	1,231.02	-1,162.00	6,832.36	6,519.45	312.91	21.835		
14,700.00	7,215.19	7,210.19	7,215.19	219.61	249.98	89.13	1,231.02	-1,162.00	6,929.12	6,616.22	312.90	22.145		
14,800.00	7,214.80	7,209.80	7,214.80	222.44	249.97	89.12	1,231.02	-1,162.00	7,025.98	6,713.09	312.90	22.455		
14,900.00	7,214.40	7,209.40	7,214.40	225.27	249.96	89.10	1,231.02	-1,162.00	7,122.93	6,810.04	312.89	22.765		
15,000.00	7,214.01	7,209.01	7,214.01	228.10	249.94	89.09	1,231.02	-1,162.00	7,219.96	6,907.07	312.89	23.075		
15,002.44	7,214.00	7,209.00	7,214.00	228.16	249.94	89.09	1,231.02	-1,162.00	7,222.32	6,909.43	312.89	23.083		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	19.00	3.28	3.28	-93.79	-73.20	-1,103.66	1,106.24					
100.00	100.00	81.00	100.00	3.28	3.57	-93.79	-73.20	-1,103.66	1,106.08	1,099.22	6.86	161.320		
200.00	200.00	181.00	200.00	3.34	5.63	-93.79	-73.20	-1,103.66	1,106.08	1,097.12	8.96	123.379		
300.00	300.00	281.00	300.00	3.44	8.71	-93.79	-73.20	-1,103.66	1,106.08	1,093.93	12.15	91.031		
400.00	400.00	381.00	400.00	3.60	12.01	-93.79	-73.20	-1,103.66	1,106.08	1,090.47	15.62	70.834		
500.00	500.00	481.00	500.00	3.81	15.40	-93.79	-73.20	-1,103.66	1,106.08	1,086.88	19.21	57.592		
600.00	599.98	580.98	599.98	4.03	18.82	68.14	-73.20	-1,103.66	1,105.43	1,082.57	22.86	48.359		
700.00	699.84	680.84	699.84	4.29	22.27	68.43	-73.20	-1,103.66	1,103.49	1,076.94	26.55	41.563		
800.00	799.54	780.54	799.54	4.57	25.71	68.81	-73.20	-1,103.66	1,100.66	1,070.39	30.28	36.352		
900.00	899.23	880.23	899.23	4.87	29.17	69.19	-73.20	-1,103.66	1,097.84	1,063.80	34.04	32.253		
1,000.00	998.92	979.92	998.92	5.20	32.63	69.58	-73.20	-1,103.66	1,095.07	1,057.25	37.83	28.950		
1,100.00	1,098.61	1,079.61	1,098.61	5.54	36.09	69.96	-73.20	-1,103.66	1,092.35	1,050.72	41.64	26.236		
1,200.00	1,198.30	1,179.30	1,198.30	5.90	39.56	70.35	-73.20	-1,103.66	1,089.68	1,044.22	45.46	23.970		
1,300.00	1,298.00	1,279.00	1,298.00	6.27	43.03	70.73	-73.20	-1,103.66	1,087.06	1,037.76	49.30	22.049		
1,400.00	1,397.69	1,378.69	1,397.69	6.66	46.50	71.12	-73.20	-1,103.66	1,084.49	1,031.34	53.15	20.403		
1,500.00	1,497.38	1,478.38	1,497.38	7.05	49.97	71.52	-73.20	-1,103.66	1,081.97	1,024.96	57.01	18.977		
1,600.00	1,597.07	1,578.07	1,597.07	7.44	53.45	71.91	-73.20	-1,103.66	1,079.50	1,018.62	60.88	17.730		
1,700.00	1,696.76	1,677.76	1,696.76	7.85	56.92	72.31	-73.20	-1,103.66	1,077.08	1,012.32	64.76	16.632		
1,800.00	1,796.45	1,777.45	1,796.45	8.25	60.39	72.70	-73.20	-1,103.66	1,074.72	1,006.08	68.64	15.657		
1,900.00	1,896.15	1,877.15	1,896.15	8.67	63.87	73.10	-73.20	-1,103.66	1,072.41	999.88	72.53	14.786		
2,000.00	1,995.84	1,976.84	1,995.84	9.08	67.35	73.50	-73.20	-1,103.66	1,070.14	993.72	76.42	14.003		
2,100.00	2,095.53	2,076.53	2,095.53	9.50	70.82	73.91	-73.20	-1,103.66	1,067.94	987.62	80.32	13.297		
2,200.00	2,195.22	2,176.22	2,195.22	9.92	74.30	74.31	-73.20	-1,103.66	1,065.78	981.57	84.22	12.655		
2,300.00	2,294.91	2,275.91	2,294.91	10.35	77.78	74.72	-73.20	-1,103.66	1,063.68	975.56	88.12	12.071		
2,400.00	2,394.60	2,375.60	2,394.60	10.77	81.25	75.12	-73.20	-1,103.66	1,061.63	969.61	92.02	11.537		
2,500.00	2,494.30	2,475.30	2,494.30	11.20	84.73	75.53	-73.20	-1,103.66	1,059.64	963.71	95.93	11.046		
2,600.00	2,593.99	2,574.99	2,593.99	11.63	88.21	75.94	-73.20	-1,103.66	1,057.70	957.87	99.84	10.594		
2,700.00	2,693.68	2,674.68	2,693.68	12.07	91.69	76.35	-73.20	-1,103.66	1,055.82	952.07	103.75	10.177		
2,800.00	2,793.37	2,774.37	2,793.37	12.50	95.16	76.77	-73.20	-1,103.66	1,053.99	946.33	107.66	9.790		
2,900.00	2,893.06	2,874.06	2,893.06	12.93	98.64	77.18	-73.20	-1,103.66	1,052.22	940.64	111.57	9.431		
3,000.00	2,992.76	2,973.76	2,992.76	13.37	102.12	77.60	-73.20	-1,103.66	1,050.50	935.01	115.49	9.096		
3,100.00	3,092.45	3,073.45	3,092.45	13.81	105.60	78.02	-73.20	-1,103.66	1,048.84	929.43	119.40	8.784		
3,200.00	3,192.14	3,173.14	3,192.14	14.25	109.08	78.43	-73.20	-1,103.66	1,047.23	923.91	123.32	8.492		
3,300.00	3,291.83	3,272.83	3,291.83	14.68	112.56	78.85	-73.20	-1,103.66	1,045.68	918.45	127.24	8.218		
3,400.00	3,391.52	3,372.52	3,391.52	15.12	116.04	79.28	-73.20	-1,103.66	1,044.19	913.03	131.15	7.962		
3,500.00	3,491.21	3,472.21	3,491.21	15.56	119.51	79.70	-73.20	-1,103.66	1,042.75	907.68	135.07	7.720		
3,600.00	3,590.91	3,571.91	3,590.91	16.00	122.99	80.12	-73.20	-1,103.66	1,041.37	902.38	138.99	7.492		
3,700.00	3,690.60	3,671.60	3,690.60	16.45	126.47	80.55	-73.20	-1,103.66	1,040.05	897.14	142.91	7.277		
3,800.00	3,790.29	3,771.29	3,790.29	16.89	129.95	80.97	-73.20	-1,103.66	1,038.79	891.95	146.84	7.074		
3,900.00	3,889.98	3,870.98	3,889.98	17.33	133.43	81.40	-73.20	-1,103.66	1,037.58	886.82	150.76	6.882		
4,000.00	3,989.67	3,970.67	3,989.67	17.77	136.91	81.83	-73.20	-1,103.66	1,036.43	881.75	154.68	6.700		
4,100.00	4,089.36	4,070.36	4,089.36	18.22	140.39	82.25	-73.20	-1,103.66	1,035.34	876.74	158.60	6.528		
4,200.00	4,189.06	4,170.06	4,189.06	18.66	143.87	82.68	-73.20	-1,103.66	1,034.31	871.79	162.53	6.364		
4,300.00	4,288.75	4,269.75	4,288.75	19.10	147.35	83.11	-73.20	-1,103.66	1,033.34	866.89	166.45	6.208		
4,400.00	4,388.44	4,369.44	4,388.44	19.55	150.83	83.54	-73.20	-1,103.66	1,032.42	862.05	170.37	6.060		
4,500.00	4,488.13	4,469.13	4,488.13	19.99	154.31	83.98	-73.20	-1,103.66	1,031.57	857.27	174.30	5.918		
4,600.00	4,587.82	4,568.82	4,587.82	20.44	157.79	84.41	-73.20	-1,103.66	1,030.77	852.55	178.22	5.784		
4,700.00	4,687.51	4,668.51	4,687.51	20.89	161.27	84.84	-73.20	-1,103.66	1,030.04	847.89	182.15	5.655		
4,800.00	4,787.21	4,768.21	4,787.21	21.33	164.75	85.28	-73.20	-1,103.66	1,029.36	843.28	186.08	5.532		
4,900.00	4,886.90	4,867.90	4,886.90	21.78	168.23	85.71	-73.20	-1,103.66	1,028.74	838.74	190.00	5.414		
5,000.00	4,986.59	4,967.59	4,986.59	22.22	171.70	86.14	-73.20	-1,103.66	1,028.18	834.25	193.93	5.302		
5,100.00	5,086.28	5,067.28	5,086.28	22.67	175.18	86.58	-73.20	-1,103.66	1,027.68	829.83	197.85	5.194		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,166.97	5,185.97	23.12	178.66	87.02	-73.20	-1,103.66	1,027.24	825.46	201.78	5.091		
5,300.00	5,285.66	5,266.66	5,285.66	23.56	182.14	87.45	-73.20	-1,103.66	1,026.86	821.16	205.71	4.992		
5,400.00	5,385.36	5,366.36	5,385.36	24.01	185.62	87.89	-73.20	-1,103.66	1,026.54	816.91	209.63	4.897		
5,500.00	5,485.05	5,466.05	5,485.05	24.46	189.10	88.32	-73.20	-1,103.66	1,026.28	812.72	213.56	4.806		
5,600.00	5,584.74	5,565.74	5,584.74	24.90	192.58	88.76	-73.20	-1,103.66	1,026.08	808.59	217.49	4.718		
5,700.00	5,684.43	5,665.43	5,684.43	25.35	196.06	89.20	-73.20	-1,103.66	1,025.94	804.53	221.41	4.634		
5,800.00	5,784.12	5,765.12	5,784.12	25.80	199.54	89.63	-73.20	-1,103.66	1,025.86	800.52	225.34	4.552		
5,883.81	5,867.67	5,848.67	5,867.67	26.18	202.46	90.00	-73.20	-1,103.66	1,025.84	797.21	228.63	4.487		
5,900.00	5,883.81	5,864.81	5,883.81	26.25	203.02	90.07	-73.20	-1,103.66	1,025.84	796.57	229.27	4.474		
6,000.00	5,983.51	5,964.51	5,983.51	26.70	206.50	90.51	-73.20	-1,103.66	1,025.88	792.68	233.20	4.399		
6,100.00	6,083.20	6,064.20	6,083.20	27.14	209.98	90.94	-73.20	-1,103.66	1,025.98	788.86	237.12	4.327		
6,200.00	6,182.89	6,163.89	6,182.89	27.59	213.46	91.38	-73.20	-1,103.66	1,026.14	785.09	241.05	4.257		
6,300.00	6,282.58	6,263.58	6,282.58	28.04	216.94	91.82	-73.20	-1,103.66	1,026.36	781.38	244.98	4.190		
6,400.00	6,382.27	6,363.27	6,382.27	28.49	220.42	92.25	-73.20	-1,103.66	1,026.64	777.73	248.91	4.125		
6,500.00	6,481.96	6,462.96	6,481.96	28.94	223.90	92.69	-73.20	-1,103.66	1,026.98	774.14	252.84	4.062		
6,600.00	6,581.66	6,562.66	6,581.66	29.39	227.38	93.13	-73.20	-1,103.66	1,027.38	770.61	256.76	4.001		
6,700.00	6,681.21	6,662.21	6,681.21	29.83	230.86	93.56	-73.20	-1,103.66	1,027.84	767.14	260.69	3.934		
6,800.00	6,778.96	6,759.96	6,778.96	30.28	234.34	94.00	-73.20	-1,103.66	1,028.36	763.71	264.64	3.867		
6,900.00	6,872.51	6,853.51	6,872.51	30.70	237.82	94.44	-73.20	-1,103.66	1,028.94	760.26	268.63	3.800		
7,000.00	6,959.55	6,940.55	6,959.55	31.10	240.57	94.88	-73.20	-1,103.66	1,029.58	756.86	272.67	3.733		
7,100.00	7,037.93	7,018.93	7,037.93	31.48	243.31	95.32	-73.20	-1,103.66	1,030.28	753.50	276.74	3.666		
7,200.00	7,105.74	7,086.74	7,105.74	31.88	245.67	95.76	-73.20	-1,103.66	1,031.04	750.18	280.84	3.600		
7,300.00	7,161.29	7,142.29	7,161.29	32.41	247.61	96.20	-73.20	-1,103.66	1,031.86	746.90	284.98	3.533		
7,400.00	7,203.22	7,184.22	7,203.22	33.13	249.08	96.64	-73.20	-1,103.66	1,032.74	743.66	289.16	3.466		
7,500.00	7,230.50	7,211.50	7,230.50	34.04	250.03	97.08	-73.20	-1,103.66	1,033.68	740.46	293.39	3.400		
7,600.00	7,242.45	7,223.45	7,242.45	35.13	250.45	97.52	-73.20	-1,103.66	1,034.68	737.30	297.67	3.333		
7,700.00	7,242.72	7,223.72	7,242.72	36.39	250.46	98.00	-73.20	-1,103.66	1,035.74	734.22	301.99	3.266		
7,800.00	7,242.33	7,223.33	7,242.33	37.81	250.44	98.48	-73.20	-1,103.66	1,036.86	731.20	306.35	3.200		
7,900.00	7,241.93	7,222.93	7,241.93	39.40	250.43	98.96	-73.20	-1,103.66	1,038.04	728.14	310.75	3.133		
7,943.36	7,241.76	7,222.76	7,241.76	40.15	250.42	99.00	-73.20	-1,103.66	1,038.17	728.00	310.89	3.130		
8,000.00	7,241.54	7,222.54	7,241.54	41.13	250.42	99.07	-73.20	-1,103.66	1,038.89	727.77	311.12	3.123		
8,100.00	7,241.15	7,222.15	7,241.15	42.97	250.40	99.92	-73.20	-1,103.66	1,039.81	726.65	312.24	3.112		
8,200.00	7,240.75	7,221.75	7,240.75	44.92	250.39	99.87	-73.20	-1,103.66	1,040.91	725.53	313.36	3.101		
8,300.00	7,240.36	7,221.36	7,240.36	46.97	250.37	99.81	-73.20	-1,103.66	1,042.08	724.40	314.53	3.090		
8,400.00	7,239.97	7,220.97	7,239.97	49.10	250.36	99.76	-73.20	-1,103.66	1,043.32	723.26	315.75	3.079		
8,500.00	7,239.57	7,220.57	7,239.57	51.29	250.35	99.71	-73.20	-1,103.66	1,044.62	722.10	317.02	3.068		
8,600.00	7,239.18	7,220.18	7,239.18	53.56	250.33	99.66	-73.20	-1,103.66	1,046.08	720.92	318.34	3.057		
8,700.00	7,238.79	7,219.79	7,238.79	55.87	250.32	99.60	-73.20	-1,103.66	1,047.60	719.73	319.71	3.046		
8,800.00	7,238.39	7,219.39	7,238.39	58.24	250.31	99.55	-73.20	-1,103.66	1,049.18	718.52	321.14	3.035		
8,900.00	7,238.00	7,219.00	7,238.00	60.64	250.29	99.50	-73.20	-1,103.66	1,050.82	717.29	322.62	3.024		
9,000.00	7,237.61	7,218.61	7,237.61	63.09	250.28	99.45	-73.20	-1,103.66	1,052.52	716.02	324.15	3.013		
9,100.00	7,237.21	7,218.21	7,237.21	65.56	250.26	99.39	-73.20	-1,103.66	1,054.28	714.73	325.72	3.002		
9,200.00	7,236.82	7,217.82	7,236.82	68.07	250.25	99.34	-73.20	-1,103.66	1,056.10	713.42	327.34	2.991		
9,300.00	7,236.43	7,217.43	7,236.43	70.61	250.24	99.29	-73.20	-1,103.66	1,057.98	712.09	329.01	2.980		
9,400.00	7,236.03	7,217.03	7,236.03	73.16	250.22	99.24	-73.20	-1,103.66	1,059.92	710.74	330.73	2.969		
9,500.00	7,235.64	7,216.64	7,235.64	75.74	250.21	99.18	-73.20	-1,103.66	1,061.92	709.37	332.50	2.958		
9,600.00	7,235.25	7,216.25	7,235.25	78.34	250.20	99.13	-73.20	-1,103.66	1,064.00	707.98	334.32	2.947		
9,700.00	7,234.85	7,215.85	7,234.85	80.96	250.18	99.08	-73.20	-1,103.66	1,066.14	706.57	336.19	2.936		
9,800.00	7,234.46	7,215.46	7,234.46	83.59	250.17	99.03	-73.20	-1,103.66	1,068.34	705.14	338.11	2.925		
9,900.00	7,234.07	7,215.07	7,234.07	86.24	250.15	98.98	-73.20	-1,103.66	1,070.60	703.69	340.08	2.914		
10,000.00	7,233.67	7,214.67	7,233.67	88.90	250.14	98.92	-73.20	-1,103.66	1,072.92	702.22	342.10	2.903		
10,100.00	7,233.28	7,214.28	7,233.28	91.57	250.13	98.87	-73.20	-1,103.66	1,075.30	700.73	344.17	2.892		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.89	7,213.89	7,232.89	94.25	250.11	88.82	-73.20	-1,103.66	2,297.26	2,011.54	285.71	8.040		
10,300.00	7,232.49	7,213.49	7,232.49	96.95	250.10	88.77	-73.20	-1,103.66	2,395.56	2,109.89	285.67	8.386		
10,400.00	7,232.10	7,213.10	7,232.10	99.65	250.09	88.71	-73.20	-1,103.66	2,494.00	2,208.37	285.63	8.732		
10,500.00	7,231.71	7,212.71	7,231.71	102.36	250.07	88.66	-73.20	-1,103.66	2,592.56	2,306.96	285.60	9.078		
10,600.00	7,231.32	7,212.32	7,231.32	105.08	250.06	88.61	-73.20	-1,103.66	2,691.22	2,405.65	285.57	9.424		
10,700.00	7,230.92	7,211.92	7,230.92	107.80	250.04	88.56	-73.20	-1,103.66	2,789.98	2,504.43	285.55	9.771		
10,800.00	7,230.53	7,211.53	7,230.53	110.53	250.03	88.50	-73.20	-1,103.66	2,888.82	2,603.30	285.53	10.117		
10,900.00	7,230.14	7,211.14	7,230.14	113.27	250.02	88.45	-73.20	-1,103.66	2,987.75	2,702.23	285.52	10.464		
11,000.00	7,229.74	7,210.74	7,229.74	116.02	250.00	88.40	-73.20	-1,103.66	3,086.74	2,801.23	285.51	10.811		
11,100.00	7,229.35	7,210.35	7,229.35	118.77	249.99	88.35	-73.20	-1,103.66	3,185.79	2,900.29	285.50	11.159		
11,200.00	7,228.96	7,209.96	7,228.96	121.52	249.98	88.29	-73.20	-1,103.66	3,284.90	2,999.40	285.50	11.506		
11,300.00	7,228.56	7,209.56	7,228.56	124.28	249.96	88.24	-73.20	-1,103.66	3,384.07	3,098.57	285.50	11.853		
11,400.00	7,228.17	7,209.17	7,228.17	127.04	249.95	88.19	-73.20	-1,103.66	3,483.28	3,197.78	285.50	12.201		
11,500.00	7,227.78	7,208.78	7,227.78	129.81	249.93	88.14	-73.20	-1,103.66	3,582.53	3,297.03	285.51	12.548		
11,600.00	7,227.38	7,208.38	7,227.38	132.58	249.92	88.09	-73.20	-1,103.66	3,681.83	3,396.31	285.52	12.895		
11,700.00	7,226.99	7,207.99	7,226.99	135.36	249.91	88.03	-73.20	-1,103.66	3,781.16	3,495.63	285.53	13.243		
11,800.00	7,226.60	7,207.60	7,226.60	138.14	249.89	87.98	-73.20	-1,103.66	3,880.53	3,594.99	285.54	13.590		
11,900.00	7,226.20	7,207.20	7,226.20	140.92	249.88	87.93	-73.20	-1,103.66	3,979.92	3,694.37	285.56	13.937		
12,000.00	7,225.81	7,206.81	7,225.81	143.70	249.87	87.88	-73.20	-1,103.66	4,079.35	3,793.78	285.57	14.285		
12,100.00	7,225.42	7,206.42	7,225.42	146.49	249.85	87.82	-73.20	-1,103.66	4,178.81	3,893.21	285.59	14.632		
12,200.00	7,225.02	7,206.02	7,225.02	149.28	249.84	87.77	-73.20	-1,103.66	4,278.29	3,992.67	285.61	14.979		
12,300.00	7,224.63	7,205.63	7,224.63	152.08	249.83	87.72	-73.20	-1,103.66	4,377.79	4,092.15	285.64	15.326		
12,400.00	7,224.24	7,205.24	7,224.24	154.87	249.81	87.67	-73.20	-1,103.66	4,477.32	4,191.65	285.66	15.673		
12,500.00	7,223.84	7,204.84	7,223.84	157.67	249.80	87.61	-73.20	-1,103.66	4,576.86	4,291.17	285.69	16.020		
12,600.00	7,223.45	7,204.45	7,223.45	160.47	249.78	87.56	-73.20	-1,103.66	4,676.43	4,390.71	285.72	16.367		
12,700.00	7,223.06	7,204.06	7,223.06	163.27	249.77	87.51	-73.20	-1,103.66	4,776.01	4,490.26	285.75	16.714		
12,800.00	7,222.66	7,203.66	7,222.66	166.07	249.76	87.46	-73.20	-1,103.66	4,875.62	4,589.83	285.78	17.061		
12,900.00	7,222.27	7,203.27	7,222.27	168.88	249.74	87.41	-73.20	-1,103.66	4,975.23	4,689.42	285.82	17.407		
13,000.00	7,221.88	7,202.88	7,221.88	171.69	249.73	87.35	-73.20	-1,103.66	5,074.86	4,789.01	285.85	17.753		
13,100.00	7,221.48	7,202.48	7,221.48	174.49	249.72	87.30	-73.20	-1,103.66	5,174.51	4,888.62	285.89	18.100		
13,200.00	7,221.09	7,202.09	7,221.09	177.30	249.70	87.25	-73.20	-1,103.66	5,274.17	4,988.24	285.93	18.446		
13,300.00	7,220.70	7,201.70	7,220.70	180.12	249.69	87.20	-73.20	-1,103.66	5,373.84	5,087.88	285.97	18.792		
13,400.00	7,220.30	7,201.30	7,220.30	182.93	249.67	87.14	-73.20	-1,103.66	5,473.53	5,187.52	286.01	19.138		
13,500.00	7,219.91	7,200.91	7,219.91	185.74	249.66	87.09	-73.20	-1,103.66	5,573.22	5,287.17	286.05	19.483		
13,600.00	7,219.52	7,200.52	7,219.52	188.56	249.65	87.04	-73.20	-1,103.66	5,672.93	5,386.84	286.09	19.829		
13,700.00	7,219.12	7,200.12	7,219.12	191.38	249.63	86.99	-73.20	-1,103.66	5,772.64	5,486.51	286.14	20.174		
13,800.00	7,218.73	7,200.27	7,218.73	194.20	249.64	86.93	-73.20	-1,103.66	5,872.37	5,586.17	286.20	20.518		
13,900.00	7,218.34	7,200.66	7,218.34	197.02	249.65	86.88	-73.20	-1,103.66	5,972.11	5,685.83	286.28	20.861		
14,000.00	7,217.94	7,201.06	7,217.94	199.84	249.67	86.83	-73.20	-1,103.66	6,071.85	5,785.50	286.35	21.204		
14,100.00	7,217.55	7,201.45	7,217.55	202.66	249.68	86.78	-73.20	-1,103.66	6,171.60	5,885.17	286.43	21.547		
14,200.00	7,217.16	7,201.84	7,217.16	205.48	249.69	86.73	-73.20	-1,103.66	6,271.36	5,984.85	286.51	21.889		
14,300.00	7,216.76	7,202.24	7,216.76	208.30	249.71	86.67	-73.20	-1,103.66	6,371.13	6,084.54	286.59	22.231		
14,400.00	7,216.37	7,202.63	7,216.37	211.13	249.72	86.62	-73.20	-1,103.66	6,470.90	6,184.24	286.67	22.573		
14,500.00	7,215.98	7,203.02	7,215.98	213.96	249.73	86.57	-73.20	-1,103.66	6,570.68	6,283.93	286.75	22.914		
14,600.00	7,215.58	7,203.42	7,215.58	216.78	249.75	86.52	-73.20	-1,103.66	6,670.47	6,383.64	286.83	23.256		
14,700.00	7,215.19	7,203.81	7,215.19	219.61	249.76	86.47	-73.20	-1,103.66	6,770.27	6,483.35	286.92	23.597		
14,800.00	7,214.80	7,204.20	7,214.80	222.44	249.78	86.41	-73.20	-1,103.66	6,870.07	6,583.07	287.00	23.937		
14,900.00	7,214.40	7,204.60	7,214.40	225.27	249.79	86.36	-73.20	-1,103.66	6,969.87	6,682.79	287.09	24.278		
15,000.00	7,214.01	7,204.99	7,214.01	228.10	249.80	86.31	-73.20	-1,103.66	7,069.68	6,782.51	287.17	24.618		
15,002.44	7,214.00	7,205.00	7,214.00	228.16	249.80	86.31	-73.20	-1,103.66	7,072.12	6,784.94	287.18	24.626		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	12.00	3.28	3.28	-67.69	608.07	-1,481.88	1,601.84					
100.00	100.00	88.00	100.00	3.28	3.62	-67.69	608.07	-1,481.88	1,601.79	1,594.88	6.91	231.923		
200.00	200.00	188.00	200.00	3.34	5.83	-67.69	608.07	-1,481.88	1,601.79	1,592.62	9.17	174.769		
300.00	300.00	288.00	300.00	3.44	8.93	-67.69	608.07	-1,481.88	1,601.79	1,589.41	12.38	129.412		
400.00	400.00	388.00	400.00	3.60	12.25	-67.69	608.07	-1,481.88	1,601.79	1,585.94	15.85	101.057		
500.00	500.00	488.00	500.00	3.81	15.64	-67.69	608.07	-1,481.88	1,601.79	1,582.35	19.44	82.378		
600.00	599.98	587.98	599.98	4.03	19.07	94.21	608.07	-1,481.88	1,601.92	1,578.82	23.10	69.349		
700.00	699.84	687.84	699.84	4.29	22.51	94.38	608.07	-1,481.88	1,602.31	1,575.52	26.79	59.807		
800.00	799.54	787.54	799.54	4.57	25.96	94.66	608.07	-1,481.88	1,602.92	1,572.40	30.52	52.520		
900.00	899.23	887.23	899.23	4.87	29.41	94.93	608.07	-1,481.88	1,603.58	1,569.30	34.28	46.776		
1,000.00	998.92	986.92	998.92	5.20	32.87	95.21	608.07	-1,481.88	1,604.28	1,566.20	38.07	42.139		
1,100.00	1,098.61	1,086.61	1,098.61	5.54	36.34	95.49	608.07	-1,481.88	1,605.01	1,563.13	41.88	38.324		
1,200.00	1,198.30	1,186.30	1,198.30	5.90	39.80	95.77	608.07	-1,481.88	1,605.78	1,560.07	45.71	35.132		
1,300.00	1,298.00	1,286.00	1,298.00	6.27	43.27	96.05	608.07	-1,481.88	1,606.59	1,557.04	49.55	32.425		
1,400.00	1,397.69	1,385.69	1,397.69	6.66	46.74	96.32	608.07	-1,481.88	1,607.44	1,554.04	53.40	30.102		
1,500.00	1,497.38	1,485.38	1,497.38	7.05	50.22	96.60	608.07	-1,481.88	1,608.33	1,551.06	57.26	28.087		
1,600.00	1,597.07	1,585.07	1,597.07	7.44	53.69	96.88	608.07	-1,481.88	1,609.25	1,548.12	61.13	26.324		
1,700.00	1,696.76	1,684.76	1,696.76	7.85	57.16	97.15	608.07	-1,481.88	1,610.21	1,545.20	65.01	24.769		
1,800.00	1,796.45	1,784.45	1,796.45	8.25	60.64	97.43	608.07	-1,481.88	1,611.21	1,542.32	68.89	23.388		
1,900.00	1,896.15	1,884.15	1,896.15	8.67	64.11	97.71	608.07	-1,481.88	1,612.25	1,539.47	72.78	22.153		
2,000.00	1,995.84	1,983.84	1,995.84	9.08	67.59	97.98	608.07	-1,481.88	1,613.32	1,536.65	76.67	21.042		
2,100.00	2,095.53	2,083.53	2,095.53	9.50	71.07	98.26	608.07	-1,481.88	1,614.43	1,533.87	80.57	20.039		
2,200.00	2,195.22	2,183.22	2,195.22	9.92	74.54	98.53	608.07	-1,481.88	1,615.58	1,531.12	84.46	19.127		
2,300.00	2,294.91	2,282.91	2,294.91	10.35	78.02	98.80	608.07	-1,481.88	1,616.77	1,528.40	88.37	18.296		
2,400.00	2,394.60	2,382.60	2,394.60	10.77	81.50	99.08	608.07	-1,481.88	1,617.99	1,525.72	92.27	17.536		
2,500.00	2,494.30	2,482.30	2,494.30	11.20	84.97	99.35	608.07	-1,481.88	1,619.25	1,523.07	96.17	16.837		
2,600.00	2,593.99	2,581.99	2,593.99	11.63	88.45	99.62	608.07	-1,481.88	1,620.55	1,520.46	100.08	16.192		
2,700.00	2,693.68	2,681.68	2,693.68	12.07	91.93	99.90	608.07	-1,481.88	1,621.88	1,517.89	103.99	15.596		
2,800.00	2,793.37	2,781.37	2,793.37	12.50	95.41	100.17	608.07	-1,481.88	1,623.25	1,515.35	107.90	15.044		
2,900.00	2,893.06	2,881.06	2,893.06	12.93	98.89	100.44	608.07	-1,481.88	1,624.66	1,512.84	111.82	14.530		
3,000.00	2,992.76	2,980.76	2,992.76	13.37	102.37	100.71	608.07	-1,481.88	1,626.10	1,510.38	115.73	14.051		
3,100.00	3,092.45	3,080.45	3,092.45	13.81	105.84	100.98	608.07	-1,481.88	1,627.59	1,507.94	119.64	13.604		
3,200.00	3,192.14	3,180.14	3,192.14	14.25	109.32	101.25	608.07	-1,481.88	1,629.10	1,505.54	123.56	13.185		
3,300.00	3,291.83	3,279.83	3,291.83	14.68	112.80	101.52	608.07	-1,481.88	1,630.66	1,503.18	127.48	12.792		
3,400.00	3,391.52	3,379.52	3,391.52	15.12	116.28	101.79	608.07	-1,481.88	1,632.25	1,500.85	131.39	12.423		
3,500.00	3,491.21	3,479.21	3,491.21	15.56	119.76	102.06	608.07	-1,481.88	1,633.87	1,498.56	135.31	12.075		
3,600.00	3,590.91	3,578.91	3,590.91	16.00	123.24	102.33	608.07	-1,481.88	1,635.53	1,496.30	139.23	11.747		
3,700.00	3,690.60	3,678.60	3,690.60	16.45	126.72	102.60	608.07	-1,481.88	1,637.23	1,494.08	143.15	11.437		
3,800.00	3,790.29	3,778.29	3,790.29	16.89	130.20	102.86	608.07	-1,481.88	1,638.97	1,491.90	147.07	11.144		
3,900.00	3,889.98	3,877.98	3,889.98	17.33	133.68	103.13	608.07	-1,481.88	1,640.74	1,489.75	150.99	10.867		
4,000.00	3,989.67	3,977.67	3,989.67	17.77	137.15	103.39	608.07	-1,481.88	1,642.54	1,487.63	154.91	10.603		
4,100.00	4,089.36	4,077.36	4,089.36	18.22	140.63	103.66	608.07	-1,481.88	1,644.38	1,485.55	158.83	10.353		
4,200.00	4,189.06	4,177.06	4,189.06	18.66	144.11	103.92	608.07	-1,481.88	1,646.26	1,483.50	162.75	10.115		
4,300.00	4,288.75	4,276.75	4,288.75	19.10	147.59	104.19	608.07	-1,481.88	1,648.17	1,481.49	166.68	9.888		
4,400.00	4,388.44	4,376.44	4,388.44	19.55	151.07	104.45	608.07	-1,481.88	1,650.12	1,479.52	170.60	9.672		
4,500.00	4,488.13	4,476.13	4,488.13	19.99	154.55	104.71	608.07	-1,481.88	1,652.10	1,477.57	174.52	9.466		
4,600.00	4,587.82	4,575.82	4,587.82	20.44	158.03	104.98	608.07	-1,481.88	1,654.11	1,475.67	178.45	9.270		
4,700.00	4,687.51	4,675.51	4,687.51	20.89	161.51	105.24	608.07	-1,481.88	1,656.16	1,473.80	182.37	9.081		
4,800.00	4,787.21	4,775.21	4,787.21	21.33	164.99	105.50	608.07	-1,481.88	1,658.25	1,471.96	186.29	8.901		
4,900.00	4,886.90	4,874.90	4,886.90	21.78	168.47	105.76	608.07	-1,481.88	1,660.37	1,470.15	190.22	8.729		
5,000.00	4,986.59	4,974.59	4,986.59	22.22	171.95	106.02	608.07	-1,481.88	1,662.52	1,468.38	194.14	8.564		
5,100.00	5,086.28	5,074.28	5,086.28	22.67	175.43	106.28	608.07	-1,481.88	1,664.71	1,466.65	198.06	8.405		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,173.97	5,185.97	23.12	178.91	106.54	608.07	-1,481.88	1,666.93	1,464.94	201.99	8.253		
5,300.00	5,285.66	5,273.66	5,285.66	23.56	182.39	106.79	608.07	-1,481.88	1,669.19	1,463.28	205.91	8.106		
5,400.00	5,385.36	5,373.36	5,385.36	24.01	185.87	107.05	608.07	-1,481.88	1,671.48	1,461.64	209.84	7.966		
5,500.00	5,485.05	5,473.05	5,485.05	24.46	189.35	107.31	608.07	-1,481.88	1,673.80	1,460.04	213.76	7.830		
5,600.00	5,584.74	5,572.74	5,584.74	24.90	192.83	107.56	608.07	-1,481.88	1,676.16	1,458.47	217.69	7.700		
5,700.00	5,684.43	5,672.43	5,684.43	25.35	196.31	107.82	608.07	-1,481.88	1,678.55	1,456.94	221.61	7.574		
5,800.00	5,784.12	5,772.12	5,784.12	25.80	199.79	108.07	608.07	-1,481.88	1,680.98	1,455.44	225.54	7.453		
5,900.00	5,883.81	5,871.81	5,883.81	26.25	203.27	108.32	608.07	-1,481.88	1,683.43	1,453.97	229.46	7.336		
6,000.00	5,983.51	5,971.51	5,983.51	26.70	206.75	108.57	608.07	-1,481.88	1,685.92	1,452.53	233.39	7.224		
6,100.00	6,083.20	6,071.20	6,083.20	27.14	210.23	108.83	608.07	-1,481.88	1,688.45	1,451.13	237.31	7.115		
6,200.00	6,182.89	6,170.89	6,182.89	27.59	213.71	109.08	608.07	-1,481.88	1,691.00	1,449.76	241.24	7.010		
6,300.00	6,282.58	6,270.58	6,282.58	28.04	217.19	109.33	608.07	-1,481.88	1,693.59	1,448.42	245.17	6.908		
6,400.00	6,382.27	6,370.27	6,382.27	28.49	220.67	109.58	608.07	-1,481.88	1,696.21	1,447.12	249.09	6.810		
6,500.00	6,481.96	6,469.96	6,481.96	28.94	224.15	109.83	608.07	-1,481.88	1,698.86	1,445.84	253.02	6.714		
6,600.00	6,581.66	6,569.66	6,581.66	29.39	227.63	110.07	608.07	-1,481.88	1,701.55	1,444.60	256.94	6.622		
6,700.00	6,681.21	6,669.21	6,681.21	29.83	231.10	71.92	608.07	-1,481.88	1,702.24	1,441.38	260.86	6.525		
6,800.00	6,778.96	6,766.96	6,778.96	30.28	234.51	55.66	608.07	-1,481.88	1,691.99	1,427.27	264.72	6.392		
6,900.00	6,872.51	6,860.51	6,872.51	30.70	237.78	52.56	608.07	-1,481.88	1,670.23	1,401.82	268.41	6.223		
7,000.00	6,959.55	6,947.55	6,959.55	31.10	240.82	53.47	608.07	-1,481.88	1,637.96	1,366.11	271.86	6.025		
7,100.00	7,037.93	7,025.93	7,037.93	31.48	243.55	56.67	608.07	-1,481.88	1,596.61	1,321.61	275.00	5.806		
7,200.00	7,105.74	7,106.26	7,105.74	31.88	246.36	61.61	608.07	-1,481.88	1,547.96	1,269.72	278.24	5.563		
7,300.00	7,161.29	7,149.29	7,161.29	32.41	247.86	67.88	608.07	-1,481.88	1,494.10	1,213.86	280.24	5.332		
7,400.00	7,203.22	7,208.78	7,203.22	33.13	249.94	74.94	608.07	-1,481.88	1,437.33	1,154.41	282.92	5.080		
7,500.00	7,230.50	7,218.50	7,230.50	34.04	250.27	82.05	608.07	-1,481.88	1,380.07	1,096.03	284.03	4.859		
7,600.00	7,242.45	7,230.45	7,242.45	35.13	250.69	88.48	608.07	-1,481.88	1,324.67	1,039.25	285.42	4.641		
7,700.00	7,242.72	7,230.72	7,242.72	36.39	250.70	90.12	608.07	-1,481.88	1,273.43	986.82	286.61	4.443		
7,800.00	7,242.33	7,230.33	7,242.33	37.81	250.69	90.10	608.07	-1,481.88	1,228.15	940.13	288.03	4.264		
7,900.00	7,241.93	7,229.93	7,241.93	39.40	250.67	90.08	608.07	-1,481.88	1,189.59	899.90	289.68	4.106		
8,000.00	7,241.54	7,229.54	7,241.54	41.13	250.66	90.06	608.07	-1,481.88	1,158.39	866.85	291.53	3.973		
8,100.00	7,241.15	7,229.15	7,241.15	42.97	250.65	90.04	608.07	-1,481.88	1,135.17	841.66	293.52	3.867		
8,200.00	7,240.75	7,228.75	7,240.75	44.92	250.63	90.02	608.07	-1,481.88	1,120.43	824.88	295.55	3.791		
8,300.00	7,240.36	7,228.36	7,240.36	46.97	250.62	90.00	608.07	-1,481.88	1,114.50	816.96	297.55	3.746		
8,316.25	7,240.30	7,228.30	7,240.30	47.32	250.62	90.00	608.07	-1,481.88	1,114.38	816.52	297.87	3.741 CC, ES		
8,400.00	7,239.97	7,227.97	7,239.97	49.10	250.60	89.98	608.07	-1,481.88	1,117.53	818.10	299.42	3.732 SF		
8,500.00	7,239.57	7,227.57	7,239.57	51.29	250.59	89.96	608.07	-1,481.88	1,129.43	828.32	301.11	3.751		
8,600.00	7,239.18	7,227.18	7,239.18	53.56	250.58	89.94	608.07	-1,481.88	1,149.94	847.39	302.55	3.801		
8,700.00	7,238.79	7,226.79	7,238.79	55.87	250.56	89.92	608.07	-1,481.88	1,178.61	874.87	303.74	3.880		
8,800.00	7,238.39	7,226.39	7,238.39	58.24	250.55	89.90	608.07	-1,481.88	1,214.85	910.18	304.67	3.987		
8,900.00	7,238.00	7,226.00	7,238.00	60.64	250.54	89.88	608.07	-1,481.88	1,258.02	952.67	305.35	4.120		
9,000.00	7,237.61	7,225.61	7,237.61	63.09	250.52	89.86	608.07	-1,481.88	1,307.42	1,001.61	305.82	4.275		
9,100.00	7,237.21	7,225.21	7,237.21	65.56	250.51	89.84	608.07	-1,481.88	1,362.39	1,056.29	306.10	4.451		
9,200.00	7,236.82	7,224.82	7,236.82	68.07	250.49	89.82	608.07	-1,481.88	1,422.27	1,116.03	306.24	4.644		
9,300.00	7,236.43	7,224.43	7,236.43	70.61	250.48	89.80	608.07	-1,481.88	1,486.47	1,180.21	306.26	4.854		
9,400.00	7,236.03	7,224.03	7,236.03	73.16	250.47	89.78	608.07	-1,481.88	1,554.46	1,248.27	306.19	5.077		
9,500.00	7,235.64	7,223.64	7,235.64	75.74	250.45	89.76	608.07	-1,481.88	1,625.76	1,319.71	306.05	5.312		
9,600.00	7,235.25	7,223.25	7,235.25	78.34	250.44	89.74	608.07	-1,481.88	1,699.95	1,394.09	305.86	5.558		
9,700.00	7,234.85	7,222.85	7,234.85	80.96	250.43	89.72	608.07	-1,481.88	1,776.68	1,471.04	305.64	5.813		
9,800.00	7,234.46	7,222.46	7,234.46	83.59	250.41	89.70	608.07	-1,481.88	1,855.62	1,550.23	305.39	6.076		
9,900.00	7,234.07	7,222.07	7,234.07	86.24	250.40	89.68	608.07	-1,481.88	1,936.51	1,631.38	305.13	6.346		
10,000.00	7,233.67	7,221.67	7,233.67	88.90	250.39	89.66	608.07	-1,481.88	2,019.11	1,714.25	304.86	6.623		
10,100.00	7,233.28	7,221.28	7,233.28	91.57	250.37	89.64	608.07	-1,481.88	2,103.23	1,798.63	304.60	6.905		
10,200.00	7,232.89	7,220.89	7,232.89	94.25	250.36	89.62	608.07	-1,481.88	2,188.68	1,884.34	304.33	7.192		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.49	7,220.49	7,232.49	96.95	250.34	89.60	608.07	-1,481.88	2,275.31	1,971.24	304.07	7.483		
10,400.00	7,232.10	7,220.10	7,232.10	99.65	250.33	89.58	608.07	-1,481.88	2,363.00	2,059.19	303.81	7.778		
10,500.00	7,231.71	7,219.71	7,231.71	102.36	250.32	89.56	608.07	-1,481.88	2,451.64	2,148.07	303.57	8.076		
10,600.00	7,231.32	7,219.32	7,231.32	105.08	250.30	89.54	608.07	-1,481.88	2,541.12	2,237.79	303.33	8.377		
10,700.00	7,230.92	7,218.92	7,230.92	107.80	250.29	89.52	608.07	-1,481.88	2,631.35	2,328.25	303.10	8.681		
10,800.00	7,230.53	7,218.53	7,230.53	110.53	250.28	89.50	608.07	-1,481.88	2,722.27	2,419.39	302.88	8.988		
10,900.00	7,230.14	7,218.14	7,230.14	113.27	250.26	89.48	608.07	-1,481.88	2,813.81	2,511.13	302.67	9.297		
11,000.00	7,229.74	7,217.74	7,229.74	116.02	250.25	89.46	608.07	-1,481.88	2,905.90	2,603.43	302.47	9.607		
11,100.00	7,229.35	7,217.35	7,229.35	118.77	250.23	89.44	608.07	-1,481.88	2,998.50	2,696.22	302.28	9.920		
11,200.00	7,228.96	7,216.96	7,228.96	121.52	250.22	89.42	608.07	-1,481.88	3,091.56	2,789.46	302.10	10.234		
11,300.00	7,228.56	7,216.56	7,228.56	124.28	250.21	89.40	608.07	-1,481.88	3,185.04	2,883.11	301.93	10.549		
11,400.00	7,228.17	7,216.17	7,228.17	127.04	250.19	89.38	608.07	-1,481.88	3,278.90	2,977.14	301.76	10.866		
11,500.00	7,227.78	7,215.78	7,227.78	129.81	250.18	89.36	608.07	-1,481.88	3,373.12	3,071.51	301.61	11.184		
11,600.00	7,227.38	7,215.38	7,227.38	132.58	250.17	89.34	608.07	-1,481.88	3,467.66	3,166.20	301.46	11.503		
11,700.00	7,226.99	7,214.99	7,226.99	135.36	250.15	89.32	608.07	-1,481.88	3,562.50	3,261.18	301.32	11.823		
11,800.00	7,226.60	7,214.60	7,226.60	138.14	250.14	89.30	608.07	-1,481.88	3,657.62	3,356.43	301.19	12.144		
11,900.00	7,226.20	7,214.20	7,226.20	140.92	250.12	89.28	608.07	-1,481.88	3,752.99	3,451.92	301.06	12.466		
12,000.00	7,225.81	7,213.81	7,225.81	143.70	250.11	89.26	608.07	-1,481.88	3,848.59	3,547.65	300.94	12.788		
12,100.00	7,225.42	7,213.42	7,225.42	146.49	250.10	89.23	608.07	-1,481.88	3,944.41	3,643.58	300.83	13.112		
12,200.00	7,225.02	7,213.02	7,225.02	149.28	250.08	89.21	608.07	-1,481.88	4,040.43	3,739.71	300.73	13.436		
12,300.00	7,224.63	7,212.63	7,224.63	152.08	250.07	89.19	608.07	-1,481.88	4,136.65	3,836.02	300.63	13.760		
12,400.00	7,224.24	7,212.24	7,224.24	154.87	250.06	89.17	608.07	-1,481.88	4,233.04	3,932.50	300.53	14.085		
12,500.00	7,223.84	7,211.84	7,223.84	157.67	250.04	89.15	608.07	-1,481.88	4,329.59	4,029.15	300.44	14.411		
12,600.00	7,223.45	7,211.45	7,223.45	160.47	250.03	89.13	608.07	-1,481.88	4,426.29	4,125.93	300.36	14.737		
12,700.00	7,223.06	7,211.06	7,223.06	163.27	250.01	89.11	608.07	-1,481.88	4,523.14	4,222.86	300.28	15.063		
12,800.00	7,222.66	7,210.66	7,222.66	166.07	250.00	89.09	608.07	-1,481.88	4,620.12	4,319.92	300.21	15.390		
12,900.00	7,222.27	7,210.27	7,222.27	168.88	249.99	89.07	608.07	-1,481.88	4,717.23	4,417.10	300.14	15.717		
13,000.00	7,221.88	7,209.88	7,221.88	171.69	249.97	89.05	608.07	-1,481.88	4,814.46	4,514.39	300.07	16.044		
13,100.00	7,221.48	7,209.48	7,221.48	174.49	249.96	89.03	608.07	-1,481.88	4,911.80	4,611.79	300.01	16.372		
13,200.00	7,221.09	7,209.09	7,221.09	177.30	249.95	89.01	608.07	-1,481.88	5,009.24	4,709.29	299.95	16.700		
13,300.00	7,220.70	7,208.70	7,220.70	180.12	249.93	88.99	608.07	-1,481.88	5,106.78	4,806.88	299.90	17.028		
13,400.00	7,220.30	7,208.30	7,220.30	182.93	249.92	88.97	608.07	-1,481.88	5,204.42	4,904.57	299.85	17.357		
13,500.00	7,219.91	7,207.91	7,219.91	185.74	249.90	88.95	608.07	-1,481.88	5,302.14	5,002.33	299.80	17.685		
13,600.00	7,219.52	7,207.52	7,219.52	188.56	249.89	88.93	608.07	-1,481.88	5,399.95	5,100.18	299.76	18.014		
13,700.00	7,219.12	7,207.12	7,219.12	191.38	249.88	88.91	608.07	-1,481.88	5,497.83	5,198.11	299.72	18.343		
13,800.00	7,218.73	7,206.73	7,218.73	194.20	249.86	88.89	608.07	-1,481.88	5,595.79	5,296.10	299.69	18.672		
13,900.00	7,218.34	7,206.34	7,218.34	197.02	249.85	88.87	608.07	-1,481.88	5,693.82	5,394.17	299.65	19.001		
14,000.00	7,217.94	7,205.94	7,217.94	199.84	249.84	88.85	608.07	-1,481.88	5,791.92	5,492.30	299.62	19.331		
14,100.00	7,217.55	7,205.55	7,217.55	202.66	249.82	88.83	608.07	-1,481.88	5,890.08	5,590.48	299.60	19.660		
14,200.00	7,217.16	7,205.16	7,217.16	205.48	249.81	88.81	608.07	-1,481.88	5,988.31	5,688.73	299.57	19.989		
14,300.00	7,216.76	7,204.76	7,216.76	208.30	249.79	88.79	608.07	-1,481.88	6,086.59	5,787.03	299.55	20.319		
14,400.00	7,216.37	7,204.37	7,216.37	211.13	249.78	88.77	608.07	-1,481.88	6,184.92	5,885.39	299.53	20.648		
14,500.00	7,215.98	7,203.98	7,215.98	213.96	249.77	88.75	608.07	-1,481.88	6,283.31	5,983.79	299.52	20.978		
14,600.00	7,215.58	7,203.58	7,215.58	216.78	249.75	88.73	608.07	-1,481.88	6,381.75	6,082.24	299.50	21.308		
14,700.00	7,215.19	7,203.19	7,215.19	219.61	249.74	88.71	608.07	-1,481.88	6,480.24	6,180.74	299.49	21.637		
14,800.00	7,214.80	7,202.80	7,214.80	222.44	249.73	88.69	608.07	-1,481.88	6,578.77	6,279.28	299.48	21.967		
14,900.00	7,214.40	7,202.40	7,214.40	225.27	249.71	88.67	608.07	-1,481.88	6,677.34	6,377.87	299.48	22.297		
15,000.00	7,214.01	7,202.01	7,214.01	228.10	249.70	88.65	608.07	-1,481.88	6,775.96	6,476.49	299.47	22.626		
15,002.44	7,214.00	7,202.00	7,214.00	228.16	249.70	88.65	608.07	-1,481.88	6,778.36	6,478.89	299.47	22.634		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	49.00	3.28	3.28	-77.39	1,116.01	-4,989.85	5,113.37				
100.00	100.00	51.00	100.00	3.28	3.40	-77.39	1,116.01	-4,989.85	5,113.13	5,106.45	6.68	765.052	
200.00	200.00	151.00	200.00	3.34	4.82	-77.39	1,116.01	-4,989.85	5,113.13	5,104.98	8.15	627.172	
300.00	300.00	251.00	300.00	3.44	7.75	-77.39	1,116.01	-4,989.85	5,113.13	5,101.94	11.19	456.914	
400.00	400.00	351.00	400.00	3.60	11.01	-77.39	1,116.01	-4,989.85	5,113.13	5,098.52	14.61	349.944	
500.00	500.00	451.00	500.00	3.81	14.38	-77.39	1,116.01	-4,989.85	5,113.13	5,094.95	18.18	281.188	
600.00	599.98	550.98	599.98	4.03	17.79	84.47	1,116.01	-4,989.85	5,112.96	5,091.14	21.83	234.236	
700.00	699.84	650.84	699.84	4.29	21.23	84.53	1,116.01	-4,989.85	5,112.46	5,086.95	25.51	200.377	
800.00	799.54	750.54	799.54	4.57	24.67	84.62	1,116.01	-4,989.85	5,111.73	5,082.49	29.24	174.824	
900.00	899.23	850.23	899.23	4.87	28.13	84.71	1,116.01	-4,989.85	5,111.00	5,078.00	33.00	154.885	
1,000.00	998.92	949.92	998.92	5.20	31.59	84.80	1,116.01	-4,989.85	5,110.28	5,073.49	36.79	138.921	
1,100.00	1,098.61	1,049.61	1,098.61	5.54	35.05	84.89	1,116.01	-4,989.85	5,109.57	5,068.98	40.59	125.871	
1,200.00	1,198.30	1,149.30	1,198.30	5.90	38.52	84.97	1,116.01	-4,989.85	5,108.87	5,064.45	44.42	115.014	
1,300.00	1,298.00	1,249.00	1,298.00	6.27	41.99	85.06	1,116.01	-4,989.85	5,108.19	5,059.93	48.26	105.848	
1,400.00	1,397.69	1,348.69	1,397.69	6.66	45.46	85.15	1,116.01	-4,989.85	5,107.52	5,055.41	52.11	98.011	
1,500.00	1,497.38	1,448.38	1,497.38	7.05	48.93	85.24	1,116.01	-4,989.85	5,106.86	5,050.89	55.97	91.237	
1,600.00	1,597.07	1,548.07	1,597.07	7.44	52.40	85.32	1,116.01	-4,989.85	5,106.21	5,046.37	59.84	85.327	
1,700.00	1,696.76	1,647.76	1,696.76	7.85	55.87	85.41	1,116.01	-4,989.85	5,105.58	5,041.86	63.72	80.126	
1,800.00	1,796.45	1,747.45	1,796.45	8.25	59.35	85.50	1,116.01	-4,989.85	5,104.95	5,037.35	67.60	75.515	
1,900.00	1,896.15	1,847.15	1,896.15	8.67	62.82	85.59	1,116.01	-4,989.85	5,104.34	5,032.85	71.49	71.400	
2,000.00	1,995.84	1,946.84	1,995.84	9.08	66.30	85.67	1,116.01	-4,989.85	5,103.74	5,028.36	75.38	67.706	
2,100.00	2,095.53	2,046.53	2,095.53	9.50	69.78	85.76	1,116.01	-4,989.85	5,103.15	5,023.88	79.28	64.371	
2,200.00	2,195.22	2,146.22	2,195.22	9.92	73.25	85.85	1,116.01	-4,989.85	5,102.58	5,019.40	83.18	61.347	
2,300.00	2,294.91	2,245.91	2,294.91	10.35	76.73	85.94	1,116.01	-4,989.85	5,102.01	5,014.94	87.08	58.592	
2,400.00	2,394.60	2,345.60	2,394.60	10.77	80.21	86.02	1,116.01	-4,989.85	5,101.46	5,010.48	90.98	56.072	
2,500.00	2,494.30	2,445.30	2,494.30	11.20	83.68	86.11	1,116.01	-4,989.85	5,100.92	5,006.03	94.89	53.758	
2,600.00	2,593.99	2,544.99	2,593.99	11.63	87.16	86.20	1,116.01	-4,989.85	5,100.39	5,001.60	98.80	51.626	
2,700.00	2,693.68	2,644.68	2,693.68	12.07	90.64	86.29	1,116.01	-4,989.85	5,099.88	4,997.17	102.71	49.655	
2,800.00	2,793.37	2,744.37	2,793.37	12.50	94.12	86.37	1,116.01	-4,989.85	5,099.37	4,992.76	106.62	47.829	
2,900.00	2,893.06	2,844.06	2,893.06	12.93	97.60	86.46	1,116.01	-4,989.85	5,098.88	4,988.35	110.53	46.131	
3,000.00	2,992.76	2,943.76	2,992.76	13.37	101.07	86.55	1,116.01	-4,989.85	5,098.40	4,983.96	114.44	44.549	
3,100.00	3,092.45	3,043.45	3,092.45	13.81	104.55	86.64	1,116.01	-4,989.85	5,097.94	4,979.58	118.36	43.071	
3,200.00	3,192.14	3,143.14	3,192.14	14.25	108.03	86.73	1,116.01	-4,989.85	5,097.48	4,975.20	122.28	41.688	
3,300.00	3,291.83	3,242.83	3,291.83	14.68	111.51	86.81	1,116.01	-4,989.85	5,097.04	4,970.84	126.19	40.391	
3,400.00	3,391.52	3,342.52	3,391.52	15.12	114.99	86.90	1,116.01	-4,989.85	5,096.60	4,966.49	130.11	39.171	
3,500.00	3,491.21	3,442.21	3,491.21	15.56	118.47	86.99	1,116.01	-4,989.85	5,096.18	4,962.15	134.03	38.022	
3,600.00	3,590.91	3,541.91	3,590.91	16.00	121.95	87.08	1,116.01	-4,989.85	5,095.78	4,957.83	137.95	36.939	
3,700.00	3,690.60	3,641.60	3,690.60	16.45	125.43	87.16	1,116.01	-4,989.85	5,095.38	4,953.51	141.87	35.915	
3,800.00	3,790.29	3,741.29	3,790.29	16.89	128.90	87.25	1,116.01	-4,989.85	5,095.00	4,949.21	145.79	34.947	
3,900.00	3,889.98	3,840.98	3,889.98	17.33	132.38	87.34	1,116.01	-4,989.85	5,094.63	4,944.91	149.71	34.029	
4,000.00	3,989.67	3,940.67	3,989.67	17.77	135.86	87.43	1,116.01	-4,989.85	5,094.27	4,940.63	153.64	33.158	
4,100.00	4,089.36	4,040.36	4,089.36	18.22	139.34	87.52	1,116.01	-4,989.85	5,093.92	4,936.36	157.56	32.330	
4,200.00	4,189.06	4,140.06	4,189.06	18.66	142.82	87.60	1,116.01	-4,989.85	5,093.59	4,932.10	161.48	31.543	
4,300.00	4,288.75	4,239.75	4,288.75	19.10	146.30	87.69	1,116.01	-4,989.85	5,093.26	4,927.86	165.41	30.792	
4,400.00	4,388.44	4,339.44	4,388.44	19.55	149.78	87.78	1,116.01	-4,989.85	5,092.95	4,923.62	169.33	30.077	
4,500.00	4,488.13	4,439.13	4,488.13	19.99	153.26	87.87	1,116.01	-4,989.85	5,092.65	4,919.40	173.25	29.394	
4,600.00	4,587.82	4,538.82	4,587.82	20.44	156.74	87.96	1,116.01	-4,989.85	5,092.37	4,915.19	177.18	28.741	
4,700.00	4,687.51	4,638.51	4,687.51	20.89	160.22	88.04	1,116.01	-4,989.85	5,092.09	4,910.99	181.10	28.117	
4,800.00	4,787.21	4,738.21	4,787.21	21.33	163.70	88.13	1,116.01	-4,989.85	5,091.83	4,906.80	185.03	27.519	
4,900.00	4,886.90	4,837.90	4,886.90	21.78	167.18	88.22	1,116.01	-4,989.85	5,091.58	4,902.62	188.95	26.946	
5,000.00	4,986.59	4,937.59	4,986.59	22.22	170.66	88.31	1,116.01	-4,989.85	5,091.34	4,898.46	192.88	26.396	
5,100.00	5,086.28	5,037.28	5,086.28	22.67	174.14	88.40	1,116.01	-4,989.85	5,091.11	4,894.31	196.81	25.869	

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,136.97	5,185.97	23.12	177.62	88.48	1,116.01	-4,989.85	5,090.90	4,890.17	200.73	25.362		
5,300.00	5,285.66	5,236.66	5,285.66	23.56	181.10	88.57	1,116.01	-4,989.85	5,090.70	4,886.04	204.66	24.874		
5,400.00	5,385.36	5,336.36	5,385.36	24.01	184.58	88.66	1,116.01	-4,989.85	5,090.51	4,881.92	208.59	24.405		
5,500.00	5,485.05	5,436.05	5,485.05	24.46	188.06	88.75	1,116.01	-4,989.85	5,090.33	4,877.81	212.51	23.953		
5,600.00	5,584.74	5,535.74	5,584.74	24.90	191.54	88.84	1,116.01	-4,989.85	5,090.16	4,873.72	216.44	23.518		
5,700.00	5,684.43	5,635.43	5,684.43	25.35	195.02	88.92	1,116.01	-4,989.85	5,090.01	4,869.64	220.37	23.098		
5,800.00	5,784.12	5,735.12	5,784.12	25.80	198.50	89.01	1,116.01	-4,989.85	5,089.87	4,865.57	224.30	22.693		
5,900.00	5,883.81	5,834.81	5,883.81	26.25	201.97	89.10	1,116.01	-4,989.85	5,089.74	4,861.51	228.22	22.302		
6,000.00	5,983.51	5,934.51	5,983.51	26.70	205.45	89.19	1,116.01	-4,989.85	5,089.62	4,857.47	232.15	21.924		
6,100.00	6,083.20	6,034.20	6,083.20	27.14	208.93	89.28	1,116.01	-4,989.85	5,089.51	4,853.43	236.08	21.559		
6,200.00	6,182.89	6,133.89	6,182.89	27.59	212.41	89.36	1,116.01	-4,989.85	5,089.42	4,849.41	240.01	21.205		
6,300.00	6,282.58	6,233.58	6,282.58	28.04	215.89	89.45	1,116.01	-4,989.85	5,089.34	4,845.40	243.93	20.864		
6,400.00	6,382.27	6,333.27	6,382.27	28.49	219.37	89.54	1,116.01	-4,989.85	5,089.27	4,841.41	247.86	20.533		
6,500.00	6,481.96	6,432.96	6,481.96	28.94	222.85	89.63	1,116.01	-4,989.85	5,089.21	4,837.42	251.79	20.212		
6,600.00	6,581.66	6,532.66	6,581.66	29.39	226.33	89.72	1,116.01	-4,989.85	5,089.17	4,833.45	255.72	19.901		
6,700.00	6,681.21	6,632.21	6,681.21	29.83	229.81	89.81	1,116.01	-4,989.85	5,089.10	4,829.48	259.64	19.591		
6,800.00	6,778.96	6,729.96	6,778.96	30.28	233.22	89.90	1,116.01	-4,989.85	5,089.04	4,825.51	263.56	19.284		
6,900.00	6,872.51	6,823.51	6,872.51	30.70	236.49	89.99	1,116.01	-4,989.85	5,089.00	4,821.54	267.48	18.985		
7,000.00	6,969.55	6,915.55	6,969.55	31.10	239.52	89.99	1,116.01	-4,989.85	5,089.00	4,817.57	271.40	18.686		
7,100.00	7,037.93	6,983.93	7,037.93	31.48	242.26	89.99	1,116.01	-4,989.85	5,089.00	4,813.60	275.32	18.387		
7,200.00	7,105.74	7,051.74	7,105.74	31.88	244.63	89.99	1,116.01	-4,989.85	5,089.00	4,809.63	279.24	18.088		
7,300.00	7,161.29	7,112.29	7,161.29	32.41	246.57	89.99	1,116.01	-4,989.85	5,089.00	4,805.66	283.16	17.789		
7,400.00	7,203.22	7,154.22	7,203.22	33.13	248.03	89.99	1,116.01	-4,989.85	5,089.00	4,801.69	287.08	17.490		
7,500.00	7,230.50	7,181.50	7,230.50	34.04	248.98	89.99	1,116.01	-4,989.85	5,089.00	4,797.72	291.00	17.191		
7,600.00	7,242.45	7,206.55	7,242.45	35.13	249.86	89.99	1,116.01	-4,989.85	5,089.00	4,793.75	294.92	16.892		
7,700.00	7,242.72	7,206.28	7,242.72	36.39	249.85	90.56	1,116.01	-4,989.85	5,089.00	4,789.78	298.84	16.593		
7,800.00	7,242.33	7,206.67	7,242.33	37.81	249.86	90.55	1,116.01	-4,989.85	5,089.00	4,785.81	302.76	16.294		
7,900.00	7,241.93	7,207.07	7,241.93	39.40	249.88	90.54	1,116.01	-4,989.85	5,089.00	4,781.84	306.68	15.995		
8,000.00	7,241.54	7,207.46	7,241.54	41.13	249.89	90.52	1,116.01	-4,989.85	5,089.00	4,777.87	310.60	15.696		
8,100.00	7,241.15	7,207.85	7,241.15	42.97	249.90	90.51	1,116.01	-4,989.85	5,089.00	4,773.90	314.52	15.397		
8,200.00	7,240.75	7,208.25	7,240.75	44.92	249.92	90.49	1,116.01	-4,989.85	5,089.00	4,769.93	318.44	15.098		
8,300.00	7,240.36	7,208.64	7,240.36	46.97	249.93	90.48	1,116.01	-4,989.85	5,089.00	4,765.96	322.36	14.799		
8,400.00	7,239.97	7,209.03	7,239.97	49.10	249.94	90.47	1,116.01	-4,989.85	5,089.00	4,761.99	326.28	14.500		
8,500.00	7,239.57	7,209.43	7,239.57	51.29	249.96	90.45	1,116.01	-4,989.85	5,089.00	4,758.02	330.20	14.201		
8,600.00	7,239.18	7,209.82	7,239.18	53.56	249.97	90.44	1,116.01	-4,989.85	5,089.00	4,754.05	334.12	13.902		
8,700.00	7,238.79	7,189.79	7,238.79	55.87	249.27	90.43	1,116.01	-4,989.85	5,089.00	4,750.08	338.04	13.603		
8,800.00	7,238.39	7,189.39	7,238.39	58.24	249.26	90.41	1,116.01	-4,989.85	5,089.00	4,746.11	341.96	13.304		
8,900.00	7,238.00	7,189.00	7,238.00	60.64	249.24	90.40	1,116.01	-4,989.85	5,089.00	4,742.14	345.88	13.005		
9,000.00	7,237.61	7,188.61	7,237.61	63.09	249.23	90.39	1,116.01	-4,989.85	5,089.00	4,738.17	349.80	12.706		
9,100.00	7,237.21	7,188.21	7,237.21	65.56	249.22	90.37	1,116.01	-4,989.85	5,089.00	4,734.20	353.72	12.407		
9,200.00	7,236.82	7,187.82	7,236.82	68.07	249.20	90.36	1,116.01	-4,989.85	5,089.00	4,730.23	357.64	12.108		
9,300.00	7,236.43	7,187.43	7,236.43	70.61	249.19	90.34	1,116.01	-4,989.85	5,089.00	4,726.26	361.56	11.809		
9,400.00	7,236.03	7,187.03	7,236.03	73.16	249.18	90.33	1,116.01	-4,989.85	5,089.00	4,722.29	365.48	11.510		
9,500.00	7,235.64	7,186.64	7,235.64	75.74	249.16	90.32	1,116.01	-4,989.85	5,089.00	4,718.32	369.40	11.211		
9,600.00	7,235.25	7,186.25	7,235.25	78.34	249.15	90.30	1,116.01	-4,989.85	5,089.00	4,714.35	373.32	10.912		
9,700.00	7,234.85	7,185.85	7,234.85	80.96	249.13	90.29	1,116.01	-4,989.85	5,089.00	4,710.38	377.24	10.613		
9,800.00	7,234.46	7,185.46	7,234.46	83.59	249.12	90.28	1,116.01	-4,989.85	5,089.00	4,706.41	381.16	10.314		
9,900.00	7,234.07	7,185.07	7,234.07	86.24	249.11	90.26	1,116.01	-4,989.85	5,089.00	4,702.44	385.08	10.015		
10,000.00	7,233.67	7,184.67	7,233.67	88.90	249.09	90.25	1,116.01	-4,989.85	5,089.00	4,698.47	389.00	9.716		
10,100.00	7,233.28	7,184.28	7,233.28	91.57	249.08	90.23	1,116.01	-4,989.85	5,089.00	4,694.50	392.92	9.417		
10,200.00	7,232.89	7,183.89	7,232.89	94.25	249.07	90.22	1,116.01	-4,989.85	5,089.00	4,690.53	396.84	9.118		
10,300.00	7,232.49	7,183.49	7,232.49	96.95	249.05	90.21	1,116.01	-4,989.85	5,089.00	4,686.56	400.76	8.819		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	7,183.10	7,232.10	99.65	249.04	90.19	1,116.01	-4,989.85	2,176.81	1,847.94	328.88	6.619		
10,500.00	7,231.71	7,182.71	7,231.71	102.36	249.02	90.18	1,116.01	-4,989.85	2,112.93	1,780.10	332.83	6.348		
10,600.00	7,231.32	7,182.32	7,231.32	105.08	249.01	90.17	1,116.01	-4,989.85	2,051.94	1,714.97	336.97	6.089		
10,700.00	7,230.92	7,181.92	7,230.92	107.80	249.00	90.15	1,116.01	-4,989.85	1,994.10	1,652.83	341.26	5.843		
10,800.00	7,230.53	7,181.53	7,230.53	110.53	248.98	90.14	1,116.01	-4,989.85	1,939.69	1,593.99	345.70	5.611		
10,900.00	7,230.14	7,181.14	7,230.14	113.27	248.97	90.13	1,116.01	-4,989.85	1,889.01	1,538.78	350.23	5.394		
11,000.00	7,229.74	7,180.74	7,229.74	116.02	248.96	90.11	1,116.01	-4,989.85	1,842.37	1,487.54	354.83	5.192		
11,100.00	7,229.35	7,180.35	7,229.35	118.77	248.94	90.10	1,116.01	-4,989.85	1,800.08	1,440.63	359.45	5.008		
11,200.00	7,228.96	7,179.96	7,228.96	121.52	248.93	90.08	1,116.01	-4,989.85	1,762.46	1,398.43	364.03	4.842		
11,300.00	7,228.56	7,179.56	7,228.56	124.28	248.92	90.07	1,116.01	-4,989.85	1,729.81	1,361.30	368.51	4.694		
11,400.00	7,228.17	7,179.17	7,228.17	127.04	248.90	90.06	1,116.01	-4,989.85	1,702.41	1,329.60	372.81	4.566		
11,500.00	7,227.78	7,178.78	7,227.78	129.81	248.89	90.04	1,116.01	-4,989.85	1,680.53	1,303.64	376.88	4.459		
11,600.00	7,227.38	7,178.38	7,227.38	132.58	248.87	90.03	1,116.01	-4,989.85	1,664.37	1,283.73	380.64	4.373		
11,700.00	7,226.99	7,177.99	7,226.99	135.36	248.86	90.02	1,116.01	-4,989.85	1,654.12	1,270.09	384.03	4.307		
11,800.00	7,226.60	7,177.60	7,226.60	138.14	248.85	90.00	1,116.01	-4,989.85	1,649.87	1,262.89	386.98	4.263		
11,820.17	7,226.52	7,177.52	7,226.52	138.70	248.84	90.00	1,116.01	-4,989.85	1,649.75	1,262.22	387.52	4.257 CC		
11,900.00	7,226.20	7,177.20	7,226.20	140.92	248.83	89.99	1,116.01	-4,989.85	1,651.68	1,262.21	389.47	4.241 ES		
12,000.00	7,225.81	7,176.81	7,225.81	143.70	248.82	89.98	1,116.01	-4,989.85	1,659.52	1,268.05	391.46	4.239 SF		
12,100.00	7,225.42	7,176.42	7,225.42	146.49	248.81	89.96	1,116.01	-4,989.85	1,673.31	1,280.36	392.95	4.258		
12,200.00	7,225.02	7,176.02	7,225.02	149.28	248.79	89.95	1,116.01	-4,989.85	1,692.91	1,298.96	393.95	4.297		
12,300.00	7,224.63	7,175.63	7,224.63	152.08	248.78	89.93	1,116.01	-4,989.85	1,718.11	1,323.64	394.46	4.356		
12,400.00	7,224.24	7,175.24	7,224.24	154.87	248.76	89.92	1,116.01	-4,989.85	1,748.67	1,354.13	394.54	4.432		
12,500.00	7,223.84	7,174.84	7,223.84	157.67	248.75	89.91	1,116.01	-4,989.85	1,784.33	1,390.10	394.23	4.526		
12,600.00	7,223.45	7,174.45	7,223.45	160.47	248.74	89.89	1,116.01	-4,989.85	1,824.77	1,431.21	393.57	4.637		
12,700.00	7,223.06	7,174.06	7,223.06	163.27	248.72	89.88	1,116.01	-4,989.85	1,869.69	1,477.09	392.60	4.762		
12,800.00	7,222.66	7,173.66	7,222.66	166.07	248.71	89.87	1,116.01	-4,989.85	1,918.78	1,527.38	391.40	4.902		
12,900.00	7,222.27	7,173.27	7,222.27	168.88	248.70	89.85	1,116.01	-4,989.85	1,971.72	1,581.73	389.99	5.056		
13,000.00	7,221.88	7,172.88	7,221.88	171.69	248.68	89.84	1,116.01	-4,989.85	2,028.21	1,639.78	388.43	5.222		
13,100.00	7,221.48	7,172.48	7,221.48	174.49	248.67	89.83	1,116.01	-4,989.85	2,087.97	1,701.22	386.75	5.399		
13,200.00	7,221.09	7,172.09	7,221.09	177.30	248.65	89.81	1,116.01	-4,989.85	2,150.71	1,765.72	384.99	5.586		
13,300.00	7,220.70	7,171.70	7,220.70	180.12	248.64	89.80	1,116.01	-4,989.85	2,216.20	1,833.02	383.17	5.784		
13,400.00	7,220.30	7,171.30	7,220.30	182.93	248.63	89.78	1,116.01	-4,989.85	2,284.18	1,902.85	381.33	5.990		
13,500.00	7,219.91	7,170.91	7,219.91	185.74	248.61	89.77	1,116.01	-4,989.85	2,354.45	1,974.97	379.48	6.204		
13,600.00	7,219.52	7,170.52	7,219.52	188.56	248.60	89.76	1,116.01	-4,989.85	2,426.81	2,049.18	377.63	6.426		
13,700.00	7,219.12	7,170.12	7,219.12	191.38	248.59	89.74	1,116.01	-4,989.85	2,501.07	2,125.27	375.81	6.655		
13,800.00	7,218.73	7,169.73	7,218.73	194.20	248.57	89.73	1,116.01	-4,989.85	2,577.08	2,203.07	374.01	6.890		
13,900.00	7,218.34	7,169.34	7,218.34	197.02	248.56	89.72	1,116.01	-4,989.85	2,654.67	2,282.42	372.25	7.131		
14,000.00	7,217.94	7,168.94	7,217.94	199.84	248.54	89.70	1,116.01	-4,989.85	2,733.72	2,363.18	370.54	7.378		
14,100.00	7,217.55	7,168.55	7,217.55	202.66	248.53	89.69	1,116.01	-4,989.85	2,814.11	2,445.24	368.87	7.629		
14,200.00	7,217.16	7,168.16	7,217.16	205.48	248.52	89.67	1,116.01	-4,989.85	2,895.72	2,528.46	367.26	7.885		
14,300.00	7,216.76	7,167.76	7,216.76	208.30	248.50	89.66	1,116.01	-4,989.85	2,978.44	2,612.75	365.69	8.145		
14,400.00	7,216.37	7,167.37	7,216.37	211.13	248.49	89.65	1,116.01	-4,989.85	3,062.20	2,698.02	364.18	8.409		
14,500.00	7,215.98	7,166.98	7,215.98	213.96	248.48	89.63	1,116.01	-4,989.85	3,146.91	2,784.19	362.72	8.676		
14,600.00	7,215.58	7,166.58	7,215.58	216.78	248.46	89.62	1,116.01	-4,989.85	3,232.49	2,871.18	361.31	8.947		
14,700.00	7,215.19	7,166.19	7,215.19	219.61	248.45	89.61	1,116.01	-4,989.85	3,318.88	2,958.92	359.96	9.220		
14,800.00	7,214.80	7,165.80	7,214.80	222.44	248.43	89.59	1,116.01	-4,989.85	3,406.01	3,047.36	358.65	9.497		
14,900.00	7,214.40	7,165.40	7,214.40	225.27	248.42	89.58	1,116.01	-4,989.85	3,493.83	3,136.44	357.39	9.776		
15,000.00	7,214.01	7,165.01	7,214.01	228.10	248.41	89.57	1,116.01	-4,989.85	3,582.29	3,226.11	356.19	10.057		
15,002.44	7,214.00	7,165.00	7,214.00	228.16	248.41	89.57	1,116.01	-4,989.85	3,584.46	3,228.30	356.16	10.064		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	47.00	3.28	3.28	-77.48	1,136.80	-5,119.74	5,244.64					
100.00	100.00	53.00	100.00	3.28	3.41	-77.48	1,136.80	-5,119.74	5,244.43	5,237.73	6.69	783.605		
200.00	200.00	153.00	200.00	3.34	4.87	-77.48	1,136.80	-5,119.74	5,244.43	5,236.22	8.20	639.250		
300.00	300.00	253.00	300.00	3.44	7.81	-77.48	1,136.80	-5,119.74	5,244.43	5,233.17	11.25	466.010		
400.00	400.00	353.00	400.00	3.60	11.07	-77.48	1,136.80	-5,119.74	5,244.43	5,229.75	14.68	357.300		
500.00	500.00	453.00	500.00	3.81	14.45	-77.48	1,136.80	-5,119.74	5,244.43	5,226.17	18.25	287.334		
600.00	599.98	552.98	599.98	4.03	17.86	84.38	1,136.80	-5,119.74	5,244.25	5,222.36	21.90	239.498		
700.00	699.84	652.84	699.84	4.29	21.30	84.44	1,136.80	-5,119.74	5,243.74	5,218.16	25.58	204.968		
800.00	799.54	752.54	799.54	4.57	24.74	84.53	1,136.80	-5,119.74	5,243.00	5,213.69	29.31	178.890		
900.00	899.23	852.23	899.23	4.87	28.20	84.62	1,136.80	-5,119.74	5,242.25	5,209.19	33.07	158.529		
1,000.00	998.92	951.92	998.92	5.20	31.66	84.70	1,136.80	-5,119.74	5,241.52	5,204.67	36.85	142.221		
1,100.00	1,098.61	1,051.61	1,098.61	5.54	35.12	84.79	1,136.80	-5,119.74	5,240.80	5,200.14	40.66	128.883		
1,200.00	1,198.30	1,151.30	1,198.30	5.90	38.59	84.87	1,136.80	-5,119.74	5,240.09	5,195.60	44.49	117.783		
1,300.00	1,298.00	1,251.00	1,298.00	6.27	42.05	84.96	1,136.80	-5,119.74	5,239.39	5,191.06	48.33	108.410		
1,400.00	1,397.69	1,350.69	1,397.69	6.66	45.53	85.04	1,136.80	-5,119.74	5,238.71	5,186.53	52.18	100.394		
1,500.00	1,497.38	1,450.38	1,497.38	7.05	49.00	85.13	1,136.80	-5,119.74	5,238.03	5,181.99	56.04	93.465		
1,600.00	1,597.07	1,550.07	1,597.07	7.44	52.47	85.21	1,136.80	-5,119.74	5,237.37	5,177.46	59.91	87.417		
1,700.00	1,696.76	1,649.76	1,696.76	7.85	55.94	85.30	1,136.80	-5,119.74	5,236.72	5,172.93	63.79	82.094		
1,800.00	1,796.45	1,749.45	1,796.45	8.25	59.42	85.38	1,136.80	-5,119.74	5,236.08	5,168.41	67.67	77.375		
1,900.00	1,896.15	1,849.15	1,896.15	8.67	62.89	85.47	1,136.80	-5,119.74	5,235.45	5,163.89	71.56	73.163		
2,000.00	1,995.84	1,948.84	1,995.84	9.08	66.37	85.55	1,136.80	-5,119.74	5,234.84	5,159.39	75.45	69.381		
2,100.00	2,095.53	2,048.53	2,095.53	9.50	69.85	85.64	1,136.80	-5,119.74	5,234.23	5,154.89	79.35	65.967		
2,200.00	2,195.22	2,148.22	2,195.22	9.92	73.32	85.73	1,136.80	-5,119.74	5,233.64	5,150.40	83.25	62.870		
2,300.00	2,294.91	2,247.91	2,294.91	10.35	76.80	85.81	1,136.80	-5,119.74	5,233.06	5,145.91	87.15	60.049		
2,400.00	2,394.60	2,347.60	2,394.60	10.77	80.28	85.90	1,136.80	-5,119.74	5,232.49	5,141.44	91.05	57.468		
2,500.00	2,494.30	2,447.30	2,494.30	11.20	83.75	85.98	1,136.80	-5,119.74	5,231.93	5,136.98	94.96	55.098		
2,600.00	2,593.99	2,546.99	2,593.99	11.63	87.23	86.07	1,136.80	-5,119.74	5,231.39	5,132.52	98.87	52.914		
2,700.00	2,693.68	2,646.68	2,693.68	12.07	90.71	86.15	1,136.80	-5,119.74	5,230.85	5,128.08	102.78	50.896		
2,800.00	2,793.37	2,746.37	2,793.37	12.50	94.19	86.24	1,136.80	-5,119.74	5,230.33	5,123.64	106.69	49.025		
2,900.00	2,893.06	2,846.06	2,893.06	12.93	97.67	86.32	1,136.80	-5,119.74	5,229.82	5,119.22	110.60	47.286		
3,000.00	2,992.76	2,945.76	2,992.76	13.37	101.14	86.41	1,136.80	-5,119.74	5,229.32	5,114.81	114.51	45.665		
3,100.00	3,092.45	3,045.45	3,092.45	13.81	104.62	86.49	1,136.80	-5,119.74	5,228.84	5,110.41	118.43	44.151		
3,200.00	3,192.14	3,145.14	3,192.14	14.25	108.10	86.58	1,136.80	-5,119.74	5,228.36	5,106.01	122.35	42.734		
3,300.00	3,291.83	3,244.83	3,291.83	14.68	111.58	86.67	1,136.80	-5,119.74	5,227.90	5,101.63	126.26	41.405		
3,400.00	3,391.52	3,344.52	3,391.52	15.12	115.06	86.75	1,136.80	-5,119.74	5,227.44	5,097.26	130.18	40.155		
3,500.00	3,491.21	3,444.21	3,491.21	15.56	118.54	86.84	1,136.80	-5,119.74	5,227.00	5,092.90	134.10	38.978		
3,600.00	3,590.91	3,543.91	3,590.91	16.00	122.02	86.92	1,136.80	-5,119.74	5,226.58	5,088.55	138.02	37.868		
3,700.00	3,690.60	3,643.60	3,690.60	16.45	125.50	87.01	1,136.80	-5,119.74	5,226.16	5,084.22	141.94	36.819		
3,800.00	3,790.29	3,743.29	3,790.29	16.89	128.97	87.09	1,136.80	-5,119.74	5,225.75	5,079.89	145.86	35.827		
3,900.00	3,889.98	3,842.98	3,889.98	17.33	132.45	87.18	1,136.80	-5,119.74	5,225.36	5,075.58	149.78	34.886		
4,000.00	3,989.67	3,942.67	3,989.67	17.77	135.93	87.27	1,136.80	-5,119.74	5,224.98	5,071.27	153.71	33.993		
4,100.00	4,089.36	4,042.36	4,089.36	18.22	139.41	87.35	1,136.80	-5,119.74	5,224.61	5,066.98	157.63	33.145		
4,200.00	4,189.06	4,142.06	4,189.06	18.66	142.89	87.44	1,136.80	-5,119.74	5,224.25	5,062.70	161.55	32.338		
4,300.00	4,288.75	4,241.75	4,288.75	19.10	146.37	87.52	1,136.80	-5,119.74	5,223.91	5,058.43	165.48	31.569		
4,400.00	4,388.44	4,341.44	4,388.44	19.55	149.85	87.61	1,136.80	-5,119.74	5,223.57	5,054.17	169.40	30.836		
4,500.00	4,488.13	4,441.13	4,488.13	19.99	153.33	87.69	1,136.80	-5,119.74	5,223.25	5,049.92	173.32	30.136		
4,600.00	4,587.82	4,540.82	4,587.82	20.44	156.81	87.78	1,136.80	-5,119.74	5,222.94	5,045.69	177.25	29.467		
4,700.00	4,687.51	4,640.51	4,687.51	20.89	160.29	87.87	1,136.80	-5,119.74	5,222.64	5,041.47	181.17	28.827		
4,800.00	4,787.21	4,740.21	4,787.21	21.33	163.77	87.95	1,136.80	-5,119.74	5,222.35	5,037.25	185.10	28.214		
4,900.00	4,886.90	4,839.90	4,886.90	21.78	167.25	88.04	1,136.80	-5,119.74	5,222.08	5,033.05	189.02	27.626		
5,000.00	4,986.59	4,939.59	4,986.59	22.22	170.73	88.12	1,136.80	-5,119.74	5,221.81	5,028.86	192.95	27.063		
5,100.00	5,086.28	5,039.28	5,086.28	22.67	174.21	88.21	1,136.80	-5,119.74	5,221.56	5,024.68	196.88	26.522		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,138.97	5,185.97	23.12	177.69	88.29	1,136.80	-5,119.74	5,221.32	5,020.52	200.80	26.002		
5,300.00	5,285.66	5,238.66	5,285.66	23.56	181.17	88.38	1,136.80	-5,119.74	5,221.09	5,016.36	204.73	25.502		
5,400.00	5,385.36	5,338.36	5,385.36	24.01	184.65	88.47	1,136.80	-5,119.74	5,220.88	5,012.22	208.66	25.021		
5,500.00	5,485.05	5,438.05	5,485.05	24.46	188.13	88.55	1,136.80	-5,119.74	5,220.67	5,008.09	212.58	24.558		
5,600.00	5,584.74	5,537.74	5,584.74	24.90	191.61	88.64	1,136.80	-5,119.74	5,220.48	5,003.97	216.51	24.112		
5,700.00	5,684.43	5,637.43	5,684.43	25.35	195.09	88.72	1,136.80	-5,119.74	5,220.30	4,999.86	220.44	23.682		
5,800.00	5,784.12	5,737.12	5,784.12	25.80	198.56	88.81	1,136.80	-5,119.74	5,220.13	4,995.76	224.36	23.266		
5,900.00	5,883.81	5,836.81	5,883.81	26.25	202.04	88.89	1,136.80	-5,119.74	5,219.97	4,991.68	228.29	22.865		
6,000.00	5,983.51	5,936.51	5,983.51	26.70	205.52	88.98	1,136.80	-5,119.74	5,219.82	4,987.60	232.22	22.478		
6,100.00	6,083.20	6,036.20	6,083.20	27.14	209.00	89.07	1,136.80	-5,119.74	5,219.69	4,983.54	236.15	22.103		
6,200.00	6,182.89	6,135.89	6,182.89	27.59	212.48	89.15	1,136.80	-5,119.74	5,219.57	4,979.49	240.08	21.741		
6,300.00	6,282.58	6,235.58	6,282.58	28.04	215.96	89.24	1,136.80	-5,119.74	5,219.46	4,975.45	244.00	21.391		
6,400.00	6,382.27	6,335.27	6,382.27	28.49	219.44	89.32	1,136.80	-5,119.74	5,219.36	4,971.42	247.93	21.052		
6,500.00	6,481.96	6,434.96	6,481.96	28.94	222.92	89.41	1,136.80	-5,119.74	5,219.27	4,967.41	251.86	20.723		
6,600.00	6,581.66	6,534.66	6,581.66	29.39	226.40	89.50	1,136.80	-5,119.74	5,219.20	4,963.41	255.79	20.404		
6,700.00	6,681.21	6,634.21	6,681.21	29.83	229.88	89.58	1,136.80	-5,119.74	5,219.13	4,959.42	259.71	20.086		
6,800.00	6,778.96	6,731.96	6,778.96	30.28	233.29	89.66	1,136.80	-5,119.74	5,219.06	4,955.45	263.63	19.768		
6,900.00	6,872.51	6,825.51	6,872.51	30.70	236.66	89.74	1,136.80	-5,119.74	5,219.00	4,951.50	267.55	19.450		
7,000.00	6,969.55	6,922.55	6,969.55	31.10	239.99	89.82	1,136.80	-5,119.74	5,218.94	4,947.56	271.47	19.132		
7,100.00	7,037.93	7,009.07	7,037.93	31.48	242.96	89.90	1,136.80	-5,119.74	5,218.88	4,943.63	275.39	18.814		
7,200.00	7,105.74	7,058.74	7,105.74	31.88	244.70	89.98	1,136.80	-5,119.74	5,218.82	4,939.70	279.31	18.496		
7,300.00	7,161.29	7,114.29	7,161.29	32.41	246.64	89.99	1,136.80	-5,119.74	4,925.78	4,935.78	278.73	17.672		
7,400.00	7,203.22	7,156.22	7,203.22	33.13	248.10	89.96	1,136.80	-5,119.74	4,841.68	4,561.20	280.48	17.262		
7,500.00	7,230.50	7,183.50	7,230.50	34.04	249.05	89.93	1,136.80	-5,119.74	4,752.33	4,470.63	281.70	16.870		
7,600.00	7,242.45	7,204.55	7,242.45	35.13	249.79	89.88	1,136.80	-5,119.74	4,659.94	4,377.24	282.70	16.484		
7,700.00	7,242.72	7,204.28	7,242.72	36.39	249.78	90.57	1,136.80	-5,119.74	4,566.76	4,283.79	282.97	16.139		
7,800.00	7,242.33	7,204.67	7,242.33	37.81	249.79	90.56	1,136.80	-5,119.74	4,473.85	4,190.54	283.31	15.791		
7,900.00	7,241.93	7,205.07	7,241.93	39.40	249.81	90.55	1,136.80	-5,119.74	4,381.25	4,097.54	283.71	15.443		
8,000.00	7,241.54	7,205.46	7,241.54	41.13	249.82	90.53	1,136.80	-5,119.74	4,288.99	4,004.82	284.17	15.093		
8,100.00	7,241.15	7,205.85	7,241.15	42.97	249.83	90.52	1,136.80	-5,119.74	4,197.08	3,912.39	284.69	14.743		
8,200.00	7,240.75	7,206.25	7,240.75	44.92	249.85	90.51	1,136.80	-5,119.74	4,105.54	3,820.26	285.28	14.391		
8,300.00	7,240.36	7,206.64	7,240.36	46.97	249.86	90.49	1,136.80	-5,119.74	4,014.41	3,728.46	285.95	14.039		
8,400.00	7,239.97	7,207.03	7,239.97	49.10	249.87	90.48	1,136.80	-5,119.74	3,923.72	3,637.02	286.70	13.686		
8,500.00	7,239.57	7,207.43	7,239.57	51.29	249.89	90.47	1,136.80	-5,119.74	3,833.48	3,545.95	287.53	13.332		
8,600.00	7,239.18	7,207.82	7,239.18	53.56	249.90	90.45	1,136.80	-5,119.74	3,743.74	3,455.29	288.46	12.979		
8,700.00	7,238.79	7,208.21	7,238.79	55.87	249.92	90.44	1,136.80	-5,119.74	3,654.54	3,365.06	289.48	12.625		
8,800.00	7,238.39	7,208.61	7,238.39	58.24	249.93	90.42	1,136.80	-5,119.74	3,565.91	3,275.31	290.60	12.271		
8,900.00	7,238.00	7,209.00	7,238.00	60.64	249.94	90.41	1,136.80	-5,119.74	3,477.89	3,186.06	291.83	11.917		
9,000.00	7,237.61	7,209.39	7,237.61	63.09	249.96	90.40	1,136.80	-5,119.74	3,390.54	3,097.36	293.18	11.565		
9,100.00	7,237.21	7,209.79	7,237.21	65.56	249.97	90.38	1,136.80	-5,119.74	3,303.91	3,009.25	294.65	11.213		
9,200.00	7,236.82	7,189.82	7,236.82	68.07	249.27	90.37	1,136.80	-5,119.74	3,218.05	2,922.50	295.54	10.889		
9,300.00	7,236.43	7,189.43	7,236.43	70.61	249.26	90.36	1,136.80	-5,119.74	3,133.03	2,835.78	297.25	10.540		
9,400.00	7,236.03	7,189.03	7,236.03	73.16	249.25	90.34	1,136.80	-5,119.74	3,048.92	2,749.81	299.10	10.194		
9,500.00	7,235.64	7,188.64	7,235.64	75.74	249.23	90.33	1,136.80	-5,119.74	2,965.79	2,664.69	301.10	9.850		
9,600.00	7,235.25	7,188.25	7,235.25	78.34	249.22	90.32	1,136.80	-5,119.74	2,883.74	2,580.48	303.26	9.509		
9,700.00	7,234.85	7,187.85	7,234.85	80.96	249.20	90.30	1,136.80	-5,119.74	2,802.85	2,497.27	305.58	9.172		
9,800.00	7,234.46	7,187.46	7,234.46	83.59	249.19	90.29	1,136.80	-5,119.74	2,723.23	2,415.17	308.07	8.840		
9,900.00	7,234.07	7,187.07	7,234.07	86.24	249.18	90.28	1,136.80	-5,119.74	2,645.00	2,334.27	310.73	8.512		
10,000.00	7,233.67	7,186.67	7,233.67	88.90	249.16	90.26	1,136.80	-5,119.74	2,568.28	2,254.70	313.58	8.190		
10,100.00	7,233.28	7,186.28	7,233.28	91.57	249.15	90.25	1,136.80	-5,119.74	2,493.21	2,176.59	316.62	7.874		
10,200.00	7,232.89	7,185.89	7,232.89	94.25	249.14	90.24	1,136.80	-5,119.74	2,419.94	2,100.09	319.85	7.566		
10,300.00	7,232.49	7,185.49	7,232.49	96.95	249.12	90.22	1,136.80	-5,119.74	2,348.65	2,025.37	323.28	7.265		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,185.10	7,232.10	99.65	249.11	90.21	1,136.80	-5,119.74	2,279.51	1,952.61	326.90	6.973		
10,500.00	7,231.71	7,184.71	7,231.71	102.36	249.09	90.20	1,136.80	-5,119.74	2,212.74	1,882.03	330.71	6.691		
10,600.00	7,231.32	7,184.32	7,231.32	105.08	249.08	90.18	1,136.80	-5,119.74	2,148.54	1,813.83	334.71	6.419		
10,700.00	7,230.92	7,183.92	7,230.92	107.80	249.07	90.17	1,136.80	-5,119.74	2,087.17	1,748.28	338.88	6.159		
10,800.00	7,230.53	7,183.53	7,230.53	110.53	249.05	90.16	1,136.80	-5,119.74	2,028.86	1,685.65	343.22	5.911		
10,900.00	7,230.14	7,183.14	7,230.14	113.27	249.04	90.14	1,136.80	-5,119.74	1,973.91	1,626.22	347.69	5.677		
11,000.00	7,229.74	7,182.74	7,229.74	116.02	249.03	90.13	1,136.80	-5,119.74	1,922.59	1,570.33	352.26	5.458		
11,100.00	7,229.35	7,182.35	7,229.35	118.77	249.01	90.11	1,136.80	-5,119.74	1,875.20	1,518.29	356.91	5.254		
11,200.00	7,228.96	7,181.96	7,228.96	121.52	249.00	90.10	1,136.80	-5,119.74	1,832.05	1,470.47	361.58	5.067		
11,300.00	7,228.56	7,181.56	7,228.56	124.28	248.98	90.09	1,136.80	-5,119.74	1,793.44	1,427.22	366.22	4.897		
11,400.00	7,228.17	7,181.17	7,228.17	127.04	248.97	90.07	1,136.80	-5,119.74	1,759.67	1,388.90	370.77	4.746		
11,500.00	7,227.78	7,180.78	7,227.78	129.81	248.96	90.06	1,136.80	-5,119.74	1,731.03	1,355.87	375.16	4.614		
11,600.00	7,227.38	7,180.38	7,227.38	132.58	248.94	90.05	1,136.80	-5,119.74	1,707.77	1,328.44	379.33	4.502		
11,700.00	7,226.99	7,179.99	7,226.99	135.36	248.93	90.03	1,136.80	-5,119.74	1,690.12	1,306.92	383.20	4.411		
11,800.00	7,226.60	7,179.60	7,226.60	138.14	248.92	90.02	1,136.80	-5,119.74	1,678.26	1,291.54	386.71	4.340		
11,900.00	7,226.20	7,179.20	7,226.20	140.92	248.90	90.01	1,136.80	-5,119.74	1,672.29	1,282.48	389.81	4.290		
11,949.88	7,226.01	7,179.01	7,226.01	142.31	248.90	90.00	1,136.80	-5,119.74	1,671.55	1,280.36	391.19	4.273 CC		
12,000.00	7,225.81	7,178.81	7,225.81	143.70	248.89	89.99	1,136.80	-5,119.74	1,672.30	1,279.85	392.45	4.261 ES		
12,100.00	7,225.42	7,178.42	7,225.42	146.49	248.88	89.98	1,136.80	-5,119.74	1,678.28	1,283.68	394.59	4.253 SF		
12,200.00	7,225.02	7,178.02	7,225.02	149.28	248.86	89.97	1,136.80	-5,119.74	1,690.16	1,293.92	396.24	4.266		
12,300.00	7,224.63	7,177.63	7,224.63	152.08	248.85	89.95	1,136.80	-5,119.74	1,707.82	1,310.44	397.38	4.298		
12,400.00	7,224.24	7,177.24	7,224.24	154.87	248.83	89.94	1,136.80	-5,119.74	1,731.09	1,333.05	398.04	4.349		
12,500.00	7,223.84	7,176.84	7,223.84	157.67	248.82	89.93	1,136.80	-5,119.74	1,759.74	1,361.50	398.24	4.419		
12,600.00	7,223.45	7,176.45	7,223.45	160.47	248.81	89.91	1,136.80	-5,119.74	1,793.52	1,395.48	398.04	4.506		
12,700.00	7,223.06	7,176.06	7,223.06	163.27	248.79	89.90	1,136.80	-5,119.74	1,832.14	1,434.67	397.47	4.610		
12,800.00	7,222.66	7,175.66	7,222.66	166.07	248.78	89.89	1,136.80	-5,119.74	1,875.30	1,478.72	396.58	4.729		
12,900.00	7,222.27	7,175.27	7,222.27	168.88	248.77	89.87	1,136.80	-5,119.74	1,922.70	1,527.27	395.43	4.862		
13,000.00	7,221.88	7,174.88	7,221.88	171.69	248.75	89.86	1,136.80	-5,119.74	1,974.03	1,579.97	394.06	5.009		
13,100.00	7,221.48	7,174.48	7,221.48	174.49	248.74	89.84	1,136.80	-5,119.74	2,029.00	1,636.48	392.52	5.169		
13,200.00	7,221.09	7,174.09	7,221.09	177.30	248.72	89.83	1,136.80	-5,119.74	2,087.31	1,696.46	390.84	5.341		
13,300.00	7,220.70	7,173.70	7,220.70	180.12	248.71	89.82	1,136.80	-5,119.74	2,148.69	1,759.61	389.07	5.523		
13,400.00	7,220.30	7,173.30	7,220.30	182.93	248.70	89.80	1,136.80	-5,119.74	2,212.89	1,825.65	387.24	5.715		
13,500.00	7,219.91	7,172.91	7,219.91	185.74	248.68	89.79	1,136.80	-5,119.74	2,279.67	1,894.31	385.36	5.916		
13,600.00	7,219.52	7,172.52	7,219.52	188.56	248.67	89.78	1,136.80	-5,119.74	2,348.81	1,965.34	383.47	6.125		
13,700.00	7,219.12	7,172.12	7,219.12	191.38	248.66	89.76	1,136.80	-5,119.74	2,420.11	2,038.53	381.58	6.342		
13,800.00	7,218.73	7,171.73	7,218.73	194.20	248.64	89.75	1,136.80	-5,119.74	2,493.38	2,113.68	379.70	6.567		
13,900.00	7,218.34	7,171.34	7,218.34	197.02	248.63	89.74	1,136.80	-5,119.74	2,568.46	2,190.61	377.85	6.798		
14,000.00	7,217.94	7,170.94	7,217.94	199.84	248.61	89.72	1,136.80	-5,119.74	2,645.18	2,269.15	376.03	7.034		
14,100.00	7,217.55	7,170.55	7,217.55	202.66	248.60	89.71	1,136.80	-5,119.74	2,723.42	2,349.16	374.26	7.277		
14,200.00	7,217.16	7,170.16	7,217.16	205.48	248.59	89.70	1,136.80	-5,119.74	2,803.04	2,430.51	372.53	7.524		
14,300.00	7,216.76	7,169.76	7,216.76	208.30	248.57	89.68	1,136.80	-5,119.74	2,883.93	2,513.08	370.85	7.777		
14,400.00	7,216.37	7,169.37	7,216.37	211.13	248.56	89.67	1,136.80	-5,119.74	2,965.98	2,596.76	369.22	8.033		
14,500.00	7,215.98	7,168.98	7,215.98	213.96	248.55	89.66	1,136.80	-5,119.74	3,049.11	2,681.47	367.64	8.294		
14,600.00	7,215.58	7,168.58	7,215.58	216.78	248.53	89.64	1,136.80	-5,119.74	3,133.22	2,767.10	366.12	8.558		
14,700.00	7,215.19	7,168.19	7,215.19	219.61	248.52	89.63	1,136.80	-5,119.74	3,218.24	2,853.59	364.65	8.826		
14,800.00	7,214.80	7,167.80	7,214.80	222.44	248.50	89.62	1,136.80	-5,119.74	3,304.11	2,940.87	363.24	9.096		
14,900.00	7,214.40	7,167.40	7,214.40	225.27	248.49	89.60	1,136.80	-5,119.74	3,390.74	3,028.87	361.87	9.370		
15,000.00	7,214.01	7,167.01	7,214.01	228.10	248.48	89.59	1,136.80	-5,119.74	3,478.09	3,117.54	360.56	9.646		
15,002.44	7,214.00	7,167.00	7,214.00	228.16	248.48	89.59	1,136.80	-5,119.74	3,480.23	3,119.71	360.52	9.653		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	54.00	3.28	3.28	-93.90	-335.04	-4,917.00	4,928.69					
100.00	100.00	46.00	100.00	3.28	3.38	-93.90	-335.04	-4,917.00	4,928.40	4,921.74	6.66	739.825		
200.00	200.00	146.00	200.00	3.34	4.69	-93.90	-335.04	-4,917.00	4,928.40	4,920.37	8.03	614.025		
300.00	300.00	246.00	300.00	3.44	7.59	-93.90	-335.04	-4,917.00	4,928.40	4,917.37	11.03	446.704		
400.00	400.00	346.00	400.00	3.60	10.84	-93.90	-335.04	-4,917.00	4,928.40	4,913.95	14.44	341.189		
500.00	500.00	446.00	500.00	3.81	14.21	-93.90	-335.04	-4,917.00	4,928.40	4,910.38	18.01	273.585		
600.00	599.98	545.98	599.98	4.03	17.62	67.97	-335.04	-4,917.00	4,927.74	4,906.09	21.66	227.538		
700.00	699.84	645.84	699.84	4.29	21.06	68.06	-335.04	-4,917.00	4,925.78	4,900.44	25.34	194.371		
800.00	799.54	745.54	799.54	4.57	24.50	68.16	-335.04	-4,917.00	4,922.89	4,893.82	29.07	169.366		
900.00	899.23	845.23	899.23	4.87	27.95	68.24	-335.04	-4,917.00	4,919.97	4,887.14	32.83	149.884		
1,000.00	998.92	944.92	998.92	5.20	31.41	68.33	-335.04	-4,917.00	4,917.06	4,880.45	36.61	134.306		
1,100.00	1,098.61	1,044.61	1,098.61	5.54	34.88	68.41	-335.04	-4,917.00	4,914.16	4,873.74	40.42	121.582		
1,200.00	1,198.30	1,144.30	1,198.30	5.90	38.34	68.50	-335.04	-4,917.00	4,911.27	4,867.02	44.24	111.006		
1,300.00	1,298.00	1,244.00	1,298.00	6.27	41.81	68.58	-335.04	-4,917.00	4,908.39	4,860.31	48.08	102.083		
1,400.00	1,397.69	1,343.69	1,397.69	6.66	45.28	68.67	-335.04	-4,917.00	4,905.52	4,853.59	51.93	94.458		
1,500.00	1,497.38	1,443.38	1,497.38	7.05	48.75	68.75	-335.04	-4,917.00	4,902.67	4,846.87	55.79	87.871		
1,600.00	1,597.07	1,543.07	1,597.07	7.44	52.23	68.84	-335.04	-4,917.00	4,899.82	4,840.16	59.66	82.125		
1,700.00	1,696.76	1,642.76	1,696.76	7.85	55.70	68.92	-335.04	-4,917.00	4,896.99	4,833.45	63.54	77.071		
1,800.00	1,796.45	1,742.45	1,796.45	8.25	59.17	69.01	-335.04	-4,917.00	4,894.16	4,826.74	67.42	72.592		
1,900.00	1,896.15	1,842.15	1,896.15	8.67	62.65	69.09	-335.04	-4,917.00	4,891.35	4,820.04	71.31	68.596		
2,000.00	1,995.84	1,941.84	1,995.84	9.08	66.13	69.18	-335.04	-4,917.00	4,888.55	4,813.35	75.20	65.009		
2,100.00	2,095.53	2,041.53	2,095.53	9.50	69.60	69.27	-335.04	-4,917.00	4,885.76	4,806.66	79.09	61.773		
2,200.00	2,195.22	2,141.22	2,195.22	9.92	73.08	69.35	-335.04	-4,917.00	4,882.98	4,799.99	82.99	58.838		
2,300.00	2,294.91	2,240.91	2,294.91	10.35	76.56	69.44	-335.04	-4,917.00	4,880.21	4,793.32	86.89	56.165		
2,400.00	2,394.60	2,340.60	2,394.60	10.77	80.03	69.52	-335.04	-4,917.00	4,877.45	4,786.66	90.79	53.720		
2,500.00	2,494.30	2,440.30	2,494.30	11.20	83.51	69.61	-335.04	-4,917.00	4,874.70	4,780.00	94.70	51.475		
2,600.00	2,593.99	2,539.99	2,593.99	11.63	86.99	69.70	-335.04	-4,917.00	4,871.97	4,773.36	98.61	49.408		
2,700.00	2,693.68	2,639.68	2,693.68	12.07	90.47	69.78	-335.04	-4,917.00	4,869.24	4,766.73	102.52	47.497		
2,800.00	2,793.37	2,739.37	2,793.37	12.50	93.94	69.87	-335.04	-4,917.00	4,866.53	4,760.10	106.43	45.726		
2,900.00	2,893.06	2,839.06	2,893.06	12.93	97.42	69.95	-335.04	-4,917.00	4,863.83	4,753.49	110.34	44.081		
3,000.00	2,992.76	2,938.76	2,992.76	13.37	100.90	70.04	-335.04	-4,917.00	4,861.14	4,746.88	114.25	42.547		
3,100.00	3,092.45	3,038.45	3,092.45	13.81	104.38	70.13	-335.04	-4,917.00	4,858.46	4,740.29	118.17	41.115		
3,200.00	3,192.14	3,138.14	3,192.14	14.25	107.86	70.22	-335.04	-4,917.00	4,855.79	4,733.70	122.08	39.774		
3,300.00	3,291.83	3,237.83	3,291.83	14.68	111.34	70.30	-335.04	-4,917.00	4,853.13	4,727.13	126.00	38.517		
3,400.00	3,391.52	3,337.52	3,391.52	15.12	114.81	70.39	-335.04	-4,917.00	4,850.48	4,720.56	129.92	37.335		
3,500.00	3,491.21	3,437.21	3,491.21	15.56	118.29	70.48	-335.04	-4,917.00	4,847.85	4,714.01	133.84	36.222		
3,600.00	3,590.91	3,536.91	3,590.91	16.00	121.77	70.56	-335.04	-4,917.00	4,845.22	4,707.47	137.76	35.173		
3,700.00	3,690.60	3,636.60	3,690.60	16.45	125.25	70.65	-335.04	-4,917.00	4,842.61	4,700.94	141.68	34.181		
3,800.00	3,790.29	3,736.29	3,790.29	16.89	128.73	70.74	-335.04	-4,917.00	4,840.01	4,694.41	145.60	33.243		
3,900.00	3,889.98	3,835.98	3,889.98	17.33	132.21	70.83	-335.04	-4,917.00	4,837.42	4,687.90	149.52	32.354		
4,000.00	3,989.67	3,935.67	3,989.67	17.77	135.69	70.91	-335.04	-4,917.00	4,834.84	4,681.40	153.44	31.510		
4,100.00	4,089.36	4,035.36	4,089.36	18.22	139.17	71.00	-335.04	-4,917.00	4,832.27	4,674.91	157.36	30.708		
4,200.00	4,189.06	4,135.06	4,189.06	18.66	142.65	71.09	-335.04	-4,917.00	4,829.72	4,668.44	161.28	29.946		
4,300.00	4,288.75	4,234.75	4,288.75	19.10	146.13	71.18	-335.04	-4,917.00	4,827.17	4,661.97	165.21	29.219		
4,400.00	4,388.44	4,334.44	4,388.44	19.55	149.61	71.26	-335.04	-4,917.00	4,824.64	4,655.51	169.13	28.526		
4,500.00	4,488.13	4,434.13	4,488.13	19.99	153.09	71.35	-335.04	-4,917.00	4,822.12	4,649.07	173.05	27.865		
4,600.00	4,587.82	4,533.82	4,587.82	20.44	156.56	71.44	-335.04	-4,917.00	4,819.61	4,642.63	176.98	27.233		
4,700.00	4,687.51	4,633.51	4,687.51	20.89	160.04	71.53	-335.04	-4,917.00	4,817.11	4,636.21	180.90	26.628		
4,800.00	4,787.21	4,733.21	4,787.21	21.33	163.52	71.62	-335.04	-4,917.00	4,814.62	4,629.80	184.83	26.049		
4,900.00	4,886.90	4,832.90	4,886.90	21.78	167.00	71.71	-335.04	-4,917.00	4,812.15	4,623.40	188.75	25.494		
5,000.00	4,986.59	4,932.59	4,986.59	22.22	170.48	71.79	-335.04	-4,917.00	4,809.69	4,617.01	192.68	24.962		
5,100.00	5,086.28	5,032.28	5,086.28	22.67	173.96	71.88	-335.04	-4,917.00	4,807.23	4,610.63	196.60	24.451		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,185.97	5,131.97	5,185.97	23.12	177.44	71.97	-335.04	-4,917.00	4,804.79	4,604.26	200.53	23.961		
5,300.00	5,285.66	5,231.66	5,285.66	23.56	180.92	72.06	-335.04	-4,917.00	4,802.36	4,597.91	204.46	23.489		
5,400.00	5,385.36	5,331.36	5,385.36	24.01	184.40	72.15	-335.04	-4,917.00	4,799.94	4,591.56	208.38	23.034		
5,500.00	5,485.05	5,431.05	5,485.05	24.46	187.88	72.24	-335.04	-4,917.00	4,797.54	4,585.23	212.31	22.597		
5,600.00	5,584.74	5,530.74	5,584.74	24.90	191.36	72.33	-335.04	-4,917.00	4,795.14	4,578.91	216.24	22.176		
5,700.00	5,684.43	5,630.43	5,684.43	25.35	194.84	72.42	-335.04	-4,917.00	4,792.76	4,572.60	220.16	21.769		
5,800.00	5,784.12	5,730.12	5,784.12	25.80	198.32	72.51	-335.04	-4,917.00	4,790.39	4,566.30	224.09	21.377		
5,900.00	5,883.81	5,829.81	5,883.81	26.25	201.80	72.59	-335.04	-4,917.00	4,788.03	4,560.01	228.02	20.999		
6,000.00	5,983.51	5,929.51	5,983.51	26.70	205.28	72.68	-335.04	-4,917.00	4,785.68	4,553.74	231.94	20.633		
6,100.00	6,083.20	6,029.20	6,083.20	27.14	208.76	72.77	-335.04	-4,917.00	4,783.35	4,547.47	235.87	20.279		
6,200.00	6,182.89	6,128.89	6,182.89	27.59	212.24	72.86	-335.04	-4,917.00	4,781.02	4,541.22	239.80	19.938		
6,300.00	6,282.58	6,228.58	6,282.58	28.04	215.72	72.95	-335.04	-4,917.00	4,778.71	4,534.98	243.73	19.607		
6,400.00	6,382.27	6,328.27	6,382.27	28.49	219.20	73.04	-335.04	-4,917.00	4,776.41	4,528.75	247.66	19.286		
6,500.00	6,481.96	6,427.96	6,481.96	28.94	222.68	73.13	-335.04	-4,917.00	4,774.12	4,522.54	251.58	18.976		
6,600.00	6,581.66	6,527.66	6,581.66	29.39	226.16	73.22	-335.04	-4,917.00	4,771.84	4,516.33	255.51	18.676		
6,700.00	6,681.21	6,627.21	6,681.21	29.83	229.63	73.31	-335.04	-4,917.00	4,769.59	4,510.12	259.44	18.374		
6,800.00	6,778.96	6,724.96	6,778.96	30.28	233.05	73.40	-335.04	-4,917.00	4,767.34	4,503.91	263.37	18.072		
6,900.00	6,872.51	6,818.51	6,872.51	30.70	236.31	73.49	-335.04	-4,917.00	4,765.09	4,497.70	267.30	17.770		
7,000.00	6,969.55	6,915.55	6,969.55	31.10	239.35	73.58	-335.04	-4,917.00	4,762.84	4,491.49	271.23	17.468		
7,100.00	7,037.93	6,983.93	7,037.93	31.48	242.09	73.67	-335.04	-4,917.00	4,760.59	4,485.28	275.16	17.166		
7,200.00	7,105.74	7,051.74	7,105.74	31.88	244.45	73.76	-335.04	-4,917.00	4,758.34	4,479.07	279.09	16.864		
7,300.00	7,161.29	7,107.29	7,161.29	32.41	246.39	73.85	-335.04	-4,917.00	4,756.09	4,472.86	283.02	16.562		
7,400.00	7,203.22	7,149.22	7,203.22	33.13	247.86	73.94	-335.04	-4,917.00	4,753.84	4,466.65	286.95	16.260		
7,500.00	7,230.50	7,176.50	7,230.50	34.04	248.81	74.03	-335.04	-4,917.00	4,751.59	4,460.44	290.88	15.958		
7,600.00	7,242.45	7,188.45	7,242.45	35.13	249.23	74.12	-335.04	-4,917.00	4,749.34	4,454.23	294.81	15.656		
7,700.00	7,242.72	7,188.72	7,242.72	36.39	249.23	74.21	-335.04	-4,917.00	4,747.09	4,448.02	298.74	15.354		
7,800.00	7,242.33	7,188.33	7,242.33	37.81	249.22	74.30	-335.04	-4,917.00	4,744.84	4,441.81	302.67	15.052		
7,900.00	7,241.93	7,187.93	7,241.93	39.40	249.21	74.39	-335.04	-4,917.00	4,742.59	4,435.60	306.60	14.750		
8,000.00	7,241.54	7,187.54	7,241.54	41.13	249.19	74.48	-335.04	-4,917.00	4,740.34	4,429.39	310.53	14.448		
8,100.00	7,241.15	7,187.15	7,241.15	42.97	249.18	74.57	-335.04	-4,917.00	4,738.09	4,423.18	314.46	14.146		
8,200.00	7,240.75	7,186.75	7,240.75	44.92	249.17	74.66	-335.04	-4,917.00	4,735.84	4,416.97	318.39	13.844		
8,300.00	7,240.36	7,186.36	7,240.36	46.97	249.15	74.75	-335.04	-4,917.00	4,733.59	4,410.76	322.32	13.542		
8,400.00	7,239.97	7,185.97	7,239.97	49.10	249.14	74.84	-335.04	-4,917.00	4,731.34	4,404.55	326.25	13.240		
8,500.00	7,239.57	7,185.57	7,239.57	51.29	249.12	74.93	-335.04	-4,917.00	4,729.09	4,398.34	330.18	12.938		
8,600.00	7,239.18	7,185.18	7,239.18	53.56	249.11	75.02	-335.04	-4,917.00	4,726.84	4,392.13	334.11	12.636		
8,700.00	7,238.79	7,184.79	7,238.79	55.87	249.10	75.11	-335.04	-4,917.00	4,724.59	4,385.92	338.04	12.334		
8,800.00	7,238.39	7,184.39	7,238.39	58.24	249.08	75.20	-335.04	-4,917.00	4,722.34	4,379.71	341.97	12.032		
8,900.00	7,238.00	7,184.00	7,238.00	60.64	249.07	75.29	-335.04	-4,917.00	4,720.09	4,373.50	345.90	11.730		
9,000.00	7,237.61	7,183.61	7,237.61	63.09	249.06	75.38	-335.04	-4,917.00	4,717.84	4,367.29	349.83	11.428		
9,100.00	7,237.21	7,183.21	7,237.21	65.56	249.04	75.47	-335.04	-4,917.00	4,715.59	4,361.08	353.76	11.126		
9,200.00	7,236.82	7,182.82	7,236.82	68.07	249.03	75.56	-335.04	-4,917.00	4,713.34	4,354.87	357.69	10.824		
9,300.00	7,236.43	7,182.43	7,236.43	70.61	249.02	75.65	-335.04	-4,917.00	4,711.09	4,348.66	361.62	10.522		
9,400.00	7,236.03	7,182.03	7,236.03	73.16	249.00	75.74	-335.04	-4,917.00	4,708.84	4,342.45	365.55	10.220		
9,500.00	7,235.64	7,181.64	7,235.64	75.74	248.99	75.83	-335.04	-4,917.00	4,706.59	4,336.24	369.48	9.918		
9,600.00	7,235.25	7,181.25	7,235.25	78.34	248.97	75.92	-335.04	-4,917.00	4,704.34	4,330.03	373.41	9.616		
9,700.00	7,234.85	7,180.85	7,234.85	80.96	248.96	76.01	-335.04	-4,917.00	4,702.09	4,323.82	377.34	9.314		
9,800.00	7,234.46	7,180.46	7,234.46	83.59	248.95	76.10	-335.04	-4,917.00	4,700.00	4,317.61	381.27	9.012		
9,900.00	7,234.07	7,180.07	7,234.07	86.24	248.93	76.19	-335.04	-4,917.00	4,697.84	4,311.40	385.20	8.710		
10,000.00	7,233.67	7,179.67	7,233.67	88.90	248.92	76.28	-335.04	-4,917.00	4,695.59	4,305.19	389.13	8.408		
10,100.00	7,233.28	7,179.28	7,233.28	91.57	248.91	76.37	-335.04	-4,917.00	4,693.34	4,298.98	393.06	8.106		
10,200.00	7,232.89	7,178.89	7,232.89	94.25	248.89	76.46	-335.04	-4,917.00	4,691.09	4,292.77	396.99	7.804		
10,300.00	7,232.49	7,178.49	7,232.49	96.95	248.88	76.55	-335.04	-4,917.00	4,688.84	4,286.56	400.92	7.502		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,232.10	7,178.10	7,232.10	99.65	248.86	91.54	-335.04	-4,917.00	1,373.03	1,087.82	285.21	4.814		
10,500.00	7,231.71	7,177.71	7,231.71	102.36	248.85	91.43	-335.04	-4,917.00	1,274.16	988.25	285.91	4.456		
10,600.00	7,231.32	7,177.32	7,231.32	105.08	248.84	91.32	-335.04	-4,917.00	1,175.48	888.70	286.78	4.099		
10,700.00	7,230.92	7,176.92	7,230.92	107.80	248.82	91.20	-335.04	-4,917.00	1,077.04	789.17	287.88	3.741		
10,800.00	7,230.53	7,176.53	7,230.53	110.53	248.81	91.09	-335.04	-4,917.00	978.93	689.64	289.28	3.384		
10,900.00	7,230.14	7,176.14	7,230.14	113.27	248.80	90.98	-335.04	-4,917.00	881.23	590.10	291.12	3.027		
11,000.00	7,229.74	7,175.74	7,229.74	116.02	248.78	90.86	-335.04	-4,917.00	784.11	490.54	293.58	2.671		
11,100.00	7,229.35	7,175.35	7,229.35	118.77	248.77	90.75	-335.04	-4,917.00	687.83	390.90	296.93	2.316		
11,200.00	7,228.96	7,174.96	7,228.96	121.52	248.75	90.64	-335.04	-4,917.00	592.77	291.15	301.62	1.965		
11,300.00	7,228.56	7,174.56	7,228.56	124.28	248.74	90.52	-335.04	-4,917.00	499.64	191.26	308.39	1.620		
11,400.00	7,228.17	7,174.17	7,228.17	127.04	248.73	90.41	-335.04	-4,917.00	409.77	91.34	318.43	1.287	Level 3	
11,500.00	7,227.78	7,173.78	7,227.78	129.81	248.71	90.29	-335.04	-4,917.00	325.85	-7.76	333.61	0.977	Level 1	
11,600.00	7,227.38	7,173.38	7,227.38	132.58	248.70	90.18	-335.04	-4,917.00	253.87	-101.75	355.62	0.714	Level 1	
11,700.00	7,226.99	7,172.99	7,226.99	135.36	248.69	90.07	-335.04	-4,917.00	206.68	-172.76	379.43	0.545	Level 1	
11,758.66	7,226.76	7,172.76	7,226.76	136.99	248.68	90.00	-335.04	-4,917.00	198.18	-187.47	385.65	0.514	Level 1, CC, ES, SF	
11,800.00	7,226.60	7,172.60	7,226.60	138.14	248.67	89.95	-335.04	-4,917.00	202.44	-181.15	383.60	0.528	Level 1	
11,900.00	7,226.20	7,172.20	7,226.20	140.92	248.66	89.84	-335.04	-4,917.00	243.41	-120.31	363.73	0.669	Level 1	
12,000.00	7,225.81	7,171.81	7,225.81	143.70	248.64	89.73	-335.04	-4,917.00	312.28	-29.49	341.77	0.914	Level 1	
12,100.00	7,225.42	7,171.42	7,225.42	146.49	248.63	89.61	-335.04	-4,917.00	394.69	68.80	325.89	1.211	Level 2	
12,200.00	7,225.02	7,171.02	7,225.02	149.28	248.62	89.50	-335.04	-4,917.00	483.79	168.60	315.19	1.535		
12,300.00	7,224.63	7,170.63	7,224.63	152.08	248.60	89.38	-335.04	-4,917.00	576.47	268.57	307.90	1.872		
12,400.00	7,224.24	7,170.24	7,224.24	154.87	248.59	89.27	-335.04	-4,917.00	671.25	368.48	302.78	2.217		
12,500.00	7,223.84	7,169.84	7,223.84	157.67	248.58	89.16	-335.04	-4,917.00	767.36	468.29	299.08	2.566		
12,600.00	7,223.45	7,169.45	7,223.45	160.47	248.56	89.04	-335.04	-4,917.00	864.36	568.03	296.33	2.917		
12,700.00	7,223.06	7,169.06	7,223.06	163.27	248.55	88.93	-335.04	-4,917.00	961.96	667.72	294.24	3.269		
12,800.00	7,222.66	7,168.66	7,222.66	166.07	248.53	88.82	-335.04	-4,917.00	1,060.02	767.39	292.63	3.622		
12,900.00	7,222.27	7,168.27	7,222.27	168.88	248.52	88.70	-335.04	-4,917.00	1,158.41	867.05	291.36	3.976		
13,000.00	7,221.88	7,167.88	7,221.88	171.69	248.51	88.59	-335.04	-4,917.00	1,257.05	966.70	290.34	4.330		
13,100.00	7,221.48	7,167.48	7,221.48	174.49	248.49	88.48	-335.04	-4,917.00	1,355.89	1,066.37	289.52	4.683		
13,200.00	7,221.09	7,167.09	7,221.09	177.30	248.48	88.36	-335.04	-4,917.00	1,454.89	1,166.04	288.85	5.037		
13,300.00	7,220.70	7,166.70	7,220.70	180.12	248.47	88.25	-335.04	-4,917.00	1,554.01	1,265.72	288.30	5.390		
13,400.00	7,220.30	7,166.30	7,220.30	182.93	248.45	88.13	-335.04	-4,917.00	1,653.25	1,365.41	287.84	5.744		
13,500.00	7,219.91	7,165.91	7,219.91	185.74	248.44	88.02	-335.04	-4,917.00	1,752.56	1,465.11	287.45	6.097		
13,600.00	7,219.52	7,165.52	7,219.52	188.56	248.42	87.91	-335.04	-4,917.00	1,851.96	1,564.83	287.13	6.450		
13,700.00	7,219.12	7,165.12	7,219.12	191.38	248.41	87.79	-335.04	-4,917.00	1,951.41	1,664.55	286.86	6.803		
13,800.00	7,218.73	7,164.73	7,218.73	194.20	248.40	87.68	-335.04	-4,917.00	2,050.92	1,764.29	286.63	7.155		
13,900.00	7,218.34	7,164.34	7,218.34	197.02	248.38	87.57	-335.04	-4,917.00	2,150.47	1,864.03	286.44	7.508		
14,000.00	7,217.94	7,163.94	7,217.94	199.84	248.37	87.45	-335.04	-4,917.00	2,250.06	1,963.79	286.27	7.860		
14,100.00	7,217.55	7,163.55	7,217.55	202.66	248.36	87.34	-335.04	-4,917.00	2,349.69	2,063.56	286.14	8.212		
14,200.00	7,217.16	7,163.16	7,217.16	205.48	248.34	87.23	-335.04	-4,917.00	2,449.35	2,163.33	286.02	8.564		
14,300.00	7,216.76	7,162.76	7,216.76	208.30	248.33	87.11	-335.04	-4,917.00	2,549.03	2,263.11	285.92	8.915		
14,400.00	7,216.37	7,162.37	7,216.37	211.13	248.31	87.00	-335.04	-4,917.00	2,648.74	2,362.90	285.84	9.266		
14,500.00	7,215.98	7,161.98	7,215.98	213.96	248.30	86.89	-335.04	-4,917.00	2,748.47	2,462.69	285.78	9.618		
14,600.00	7,215.58	7,161.58	7,215.58	216.78	248.29	86.77	-335.04	-4,917.00	2,848.22	2,562.49	285.72	9.968		
14,700.00	7,215.19	7,161.19	7,215.19	219.61	248.27	86.66	-335.04	-4,917.00	2,947.98	2,662.30	285.68	10.319		
14,800.00	7,214.80	7,160.80	7,214.80	222.44	248.26	86.55	-335.04	-4,917.00	3,047.76	2,762.11	285.65	10.669		
14,900.00	7,214.40	7,160.40	7,214.40	225.27	248.25	86.43	-335.04	-4,917.00	3,147.56	2,861.93	285.63	11.020		
15,000.00	7,214.01	7,160.01	7,214.01	228.10	248.23	86.32	-335.04	-4,917.00	3,247.36	2,961.75	285.62	11.370		
15,002.44	7,214.00	7,160.00	7,214.00	228.16	248.23	86.32	-335.04	-4,917.00	3,249.80	2,964.18	285.62	11.378		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	57.00	3.28	3.28	-111.68	-3,042.58	-7,654.76	8,237.47					
100.00	100.00	43.00	100.00	3.28	3.36	-111.68	-3,042.58	-7,654.76	8,237.27	8,230.62	6.65	1,238.779		
200.00	200.00	143.00	200.00	3.34	4.62	-111.68	-3,042.58	-7,654.76	8,237.27	8,229.32	7.95	1,035.859		
300.00	300.00	243.00	300.00	3.44	7.49	-111.68	-3,042.58	-7,654.76	8,237.27	8,226.33	10.94	753.052		
400.00	400.00	343.00	400.00	3.60	10.74	-111.68	-3,042.58	-7,654.76	8,237.27	8,222.92	14.34	574.226		
500.00	500.00	443.00	500.00	3.81	14.11	-111.68	-3,042.58	-7,654.76	8,237.27	8,219.36	17.91	459.867		
600.00	599.98	542.98	599.98	4.03	17.52	50.19	-3,042.58	-7,654.76	8,236.15	8,214.60	21.55	382.116		
700.00	699.84	642.84	699.84	4.29	20.95	50.27	-3,042.58	-7,654.76	8,232.80	8,207.56	25.24	326.185		
800.00	799.54	742.54	799.54	4.57	24.40	50.33	-3,042.58	-7,654.76	8,227.85	8,198.88	28.96	284.071		
900.00	899.23	842.23	899.23	4.87	27.85	50.37	-3,042.58	-7,654.76	8,222.83	8,190.11	32.72	251.299		
1,000.00	998.92	941.92	998.92	5.20	31.31	50.41	-3,042.58	-7,654.76	8,217.82	8,181.31	36.51	225.112		
1,100.00	1,098.61	1,041.61	1,098.61	5.54	34.77	50.45	-3,042.58	-7,654.76	8,212.81	8,172.50	40.31	203.735		
1,200.00	1,198.30	1,141.30	1,198.30	5.90	38.24	50.49	-3,042.58	-7,654.76	8,207.81	8,163.68	44.13	185.973		
1,300.00	1,298.00	1,241.00	1,298.00	6.27	41.71	50.54	-3,042.58	-7,654.76	8,202.81	8,154.84	47.97	170.993		
1,400.00	1,397.69	1,340.69	1,397.69	6.66	45.18	50.58	-3,042.58	-7,654.76	8,197.82	8,146.00	51.82	158.196		
1,500.00	1,497.38	1,440.38	1,497.38	7.05	48.65	50.62	-3,042.58	-7,654.76	8,192.83	8,137.15	55.68	147.144		
1,600.00	1,597.07	1,540.07	1,597.07	7.44	52.12	50.66	-3,042.58	-7,654.76	8,187.84	8,128.30	59.55	137.505		
1,700.00	1,696.76	1,639.76	1,696.76	7.85	55.60	50.70	-3,042.58	-7,654.76	8,182.86	8,119.44	63.42	129.028		
1,800.00	1,796.45	1,739.45	1,796.45	8.25	59.07	50.75	-3,042.58	-7,654.76	8,177.89	8,110.59	67.30	121.516		
1,900.00	1,896.15	1,839.15	1,896.15	8.67	62.55	50.79	-3,042.58	-7,654.76	8,172.91	8,101.73	71.18	114.816		
2,000.00	1,995.84	1,938.84	1,995.84	9.08	66.02	50.83	-3,042.58	-7,654.76	8,167.95	8,092.88	75.07	108.802		
2,100.00	2,095.53	2,038.53	2,095.53	9.50	69.50	50.88	-3,042.58	-7,654.76	8,162.98	8,084.02	78.96	103.376		
2,200.00	2,195.22	2,138.22	2,195.22	9.92	72.97	50.92	-3,042.58	-7,654.76	8,158.03	8,075.17	82.86	98.456		
2,300.00	2,294.91	2,237.91	2,294.91	10.35	76.45	50.96	-3,042.58	-7,654.76	8,153.07	8,066.32	86.76	93.975		
2,400.00	2,394.60	2,337.60	2,394.60	10.77	79.93	51.00	-3,042.58	-7,654.76	8,148.12	8,057.47	90.66	89.877		
2,500.00	2,494.30	2,437.30	2,494.30	11.20	83.41	51.05	-3,042.58	-7,654.76	8,143.18	8,048.62	94.56	86.115		
2,600.00	2,593.99	2,536.99	2,593.99	11.63	86.88	51.09	-3,042.58	-7,654.76	8,138.24	8,039.77	98.47	82.649		
2,700.00	2,693.68	2,636.68	2,693.68	12.07	90.36	51.13	-3,042.58	-7,654.76	8,133.30	8,030.93	102.37	79.447		
2,800.00	2,793.37	2,736.37	2,793.37	12.50	93.84	51.17	-3,042.58	-7,654.76	8,128.37	8,022.09	106.28	76.479		
2,900.00	2,893.06	2,836.06	2,893.06	12.93	97.32	51.22	-3,042.58	-7,654.76	8,123.45	8,013.26	110.19	73.721		
3,000.00	2,992.76	2,935.76	2,992.76	13.37	100.80	51.26	-3,042.58	-7,654.76	8,118.53	8,004.42	114.10	71.151		
3,100.00	3,092.45	3,035.45	3,092.45	13.81	104.27	51.30	-3,042.58	-7,654.76	8,113.61	7,995.59	118.02	68.750		
3,200.00	3,192.14	3,135.14	3,192.14	14.25	107.75	51.35	-3,042.58	-7,654.76	8,108.70	7,986.77	121.93	66.503		
3,300.00	3,291.83	3,234.83	3,291.83	14.68	111.23	51.39	-3,042.58	-7,654.76	8,103.79	7,977.95	125.84	64.396		
3,400.00	3,391.52	3,334.52	3,391.52	15.12	114.71	51.43	-3,042.58	-7,654.76	8,098.89	7,969.13	129.76	62.415		
3,500.00	3,491.21	3,434.21	3,491.21	15.56	118.19	51.48	-3,042.58	-7,654.76	8,093.99	7,960.31	133.67	60.550		
3,600.00	3,590.91	3,533.91	3,590.91	16.00	121.67	51.52	-3,042.58	-7,654.76	8,089.09	7,951.50	137.59	58.791		
3,700.00	3,690.60	3,633.60	3,690.60	16.45	125.15	51.56	-3,042.58	-7,654.76	8,084.21	7,942.70	141.51	57.129		
3,800.00	3,790.29	3,733.29	3,790.29	16.89	128.63	51.61	-3,042.58	-7,654.76	8,079.32	7,933.89	145.43	55.556		
3,900.00	3,889.98	3,832.98	3,889.98	17.33	132.10	51.65	-3,042.58	-7,654.76	8,074.44	7,925.10	149.35	54.065		
4,000.00	3,989.67	3,932.67	3,989.67	17.77	135.58	51.69	-3,042.58	-7,654.76	8,069.57	7,916.30	153.26	52.651		
4,100.00	4,089.36	4,032.36	4,089.36	18.22	139.06	51.74	-3,042.58	-7,654.76	8,064.70	7,907.51	157.18	51.307		
4,200.00	4,189.06	4,132.06	4,189.06	18.66	142.54	51.78	-3,042.58	-7,654.76	8,059.83	7,898.72	161.10	50.028		
4,300.00	4,288.75	4,231.75	4,288.75	19.10	146.02	51.83	-3,042.58	-7,654.76	8,054.97	7,889.94	165.03	48.810		
4,400.00	4,388.44	4,331.44	4,388.44	19.55	149.50	51.87	-3,042.58	-7,654.76	8,050.11	7,881.17	168.95	47.649		
4,500.00	4,488.13	4,431.13	4,488.13	19.99	152.98	51.91	-3,042.58	-7,654.76	8,045.26	7,872.39	172.87	46.540		
4,600.00	4,587.82	4,530.82	4,587.82	20.44	156.46	51.96	-3,042.58	-7,654.76	8,040.41	7,863.62	176.79	45.480		
4,700.00	4,687.51	4,630.51	4,687.51	20.89	159.94	52.00	-3,042.58	-7,654.76	8,035.57	7,854.86	180.71	44.466		
4,800.00	4,787.21	4,730.21	4,787.21	21.33	163.42	52.05	-3,042.58	-7,654.76	8,030.73	7,846.10	184.63	43.495		
4,900.00	4,886.90	4,829.90	4,886.90	21.78	166.90	52.09	-3,042.58	-7,654.76	8,025.90	7,837.34	188.56	42.565		
5,000.00	4,986.59	4,929.59	4,986.59	22.22	170.38	52.13	-3,042.58	-7,654.76	8,021.07	7,828.59	192.48	41.672		
5,100.00	5,086.28	5,029.28	5,086.28	22.67	173.86	52.18	-3,042.58	-7,654.76	8,016.25	7,819.85	196.40	40.815		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,128.97	5,185.97	23.12	177.34	52.22	-3,042.58	-7,654.76	8,011.43	7,811.11	200.33	39.992		
5,300.00	5,285.66	5,228.66	5,285.66	23.56	180.82	52.27	-3,042.58	-7,654.76	8,006.62	7,802.37	204.25	39.200		
5,400.00	5,385.36	5,328.36	5,385.36	24.01	184.30	52.31	-3,042.58	-7,654.76	8,001.81	7,793.64	208.17	38.438		
5,500.00	5,485.05	5,428.05	5,485.05	24.46	187.78	52.36	-3,042.58	-7,654.76	7,997.01	7,784.91	212.10	37.704		
5,600.00	5,584.74	5,527.74	5,584.74	24.90	191.26	52.40	-3,042.58	-7,654.76	7,992.21	7,776.18	216.02	36.997		
5,700.00	5,684.43	5,627.43	5,684.43	25.35	194.74	52.44	-3,042.58	-7,654.76	7,987.41	7,767.47	219.95	36.315		
5,800.00	5,784.12	5,727.12	5,784.12	25.80	198.22	52.49	-3,042.58	-7,654.76	7,982.62	7,758.75	223.87	35.657		
5,900.00	5,883.81	5,826.81	5,883.81	26.25	201.70	52.53	-3,042.58	-7,654.76	7,977.84	7,750.04	227.80	35.022		
6,000.00	5,983.51	5,926.51	5,983.51	26.70	205.18	52.58	-3,042.58	-7,654.76	7,973.06	7,741.34	231.72	34.408		
6,100.00	6,083.20	6,026.20	6,083.20	27.14	208.66	52.62	-3,042.58	-7,654.76	7,968.28	7,732.64	235.65	33.814		
6,200.00	6,182.89	6,125.89	6,182.89	27.59	212.14	52.67	-3,042.58	-7,654.76	7,963.51	7,723.94	239.57	33.240		
6,300.00	6,282.58	6,225.58	6,282.58	28.04	215.61	52.71	-3,042.58	-7,654.76	7,958.75	7,715.25	243.50	32.685		
6,400.00	6,382.27	6,325.27	6,382.27	28.49	219.09	52.76	-3,042.58	-7,654.76	7,953.99	7,706.56	247.42	32.147		
6,500.00	6,481.96	6,424.96	6,481.96	28.94	222.57	52.80	-3,042.58	-7,654.76	7,949.23	7,697.88	251.35	31.626		
6,600.00	6,581.66	6,524.66	6,581.66	29.39	226.05	52.85	-3,042.58	-7,654.76	7,944.48	7,689.21	255.28	31.121		
6,700.00	6,681.21	6,624.21	6,681.21	29.83	229.53	14.26	-3,042.58	-7,654.76	7,937.29	7,678.09	259.20	30.623		
6,800.00	6,778.96	6,721.96	6,778.96	30.28	232.94	-3.81	-3,042.58	-7,654.76	7,916.72	7,653.68	263.04	30.097		
6,900.00	6,872.51	6,815.51	6,872.51	30.70	236.21	-10.32	-3,042.58	-7,654.76	7,881.94	7,615.24	266.71	29.553		
7,000.00	6,969.55	6,902.55	6,969.55	31.10	239.25	-14.68	-3,042.58	-7,654.76	7,833.82	7,563.71	270.11	29.002		
7,100.00	7,037.93	6,980.93	7,037.93	31.48	241.98	-18.95	-3,042.58	-7,654.76	7,773.55	7,500.39	273.17	28.457		
7,200.00	7,105.74	7,048.74	7,105.74	31.88	244.35	-24.17	-3,042.58	-7,654.76	7,702.65	7,426.86	275.79	27.929		
7,300.00	7,161.29	7,104.29	7,161.29	32.41	246.29	-31.48	-3,042.58	-7,654.76	7,622.90	7,344.95	277.94	27.426		
7,400.00	7,203.22	7,146.22	7,203.22	33.13	247.75	-42.57	-3,042.58	-7,654.76	7,536.28	7,256.71	279.57	26.957		
7,500.00	7,230.50	7,173.50	7,230.50	34.04	248.70	-59.74	-3,042.58	-7,654.76	7,444.98	7,164.33	280.65	26.528		
7,600.00	7,242.45	7,185.45	7,242.45	35.13	249.12	-83.33	-3,042.58	-7,654.76	7,351.27	7,070.10	281.17	26.145		
7,700.00	7,242.72	7,185.72	7,242.72	36.39	249.13	-90.62	-3,042.58	-7,654.76	7,257.25	6,975.95	281.30	25.799		
7,800.00	7,242.33	7,185.33	7,242.33	37.81	249.12	-90.61	-3,042.58	-7,654.76	7,163.39	6,881.95	281.44	25.453		
7,900.00	7,241.93	7,184.93	7,241.93	39.40	249.10	-90.60	-3,042.58	-7,654.76	7,069.70	6,788.08	281.62	25.104		
8,000.00	7,241.54	7,184.54	7,241.54	41.13	249.09	-90.59	-3,042.58	-7,654.76	6,976.18	6,694.35	281.84	24.753		
8,100.00	7,241.15	7,184.15	7,241.15	42.97	249.08	-90.58	-3,042.58	-7,654.76	6,882.85	6,600.75	282.10	24.398		
8,200.00	7,240.75	7,183.75	7,240.75	44.92	249.06	-90.57	-3,042.58	-7,654.76	6,789.71	6,507.29	282.42	24.041		
8,300.00	7,240.36	7,183.36	7,240.36	46.97	249.05	-90.56	-3,042.58	-7,654.76	6,696.77	6,413.98	282.79	23.681		
8,400.00	7,239.97	7,182.97	7,239.97	49.10	249.03	-90.55	-3,042.58	-7,654.76	6,604.03	6,320.82	283.20	23.319		
8,500.00	7,239.57	7,182.57	7,239.57	51.29	249.02	-90.55	-3,042.58	-7,654.76	6,511.51	6,227.83	283.68	22.954		
8,600.00	7,239.18	7,182.18	7,239.18	53.56	249.01	-90.54	-3,042.58	-7,654.76	6,419.21	6,135.00	284.21	22.586		
8,700.00	7,238.79	7,181.79	7,238.79	55.87	248.99	-90.53	-3,042.58	-7,654.76	6,327.14	6,042.35	284.80	22.216		
8,800.00	7,238.39	7,181.39	7,238.39	58.24	248.98	-90.52	-3,042.58	-7,654.76	6,235.32	5,949.87	285.45	21.844		
8,900.00	7,238.00	7,181.00	7,238.00	60.64	248.97	-90.51	-3,042.58	-7,654.76	6,143.76	5,857.60	286.16	21.470		
9,000.00	7,237.61	7,180.61	7,237.61	63.09	248.95	-90.50	-3,042.58	-7,654.76	6,052.46	5,765.52	286.94	21.093		
9,100.00	7,237.21	7,180.21	7,237.21	65.56	248.94	-90.49	-3,042.58	-7,654.76	5,961.44	5,673.65	287.79	20.715		
9,200.00	7,236.82	7,179.82	7,236.82	68.07	248.92	-90.48	-3,042.58	-7,654.76	5,870.71	5,582.01	288.70	20.335		
9,300.00	7,236.43	7,179.43	7,236.43	70.61	248.91	-90.47	-3,042.58	-7,654.76	5,780.29	5,490.61	289.69	19.954		
9,400.00	7,236.03	7,179.03	7,236.03	73.16	248.90	-90.46	-3,042.58	-7,654.76	5,690.19	5,399.45	290.75	19.571		
9,500.00	7,235.64	7,178.64	7,235.64	75.74	248.88	-90.45	-3,042.58	-7,654.76	5,600.43	5,308.55	291.88	19.188		
9,600.00	7,235.25	7,178.25	7,235.25	78.34	248.87	-90.45	-3,042.58	-7,654.76	5,511.02	5,217.93	293.09	18.803		
9,700.00	7,234.85	7,177.85	7,234.85	80.96	248.86	-90.44	-3,042.58	-7,654.76	5,421.98	5,127.60	294.38	18.419		
9,800.00	7,234.46	7,177.46	7,234.46	83.59	248.84	-90.43	-3,042.58	-7,654.76	5,333.32	5,037.58	295.74	18.034		
9,900.00	7,234.07	7,177.07	7,234.07	86.24	248.83	-90.42	-3,042.58	-7,654.76	5,245.08	4,947.88	297.19	17.649		
10,000.00	7,233.67	7,176.67	7,233.67	88.90	248.81	-90.41	-3,042.58	-7,654.76	5,157.26	4,858.53	298.73	17.264		
10,100.00	7,233.28	7,176.28	7,233.28	91.57	248.80	-90.40	-3,042.58	-7,654.76	5,069.90	4,769.55	300.35	16.880		
10,200.00	7,232.89	7,175.89	7,232.89	94.25	248.79	-90.39	-3,042.58	-7,654.76	4,983.01	4,680.95	302.06	16.497		
10,300.00	7,232.49	7,175.49	7,232.49	96.95	248.77	-90.38	-3,042.58	-7,654.76	4,896.62	4,592.76	303.85	16.115		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,175.10	7,232.10	99.65	248.76	-90.37	-3,042.58	-7,654.76	4,810.75	4,505.01	305.75	15.734		
10,500.00	7,231.71	7,174.71	7,231.71	102.36	248.75	-90.36	-3,042.58	-7,654.76	4,725.45	4,417.72	307.73	15.356		
10,600.00	7,231.32	7,174.32	7,231.32	105.08	248.73	-90.35	-3,042.58	-7,654.76	4,640.73	4,330.91	309.82	14.979		
10,700.00	7,230.92	7,173.92	7,230.92	107.80	248.72	-90.35	-3,042.58	-7,654.76	4,556.63	4,244.63	312.00	14.604		
10,800.00	7,230.53	7,173.53	7,230.53	110.53	248.70	-90.34	-3,042.58	-7,654.76	4,473.18	4,158.89	314.29	14.233		
10,900.00	7,230.14	7,173.14	7,230.14	113.27	248.69	-90.33	-3,042.58	-7,654.76	4,390.43	4,073.75	316.68	13.864		
11,000.00	7,229.74	7,172.74	7,229.74	116.02	248.68	-90.32	-3,042.58	-7,654.76	4,308.41	3,989.22	319.18	13.498		
11,100.00	7,229.35	7,172.35	7,229.35	118.77	248.66	-90.31	-3,042.58	-7,654.76	4,227.16	3,905.36	321.80	13.136		
11,200.00	7,228.96	7,171.96	7,228.96	121.52	248.65	-90.30	-3,042.58	-7,654.76	4,146.73	3,822.21	324.52	12.778		
11,300.00	7,228.56	7,171.56	7,228.56	124.28	248.64	-90.29	-3,042.58	-7,654.76	4,067.17	3,739.80	327.37	12.424		
11,400.00	7,228.17	7,171.17	7,228.17	127.04	248.62	-90.28	-3,042.58	-7,654.76	3,988.53	3,658.20	330.33	12.074		
11,500.00	7,227.78	7,170.78	7,227.78	129.81	248.61	-90.27	-3,042.58	-7,654.76	3,910.87	3,577.45	333.42	11.730		
11,600.00	7,227.38	7,170.38	7,227.38	132.58	248.59	-90.26	-3,042.58	-7,654.76	3,834.24	3,497.61	336.63	11.390		
11,700.00	7,226.99	7,169.99	7,226.99	135.36	248.58	-90.26	-3,042.58	-7,654.76	3,758.71	3,418.74	339.97	11.056		
11,800.00	7,226.60	7,169.60	7,226.60	138.14	248.57	-90.25	-3,042.58	-7,654.76	3,684.35	3,340.91	343.43	10.728		
11,900.00	7,226.20	7,169.20	7,226.20	140.92	248.55	-90.24	-3,042.58	-7,654.76	3,611.22	3,264.19	347.03	10.406		
12,000.00	7,225.81	7,168.81	7,225.81	143.70	248.54	-90.23	-3,042.58	-7,654.76	3,539.41	3,188.65	350.76	10.091		
12,100.00	7,225.42	7,168.42	7,225.42	146.49	248.53	-90.22	-3,042.58	-7,654.76	3,468.99	3,114.37	354.62	9.782		
12,200.00	7,225.02	7,168.02	7,225.02	149.28	248.51	-90.21	-3,042.58	-7,654.76	3,400.06	3,041.44	358.61	9.481		
12,300.00	7,224.63	7,167.63	7,224.63	152.08	248.50	-90.20	-3,042.58	-7,654.76	3,332.70	2,969.96	362.74	9.188		
12,400.00	7,224.24	7,167.24	7,224.24	154.87	248.48	-90.19	-3,042.58	-7,654.76	3,267.02	2,900.03	366.99	8.902		
12,500.00	7,223.84	7,166.84	7,223.84	157.67	248.47	-90.18	-3,042.58	-7,654.76	3,203.11	2,831.74	371.36	8.625		
12,600.00	7,223.45	7,166.45	7,223.45	160.47	248.46	-90.17	-3,042.58	-7,654.76	3,141.08	2,765.22	375.86	8.357		
12,700.00	7,223.06	7,166.06	7,223.06	163.27	248.44	-90.16	-3,042.58	-7,654.76	3,081.05	2,700.59	380.47	8.098		
12,800.00	7,222.66	7,165.66	7,222.66	166.07	248.43	-90.16	-3,042.58	-7,654.76	3,023.14	2,637.96	385.18	7.849		
12,900.00	7,222.27	7,165.27	7,222.27	168.88	248.42	-90.15	-3,042.58	-7,654.76	2,967.47	2,577.49	389.99	7.609		
13,000.00	7,221.88	7,164.88	7,221.88	171.69	248.40	-90.14	-3,042.58	-7,654.76	2,914.17	2,519.30	394.87	7.380		
13,100.00	7,221.48	7,164.48	7,221.48	174.49	248.39	-90.13	-3,042.58	-7,654.76	2,863.37	2,463.54	399.82	7.162		
13,200.00	7,221.09	7,164.09	7,221.09	177.30	248.37	-90.12	-3,042.58	-7,654.76	2,815.20	2,410.38	404.82	6.954		
13,300.00	7,220.70	7,163.70	7,220.70	180.12	248.36	-90.11	-3,042.58	-7,654.76	2,769.81	2,359.96	409.85	6.758		
13,400.00	7,220.30	7,163.30	7,220.30	182.93	248.35	-90.10	-3,042.58	-7,654.76	2,727.34	2,312.46	414.88	6.574		
13,500.00	7,219.91	7,162.91	7,219.91	185.74	248.33	-90.09	-3,042.58	-7,654.76	2,687.91	2,268.02	419.89	6.401		
13,600.00	7,219.52	7,162.52	7,219.52	188.56	248.32	-90.08	-3,042.58	-7,654.76	2,651.67	2,226.82	424.85	6.241		
13,700.00	7,219.12	7,162.12	7,219.12	191.38	248.31	-90.07	-3,042.58	-7,654.76	2,618.75	2,189.02	429.73	6.094		
13,800.00	7,218.73	7,161.73	7,218.73	194.20	248.29	-90.06	-3,042.58	-7,654.76	2,589.28	2,154.78	434.50	5.959		
13,900.00	7,218.34	7,161.34	7,218.34	197.02	248.28	-90.06	-3,042.58	-7,654.76	2,563.37	2,124.24	439.12	5.837		
14,000.00	7,217.94	7,160.94	7,217.94	199.84	248.27	-90.05	-3,042.58	-7,654.76	2,541.13	2,097.56	443.57	5.729		
14,100.00	7,217.55	7,160.55	7,217.55	202.66	248.25	-90.04	-3,042.58	-7,654.76	2,522.66	2,074.85	447.81	5.633		
14,200.00	7,217.16	7,160.16	7,217.16	205.48	248.24	-90.03	-3,042.58	-7,654.76	2,508.05	2,056.23	451.82	5.551		
14,300.00	7,216.76	7,159.76	7,216.76	208.30	248.22	-90.02	-3,042.58	-7,654.76	2,497.36	2,041.81	455.55	5.482		
14,400.00	7,216.37	7,159.37	7,216.37	211.13	248.21	-90.01	-3,042.58	-7,654.76	2,490.64	2,031.65	458.99	5.426		
14,500.00	7,215.98	7,158.98	7,215.98	213.96	248.20	-90.00	-3,042.58	-7,654.76	2,487.93	2,025.81	462.12	5.384		
14,517.54	7,215.91	7,158.91	7,215.91	214.45	248.19	-90.00	-3,042.58	-7,654.76	2,487.87	2,025.24	462.63	5.378 CC		
14,600.00	7,215.58	7,158.58	7,215.58	216.78	248.18	-89.99	-3,042.58	-7,654.76	2,489.24	2,024.32	464.91	5.354 ES		
14,700.00	7,215.19	7,158.19	7,215.19	219.61	248.17	-89.98	-3,042.58	-7,654.76	2,494.55	2,027.19	467.36	5.338		
14,800.00	7,214.80	7,157.80	7,214.80	222.44	248.16	-89.97	-3,042.58	-7,654.76	2,503.85	2,034.40	469.45	5.334 SF		
14,900.00	7,214.40	7,157.40	7,214.40	225.27	248.14	-89.97	-3,042.58	-7,654.76	2,517.10	2,045.91	471.19	5.342		
15,000.00	7,214.01	7,157.01	7,214.01	228.10	248.13	-89.96	-3,042.58	-7,654.76	2,534.22	2,061.65	472.57	5.363		
15,002.44	7,214.00	7,157.00	7,214.00	228.16	248.13	-89.96	-3,042.58	-7,654.76	2,534.68	2,062.08	472.60	5.363		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	44.00	3.28	3.28	-103.38	-1,550.71	-6,519.14	6,701.18				
100.00	100.00	56.00	100.00	3.28	3.42	-103.38	-1,550.71	-6,519.14	6,701.04	6,694.33	6.71	999.070	
200.00	200.00	156.00	200.00	3.34	4.94	-103.38	-1,550.71	-6,519.14	6,701.04	6,692.75	8.28	809.117	
300.00	300.00	256.00	300.00	3.44	7.90	-103.38	-1,550.71	-6,519.14	6,701.04	6,689.69	11.35	590.449	
400.00	400.00	356.00	400.00	3.60	11.17	-103.38	-1,550.71	-6,519.14	6,701.04	6,686.26	14.78	453.446	
500.00	500.00	456.00	500.00	3.81	14.55	-103.38	-1,550.71	-6,519.14	6,701.04	6,682.68	18.35	365.098	
600.00	599.98	555.98	599.98	4.03	17.97	58.48	-1,550.71	-6,519.14	6,700.12	6,678.12	22.00	304.552	
700.00	699.84	655.84	699.84	4.29	21.40	58.57	-1,550.71	-6,519.14	6,697.39	6,671.70	25.69	260.725	
800.00	799.54	755.54	799.54	4.57	24.85	58.64	-1,550.71	-6,519.14	6,693.35	6,663.94	29.41	227.563	
900.00	899.23	855.23	899.23	4.87	28.30	58.70	-1,550.71	-6,519.14	6,689.26	6,656.09	33.17	201.655	
1,000.00	998.92	954.92	998.92	5.20	31.76	58.76	-1,550.71	-6,519.14	6,685.18	6,648.22	36.96	180.889	
1,100.00	1,098.61	1,054.61	1,098.61	5.54	35.22	58.81	-1,550.71	-6,519.14	6,681.10	6,640.34	40.76	163.895	
1,200.00	1,198.30	1,154.30	1,198.30	5.90	38.69	58.87	-1,550.71	-6,519.14	6,677.03	6,632.45	44.59	149.747	
1,300.00	1,298.00	1,254.00	1,298.00	6.27	42.16	58.93	-1,550.71	-6,519.14	6,672.97	6,624.54	48.43	137.794	
1,400.00	1,397.69	1,353.69	1,397.69	6.66	45.63	58.99	-1,550.71	-6,519.14	6,668.92	6,616.64	52.28	127.568	
1,500.00	1,497.38	1,453.38	1,497.38	7.05	49.10	59.04	-1,550.71	-6,519.14	6,664.87	6,608.73	56.14	118.725	
1,600.00	1,597.07	1,553.07	1,597.07	7.44	52.57	59.10	-1,550.71	-6,519.14	6,660.83	6,600.82	60.01	111.004	
1,700.00	1,696.76	1,652.76	1,696.76	7.85	56.05	59.16	-1,550.71	-6,519.14	6,656.79	6,592.91	63.88	104.208	
1,800.00	1,796.45	1,752.45	1,796.45	8.25	59.52	59.22	-1,550.71	-6,519.14	6,652.76	6,585.00	67.76	98.181	
1,900.00	1,896.15	1,852.15	1,896.15	8.67	63.00	59.28	-1,550.71	-6,519.14	6,648.74	6,577.10	71.65	92.800	
2,000.00	1,995.84	1,951.84	1,995.84	9.08	66.47	59.33	-1,550.71	-6,519.14	6,644.73	6,569.19	75.54	87.968	
2,100.00	2,095.53	2,051.53	2,095.53	9.50	69.95	59.39	-1,550.71	-6,519.14	6,640.72	6,561.29	79.43	83.605	
2,200.00	2,195.22	2,151.22	2,195.22	9.92	73.43	59.45	-1,550.71	-6,519.14	6,636.72	6,553.39	83.33	79.648	
2,300.00	2,294.91	2,250.91	2,294.91	10.35	76.90	59.51	-1,550.71	-6,519.14	6,632.73	6,545.50	87.23	76.041	
2,400.00	2,394.60	2,350.60	2,394.60	10.77	80.38	59.57	-1,550.71	-6,519.14	6,628.74	6,537.61	91.13	72.741	
2,500.00	2,494.30	2,450.30	2,494.30	11.20	83.86	59.62	-1,550.71	-6,519.14	6,624.76	6,529.73	95.03	69.711	
2,600.00	2,593.99	2,549.99	2,593.99	11.63	87.34	59.68	-1,550.71	-6,519.14	6,620.78	6,521.85	98.94	66.918	
2,700.00	2,693.68	2,649.68	2,693.68	12.07	90.81	59.74	-1,550.71	-6,519.14	6,616.82	6,513.97	102.85	64.337	
2,800.00	2,793.37	2,749.37	2,793.37	12.50	94.29	59.80	-1,550.71	-6,519.14	6,612.86	6,506.10	106.76	61.943	
2,900.00	2,893.06	2,849.06	2,893.06	12.93	97.77	59.86	-1,550.71	-6,519.14	6,608.91	6,498.24	110.67	59.719	
3,000.00	2,992.76	2,948.76	2,992.76	13.37	101.25	59.92	-1,550.71	-6,519.14	6,604.96	6,490.38	114.58	57.645	
3,100.00	3,092.45	3,048.45	3,092.45	13.81	104.73	59.98	-1,550.71	-6,519.14	6,601.02	6,482.53	118.49	55.708	
3,200.00	3,192.14	3,148.14	3,192.14	14.25	108.21	60.04	-1,550.71	-6,519.14	6,597.09	6,474.68	122.41	53.894	
3,300.00	3,291.83	3,247.83	3,291.83	14.68	111.68	60.09	-1,550.71	-6,519.14	6,593.17	6,466.84	126.32	52.193	
3,400.00	3,391.52	3,347.52	3,391.52	15.12	115.16	60.15	-1,550.71	-6,519.14	6,589.25	6,459.01	130.24	50.593	
3,500.00	3,491.21	3,447.21	3,491.21	15.56	118.64	60.21	-1,550.71	-6,519.14	6,585.34	6,451.18	134.16	49.087	
3,600.00	3,590.91	3,546.91	3,590.91	16.00	122.12	60.27	-1,550.71	-6,519.14	6,581.43	6,443.36	138.08	47.665	
3,700.00	3,690.60	3,646.60	3,690.60	16.45	125.60	60.33	-1,550.71	-6,519.14	6,577.54	6,435.54	141.99	46.322	
3,800.00	3,790.29	3,746.29	3,790.29	16.89	129.08	60.39	-1,550.71	-6,519.14	6,573.65	6,427.74	145.91	45.052	
3,900.00	3,889.98	3,845.98	3,889.98	17.33	132.56	60.45	-1,550.71	-6,519.14	6,569.77	6,419.93	149.83	43.847	
4,000.00	3,989.67	3,945.67	3,989.67	17.77	136.04	60.51	-1,550.71	-6,519.14	6,565.89	6,412.14	153.75	42.704	
4,100.00	4,089.36	4,045.36	4,089.36	18.22	139.52	60.57	-1,550.71	-6,519.14	6,562.02	6,404.35	157.68	41.617	
4,200.00	4,189.06	4,145.06	4,189.06	18.66	143.00	60.63	-1,550.71	-6,519.14	6,558.16	6,396.57	161.60	40.583	
4,300.00	4,288.75	4,244.75	4,288.75	19.10	146.48	60.69	-1,550.71	-6,519.14	6,554.31	6,388.79	165.52	39.599	
4,400.00	4,388.44	4,344.44	4,388.44	19.55	149.96	60.75	-1,550.71	-6,519.14	6,550.46	6,381.02	169.44	38.659	
4,500.00	4,488.13	4,444.13	4,488.13	19.99	153.43	60.81	-1,550.71	-6,519.14	6,546.62	6,373.26	173.36	37.762	
4,600.00	4,587.82	4,543.82	4,587.82	20.44	156.91	60.87	-1,550.71	-6,519.14	6,542.79	6,365.50	177.29	36.905	
4,700.00	4,687.51	4,643.51	4,687.51	20.89	160.39	60.93	-1,550.71	-6,519.14	6,538.96	6,357.75	181.21	36.085	
4,800.00	4,787.21	4,743.21	4,787.21	21.33	163.87	60.99	-1,550.71	-6,519.14	6,535.15	6,350.01	185.13	35.300	
4,900.00	4,886.90	4,842.90	4,886.90	21.78	167.35	61.05	-1,550.71	-6,519.14	6,531.34	6,342.28	189.06	34.547	
5,000.00	4,986.59	4,942.59	4,986.59	22.22	170.83	61.11	-1,550.71	-6,519.14	6,527.53	6,334.55	192.98	33.825	
5,100.00	5,086.28	5,042.28	5,086.28	22.67	174.31	61.17	-1,550.71	-6,519.14	6,523.73	6,326.83	196.91	33.131	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,141.97	5,185.97	23.12	177.79	61.23	-1,550.71	-6,519.14	6,519.95	6,319.11	200.83	32.465		
5,300.00	5,285.66	5,241.66	5,285.66	23.56	181.27	61.29	-1,550.71	-6,519.14	6,516.16	6,311.41	204.76	31.824		
5,400.00	5,385.36	5,341.36	5,385.36	24.01	184.75	61.35	-1,550.71	-6,519.14	6,512.39	6,303.71	208.68	31.207		
5,500.00	5,485.05	5,441.05	5,485.05	24.46	188.23	61.41	-1,550.71	-6,519.14	6,508.62	6,296.01	212.61	30.613		
5,600.00	5,584.74	5,540.74	5,584.74	24.90	191.71	61.47	-1,550.71	-6,519.14	6,504.86	6,288.33	216.53	30.041		
5,700.00	5,684.43	5,640.43	5,684.43	25.35	195.19	61.53	-1,550.71	-6,519.14	6,501.11	6,280.65	220.46	29.489		
5,800.00	5,784.12	5,740.12	5,784.12	25.80	198.67	61.59	-1,550.71	-6,519.14	6,497.36	6,272.98	224.39	28.956		
5,900.00	5,883.81	5,839.81	5,883.81	26.25	202.15	61.65	-1,550.71	-6,519.14	6,493.62	6,265.31	228.31	28.442		
6,000.00	5,983.51	5,939.51	5,983.51	26.70	205.63	61.71	-1,550.71	-6,519.14	6,489.89	6,257.66	232.24	27.945		
6,100.00	6,083.20	6,039.20	6,083.20	27.14	209.11	61.77	-1,550.71	-6,519.14	6,486.17	6,250.01	236.16	27.465		
6,200.00	6,182.89	6,138.89	6,182.89	27.59	212.59	61.83	-1,550.71	-6,519.14	6,482.45	6,242.36	240.09	27.000		
6,300.00	6,282.58	6,238.58	6,282.58	28.04	216.07	61.89	-1,550.71	-6,519.14	6,478.74	6,234.73	244.02	26.550		
6,400.00	6,382.27	6,338.27	6,382.27	28.49	219.55	61.96	-1,550.71	-6,519.14	6,475.04	6,227.10	247.94	26.115		
6,500.00	6,481.96	6,437.96	6,481.96	28.94	223.03	62.02	-1,550.71	-6,519.14	6,471.35	6,219.48	251.87	25.693		
6,600.00	6,581.66	6,537.66	6,581.66	29.39	226.51	62.08	-1,550.71	-6,519.14	6,467.66	6,211.86	255.80	25.284		
6,700.00	6,681.21	6,637.21	6,681.21	29.83	229.98	23.59	-1,550.71	-6,519.14	6,461.43	6,201.71	259.72	24.878		
6,800.00	6,778.96	6,734.96	6,778.96	30.28	233.40	5.87	-1,550.71	-6,519.14	6,441.26	6,177.69	263.57	24.439		
6,900.00	6,872.51	6,828.51	6,872.51	30.70	236.66	-0.04	-1,550.71	-6,519.14	6,406.24	6,139.00	267.24	23.972		
7,000.00	6,959.55	6,915.55	6,959.55	31.10	239.70	-3.48	-1,550.71	-6,519.14	6,357.23	6,086.58	270.65	23.489		
7,100.00	7,037.93	7,006.07	7,037.93	31.48	242.86	-6.38	-1,550.71	-6,519.14	6,295.45	6,021.32	274.13	22.965		
7,200.00	7,105.74	7,061.74	7,105.74	31.88	244.80	-9.63	-1,550.71	-6,519.14	6,222.41	5,946.08	276.33	22.518		
7,300.00	7,161.29	7,117.29	7,161.29	32.41	246.74	-14.21	-1,550.71	-6,519.14	6,139.92	5,861.45	278.47	22.049		
7,400.00	7,203.22	7,159.22	7,203.22	33.13	248.20	-22.00	-1,550.71	-6,519.14	6,050.04	5,769.97	280.07	21.602		
7,500.00	7,230.50	7,186.50	7,230.50	34.04	249.16	-38.32	-1,550.71	-6,519.14	5,954.97	5,673.87	281.10	21.184		
7,600.00	7,242.45	7,201.55	7,242.45	35.13	249.68	-76.30	-1,550.71	-6,519.14	5,857.09	5,575.42	281.67	20.795		
7,700.00	7,242.72	7,201.28	7,242.72	36.39	249.67	-91.27	-1,550.71	-6,519.14	5,758.60	5,476.92	281.67	20.444		
7,800.00	7,242.33	7,201.67	7,242.33	37.81	249.69	-91.25	-1,550.71	-6,519.14	5,660.16	5,378.44	281.72	20.092		
7,900.00	7,241.93	7,202.07	7,241.93	39.40	249.70	-91.23	-1,550.71	-6,519.14	5,561.78	5,280.01	281.77	19.739		
8,000.00	7,241.54	7,202.46	7,241.54	41.13	249.71	-91.20	-1,550.71	-6,519.14	5,463.45	5,181.62	281.84	19.385		
8,100.00	7,241.15	7,202.85	7,241.15	42.97	249.73	-91.18	-1,550.71	-6,519.14	5,365.19	5,083.28	281.92	19.031		
8,200.00	7,240.75	7,203.25	7,240.75	44.92	249.74	-91.16	-1,550.71	-6,519.14	5,267.00	4,984.98	282.01	18.676		
8,300.00	7,240.36	7,203.64	7,240.36	46.97	249.76	-91.14	-1,550.71	-6,519.14	5,168.87	4,886.74	282.13	18.321		
8,400.00	7,239.97	7,204.03	7,239.97	49.10	249.77	-91.11	-1,550.71	-6,519.14	5,070.82	4,788.56	282.26	17.965		
8,500.00	7,239.57	7,204.43	7,239.57	51.29	249.78	-91.09	-1,550.71	-6,519.14	4,972.84	4,690.43	282.41	17.608		
8,600.00	7,239.18	7,204.82	7,239.18	53.56	249.80	-91.07	-1,550.71	-6,519.14	4,874.95	4,592.36	282.59	17.251		
8,700.00	7,238.79	7,205.21	7,238.79	55.87	249.81	-91.05	-1,550.71	-6,519.14	4,777.14	4,494.35	282.79	16.893		
8,800.00	7,238.39	7,205.61	7,238.39	58.24	249.82	-91.02	-1,550.71	-6,519.14	4,679.42	4,396.41	283.01	16.534		
8,900.00	7,238.00	7,206.00	7,238.00	60.64	249.84	-91.00	-1,550.71	-6,519.14	4,581.81	4,298.54	283.27	16.175		
9,000.00	7,237.61	7,206.39	7,237.61	63.09	249.85	-90.98	-1,550.71	-6,519.14	4,484.30	4,200.74	283.55	15.815		
9,100.00	7,237.21	7,206.79	7,237.21	65.56	249.87	-90.96	-1,550.71	-6,519.14	4,386.90	4,103.02	283.88	15.454		
9,200.00	7,236.82	7,207.18	7,236.82	68.07	249.88	-90.94	-1,550.71	-6,519.14	4,289.62	4,005.39	284.23	15.092		
9,300.00	7,236.43	7,207.57	7,236.43	70.61	249.89	-90.91	-1,550.71	-6,519.14	4,192.47	3,907.83	284.63	14.729		
9,400.00	7,236.03	7,207.97	7,236.03	73.16	249.91	-90.89	-1,550.71	-6,519.14	4,095.46	3,810.38	285.08	14.366		
9,500.00	7,235.64	7,208.36	7,235.64	75.74	249.92	-90.87	-1,550.71	-6,519.14	3,998.59	3,713.02	285.57	14.002		
9,600.00	7,235.25	7,208.75	7,235.25	78.34	249.93	-90.85	-1,550.71	-6,519.14	3,901.88	3,615.76	286.12	13.637		
9,700.00	7,234.85	7,209.15	7,234.85	80.96	249.95	-90.82	-1,550.71	-6,519.14	3,805.34	3,518.62	286.72	13.272		
9,800.00	7,234.46	7,209.54	7,234.46	83.59	249.96	-90.80	-1,550.71	-6,519.14	3,708.99	3,421.60	287.39	12.906		
9,900.00	7,234.07	7,209.93	7,234.07	86.24	249.98	-90.78	-1,550.71	-6,519.14	3,612.83	3,324.71	288.12	12.539		
10,000.00	7,233.67	7,189.67	7,233.67	88.90	249.27	-90.76	-1,550.71	-6,519.14	3,516.89	3,228.67	288.21	12.202		
10,100.00	7,233.28	7,189.28	7,233.28	91.57	249.25	-90.73	-1,550.71	-6,519.14	3,421.18	3,132.10	289.08	11.835		
10,200.00	7,232.89	7,188.89	7,232.89	94.25	249.24	-90.71	-1,550.71	-6,519.14	3,325.72	3,035.69	290.03	11.467		
10,300.00	7,232.49	7,188.49	7,232.49	96.95	249.23	-90.69	-1,550.71	-6,519.14	3,230.53	2,939.46	291.08	11.099		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,188.10	7,232.10	99.65	249.21	-90.67	-1,550.71	-6,519.14	3,135.65	2,843.42	292.23	10.730		
10,500.00	7,231.71	7,187.71	7,231.71	102.36	249.20	-90.64	-1,550.71	-6,519.14	3,041.09	2,747.60	293.50	10.362		
10,600.00	7,231.32	7,187.32	7,231.32	105.08	249.19	-90.62	-1,550.71	-6,519.14	2,946.90	2,652.01	294.89	9.993		
10,700.00	7,230.92	7,186.92	7,230.92	107.80	249.17	-90.60	-1,550.71	-6,519.14	2,853.10	2,556.68	296.42	9.625		
10,800.00	7,230.53	7,186.53	7,230.53	110.53	249.16	-90.58	-1,550.71	-6,519.14	2,759.73	2,461.63	298.10	9.258		
10,900.00	7,230.14	7,186.14	7,230.14	113.27	249.14	-90.55	-1,550.71	-6,519.14	2,666.85	2,366.91	299.94	8.891		
11,000.00	7,229.74	7,185.74	7,229.74	116.02	249.13	-90.53	-1,550.71	-6,519.14	2,574.49	2,272.54	301.95	8.526		
11,100.00	7,229.35	7,185.35	7,229.35	118.77	249.12	-90.51	-1,550.71	-6,519.14	2,482.73	2,178.57	304.16	8.162		
11,200.00	7,228.96	7,184.96	7,228.96	121.52	249.10	-90.49	-1,550.71	-6,519.14	2,391.64	2,085.05	306.59	7.801		
11,300.00	7,228.56	7,184.56	7,228.56	124.28	249.09	-90.46	-1,550.71	-6,519.14	2,301.28	1,992.04	309.24	7.442		
11,400.00	7,228.17	7,184.17	7,228.17	127.04	249.08	-90.44	-1,550.71	-6,519.14	2,211.75	1,899.60	312.15	7.086		
11,500.00	7,227.78	7,183.78	7,227.78	129.81	249.06	-90.42	-1,550.71	-6,519.14	2,123.15	1,807.82	315.34	6.733		
11,600.00	7,227.38	7,183.38	7,227.38	132.58	249.05	-90.40	-1,550.71	-6,519.14	2,035.61	1,716.78	318.83	6.385		
11,700.00	7,226.99	7,182.99	7,226.99	135.36	249.03	-90.37	-1,550.71	-6,519.14	1,949.28	1,626.62	322.65	6.041		
11,800.00	7,226.60	7,182.60	7,226.60	138.14	249.02	-90.35	-1,550.71	-6,519.14	1,864.30	1,537.46	326.84	5.704		
11,900.00	7,226.20	7,182.20	7,226.20	140.92	249.01	-90.33	-1,550.71	-6,519.14	1,780.89	1,449.46	331.43	5.373		
12,000.00	7,225.81	7,181.81	7,225.81	143.70	248.99	-90.31	-1,550.71	-6,519.14	1,699.27	1,362.83	336.44	5.051		
12,100.00	7,225.42	7,181.42	7,225.42	146.49	248.98	-90.28	-1,550.71	-6,519.14	1,619.71	1,277.81	341.90	4.737		
12,200.00	7,225.02	7,181.02	7,225.02	149.28	248.97	-90.26	-1,550.71	-6,519.14	1,542.54	1,194.68	347.85	4.434		
12,300.00	7,224.63	7,180.63	7,224.63	152.08	248.95	-90.24	-1,550.71	-6,519.14	1,468.12	1,113.81	354.30	4.144		
12,400.00	7,224.24	7,180.24	7,224.24	154.87	248.94	-90.22	-1,550.71	-6,519.14	1,396.89	1,035.64	361.25	3.867		
12,500.00	7,223.84	7,179.84	7,223.84	157.67	248.92	-90.20	-1,550.71	-6,519.14	1,329.38	960.69	368.69	3.606		
12,600.00	7,223.45	7,179.45	7,223.45	160.47	248.91	-90.17	-1,550.71	-6,519.14	1,266.18	889.61	376.57	3.362		
12,700.00	7,223.06	7,179.06	7,223.06	163.27	248.90	-90.15	-1,550.71	-6,519.14	1,207.95	823.18	384.78	3.139		
12,800.00	7,222.66	7,178.66	7,222.66	166.07	248.88	-90.13	-1,550.71	-6,519.14	1,155.47	762.29	393.18	2.939		
12,900.00	7,222.27	7,178.27	7,222.27	168.88	248.87	-90.11	-1,550.71	-6,519.14	1,109.53	707.98	401.55	2.763		
13,000.00	7,221.88	7,177.88	7,221.88	171.69	248.86	-90.08	-1,550.71	-6,519.14	1,070.98	661.38	409.60	2.615		
13,100.00	7,221.48	7,177.48	7,221.48	174.49	248.84	-90.06	-1,550.71	-6,519.14	1,040.64	623.66	416.99	2.496		
13,200.00	7,221.09	7,177.09	7,221.09	177.30	248.83	-90.04	-1,550.71	-6,519.14	1,019.26	595.91	423.35	2.408		
13,300.00	7,220.70	7,176.70	7,220.70	180.12	248.82	-90.02	-1,550.71	-6,519.14	1,007.39	579.05	428.34	2.352		
13,370.28	7,220.42	7,176.42	7,220.42	182.09	248.81	-90.00	-1,550.71	-6,519.14	1,004.93	574.05	430.88	2.332 CC		
13,400.00	7,220.30	7,176.30	7,220.30	182.93	248.80	-89.99	-1,550.71	-6,519.14	1,005.37	573.67	431.71	2.329 ES, SF		
13,500.00	7,219.91	7,175.91	7,219.91	185.74	248.79	-89.97	-1,550.71	-6,519.14	1,013.27	579.94	433.33	2.338		
13,600.00	7,219.52	7,175.52	7,219.52	188.56	248.77	-89.95	-1,550.71	-6,519.14	1,030.85	597.61	433.24	2.379		
13,700.00	7,219.12	7,175.12	7,219.12	191.38	248.76	-89.93	-1,550.71	-6,519.14	1,057.64	626.04	431.60	2.450		
13,800.00	7,218.73	7,174.73	7,218.73	194.20	248.75	-89.90	-1,550.71	-6,519.14	1,092.95	664.27	428.69	2.550		
13,900.00	7,218.34	7,174.34	7,218.34	197.02	248.73	-89.88	-1,550.71	-6,519.14	1,136.00	711.20	424.80	2.674		
14,000.00	7,217.94	7,173.94	7,217.94	199.84	248.72	-89.86	-1,550.71	-6,519.14	1,185.93	765.70	420.23	2.822		
14,100.00	7,217.55	7,173.55	7,217.55	202.66	248.71	-89.84	-1,550.71	-6,519.14	1,241.92	826.66	415.26	2.991		
14,200.00	7,217.16	7,173.16	7,217.16	205.48	248.69	-89.81	-1,550.71	-6,519.14	1,303.19	893.09	410.10	3.178		
14,300.00	7,216.76	7,172.76	7,216.76	208.30	248.68	-89.79	-1,550.71	-6,519.14	1,369.04	964.12	404.92	3.381		
14,400.00	7,216.37	7,172.37	7,216.37	211.13	248.66	-89.77	-1,550.71	-6,519.14	1,438.82	1,039.00	399.82	3.599		
14,500.00	7,215.98	7,171.98	7,215.98	213.96	248.65	-89.75	-1,550.71	-6,519.14	1,512.00	1,117.10	394.90	3.829		
14,600.00	7,215.58	7,171.58	7,215.58	216.78	248.64	-89.72	-1,550.71	-6,519.14	1,588.11	1,197.91	390.20	4.070		
14,700.00	7,215.19	7,171.19	7,215.19	219.61	248.62	-89.70	-1,550.71	-6,519.14	1,666.74	1,281.00	385.74	4.321		
14,800.00	7,214.80	7,170.80	7,214.80	222.44	248.61	-89.68	-1,550.71	-6,519.14	1,747.56	1,366.01	381.55	4.580		
14,900.00	7,214.40	7,170.40	7,214.40	225.27	248.60	-89.66	-1,550.71	-6,519.14	1,830.27	1,452.67	377.61	4.847		
15,000.00	7,214.01	7,170.01	7,214.01	228.10	248.58	-89.63	-1,550.71	-6,519.14	1,914.64	1,540.72	373.92	5.120		
15,002.44	7,214.00	7,170.00	7,214.00	228.16	248.58	-89.63	-1,550.71	-6,519.14	1,916.71	1,542.88	373.83	5.127		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	39.00	3.28	3.28	-93.10	-414.12	-7,657.83	7,669.12					
100.00	100.00	100.00	126.32	3.28	3.29	-93.09	-413.84	-7,657.55	7,668.77	7,662.20	6.57	1,166.912		
200.00	200.00	181.62	220.61	3.34	3.33	-93.09	-413.24	-7,657.15	7,668.32	7,661.65	6.67	1,150.427		
276.74	276.74	237.75	276.74	3.42	3.38	-93.09	-412.87	-7,657.09	7,668.22	7,661.42	6.79	1,128.874		
300.00	300.00	254.91	293.91	3.44	3.40	-93.09	-412.78	-7,657.11	7,668.23	7,661.39	6.84	1,120.946		
400.00	400.00	330.12	369.12	3.60	3.49	-93.08	-412.58	-7,657.30	7,668.47	7,661.38	7.10	1,080.637		
500.00	500.00	411.14	450.13	3.81	3.63	-93.08	-412.65	-7,657.75	7,669.02	7,661.59	7.43	1,031.841		
600.00	599.98	519.99	558.98	4.03	3.85	68.76	-412.92	-7,658.35	7,668.95	7,661.07	7.88	973.003		
700.00	699.84	610.13	649.12	4.29	4.06	68.82	-413.57	-7,658.86	7,667.66	7,659.31	8.35	918.601		
800.00	799.54	698.49	737.47	4.57	4.30	68.87	-414.46	-7,659.46	7,665.59	7,656.73	8.86	864.994		
900.00	899.23	800.32	839.30	4.87	4.59	68.92	-415.49	-7,660.22	7,663.56	7,654.10	9.46	809.931		
1,000.00	998.92	905.00	943.96	5.20	4.92	68.96	-416.52	-7,660.95	7,661.48	7,651.37	10.11	757.570		
1,100.00	1,098.61	1,009.90	1,048.86	5.54	5.26	69.02	-417.40	-7,661.63	7,659.35	7,648.55	10.80	709.150		
1,200.00	1,198.30	1,111.01	1,149.96	5.90	5.60	69.07	-417.94	-7,662.25	7,657.18	7,645.67	11.50	665.590		
1,300.00	1,298.00	1,208.34	1,247.29	6.27	5.95	69.12	-418.30	-7,662.88	7,655.03	7,642.81	12.22	626.532		
1,400.00	1,397.69	1,318.17	1,357.12	6.66	6.34	69.18	-418.57	-7,663.49	7,652.80	7,639.81	13.00	588.840		
1,500.00	1,497.38	1,410.35	1,449.30	7.05	6.69	69.23	-418.85	-7,664.02	7,650.60	7,636.87	13.73	557.353		
1,600.00	1,597.07	1,510.04	1,548.98	7.44	7.06	69.28	-419.25	-7,664.63	7,648.43	7,633.94	14.50	527.553		
1,700.00	1,696.76	1,602.86	1,641.80	7.85	7.42	69.33	-419.57	-7,665.24	7,646.33	7,631.08	15.25	501.250		
1,800.00	1,796.45	1,710.93	1,749.87	8.25	7.83	69.39	-419.75	-7,665.95	7,644.22	7,628.14	16.08	475.398		
1,900.00	1,896.15	1,807.31	1,846.25	8.67	8.21	69.44	-419.87	-7,666.57	7,642.10	7,625.23	16.87	453.046		
2,000.00	1,995.84	1,911.11	1,950.04	9.08	8.62	69.49	-420.09	-7,667.21	7,639.97	7,622.28	17.69	431.803		
2,100.00	2,095.53	2,000.51	2,039.44	9.50	8.98	69.54	-420.29	-7,667.81	7,637.90	7,619.43	18.47	413.584		
2,200.00	2,195.22	2,139.58	2,178.51	9.92	9.53	69.62	-420.36	-7,668.38	7,635.54	7,616.09	19.45	392.668		
2,300.00	2,294.91	2,251.02	2,289.95	10.35	9.98	69.68	-420.85	-7,668.55	7,632.98	7,612.66	20.32	375.689		
2,400.00	2,394.60	2,356.61	2,395.53	10.77	10.41	69.73	-421.50	-7,668.50	7,630.23	7,609.06	21.17	360.435		
2,500.00	2,494.30	2,454.89	2,493.82	11.20	10.81	69.78	-421.98	-7,668.50	7,627.52	7,605.52	22.00	346.766		
2,600.00	2,593.99	2,577.64	2,616.56	11.63	11.31	69.84	-422.41	-7,668.36	7,624.71	7,601.79	22.92	332.607		
2,700.00	2,693.68	2,701.81	2,740.73	12.07	11.82	69.91	-422.54	-7,667.78	7,621.53	7,597.67	23.86	319.429		
2,800.00	2,793.37	2,795.59	2,834.52	12.50	12.20	69.97	-422.31	-7,667.24	7,618.26	7,593.58	24.68	308.729		
2,900.00	2,893.06	2,851.57	2,890.49	12.93	12.43	70.00	-422.00	-7,667.10	7,615.30	7,589.96	25.34	300.497		
3,000.00	2,992.76	2,900.01	2,938.93	13.37	12.63	70.03	-421.58	-7,667.26	7,612.95	7,586.97	25.98	293.048		
3,100.00	3,092.45	2,966.16	3,005.07	13.81	12.90	70.07	-420.87	-7,667.85	7,611.15	7,584.46	26.69	285.179		
3,200.00	3,192.14	3,038.93	3,077.83	14.25	13.20	70.12	-419.98	-7,668.89	7,609.85	7,582.42	27.43	277.447		
3,300.00	3,291.83	3,117.74	3,156.62	14.68	13.53	70.17	-418.86	-7,670.17	7,608.77	7,580.58	28.19	269.876		
3,400.00	3,391.52	3,173.61	3,212.47	15.12	13.76	70.21	-417.98	-7,671.35	7,608.17	7,579.31	28.86	263.587		
3,455.56	3,446.91	3,206.16	3,245.01	15.37	13.90	70.23	-417.42	-7,672.18	7,608.09	7,578.85	29.24	260.169		
3,500.00	3,491.21	3,239.10	3,277.93	15.56	14.04	70.25	-416.83	-7,673.10	7,608.13	7,578.55	29.58	257.246		
3,600.00	3,590.91	3,318.20	3,356.98	16.00	14.37	70.31	-415.31	-7,675.49	7,608.45	7,578.10	30.34	250.733		
3,700.00	3,690.60	3,426.54	3,465.23	16.45	14.82	70.39	-412.73	-7,678.85	7,608.86	7,577.62	31.24	243.562		
3,800.00	3,790.29	3,557.18	3,595.78	16.89	15.37	70.49	-409.15	-7,682.53	7,608.98	7,576.75	32.23	236.073		
3,900.00	3,889.98	3,666.64	3,705.17	17.33	15.83	70.57	-406.43	-7,685.28	7,608.82	7,575.69	33.13	229.640		
4,000.00	3,989.67	3,770.01	3,808.48	17.77	16.27	70.65	-404.23	-7,687.82	7,608.63	7,574.62	34.01	223.713		
4,100.00	4,089.36	3,872.59	3,911.01	18.22	16.70	70.72	-402.28	-7,690.27	7,608.39	7,573.51	34.89	218.099		
4,200.00	4,189.06	3,977.60	4,015.98	18.66	17.14	70.79	-400.59	-7,692.74	7,608.12	7,572.35	35.77	212.693		
4,300.00	4,288.75	4,096.63	4,134.97	19.10	17.64	70.87	-398.92	-7,695.34	7,607.71	7,570.99	36.72	207.204		
4,400.00	4,388.44	4,190.67	4,228.98	19.55	18.04	70.93	-397.58	-7,697.29	7,607.19	7,569.64	37.56	202.555		
4,500.00	4,488.13	4,297.58	4,335.86	19.99	18.49	71.00	-396.39	-7,699.51	7,606.69	7,568.24	38.45	197.825		
4,600.00	4,587.82	4,404.06	4,442.32	20.44	18.93	71.07	-395.57	-7,701.61	7,606.10	7,566.75	39.35	193.314		
4,700.00	4,687.51	4,530.85	4,569.09	20.89	19.47	71.14	-394.94	-7,703.87	7,605.34	7,565.02	40.33	188.594		
4,800.00	4,787.21	4,658.72	4,696.95	21.33	20.01	71.22	-394.54	-7,705.51	7,604.06	7,562.75	41.31	184.064		
4,900.00	4,886.90	4,754.51	4,792.73	21.78	20.41	71.27	-394.24	-7,706.67	7,602.74	7,560.58	42.16	180.319		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,986.59	4,859.03	4,897.24	22.22	20.86	71.34	-393.93	-7,707.96	7,601.46	7,558.41	43.05	176.570		
5,100.00	5,086.28	4,963.40	5,001.60	22.67	21.30	71.40	-393.55	-7,709.14	7,600.08	7,556.14	43.94	172.970		
5,200.00	5,185.97	5,071.17	5,109.36	23.12	21.75	71.46	-393.07	-7,710.31	7,598.66	7,553.81	44.84	169.458		
5,300.00	5,285.66	5,171.34	5,209.53	23.56	22.18	71.52	-392.65	-7,711.30	7,597.14	7,551.43	45.71	166.196		
5,400.00	5,385.36	5,274.56	5,312.74	24.01	22.61	71.58	-392.33	-7,712.32	7,595.65	7,549.05	46.60	163.010		
5,500.00	5,485.05	5,441.02	5,479.20	24.46	23.32	71.68	-391.50	-7,713.16	7,593.67	7,545.92	47.74	159.053		
5,600.00	5,584.74	5,536.36	5,574.53	24.90	23.72	71.74	-390.82	-7,713.19	7,591.23	7,542.64	48.59	156.220		
5,700.00	5,684.43	5,612.60	5,650.78	25.35	24.04	71.78	-390.51	-7,713.44	7,589.08	7,539.71	49.37	153.734		
5,800.00	5,784.12	5,714.08	5,752.25	25.80	24.47	71.84	-390.21	-7,713.86	7,587.04	7,536.80	50.24	151.007		
5,900.00	5,883.81	5,803.19	5,841.36	26.25	24.85	71.90	-389.87	-7,714.30	7,585.09	7,534.02	51.07	148.525		
6,000.00	5,983.51	5,901.11	5,939.28	26.70	25.27	71.96	-389.45	-7,714.86	7,583.22	7,531.29	51.93	146.020		
6,100.00	6,083.20	5,977.30	6,015.47	27.14	25.59	72.00	-389.18	-7,715.42	7,581.53	7,528.82	52.71	143.847		
6,200.00	6,182.89	6,084.05	6,122.21	27.59	26.05	72.06	-388.98	-7,716.38	7,580.01	7,526.40	53.61	141.399		
6,300.00	6,282.58	6,160.40	6,198.56	28.04	26.37	72.11	-388.89	-7,717.07	7,578.51	7,524.12	54.38	139.360		
6,400.00	6,382.27	6,243.00	6,281.15	28.49	26.72	72.15	-388.86	-7,718.13	7,577.36	7,522.18	55.18	137.319		
6,500.00	6,481.96	6,342.16	6,380.30	28.94	27.14	72.21	-389.05	-7,719.46	7,576.30	7,520.25	56.05	135.167		
6,600.00	6,581.66	6,456.60	6,494.73	29.39	27.63	72.27	-389.34	-7,720.95	7,575.21	7,518.22	56.99	132.930		
6,700.00	6,681.21	6,574.84	6,612.96	29.83	28.13	72.36	-389.92	-7,722.12	7,571.21	7,513.28	57.94	130.681		
6,800.00	6,778.96	6,667.61	6,705.73	30.28	28.53	72.48	-390.54	-7,722.97	7,562.99	7,494.22	58.77	128.520		
6,900.00	6,872.51	6,745.13	6,783.24	30.70	28.86	72.59	-391.49	-7,723.80	7,519.77	7,460.25	59.51	126.353		
7,000.00	6,969.55	6,815.52	6,853.62	31.10	29.16	72.71	-392.47	-7,724.74	7,472.45	7,412.25	60.19	124.138		
7,100.00	7,037.93	6,886.84	6,924.92	31.48	29.46	72.83	-393.36	-7,725.80	7,412.08	7,351.25	60.83	121.844		
7,200.00	7,105.74	6,936.21	6,974.28	31.88	29.67	72.95	-393.88	-7,726.61	7,340.13	7,278.81	61.32	119.695		
7,300.00	7,161.29	6,974.38	7,012.44	32.41	29.84	73.07	-394.22	-7,727.35	7,258.40	7,196.69	61.71	117.626		
7,400.00	7,203.22	7,005.37	7,043.42	33.13	29.97	73.19	-394.47	-7,728.02	7,168.79	7,106.80	62.00	115.629		
7,500.00	7,230.50	7,033.38	7,071.43	34.04	30.09	73.31	-394.66	-7,728.65	7,073.42	7,011.20	62.22	113.689		
7,600.00	7,242.45	7,046.90	7,084.94	35.13	30.14	73.43	-394.74	-7,728.96	6,974.59	6,912.26	62.32	111.908		
7,700.00	7,242.72	7,049.32	7,087.36	36.39	30.15	73.55	-394.75	-7,729.01	6,874.66	6,812.30	62.35	110.252		
7,800.00	7,242.33	7,051.11	7,089.15	37.81	30.16	73.67	-394.76	-7,729.05	6,774.70	6,712.32	62.38	108.603		
7,900.00	7,241.93	7,052.90	7,090.94	39.40	30.17	73.79	-394.77	-7,729.09	6,674.75	6,612.34	62.41	106.954		
8,000.00	7,241.54	7,054.70	7,092.74	41.13	30.18	73.91	-394.78	-7,729.13	6,574.79	6,512.36	62.44	105.303		
8,100.00	7,241.15	7,056.50	7,094.54	42.97	30.19	74.03	-394.79	-7,729.17	6,474.84	6,412.37	62.47	103.651		
8,200.00	7,240.75	7,058.30	7,096.34	44.92	30.19	74.15	-394.80	-7,729.21	6,374.89	6,312.39	62.50	101.998		
8,300.00	7,240.36	7,060.10	7,098.14	46.97	30.20	74.27	-394.81	-7,729.26	6,274.94	6,212.41	62.53	100.345		
8,400.00	7,239.97	7,061.90	7,099.94	49.10	30.21	74.39	-394.82	-7,729.30	6,174.99	6,112.42	62.57	98.690		
8,500.00	7,239.57	7,063.71	7,101.75	51.29	30.22	74.51	-394.83	-7,729.34	6,075.04	6,012.44	62.61	97.035		
8,600.00	7,239.18	7,065.52	7,103.56	53.56	30.22	74.63	-394.83	-7,729.38	5,975.09	5,912.45	62.65	95.380		
8,700.00	7,238.79	7,067.33	7,105.37	55.87	30.23	74.75	-394.84	-7,729.42	5,875.15	5,812.46	62.69	93.723		
8,800.00	7,238.39	7,069.14	7,107.18	58.24	30.24	74.87	-394.85	-7,729.46	5,775.20	5,712.48	62.73	92.067		
8,900.00	7,238.00	7,070.96	7,108.99	60.64	30.25	74.99	-394.86	-7,729.50	5,675.26	5,612.49	62.77	90.410		
9,000.00	7,237.61	7,072.77	7,110.81	63.09	30.25	75.11	-394.87	-7,729.54	5,575.32	5,512.50	62.82	88.752		
9,100.00	7,237.21	7,074.59	7,112.63	65.56	30.26	75.23	-394.88	-7,729.59	5,475.38	5,412.51	62.87	87.095		
9,200.00	7,236.82	7,076.41	7,114.45	68.07	30.27	75.35	-394.88	-7,729.63	5,375.44	5,312.52	62.92	85.437		
9,300.00	7,236.43	7,078.24	7,116.27	70.61	30.28	75.47	-394.89	-7,729.67	5,275.50	5,212.54	62.97	83.779		
9,400.00	7,236.03	7,080.06	7,118.10	73.16	30.29	75.59	-394.90	-7,729.71	5,175.57	5,112.55	63.02	82.122		
9,500.00	7,235.64	7,081.89	7,119.93	75.74	30.29	75.71	-394.91	-7,729.75	5,075.64	5,012.56	63.08	80.464		
9,600.00	7,235.25	7,083.72	7,121.76	78.34	30.30	75.83	-394.91	-7,729.79	4,975.70	4,912.57	63.14	78.806		
9,700.00	7,234.85	7,085.55	7,123.59	80.96	30.31	75.95	-394.92	-7,729.84	4,875.78	4,812.58	63.20	77.149		
9,800.00	7,234.46	7,087.39	7,125.42	83.59	30.32	76.07	-394.93	-7,729.88	4,775.85	4,712.58	63.26	75.492		
9,900.00	7,234.07	7,089.23	7,127.26	86.24	30.32	76.19	-394.93	-7,729.92	4,675.92	4,612.59	63.33	73.835		
10,000.00	7,233.67	7,091.07	7,129.10	88.90	30.33	76.31	-394.94	-7,729.96	4,576.00	4,512.60	63.40	72.178		
10,100.00	7,233.28	7,092.91	7,130.94	91.57	30.34	76.43	-394.95	-7,730.01	4,476.08	4,412.61	63.47	70.522		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.89	7,094.75	7,132.78	94.25	30.35	62.65	-394.95	-7,730.05	4,376.17	4,312.62	63.55	68.866		
10,300.00	7,232.49	7,096.60	7,134.63	96.95	30.36	63.17	-394.96	-7,730.09	4,276.25	4,212.63	63.62	67.211		
10,400.00	7,232.10	7,098.44	7,136.47	99.65	30.36	63.70	-394.97	-7,730.13	4,176.34	4,112.64	63.71	65.557		
10,500.00	7,231.71	7,100.35	7,138.38	102.36	30.37	64.25	-394.97	-7,730.18	4,076.44	4,012.64	63.79	63.902		
10,600.00	7,231.32	7,102.58	7,140.61	105.08	30.38	64.89	-394.98	-7,730.23	3,976.53	3,912.65	63.88	62.248		
10,700.00	7,230.92	7,104.79	7,142.82	107.80	30.39	65.54	-394.99	-7,730.28	3,876.63	3,812.66	63.98	60.594		
10,800.00	7,230.53	7,106.98	7,145.01	110.53	30.40	66.20	-395.00	-7,730.33	3,776.74	3,712.66	64.08	58.941		
10,900.00	7,230.14	7,109.16	7,147.18	113.27	30.41	66.85	-395.00	-7,730.38	3,676.85	3,612.67	64.18	57.288		
11,000.00	7,229.74	7,111.31	7,149.34	116.02	30.42	67.50	-395.01	-7,730.43	3,576.96	3,512.67	64.29	55.637		
11,100.00	7,229.35	7,113.45	7,151.48	118.77	30.43	68.16	-395.02	-7,730.47	3,477.08	3,412.68	64.41	53.986		
11,200.00	7,228.96	7,115.58	7,153.60	121.52	30.44	68.82	-395.03	-7,730.52	3,377.21	3,312.68	64.53	52.336		
11,300.00	7,228.56	7,117.69	7,155.71	124.28	30.45	69.47	-395.04	-7,730.57	3,277.34	3,212.68	64.66	50.686		
11,400.00	7,228.17	7,119.78	7,157.80	127.04	30.46	70.13	-395.05	-7,730.62	3,177.48	3,112.69	64.80	49.037		
11,500.00	7,227.78	7,121.86	7,159.88	129.81	30.46	70.79	-395.05	-7,730.66	3,077.63	3,012.69	64.94	47.389		
11,600.00	7,227.38	7,123.92	7,161.94	132.58	30.47	71.45	-395.06	-7,730.71	2,977.79	2,912.69	65.10	45.741		
11,700.00	7,226.99	7,125.96	7,163.98	135.36	30.48	72.11	-395.07	-7,730.75	2,877.95	2,812.68	65.27	44.094		
11,800.00	7,226.60	7,127.99	7,166.01	138.14	30.49	72.77	-395.08	-7,730.80	2,778.13	2,712.68	65.45	42.447		
11,900.00	7,226.20	7,130.00	7,168.03	140.92	30.50	73.42	-395.09	-7,730.84	2,678.32	2,612.67	65.65	40.800		
12,000.00	7,225.81	7,132.00	7,170.02	143.70	30.51	74.08	-395.10	-7,730.89	2,578.52	2,512.66	65.86	39.153		
12,100.00	7,225.42	7,133.99	7,172.01	146.49	30.52	74.74	-395.11	-7,730.93	2,478.74	2,412.65	66.09	37.505		
12,200.00	7,225.02	7,135.96	7,173.98	149.28	30.52	75.40	-395.12	-7,730.97	2,378.97	2,312.63	66.34	35.858		
12,300.00	7,224.63	7,137.91	7,175.93	152.08	30.53	76.05	-395.13	-7,731.02	2,279.22	2,212.60	66.62	34.210		
12,400.00	7,224.24	7,139.85	7,177.87	154.87	30.54	76.71	-395.14	-7,731.06	2,179.50	2,112.56	66.94	32.561		
12,500.00	7,223.84	7,141.78	7,179.80	157.67	30.55	77.36	-395.15	-7,731.10	2,079.79	2,012.51	67.28	30.911		
12,600.00	7,223.45	7,143.69	7,181.71	160.47	30.56	78.01	-395.16	-7,731.14	1,980.12	1,912.45	67.67	29.260		
12,700.00	7,223.06	7,145.59	7,183.60	163.27	30.57	78.67	-395.17	-7,731.18	1,880.48	1,812.36	68.12	27.607		
12,800.00	7,222.66	7,147.47	7,185.49	166.07	30.57	79.31	-395.18	-7,731.22	1,780.88	1,712.26	68.62	25.952		
12,900.00	7,222.27	7,149.34	7,187.36	168.88	30.58	79.96	-395.19	-7,731.26	1,681.32	1,612.12	69.20	24.296		
13,000.00	7,221.88	7,151.20	7,189.21	171.69	30.59	80.61	-395.20	-7,731.30	1,581.82	1,511.94	69.88	22.637		
13,100.00	7,221.48	7,153.04	7,191.06	174.49	30.60	81.25	-395.21	-7,731.34	1,482.38	1,411.70	70.67	20.975		
13,200.00	7,221.09	7,154.87	7,192.89	177.30	30.60	81.89	-395.22	-7,731.38	1,383.02	1,311.40	71.62	19.311		
13,300.00	7,220.70	7,156.69	7,194.70	180.12	30.61	82.53	-395.23	-7,731.42	1,283.76	1,211.00	72.75	17.646		
13,400.00	7,220.30	7,158.49	7,196.51	182.93	30.62	83.16	-395.24	-7,731.46	1,184.61	1,110.48	74.13	15.979		
13,500.00	7,219.91	7,160.28	7,198.30	185.74	30.63	83.80	-395.25	-7,731.49	1,085.63	1,009.79	75.84	14.314		
13,600.00	7,219.52	7,162.06	7,200.08	188.56	30.64	84.43	-395.26	-7,731.53	986.84	908.85	77.99	12.653		
13,700.00	7,219.12	7,163.83	7,201.84	191.38	30.64	85.05	-395.27	-7,731.57	888.32	807.59	80.74	11.002		
13,800.00	7,218.73	7,165.58	7,203.60	194.20	30.65	85.68	-395.28	-7,731.60	790.18	705.84	84.34	9.369		
13,900.00	7,218.34	7,167.33	7,205.34	197.02	30.66	86.30	-395.30	-7,731.64	692.55	603.40	89.16	7.768		
14,000.00	7,217.94	7,169.06	7,207.07	199.84	30.67	86.91	-395.31	-7,731.68	595.72	499.90	95.82	6.217		
14,100.00	7,217.55	7,170.77	7,208.78	202.66	30.67	87.53	-395.32	-7,731.71	500.12	394.77	105.35	4.747		
14,200.00	7,217.16	7,172.48	7,210.49	205.48	30.68	88.14	-395.33	-7,731.75	406.64	287.06	119.57	3.401		
14,300.00	7,216.76	7,174.17	7,212.18	208.30	30.69	88.74	-395.34	-7,731.78	317.15	175.31	141.83	2.236		
14,400.00	7,216.37	7,175.85	7,213.86	211.13	30.69	89.35	-395.35	-7,731.82	236.23	58.74	177.50	1.331 Level 3		
14,500.00	7,215.98	7,177.52	7,215.53	213.96	30.70	89.95	-395.36	-7,731.85	176.13	-50.20	226.34	0.778 Level 1		
14,573.94	7,215.69	7,178.75	7,216.76	216.05	30.71	90.39	-395.37	-7,731.87	159.87	-86.82	246.69	0.648 Level 1, CC, ES, SF		
14,600.00	7,215.58	7,179.18	7,217.19	216.78	30.71	90.54	-395.37	-7,731.88	161.97	-82.35	244.32	0.663 Level 1		
14,700.00	7,215.19	7,180.83	7,218.84	219.61	30.72	91.13	-395.39	-7,731.92	203.57	0.42	203.16	1.002 Level 2		
14,800.00	7,214.80	7,182.47	7,220.48	222.44	30.72	91.72	-395.40	-7,731.95	276.85	116.23	160.62	1.724		
14,900.00	7,214.40	7,184.09	7,222.10	225.27	30.73	92.30	-395.41	-7,731.98	363.10	230.06	133.04	2.729		
15,000.00	7,214.01	7,185.71	7,223.72	228.10	30.74	92.88	-395.42	-7,732.02	455.01	339.34	115.66	3.934		
15,002.44	7,214.00	7,185.75	7,223.76	228.16	30.74	92.89	-395.42	-7,732.02	457.29	341.96	115.33	3.965		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	62.00	3.28	3.28	-112.87	-1,505.05	-3,567.62	3,872.59					
100.00	100.00	38.00	100.00	3.28	3.35	-112.87	-1,505.05	-3,567.62	3,872.09	3,865.46	6.63	583.928		
200.00	200.00	138.00	200.00	3.34	4.49	-112.87	-1,505.05	-3,567.62	3,872.09	3,864.26	7.83	494.455		
300.00	300.00	238.00	300.00	3.44	7.34	-112.87	-1,505.05	-3,567.62	3,872.09	3,861.31	10.78	359.127		
400.00	400.00	338.00	400.00	3.60	10.58	-112.87	-1,505.05	-3,567.62	3,872.09	3,857.91	14.18	273.088		
500.00	500.00	438.00	500.00	3.81	13.94	-112.87	-1,505.05	-3,567.62	3,872.09	3,854.35	17.74	218.237		
600.00	599.98	537.98	599.98	4.03	17.35	49.00	-1,505.05	-3,567.62	3,870.95	3,849.56	21.38	181.032		
700.00	699.84	637.84	699.84	4.29	20.78	49.11	-1,505.05	-3,567.62	3,867.51	3,842.45	25.07	154.285		
800.00	799.54	737.54	799.54	4.57	24.23	49.22	-1,505.05	-3,567.62	3,862.45	3,833.65	28.79	134.154		
900.00	899.23	837.23	899.23	4.87	27.68	49.30	-1,505.05	-3,567.62	3,857.32	3,824.77	32.55	118.512		
1,000.00	998.92	936.92	998.92	5.20	31.14	49.39	-1,505.05	-3,567.62	3,852.20	3,815.86	36.33	106.028		
1,100.00	1,098.61	1,036.61	1,098.61	5.54	34.60	49.48	-1,505.05	-3,567.62	3,847.08	3,806.95	40.14	95.848		
1,200.00	1,198.30	1,136.30	1,198.30	5.90	38.06	49.57	-1,505.05	-3,567.62	3,841.98	3,798.02	43.96	87.397		
1,300.00	1,298.00	1,236.00	1,298.00	6.27	41.53	49.66	-1,505.05	-3,567.62	3,836.89	3,789.09	47.80	80.274		
1,400.00	1,397.69	1,335.69	1,397.69	6.66	45.00	49.75	-1,505.05	-3,567.62	3,831.80	3,780.16	51.65	74.194		
1,500.00	1,497.38	1,435.38	1,497.38	7.05	48.47	49.84	-1,505.05	-3,567.62	3,826.73	3,771.23	55.50	68.945		
1,600.00	1,597.07	1,535.07	1,597.07	7.44	51.95	49.93	-1,505.05	-3,567.62	3,821.67	3,762.29	59.37	64.369		
1,700.00	1,696.76	1,634.76	1,696.76	7.85	55.42	50.02	-1,505.05	-3,567.62	3,816.61	3,753.37	63.24	60.347		
1,800.00	1,796.45	1,734.45	1,796.45	8.25	58.90	50.11	-1,505.05	-3,567.62	3,811.56	3,744.44	67.12	56.784		
1,900.00	1,896.15	1,834.15	1,896.15	8.67	62.37	50.20	-1,505.05	-3,567.62	3,806.53	3,735.52	71.01	53.607		
2,000.00	1,995.84	1,933.84	1,995.84	9.08	65.85	50.29	-1,505.05	-3,567.62	3,801.50	3,726.60	74.90	50.757		
2,100.00	2,095.53	2,033.53	2,095.53	9.50	69.32	50.38	-1,505.05	-3,567.62	3,796.48	3,717.69	78.79	48.186		
2,200.00	2,195.22	2,133.22	2,195.22	9.92	72.80	50.47	-1,505.05	-3,567.62	3,791.47	3,708.79	82.68	45.855		
2,300.00	2,294.91	2,232.91	2,294.91	10.35	76.28	50.56	-1,505.05	-3,567.62	3,786.48	3,699.89	86.58	43.732		
2,400.00	2,394.60	2,332.60	2,394.60	10.77	79.75	50.65	-1,505.05	-3,567.62	3,781.49	3,691.00	90.48	41.792		
2,500.00	2,494.30	2,432.30	2,494.30	11.20	83.23	50.74	-1,505.05	-3,567.62	3,776.51	3,682.12	94.39	40.011		
2,600.00	2,593.99	2,531.99	2,593.99	11.63	86.71	50.84	-1,505.05	-3,567.62	3,771.54	3,673.25	98.29	38.371		
2,700.00	2,693.68	2,631.68	2,693.68	12.07	90.19	50.93	-1,505.05	-3,567.62	3,766.58	3,664.38	102.20	36.855		
2,800.00	2,793.37	2,731.37	2,793.37	12.50	93.66	51.02	-1,505.05	-3,567.62	3,761.63	3,655.52	106.11	35.451		
2,900.00	2,893.06	2,831.06	2,893.06	12.93	97.14	51.11	-1,505.05	-3,567.62	3,756.69	3,646.67	110.02	34.146		
3,000.00	2,992.76	2,930.76	2,992.76	13.37	100.62	51.21	-1,505.05	-3,567.62	3,751.76	3,637.83	113.93	32.931		
3,100.00	3,092.45	3,030.45	3,092.45	13.81	104.10	51.30	-1,505.05	-3,567.62	3,746.84	3,629.00	117.84	31.796		
3,200.00	3,192.14	3,130.14	3,192.14	14.25	107.58	51.39	-1,505.05	-3,567.62	3,741.93	3,620.18	121.75	30.733		
3,300.00	3,291.83	3,229.83	3,291.83	14.68	111.06	51.49	-1,505.05	-3,567.62	3,737.03	3,611.36	125.67	29.737		
3,400.00	3,391.52	3,329.52	3,391.52	15.12	114.54	51.58	-1,505.05	-3,567.62	3,732.14	3,602.56	129.58	28.801		
3,500.00	3,491.21	3,429.21	3,491.21	15.56	118.01	51.68	-1,505.05	-3,567.62	3,727.26	3,593.76	133.50	27.919		
3,600.00	3,590.91	3,528.91	3,590.91	16.00	121.49	51.77	-1,505.05	-3,567.62	3,722.39	3,584.97	137.42	27.088		
3,700.00	3,690.60	3,628.60	3,690.60	16.45	124.97	51.87	-1,505.05	-3,567.62	3,717.53	3,576.20	141.34	26.303		
3,800.00	3,790.29	3,728.29	3,790.29	16.89	128.45	51.96	-1,505.05	-3,567.62	3,712.68	3,567.43	145.25	25.560		
3,900.00	3,889.98	3,827.98	3,889.98	17.33	131.93	52.06	-1,505.05	-3,567.62	3,707.84	3,558.67	149.17	24.856		
4,000.00	3,989.67	3,927.67	3,989.67	17.77	135.41	52.15	-1,505.05	-3,567.62	3,703.02	3,549.92	153.09	24.188		
4,100.00	4,089.36	4,027.36	4,089.36	18.22	138.89	52.25	-1,505.05	-3,567.62	3,698.20	3,541.18	157.01	23.554		
4,200.00	4,189.06	4,127.06	4,189.06	18.66	142.37	52.34	-1,505.05	-3,567.62	3,693.39	3,532.46	160.93	22.950		
4,300.00	4,288.75	4,226.75	4,288.75	19.10	145.85	52.44	-1,505.05	-3,567.62	3,688.59	3,523.74	164.85	22.375		
4,400.00	4,388.44	4,326.44	4,388.44	19.55	149.33	52.54	-1,505.05	-3,567.62	3,683.80	3,515.03	168.78	21.827		
4,500.00	4,488.13	4,426.13	4,488.13	19.99	152.81	52.63	-1,505.05	-3,567.62	3,679.03	3,506.33	172.70	21.303		
4,600.00	4,587.82	4,525.82	4,587.82	20.44	156.29	52.73	-1,505.05	-3,567.62	3,674.26	3,497.64	176.62	20.803		
4,700.00	4,687.51	4,625.51	4,687.51	20.89	159.77	52.83	-1,505.05	-3,567.62	3,669.51	3,488.96	180.54	20.325		
4,800.00	4,787.21	4,725.21	4,787.21	21.33	163.24	52.93	-1,505.05	-3,567.62	3,664.76	3,480.30	184.46	19.867		
4,900.00	4,886.90	4,824.90	4,886.90	21.78	166.72	53.02	-1,505.05	-3,567.62	3,660.03	3,471.64	188.39	19.428		
5,000.00	4,986.59	4,924.59	4,986.59	22.22	170.20	53.12	-1,505.05	-3,567.62	3,655.30	3,462.99	192.31	19.007		
5,100.00	5,086.28	5,024.28	5,086.28	22.67	173.68	53.22	-1,505.05	-3,567.62	3,650.59	3,454.36	196.23	18.603		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,123.97	5,185.97	23.12	177.16	53.32	-1,505.05	-3,567.62	3,645.89	3,445.73	200.16	18.215		
5,300.00	5,285.66	5,223.66	5,285.66	23.56	180.64	53.42	-1,505.05	-3,567.62	3,641.20	3,437.12	204.08	17.842		
5,400.00	5,385.36	5,323.36	5,385.36	24.01	184.12	53.52	-1,505.05	-3,567.62	3,636.52	3,428.51	208.01	17.483		
5,500.00	5,485.05	5,423.05	5,485.05	24.46	187.60	53.62	-1,505.05	-3,567.62	3,631.85	3,419.92	211.93	17.137		
5,600.00	5,584.74	5,522.74	5,584.74	24.90	191.08	53.72	-1,505.05	-3,567.62	3,627.19	3,411.33	215.86	16.804		
5,700.00	5,684.43	5,622.43	5,684.43	25.35	194.56	53.81	-1,505.05	-3,567.62	3,622.54	3,402.76	219.78	16.482		
5,800.00	5,784.12	5,722.12	5,784.12	25.80	198.04	53.92	-1,505.05	-3,567.62	3,617.91	3,394.20	223.71	16.172		
5,900.00	5,883.81	5,821.81	5,883.81	26.25	201.52	54.02	-1,505.05	-3,567.62	3,613.28	3,385.65	227.63	15.873		
6,000.00	5,983.51	5,921.51	5,983.51	26.70	205.00	54.12	-1,505.05	-3,567.62	3,608.67	3,377.11	231.56	15.584		
6,100.00	6,083.20	6,021.20	6,083.20	27.14	208.48	54.22	-1,505.05	-3,567.62	3,604.07	3,368.58	235.48	15.305		
6,200.00	6,182.89	6,120.89	6,182.89	27.59	211.96	54.32	-1,505.05	-3,567.62	3,599.47	3,360.06	239.41	15.035		
6,300.00	6,282.58	6,220.58	6,282.58	28.04	215.44	54.42	-1,505.05	-3,567.62	3,594.89	3,351.56	243.34	14.773		
6,400.00	6,382.27	6,320.27	6,382.27	28.49	218.92	54.52	-1,505.05	-3,567.62	3,590.33	3,343.06	247.26	14.520		
6,500.00	6,481.96	6,419.96	6,481.96	28.94	222.40	54.62	-1,505.05	-3,567.62	3,585.77	3,334.58	251.19	14.275		
6,600.00	6,581.66	6,519.66	6,581.66	29.39	225.88	54.73	-1,505.05	-3,567.62	3,581.22	3,326.10	255.12	14.038		
6,700.00	6,681.21	6,619.21	6,681.21	29.83	229.35	16.21	-1,505.05	-3,567.62	3,574.21	3,315.17	259.04	13.798		
6,800.00	6,778.96	6,716.96	6,778.96	30.28	232.77	-1.78	-1,505.05	-3,567.62	3,553.68	3,290.80	262.88	13.518		
6,900.00	6,872.51	6,810.51	6,872.51	30.70	236.03	-8.20	-1,505.05	-3,567.62	3,518.78	3,252.23	266.55	13.201		
7,000.00	6,959.55	6,902.45	6,959.55	31.10	239.24	-12.47	-1,505.05	-3,567.62	3,470.37	3,200.24	270.13	12.847		
7,100.00	7,037.93	6,975.93	7,037.93	31.48	241.81	-16.64	-1,505.05	-3,567.62	3,409.68	3,136.67	273.01	12.489		
7,200.00	7,105.74	7,043.74	7,105.74	31.88	244.17	-21.80	-1,505.05	-3,567.62	3,338.25	3,062.62	275.63	12.111		
7,300.00	7,161.29	7,100.71	7,161.29	32.41	246.16	-29.12	-1,505.05	-3,567.62	3,257.91	2,980.08	277.83	11.726		
7,400.00	7,203.22	7,141.22	7,203.22	33.13	247.58	-40.46	-1,505.05	-3,567.62	3,170.70	2,891.30	279.40	11.348		
7,500.00	7,230.50	7,168.50	7,230.50	34.04	248.53	-58.39	-1,505.05	-3,567.62	3,078.87	2,798.40	280.47	10.978		
7,600.00	7,242.45	7,180.45	7,242.45	35.13	248.95	-83.12	-1,505.05	-3,567.62	2,984.75	2,703.76	280.99	10.622		
7,700.00	7,242.72	7,180.72	7,242.72	36.39	248.96	-90.62	-1,505.05	-3,567.62	2,890.50	2,609.38	281.12	10.282		
7,800.00	7,242.33	7,180.33	7,242.33	37.81	248.94	-90.60	-1,505.05	-3,567.62	2,796.66	2,515.39	281.27	9.943		
7,900.00	7,241.93	7,179.93	7,241.93	39.40	248.93	-90.58	-1,505.05	-3,567.62	2,703.26	2,421.77	281.49	9.603		
8,000.00	7,241.54	7,179.54	7,241.54	41.13	248.91	-90.55	-1,505.05	-3,567.62	2,610.35	2,328.58	281.77	9.264		
8,100.00	7,241.15	7,179.15	7,241.15	42.97	248.90	-90.53	-1,505.05	-3,567.62	2,517.98	2,235.84	282.14	8.924		
8,200.00	7,240.75	7,178.75	7,240.75	44.92	248.89	-90.51	-1,505.05	-3,567.62	2,426.22	2,143.61	282.61	8.585		
8,300.00	7,240.36	7,178.36	7,240.36	46.97	248.87	-90.49	-1,505.05	-3,567.62	2,335.14	2,051.95	283.19	8.246		
8,400.00	7,239.97	7,177.97	7,239.97	49.10	248.86	-90.46	-1,505.05	-3,567.62	2,244.81	1,960.92	283.89	7.907		
8,500.00	7,239.57	7,177.57	7,239.57	51.29	248.85	-90.44	-1,505.05	-3,567.62	2,155.34	1,870.60	284.75	7.569		
8,600.00	7,239.18	7,177.18	7,239.18	53.56	248.83	-90.42	-1,505.05	-3,567.62	2,066.84	1,781.07	285.77	7.233		
8,700.00	7,238.79	7,176.79	7,238.79	55.87	248.82	-90.39	-1,505.05	-3,567.62	1,979.42	1,692.44	286.99	6.897		
8,800.00	7,238.39	7,176.39	7,238.39	58.24	248.80	-90.37	-1,505.05	-3,567.62	1,893.26	1,604.84	288.42	6.564		
8,900.00	7,238.00	7,176.00	7,238.00	60.64	248.79	-90.35	-1,505.05	-3,567.62	1,808.52	1,518.42	290.10	6.234		
9,000.00	7,237.61	7,175.61	7,237.61	63.09	248.78	-90.33	-1,505.05	-3,567.62	1,725.41	1,433.35	292.06	5.908		
9,100.00	7,237.21	7,175.21	7,237.21	65.56	248.76	-90.30	-1,505.05	-3,567.62	1,644.19	1,349.87	294.32	5.586		
9,200.00	7,236.82	7,174.82	7,236.82	68.07	248.75	-90.28	-1,505.05	-3,567.62	1,565.14	1,268.23	296.91	5.271		
9,300.00	7,236.43	7,174.43	7,236.43	70.61	248.74	-90.26	-1,505.05	-3,567.62	1,488.62	1,188.75	299.86	4.964		
9,400.00	7,236.03	7,174.03	7,236.03	73.16	248.72	-90.23	-1,505.05	-3,567.62	1,415.02	1,111.83	303.19	4.667		
9,500.00	7,235.64	7,173.64	7,235.64	75.74	248.71	-90.21	-1,505.05	-3,567.62	1,344.84	1,037.92	306.92	4.382		
9,600.00	7,235.25	7,173.25	7,235.25	78.34	248.69	-90.19	-1,505.05	-3,567.62	1,278.64	967.59	311.04	4.111		
9,700.00	7,234.85	7,172.85	7,234.85	80.96	248.68	-90.16	-1,505.05	-3,567.62	1,217.05	901.52	315.53	3.857		
9,800.00	7,234.46	7,172.46	7,234.46	83.59	248.67	-90.14	-1,505.05	-3,567.62	1,160.83	840.48	320.35	3.624		
9,900.00	7,234.07	7,172.07	7,234.07	86.24	248.65	-90.12	-1,505.05	-3,567.62	1,110.78	785.38	325.40	3.414		
10,000.00	7,233.67	7,171.67	7,233.67	88.90	248.64	-90.10	-1,505.05	-3,567.62	1,067.77	737.23	330.55	3.230		
10,100.00	7,233.28	7,171.28	7,233.28	91.57	248.63	-90.07	-1,505.05	-3,567.62	1,032.69	697.08	335.61	3.077		
10,200.00	7,232.89	7,170.89	7,232.89	94.25	248.61	-90.05	-1,505.05	-3,567.62	1,006.36	665.97	340.39	2.956		
10,300.00	7,232.49	7,170.49	7,232.49	96.95	248.60	-90.03	-1,505.05	-3,567.62	989.48	644.84	344.64	2.871		

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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.10	7,170.10	7,232.10	99.65	248.58	-90.00	-1,505.05	-3,567.62	982.53	634.38	348.15	2.822		
10,418.47	7,232.03	7,170.03	7,232.03	100.15	248.58	-90.00	-1,505.05	-3,567.62	982.36	633.65	348.70	2.817 CC, ES		
10,500.00	7,231.71	7,169.71	7,231.71	102.36	248.57	-89.98	-1,505.05	-3,567.62	985.74	634.96	350.77	2.810 SF		
10,600.00	7,231.32	7,169.32	7,231.32	105.08	248.56	-89.96	-1,505.05	-3,567.62	998.99	646.56	352.43	2.835		
10,700.00	7,230.92	7,168.92	7,230.92	107.80	248.54	-89.94	-1,505.05	-3,567.62	1,021.90	668.75	353.15	2.894		
10,800.00	7,230.53	7,168.53	7,230.53	110.53	248.53	-89.91	-1,505.05	-3,567.62	1,053.85	700.82	353.02	2.985		
10,900.00	7,230.14	7,168.14	7,230.14	113.27	248.52	-89.89	-1,505.05	-3,567.62	1,094.03	741.83	352.20	3.106		
11,000.00	7,229.74	7,167.74	7,229.74	116.02	248.50	-89.87	-1,505.05	-3,567.62	1,141.58	790.74	350.83	3.254		
11,100.00	7,229.35	7,167.35	7,229.35	118.77	248.49	-89.84	-1,505.05	-3,567.62	1,195.62	846.53	349.09	3.425		
11,200.00	7,228.96	7,166.96	7,228.96	121.52	248.48	-89.82	-1,505.05	-3,567.62	1,255.31	908.20	347.11	3.616		
11,300.00	7,228.56	7,166.56	7,228.56	124.28	248.46	-89.80	-1,505.05	-3,567.62	1,319.89	974.90	344.99	3.826		
11,400.00	7,228.17	7,166.17	7,228.17	127.04	248.45	-89.77	-1,505.05	-3,567.62	1,388.67	1,045.84	342.83	4.051		
11,500.00	7,227.78	7,165.78	7,227.78	129.81	248.43	-89.75	-1,505.05	-3,567.62	1,461.07	1,120.38	340.68	4.289		
11,600.00	7,227.38	7,165.38	7,227.38	132.58	248.42	-89.73	-1,505.05	-3,567.62	1,536.56	1,197.98	338.59	4.538		
11,700.00	7,226.99	7,164.99	7,226.99	135.36	248.41	-89.71	-1,505.05	-3,567.62	1,614.72	1,278.15	336.57	4.798		
11,800.00	7,226.60	7,164.60	7,226.60	138.14	248.39	-89.68	-1,505.05	-3,567.62	1,695.18	1,360.53	334.65	5.066		
11,900.00	7,226.20	7,164.20	7,226.20	140.92	248.38	-89.66	-1,505.05	-3,567.62	1,777.62	1,444.79	332.83	5.341		
12,000.00	7,225.81	7,163.81	7,225.81	143.70	248.37	-89.64	-1,505.05	-3,567.62	1,861.78	1,530.67	331.11	5.623		
12,100.00	7,225.42	7,163.42	7,225.42	146.49	248.35	-89.61	-1,505.05	-3,567.62	1,947.44	1,617.94	329.51	5.910		
12,200.00	7,225.02	7,163.02	7,225.02	149.28	248.34	-89.59	-1,505.05	-3,567.62	2,034.41	1,706.41	328.00	6.203		
12,300.00	7,224.63	7,162.63	7,224.63	152.08	248.32	-89.57	-1,505.05	-3,567.62	2,122.53	1,795.94	326.59	6.499		
12,400.00	7,224.24	7,162.24	7,224.24	154.87	248.31	-89.55	-1,505.05	-3,567.62	2,211.66	1,886.39	325.27	6.800		
12,500.00	7,223.84	7,161.84	7,223.84	157.67	248.30	-89.52	-1,505.05	-3,567.62	2,301.68	1,977.65	324.03	7.103		
12,600.00	7,223.45	7,161.45	7,223.45	160.47	248.28	-89.50	-1,505.05	-3,567.62	2,392.49	2,069.62	322.88	7.410		
12,700.00	7,223.06	7,161.06	7,223.06	163.27	248.27	-89.48	-1,505.05	-3,567.62	2,484.01	2,162.22	321.80	7.719		
12,800.00	7,222.66	7,160.66	7,222.66	166.07	248.26	-89.45	-1,505.05	-3,567.62	2,576.16	2,255.38	320.79	8.031		
12,900.00	7,222.27	7,160.27	7,222.27	168.88	248.24	-89.43	-1,505.05	-3,567.62	2,668.88	2,349.04	319.84	8.344		
13,000.00	7,221.88	7,159.88	7,221.88	171.69	248.23	-89.41	-1,505.05	-3,567.62	2,762.10	2,443.15	318.95	8.660		
13,100.00	7,221.48	7,159.48	7,221.48	174.49	248.21	-89.38	-1,505.05	-3,567.62	2,855.79	2,537.67	318.12	8.977		
13,200.00	7,221.09	7,159.09	7,221.09	177.30	248.20	-89.36	-1,505.05	-3,567.62	2,949.88	2,632.54	317.34	9.296		
13,300.00	7,220.70	7,158.70	7,220.70	180.12	248.19	-89.34	-1,505.05	-3,567.62	3,044.36	2,727.75	316.61	9.616		
13,400.00	7,220.30	7,158.30	7,220.30	182.93	248.17	-89.32	-1,505.05	-3,567.62	3,139.17	2,823.26	315.92	9.937		
13,500.00	7,219.91	7,157.91	7,219.91	185.74	248.16	-89.29	-1,505.05	-3,567.62	3,234.30	2,919.04	315.27	10.259		
13,600.00	7,219.52	7,157.52	7,219.52	188.56	248.15	-89.27	-1,505.05	-3,567.62	3,329.72	3,015.06	314.65	10.582		
13,700.00	7,219.12	7,157.12	7,219.12	191.38	248.13	-89.25	-1,505.05	-3,567.62	3,425.39	3,111.32	314.08	10.906		
13,800.00	7,218.73	7,156.73	7,218.73	194.20	248.12	-89.22	-1,505.05	-3,567.62	3,521.31	3,207.78	313.53	11.231		
13,900.00	7,218.34	7,156.34	7,218.34	197.02	248.10	-89.20	-1,505.05	-3,567.62	3,617.44	3,304.43	313.02	11.557		
14,000.00	7,217.94	7,155.94	7,217.94	199.84	248.09	-89.18	-1,505.05	-3,567.62	3,713.78	3,401.25	312.53	11.883		
14,100.00	7,217.55	7,155.55	7,217.55	202.66	248.08	-89.16	-1,505.05	-3,567.62	3,810.31	3,498.24	312.07	12.210		
14,200.00	7,217.16	7,155.16	7,217.16	205.48	248.06	-89.13	-1,505.05	-3,567.62	3,907.02	3,595.38	311.63	12.537		
14,300.00	7,216.76	7,154.76	7,216.76	208.30	248.05	-89.11	-1,505.05	-3,567.62	4,003.88	3,692.66	311.22	12.865		
14,400.00	7,216.37	7,154.37	7,216.37	211.13	248.04	-89.09	-1,505.05	-3,567.62	4,100.90	3,790.07	310.83	13.193		
14,500.00	7,215.98	7,153.98	7,215.98	213.96	248.02	-89.06	-1,505.05	-3,567.62	4,198.05	3,887.59	310.46	13.522		
14,600.00	7,215.58	7,153.58	7,215.58	216.78	248.01	-89.04	-1,505.05	-3,567.62	4,295.34	3,985.23	310.11	13.851		
14,700.00	7,215.19	7,153.19	7,215.19	219.61	247.99	-89.02	-1,505.05	-3,567.62	4,392.75	4,082.97	309.78	14.180		
14,800.00	7,214.80	7,152.80	7,214.80	222.44	247.98	-89.00	-1,505.05	-3,567.62	4,490.27	4,180.81	309.46	14.510		
14,900.00	7,214.40	7,152.40	7,214.40	225.27	247.97	-88.97	-1,505.05	-3,567.62	4,587.90	4,278.74	309.16	14.840		
15,000.00	7,214.01	7,152.01	7,214.01	228.10	247.95	-88.95	-1,505.05	-3,567.62	4,685.63	4,376.76	308.87	15.170		
15,002.44	7,214.00	7,152.00	7,214.00	228.16	247.95	-88.95	-1,505.05	-3,567.62	4,688.01	4,379.14	308.87	15.178		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	59.63	3.28	3.28	-91.84	-293.52	-9,144.53	9,149.44					
100.00	100.00	185.16	211.14	3.28	3.34	-91.83	-292.07	-9,142.96	9,148.30	9,141.68	6.62	1,381.475		
200.00	200.00	289.17	315.14	3.34	3.45	-91.83	-291.56	-9,141.64	9,147.01	9,140.22	6.79	1,347.695		
300.00	300.00	369.07	395.03	3.44	3.58	-91.83	-291.39	-9,140.73	9,145.87	9,138.85	7.02	1,303.120		
400.00	400.00	464.88	490.84	3.60	3.76	-91.82	-291.15	-9,139.77	9,144.85	9,137.49	7.36	1,241.984		
500.00	500.00	547.70	573.66	3.81	3.95	-91.82	-290.93	-9,139.01	9,143.94	9,136.18	7.75	1,179.156		
600.00	599.98	624.13	650.08	4.03	4.15	70.04	-291.05	-9,138.48	9,142.65	9,134.48	8.18	1,118.106		
700.00	699.84	738.74	764.70	4.29	4.47	70.12	-291.20	-9,137.91	9,140.39	9,131.64	8.75	1,044.731		
800.00	799.54	849.20	875.15	4.57	4.81	70.19	-291.05	-9,137.06	9,136.99	9,127.62	9.37	975.029		
900.00	899.23	930.52	956.47	4.87	5.08	70.23	-290.93	-9,136.46	9,133.59	9,123.64	9.94	918.665		
1,000.00	998.92	984.00	1,009.95	5.20	5.26	70.25	-290.98	-9,136.17	9,130.46	9,120.01	10.45	873.750		
1,100.00	1,098.61	984.00	1,009.95	5.54	5.26	70.25	-290.98	-9,136.17	9,128.22	9,117.43	10.80	845.588		
1,200.00	1,198.30	1,049.65	1,075.60	5.90	5.47	70.28	-290.98	-9,136.45	9,126.25	9,114.88	11.37	802.574		
1,300.00	1,298.00	1,112.00	1,137.93	6.27	5.68	70.31	-290.75	-9,137.84	9,125.57	9,113.61	11.95	763.462		
1,381.38	1,379.12	1,112.00	1,137.93	6.58	5.68	70.31	-290.75	-9,137.84	9,125.20	9,112.94	12.26	744.144		
1,400.00	1,397.69	1,112.00	1,137.93	6.66	5.68	70.31	-290.75	-9,137.84	9,125.22	9,112.89	12.33	739.827		
1,500.00	1,497.38	1,112.00	1,137.93	7.05	5.68	70.31	-290.75	-9,137.84	9,125.97	9,113.25	12.72	717.250		
1,600.00	1,597.07	1,112.00	1,137.93	7.44	5.68	70.31	-290.75	-9,137.84	9,127.82	9,114.70	13.12	695.760		
1,700.00	1,696.76	1,181.51	1,207.37	7.85	5.92	70.35	-290.42	-9,140.78	9,129.71	9,115.95	13.75	663.887		
1,800.00	1,796.45	1,241.00	1,266.74	8.25	6.12	70.38	-290.23	-9,144.55	9,133.11	9,118.75	14.36	636.025		
1,900.00	1,896.15	1,241.00	1,266.74	8.67	6.12	70.38	-290.23	-9,144.55	9,136.83	9,122.06	14.77	618.709		
2,000.00	1,995.84	1,241.00	1,266.74	9.08	6.12	70.38	-290.23	-9,144.55	9,141.65	9,126.47	15.18	602.304		
2,100.00	2,095.53	1,241.00	1,266.74	9.50	6.12	70.38	-290.23	-9,144.55	9,147.55	9,131.96	15.59	586.772		
2,200.00	2,195.22	1,302.22	1,327.75	9.92	6.34	70.41	-290.08	-9,149.69	9,153.68	9,137.46	16.22	564.352		
2,300.00	2,294.91	1,369.00	1,394.14	10.35	6.58	70.44	-289.92	-9,156.81	9,161.40	9,144.53	16.87	542.911		
2,400.00	2,394.60	1,369.00	1,394.14	10.77	6.58	70.44	-289.92	-9,156.81	9,169.18	9,151.89	17.29	530.348		
2,500.00	2,494.30	1,369.00	1,394.14	11.20	6.58	70.44	-289.92	-9,156.81	9,178.04	9,160.34	17.70	518.445		
2,600.00	2,593.99	1,369.00	1,394.14	11.63	6.58	70.44	-289.92	-9,156.81	9,187.98	9,169.87	18.12	507.165		
2,700.00	2,693.68	1,424.28	1,448.98	12.07	6.79	70.47	-289.94	-9,163.83	9,198.36	9,179.62	18.74	490.961		
2,800.00	2,793.37	1,450.01	1,474.46	12.50	6.88	70.48	-290.06	-9,167.41	9,209.71	9,190.47	19.24	478.553		
2,900.00	2,893.06	1,498.00	1,521.90	12.93	7.07	70.50	-290.48	-9,174.63	9,221.97	9,202.13	19.84	464.784		
3,000.00	2,992.76	1,498.00	1,521.90	13.37	7.07	70.50	-290.48	-9,174.63	9,234.81	9,214.56	20.25	456.027		
3,100.00	3,092.45	1,498.00	1,521.90	13.81	7.07	70.50	-290.48	-9,174.63	9,248.71	9,228.06	20.66	447.713		
3,200.00	3,192.14	1,548.80	1,571.98	14.25	7.28	70.52	-291.09	-9,183.07	9,263.10	9,241.83	21.26	435.603		
3,300.00	3,291.83	1,572.55	1,595.35	14.68	7.38	70.53	-291.40	-9,187.32	9,278.45	9,256.68	21.76	426.319		
3,400.00	3,391.52	1,626.00	1,647.80	15.12	7.60	70.55	-292.16	-9,197.56	9,294.79	9,272.41	22.38	415.247		
3,500.00	3,491.21	1,626.00	1,647.80	15.56	7.60	70.55	-292.16	-9,197.56	9,311.55	9,288.77	22.78	408.708		
3,600.00	3,590.91	1,626.00	1,647.80	16.00	7.60	70.55	-292.16	-9,197.56	9,329.35	9,306.17	23.18	402.491		
3,700.00	3,690.60	1,626.00	1,647.80	16.45	7.60	70.55	-292.16	-9,197.56	9,348.18	9,324.61	23.57	396.581		
3,800.00	3,790.29	1,686.97	1,707.38	16.89	7.88	70.57	-293.19	-9,210.45	9,367.17	9,342.94	24.22	386.723		
3,900.00	3,889.98	1,754.00	1,772.54	17.33	8.19	70.60	-294.57	-9,226.14	9,387.78	9,362.88	24.90	377.008		
4,000.00	3,989.67	1,754.00	1,772.54	17.77	8.19	70.60	-294.57	-9,226.14	9,408.35	9,383.06	25.29	372.072		
4,100.00	4,089.36	1,754.00	1,772.54	18.22	8.19	70.60	-294.57	-9,226.14	9,429.94	9,404.27	25.67	367.377		
4,200.00	4,189.06	1,754.00	1,772.54	18.66	8.19	70.60	-294.57	-9,226.14	9,452.54	9,426.49	26.05	362.911		
4,300.00	4,288.75	1,808.80	1,825.54	19.10	8.47	70.62	-295.72	-9,240.00	9,475.58	9,448.91	26.67	355.291		
4,400.00	4,388.44	1,836.61	1,852.36	19.55	8.62	70.63	-296.23	-9,247.32	9,499.48	9,472.31	27.17	349.633		
4,500.00	4,488.13	1,883.00	1,896.99	19.99	8.86	70.64	-296.97	-9,259.98	9,524.14	9,496.39	27.75	343.154		
4,600.00	4,587.82	1,883.00	1,896.99	20.44	8.86	70.64	-296.97	-9,259.98	9,549.40	9,521.27	28.12	339.589		
4,700.00	4,687.51	1,924.44	1,936.73	20.89	9.10	70.66	-297.59	-9,271.70	9,575.35	9,546.67	28.68	333.857		
4,800.00	4,787.21	1,955.63	1,966.57	21.33	9.28	70.67	-298.08	-9,280.76	9,601.98	9,572.79	29.19	328.936		
4,900.00	4,886.90	2,011.00	2,019.39	21.78	9.60	70.69	-298.99	-9,297.35	9,629.36	9,599.54	29.82	322.932		
5,000.00	4,986.59	2,011.00	2,019.39	22.22	9.60	70.69	-298.99	-9,297.35	9,657.21	9,627.04	30.17	320.081		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,086.28	2,064.34	2,070.13	22.67	9.93	70.71	-299.89	-9,313.79	9,685.69	9,654.90	30.79	314.579		
5,200.00	5,185.97	2,108.09	2,111.65	23.12	10.21	70.73	-300.62	-9,327.53	9,714.69	9,683.33	31.36	309.789		
5,300.00	5,285.66	5,300.00	2,375.84	23.56	32.19	70.84	-304.53	-9,412.79	9,742.91	9,695.98	46.94	207.570		
5,400.00	5,385.36	2,462.65	2,449.27	24.01	12.58	70.86	-305.74	-9,435.66	9,770.29	9,736.37	33.92	288.046		
5,500.00	5,485.05	2,525.00	2,508.67	24.46	13.01	70.89	-306.58	-9,454.60	9,798.23	9,763.63	34.60	283.164		
5,600.00	5,584.74	2,561.50	2,543.39	24.90	13.27	70.90	-306.97	-9,465.85	9,826.58	9,791.44	35.15	279.585		
5,700.00	5,684.43	2,617.88	2,596.96	25.35	13.68	70.93	-307.34	-9,483.41	9,855.35	9,819.55	35.80	275.293		
5,800.00	5,784.12	2,653.00	2,630.30	25.80	13.94	70.94	-307.43	-9,494.46	9,884.55	9,848.21	36.33	272.052		
5,900.00	5,883.81	2,696.54	2,671.55	26.25	14.27	70.96	-307.46	-9,508.38	9,914.27	9,877.35	36.91	268.575		
6,000.00	5,983.51	2,728.04	2,701.32	26.70	14.51	70.98	-307.46	-9,518.68	9,944.63	9,907.20	37.43	265.717		
6,100.00	6,083.20	3,003.88	2,962.68	27.14	16.60	71.08	-310.16	-9,606.73	9,973.76	9,934.42	39.34	253.554		
7,100.00	7,037.93	6,911.38	6,763.39	31.48	39.29	7.89	-330.65	-10,302.07	9,991.88	9,929.88	62.00	161.156		
7,200.00	7,105.74	6,967.53	6,819.50	31.88	39.49	7.35	-331.87	-10,303.67	9,920.77	9,858.24	62.52	158.669		
7,300.00	7,161.29	7,014.23	6,866.17	32.41	39.65	7.32	-333.01	-10,305.06	9,839.64	9,776.69	62.95	156.314		
7,400.00	7,203.22	7,064.01	6,915.91	33.13	39.83	7.95	-334.21	-10,306.56	9,750.41	9,687.10	63.31	154.002		
7,500.00	7,230.50	7,098.93	6,950.80	34.04	39.96	10.09	-334.90	-10,307.59	9,655.25	9,591.69	63.56	151.912		
7,600.00	7,242.45	7,116.11	6,967.97	35.13	40.02	22.09	-335.19	-10,308.09	9,556.52	9,492.84	63.68	150.072		
7,700.00	7,242.72	7,119.77	6,971.64	36.39	40.04	45.75	-335.25	-10,308.20	9,456.61	9,392.89	63.72	148.418		
7,800.00	7,242.33	7,122.66	6,974.53	37.81	40.05	46.10	-335.30	-10,308.28	9,356.67	9,292.92	63.75	146.777		
7,900.00	7,241.93	7,125.54	6,977.41	39.40	40.06	46.46	-335.34	-10,308.37	9,256.74	9,192.95	63.78	145.134		
8,000.00	7,241.54	7,128.41	6,980.27	41.13	40.07	46.81	-335.39	-10,308.45	9,156.80	9,092.98	63.82	143.489		
8,100.00	7,241.15	7,131.27	6,983.13	42.97	40.08	47.17	-335.43	-10,308.53	9,056.86	8,993.01	63.85	141.843		
8,200.00	7,240.75	7,134.12	6,985.98	44.92	40.09	47.54	-335.47	-10,308.61	8,956.93	8,893.04	63.89	140.195		
8,300.00	7,240.36	7,136.96	6,988.81	46.97	40.10	47.90	-335.51	-10,308.69	8,857.00	8,793.07	63.93	138.546		
8,400.00	7,239.97	7,139.78	6,991.64	49.10	40.11	48.27	-335.55	-10,308.78	8,757.06	8,693.09	63.97	136.896		
8,500.00	7,239.57	7,142.60	6,994.45	51.29	40.12	48.64	-335.59	-10,308.86	8,657.13	8,593.12	64.01	135.245		
8,600.00	7,239.18	7,145.40	6,997.26	53.56	40.13	49.02	-335.63	-10,308.94	8,557.20	8,493.15	64.05	133.593		
8,700.00	7,238.79	7,149.06	7,000.91	55.87	40.14	49.51	-335.67	-10,309.04	8,457.27	8,393.17	64.10	131.934		
8,800.00	7,238.39	7,153.77	7,005.62	58.24	40.16	50.16	-335.74	-10,309.17	8,357.34	8,293.18	64.16	130.267		
8,900.00	7,238.00	7,158.37	7,010.22	60.64	40.18	50.81	-335.79	-10,309.30	8,257.41	8,193.20	64.21	128.600		
9,000.00	7,237.61	7,162.88	7,014.72	63.09	40.19	51.46	-335.85	-10,309.43	8,157.48	8,093.21	64.27	126.934		
9,100.00	7,237.21	7,167.29	7,019.13	65.56	40.21	52.10	-335.91	-10,309.55	8,057.55	7,993.23	64.32	125.269		
9,200.00	7,236.82	7,171.60	7,023.44	68.07	40.22	52.74	-335.96	-10,309.67	7,957.62	7,893.24	64.38	123.603		
9,300.00	7,236.43	7,175.83	7,027.66	70.61	40.24	53.38	-336.01	-10,309.78	7,857.69	7,793.25	64.44	121.938		
9,400.00	7,236.03	7,179.96	7,031.80	73.16	40.25	54.02	-336.06	-10,309.89	7,757.76	7,693.26	64.50	120.273		
9,500.00	7,235.64	7,184.01	7,035.84	75.74	40.27	54.66	-336.11	-10,310.00	7,657.84	7,593.27	64.56	118.609		
9,600.00	7,235.25	7,187.98	7,039.81	78.34	40.28	55.29	-336.16	-10,310.10	7,557.91	7,493.28	64.63	116.946		
9,700.00	7,234.85	7,191.86	7,043.69	80.96	40.30	55.92	-336.20	-10,310.20	7,457.99	7,393.29	64.69	115.282		
9,800.00	7,234.46	7,195.67	7,047.50	83.59	40.31	56.54	-336.24	-10,310.30	7,358.06	7,293.30	64.76	113.620		
9,900.00	7,234.07	7,199.40	7,051.23	86.24	40.32	57.16	-336.29	-10,310.40	7,258.14	7,193.31	64.83	111.957		
10,000.00	7,233.67	7,203.06	7,054.88	88.90	40.34	57.78	-336.33	-10,310.49	7,158.22	7,093.31	64.90	110.296		
10,100.00	7,233.28	7,206.64	7,058.47	91.57	40.35	58.40	-336.37	-10,310.58	7,058.29	6,993.32	64.97	108.635		
10,200.00	7,232.89	7,210.16	7,061.99	94.25	40.36	59.01	-336.41	-10,310.67	6,958.37	6,893.33	65.05	106.974		
10,300.00	7,232.49	7,213.61	7,065.43	96.95	40.37	59.62	-336.44	-10,310.75	6,858.45	6,793.33	65.12	105.314		
10,400.00	7,232.10	7,217.00	7,068.82	99.65	40.39	60.22	-336.48	-10,310.84	6,758.54	6,693.33	65.20	103.655		
10,500.00	7,231.71	7,220.32	7,072.14	102.36	40.40	60.82	-336.52	-10,310.92	6,658.62	6,593.34	65.28	101.996		
10,600.00	7,231.32	7,223.58	7,075.40	105.08	40.41	61.42	-336.55	-10,311.00	6,558.71	6,493.34	65.37	100.338		
10,700.00	7,230.92	7,226.78	7,078.59	107.80	40.42	62.01	-336.58	-10,311.07	6,458.79	6,393.34	65.45	98.681		
10,800.00	7,230.53	7,229.92	7,081.73	110.53	40.43	62.59	-336.61	-10,311.15	6,358.88	6,293.34	65.54	97.025		
10,900.00	7,230.14	7,233.00	7,084.82	113.27	40.44	63.18	-336.65	-10,311.22	6,258.97	6,193.34	65.63	95.369		
11,000.00	7,229.74	7,236.03	7,087.84	116.02	40.45	63.76	-336.68	-10,311.29	6,159.06	6,093.34	65.72	93.714		
11,100.00	7,229.35	7,239.00	7,090.82	118.77	40.46	64.33	-336.71	-10,311.36	6,059.16	5,993.34	65.82	92.060		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
11,200.00	7,228.96	7,241.93	7,093.74	121.52	40.48	64.90	-336.73	-10,311.43	5,959.26	5,893.34	65.92	90.407		
11,300.00	7,228.56	7,244.80	7,096.61	124.28	40.49	65.47	-336.76	-10,311.49	5,859.35	5,793.34	66.02	88.755		
11,400.00	7,228.17	7,247.62	7,099.43	127.04	40.50	66.03	-336.79	-10,311.56	5,759.46	5,693.33	66.12	87.103		
11,500.00	7,227.78	7,250.39	7,102.20	129.81	40.51	66.58	-336.81	-10,311.62	5,659.56	5,593.33	66.23	85.452		
11,600.00	7,227.38	7,253.12	7,104.93	132.58	40.52	67.13	-336.84	-10,311.68	5,559.67	5,493.32	66.34	83.802		
11,700.00	7,226.99	7,255.80	7,107.61	135.36	40.53	67.68	-336.87	-10,311.74	5,459.78	5,393.32	66.46	82.153		
11,800.00	7,226.60	7,258.43	7,110.24	138.14	40.53	68.22	-336.89	-10,311.80	5,359.89	5,293.31	66.58	80.505		
11,900.00	7,226.20	7,261.02	7,112.83	140.92	40.54	68.76	-336.91	-10,311.86	5,260.01	5,193.30	66.70	78.858		
12,000.00	7,225.81	7,263.57	7,115.38	143.70	40.55	69.29	-336.94	-10,311.91	5,160.13	5,093.30	66.83	77.211		
12,100.00	7,225.42	7,266.08	7,117.88	146.49	40.56	69.82	-336.96	-10,311.97	5,060.25	4,993.29	66.97	75.566		
12,200.00	7,225.02	7,268.55	7,120.35	149.28	40.57	70.34	-336.98	-10,312.02	4,960.38	4,893.28	67.10	73.921		
12,300.00	7,224.63	7,270.97	7,122.78	152.08	40.58	70.86	-337.00	-10,312.07	4,860.51	4,793.26	67.25	72.277		
12,400.00	7,224.24	7,273.36	7,125.16	154.87	40.59	71.37	-337.02	-10,312.12	4,760.65	4,693.25	67.40	70.634		
12,500.00	7,223.84	7,275.71	7,127.51	157.67	40.60	71.88	-337.04	-10,312.17	4,660.79	4,593.24	67.56	68.991		
12,600.00	7,223.45	7,278.05	7,129.85	160.47	40.61	72.38	-337.06	-10,312.22	4,560.94	4,493.22	67.72	67.350		
12,700.00	7,223.06	7,280.35	7,132.16	163.27	40.61	72.89	-337.08	-10,312.27	4,461.09	4,393.20	67.89	65.709		
12,800.00	7,222.66	7,282.62	7,134.43	166.07	40.62	73.39	-337.10	-10,312.32	4,361.25	4,293.18	68.07	64.069		
12,900.00	7,222.27	7,284.86	7,136.66	168.88	40.63	73.88	-337.12	-10,312.36	4,261.42	4,193.16	68.26	62.429		
13,000.00	7,221.88	7,287.06	7,138.86	171.69	40.64	74.37	-337.14	-10,312.41	4,161.59	4,093.13	68.46	60.790		
13,100.00	7,221.48	7,289.22	7,141.02	174.49	40.64	74.85	-337.16	-10,312.45	4,061.77	3,993.11	68.67	59.152		
13,200.00	7,221.09	7,291.35	7,143.15	177.30	40.65	75.33	-337.17	-10,312.49	3,961.96	3,893.07	68.89	57.514		
13,300.00	7,220.70	7,293.46	7,145.25	180.12	40.66	75.80	-337.19	-10,312.54	3,862.16	3,793.04	69.12	55.877		
13,400.00	7,220.30	7,295.52	7,147.32	182.93	40.67	76.27	-337.21	-10,312.58	3,762.37	3,693.00	69.37	54.240		
13,500.00	7,219.91	7,297.56	7,149.36	185.74	40.67	76.73	-337.23	-10,312.62	3,662.58	3,592.96	69.63	52.603		
13,600.00	7,219.52	7,299.57	7,151.37	188.56	40.68	77.19	-337.24	-10,312.66	3,562.81	3,492.91	69.91	50.966		
13,700.00	7,219.12	7,301.55	7,153.34	191.38	40.69	77.64	-337.26	-10,312.70	3,463.06	3,392.85	70.20	49.330		
13,800.00	7,218.73	7,303.50	7,155.29	194.20	40.69	78.09	-337.28	-10,312.73	3,363.31	3,292.79	70.52	47.694		
13,900.00	7,218.34	7,305.42	7,157.21	197.02	40.70	78.53	-337.29	-10,312.77	3,263.58	3,192.72	70.86	46.058		
14,000.00	7,217.94	7,307.31	7,159.11	199.84	40.71	78.97	-337.31	-10,312.81	3,163.87	3,092.64	71.22	44.421		
14,100.00	7,217.55	7,309.18	7,160.97	202.66	40.71	79.40	-337.32	-10,312.84	3,064.17	2,992.55	71.62	42.785		
14,200.00	7,217.16	7,311.02	7,162.81	205.48	40.72	79.83	-337.34	-10,312.88	2,964.49	2,892.45	72.04	41.149		
14,300.00	7,216.76	7,312.83	7,164.63	208.30	40.73	80.25	-337.35	-10,312.91	2,864.84	2,792.33	72.51	39.512		
14,400.00	7,216.37	7,314.62	7,166.41	211.13	40.73	80.67	-337.37	-10,312.95	2,765.21	2,692.20	73.01	37.875		
14,500.00	7,215.98	7,316.38	7,168.18	213.96	40.74	81.08	-337.38	-10,312.98	2,665.60	2,592.04	73.56	36.239		
14,600.00	7,215.58	7,318.12	7,169.92	216.78	40.75	81.49	-337.40	-10,313.01	2,566.03	2,491.87	74.16	34.602		
14,700.00	7,215.19	7,319.84	7,171.63	219.61	40.75	81.89	-337.41	-10,313.04	2,466.48	2,391.66	74.82	32.965		
14,800.00	7,214.80	7,321.53	7,173.32	222.44	40.76	82.29	-337.43	-10,313.08	2,366.98	2,291.43	75.55	31.328		
14,900.00	7,214.40	7,323.20	7,174.99	225.27	40.76	82.69	-337.44	-10,313.11	2,267.52	2,191.15	76.37	29.693		
15,000.00	7,214.01	7,324.85	7,176.64	228.10	40.77	83.08	-337.45	-10,313.14	2,168.10	2,090.83	77.27	28.058		
15,002.44	7,214.00	7,324.89	7,176.68	228.16	40.77	83.09	-337.45	-10,313.14	2,165.68	2,088.39	77.30	28.018 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	39.00	3.28	3.28	-91.50	-239.11	-9,147.50	9,150.71					
100.00	100.00	61.00	100.00	3.28	3.45	-91.50	-239.11	-9,147.50	9,150.63	9,143.90	6.73	1,359.028		
200.00	200.00	161.00	200.00	3.34	5.08	-91.50	-239.11	-9,147.50	9,150.63	9,142.21	8.41	1,087.567		
300.00	300.00	261.00	300.00	3.44	8.06	-91.50	-239.11	-9,147.50	9,150.63	9,139.12	11.51	795.140		
400.00	400.00	361.00	400.00	3.60	11.34	-91.50	-239.11	-9,147.50	9,150.63	9,135.68	14.94	612.287		
500.00	500.00	461.00	500.00	3.81	14.72	-91.50	-239.11	-9,147.50	9,150.63	9,132.10	18.52	493.983		
600.00	599.98	560.98	599.98	4.03	18.14	70.36	-239.11	-9,147.50	9,150.04	9,127.87	22.17	412.694		
700.00	699.84	660.84	699.84	4.29	21.58	70.42	-239.11	-9,147.50	9,148.28	9,122.42	25.86	353.769		
800.00	799.54	760.54	799.54	4.57	25.02	70.48	-239.11	-9,147.50	9,145.69	9,116.10	29.59	309.127		
900.00	899.23	860.23	899.23	4.87	28.47	70.53	-239.11	-9,147.50	9,143.06	9,109.72	33.35	274.194		
1,000.00	998.92	959.92	998.92	5.20	31.93	70.57	-239.11	-9,147.50	9,140.44	9,103.31	37.13	246.162		
1,100.00	1,098.61	1,059.61	1,098.61	5.54	35.40	70.62	-239.11	-9,147.50	9,137.83	9,096.89	40.94	223.201		
1,200.00	1,198.30	1,159.30	1,198.30	5.90	38.86	70.67	-239.11	-9,147.50	9,135.22	9,090.46	44.77	204.069		
1,300.00	1,298.00	1,259.00	1,298.00	6.27	42.33	70.71	-239.11	-9,147.50	9,132.62	9,084.01	48.61	187.894		
1,400.00	1,397.69	1,358.69	1,397.69	6.66	45.80	70.76	-239.11	-9,147.50	9,130.02	9,077.57	52.46	174.050		
1,500.00	1,497.38	1,458.38	1,497.38	7.05	49.28	70.81	-239.11	-9,147.50	9,127.43	9,071.12	56.32	162.071		
1,600.00	1,597.07	1,558.07	1,597.07	7.44	52.75	70.85	-239.11	-9,147.50	9,124.85	9,064.66	60.19	151.609		
1,700.00	1,696.76	1,657.76	1,696.76	7.85	56.22	70.90	-239.11	-9,147.50	9,122.27	9,058.21	64.06	142.396		
1,800.00	1,796.45	1,757.45	1,796.45	8.25	59.70	70.94	-239.11	-9,147.50	9,119.70	9,051.76	67.94	134.223		
1,900.00	1,896.15	1,857.15	1,896.15	8.67	63.17	70.99	-239.11	-9,147.50	9,117.13	9,045.30	71.83	126.925		
2,000.00	1,995.84	1,956.84	1,995.84	9.08	66.65	71.04	-239.11	-9,147.50	9,114.57	9,038.85	75.72	120.369		
2,100.00	2,095.53	2,056.53	2,095.53	9.50	70.12	71.08	-239.11	-9,147.50	9,112.02	9,032.40	79.62	114.448		
2,200.00	2,195.22	2,156.22	2,195.22	9.92	73.60	71.13	-239.11	-9,147.50	9,109.47	9,025.96	83.52	109.076		
2,300.00	2,294.91	2,255.91	2,294.91	10.35	77.08	71.18	-239.11	-9,147.50	9,106.93	9,019.52	87.42	104.179		
2,400.00	2,394.60	2,355.60	2,394.60	10.77	80.56	71.22	-239.11	-9,147.50	9,104.40	9,013.08	91.32	99.698		
2,500.00	2,494.30	2,455.30	2,494.30	11.20	84.03	71.27	-239.11	-9,147.50	9,101.87	9,006.64	95.22	95.583		
2,600.00	2,593.99	2,554.99	2,593.99	11.63	87.51	71.32	-239.11	-9,147.50	9,099.34	9,000.21	99.13	91.790		
2,700.00	2,693.68	2,654.68	2,693.68	12.07	90.99	71.36	-239.11	-9,147.50	9,096.83	8,993.78	103.04	88.283		
2,800.00	2,793.37	2,754.37	2,793.37	12.50	94.47	71.41	-239.11	-9,147.50	9,094.31	8,987.36	106.95	85.031		
2,900.00	2,893.06	2,854.06	2,893.06	12.93	97.94	71.46	-239.11	-9,147.50	9,091.81	8,980.94	110.87	82.008		
3,000.00	2,992.76	2,953.76	2,992.76	13.37	101.42	71.50	-239.11	-9,147.50	9,089.31	8,974.53	114.78	79.190		
3,100.00	3,092.45	3,053.45	3,092.45	13.81	104.90	71.55	-239.11	-9,147.50	9,086.82	8,968.12	118.69	76.557		
3,200.00	3,192.14	3,153.14	3,192.14	14.25	108.38	71.60	-239.11	-9,147.50	9,084.33	8,961.72	122.61	74.092		
3,300.00	3,291.83	3,252.83	3,291.83	14.68	111.86	71.64	-239.11	-9,147.50	9,081.85	8,955.32	126.53	71.778		
3,400.00	3,391.52	3,352.52	3,391.52	15.12	115.34	71.69	-239.11	-9,147.50	9,079.38	8,948.93	130.44	69.604		
3,500.00	3,491.21	3,452.21	3,491.21	15.56	118.82	71.74	-239.11	-9,147.50	9,076.91	8,942.54	134.36	67.555		
3,600.00	3,590.91	3,551.91	3,590.91	16.00	122.30	71.79	-239.11	-9,147.50	9,074.44	8,936.16	138.28	65.623		
3,700.00	3,690.60	3,651.60	3,690.60	16.45	125.77	71.83	-239.11	-9,147.50	9,071.99	8,929.79	142.20	63.797		
3,800.00	3,790.29	3,751.29	3,790.29	16.89	129.25	71.88	-239.11	-9,147.50	9,069.54	8,923.42	146.12	62.068		
3,900.00	3,889.98	3,850.98	3,889.98	17.33	132.73	71.93	-239.11	-9,147.50	9,067.09	8,917.05	150.04	60.430		
4,000.00	3,989.67	3,950.67	3,989.67	17.77	136.21	71.97	-239.11	-9,147.50	9,064.66	8,910.69	153.96	58.875		
4,100.00	4,089.36	4,050.36	4,089.36	18.22	139.69	72.02	-239.11	-9,147.50	9,062.22	8,904.34	157.89	57.397		
4,200.00	4,189.06	4,150.06	4,189.06	18.66	143.17	72.07	-239.11	-9,147.50	9,059.80	8,897.99	161.81	55.991		
4,300.00	4,288.75	4,249.75	4,288.75	19.10	146.65	72.11	-239.11	-9,147.50	9,057.38	8,891.65	165.73	54.651		
4,400.00	4,388.44	4,349.44	4,388.44	19.55	150.13	72.16	-239.11	-9,147.50	9,054.96	8,885.31	169.66	53.373		
4,500.00	4,488.13	4,449.13	4,488.13	19.99	153.61	72.21	-239.11	-9,147.50	9,052.56	8,878.98	173.58	52.152		
4,600.00	4,587.82	4,548.82	4,587.82	20.44	157.09	72.26	-239.11	-9,147.50	9,050.16	8,872.65	177.50	50.986		
4,700.00	4,687.51	4,648.51	4,687.51	20.89	160.57	72.30	-239.11	-9,147.50	9,047.76	8,866.33	181.43	49.870		
4,800.00	4,787.21	4,748.21	4,787.21	21.33	164.05	72.35	-239.11	-9,147.50	9,045.37	8,860.02	185.35	48.801		
4,900.00	4,886.90	4,847.90	4,886.90	21.78	167.53	72.40	-239.11	-9,147.50	9,042.99	8,853.71	189.28	47.776		
5,000.00	4,986.59	4,947.59	4,986.59	22.22	171.01	72.44	-239.11	-9,147.50	9,040.61	8,847.41	193.20	46.793		
5,100.00	5,086.28	5,047.28	5,086.28	22.67	174.49	72.49	-239.11	-9,147.50	9,038.24	8,841.11	197.13	45.849		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,185.97	5,146.97	5,185.97	23.12	177.97	72.54	-239.11	-9,147.50	9,035.88	8,834.82	201.05	44.942		
5,300.00	5,285.66	5,246.66	5,285.66	23.56	181.45	72.59	-239.11	-9,147.50	9,033.52	8,828.54	204.98	44.070		
5,400.00	5,385.36	5,346.36	5,385.36	24.01	184.93	72.63	-239.11	-9,147.50	9,031.17	8,822.26	208.91	43.231		
5,500.00	5,485.05	5,446.05	5,485.05	24.46	188.40	72.68	-239.11	-9,147.50	9,028.82	8,815.99	212.83	42.422		
5,600.00	5,584.74	5,545.74	5,584.74	24.90	191.88	72.73	-239.11	-9,147.50	9,026.49	8,809.72	216.76	41.643		
5,700.00	5,684.43	5,645.43	5,684.43	25.35	195.36	72.78	-239.11	-9,147.50	9,024.15	8,803.47	220.69	40.891		
5,800.00	5,784.12	5,745.12	5,784.12	25.80	198.84	72.82	-239.11	-9,147.50	9,021.83	8,797.21	224.61	40.166		
5,900.00	5,883.81	5,844.81	5,883.81	26.25	202.32	72.87	-239.11	-9,147.50	9,019.51	8,790.96	228.54	39.465		
6,000.00	5,983.51	5,944.51	5,983.51	26.70	205.80	72.92	-239.11	-9,147.50	9,017.19	8,784.72	232.47	38.789		
6,100.00	6,083.20	6,044.20	6,083.20	27.14	209.28	72.97	-239.11	-9,147.50	9,014.88	8,778.49	236.40	38.135		
6,200.00	6,182.89	6,143.89	6,182.89	27.59	212.76	73.01	-239.11	-9,147.50	9,012.58	8,772.26	240.32	37.502		
6,300.00	6,282.58	6,243.58	6,282.58	28.04	216.24	73.06	-239.11	-9,147.50	9,010.29	8,766.03	244.25	36.889		
6,400.00	6,382.27	6,343.27	6,382.27	28.49	219.72	73.11	-239.11	-9,147.50	9,008.00	8,759.82	248.18	36.296		
6,500.00	6,481.96	6,442.96	6,481.96	28.94	223.20	73.16	-239.11	-9,147.50	9,005.71	8,753.60	252.11	35.722		
6,600.00	6,581.66	6,542.66	6,581.66	29.39	226.68	73.20	-239.11	-9,147.50	9,003.44	8,747.40	256.04	35.165		
6,700.00	6,681.21	6,642.21	6,681.21	29.83	230.16	73.25	-239.11	-9,147.50	8,998.58	8,738.62	259.96	34.615		
6,800.00	6,778.96	6,739.96	6,778.96	30.28	233.57	73.30	-239.11	-9,147.50	8,993.72	8,729.84	263.88	34.088		
6,900.00	6,872.51	6,833.51	6,872.51	30.70	236.84	73.35	-239.11	-9,147.50	8,988.86	8,721.06	267.79	33.561		
7,000.00	6,969.55	6,925.55	6,969.55	31.10	239.87	73.40	-239.11	-9,147.50	8,984.00	8,712.28	271.69	33.034		
7,100.00	7,037.93	7,001.07	7,037.93	31.48	242.68	73.45	-239.11	-9,147.50	8,979.14	8,703.50	275.59	32.507		
7,200.00	7,105.74	7,066.74	7,105.74	31.88	244.98	73.50	-239.11	-9,147.50	8,974.28	8,694.72	279.49	31.980		
7,300.00	7,161.29	7,122.29	7,161.29	32.41	246.92	73.55	-239.11	-9,147.50	8,969.42	8,685.94	283.39	31.453		
7,400.00	7,203.22	7,164.22	7,203.22	33.13	248.38	73.60	-239.11	-9,147.50	8,964.56	8,677.16	287.29	30.926		
7,500.00	7,230.50	7,208.50	7,230.50	34.04	249.93	73.65	-239.11	-9,147.50	8,959.70	8,668.38	291.19	30.399		
7,600.00	7,242.45	7,203.45	7,242.45	35.13	249.75	73.70	-239.11	-9,147.50	8,954.84	8,659.60	295.09	29.872		
7,700.00	7,242.72	7,203.72	7,242.72	36.39	249.76	73.75	-239.11	-9,147.50	8,949.98	8,650.82	298.99	29.345		
7,800.00	7,242.33	7,203.33	7,242.33	37.81	249.74	73.80	-239.11	-9,147.50	8,945.12	8,642.04	302.89	28.818		
7,900.00	7,241.93	7,202.93	7,241.93	39.40	249.73	73.85	-239.11	-9,147.50	8,940.26	8,633.26	306.79	28.291		
8,000.00	7,241.54	7,202.54	7,241.54	41.13	249.72	73.90	-239.11	-9,147.50	8,935.40	8,624.48	310.69	27.764		
8,100.00	7,241.15	7,202.15	7,241.15	42.97	249.70	73.95	-239.11	-9,147.50	8,930.54	8,615.70	314.59	27.237		
8,200.00	7,240.75	7,201.75	7,240.75	44.92	249.69	74.00	-239.11	-9,147.50	8,925.68	8,606.92	318.49	26.710		
8,300.00	7,240.36	7,201.36	7,240.36	46.97	249.68	74.05	-239.11	-9,147.50	8,920.82	8,598.14	322.39	26.183		
8,400.00	7,239.97	7,200.97	7,239.97	49.10	249.66	74.10	-239.11	-9,147.50	8,915.96	8,589.36	326.29	25.656		
8,500.00	7,239.57	7,200.57	7,239.57	51.29	249.65	74.15	-239.11	-9,147.50	8,911.10	8,580.58	330.19	25.129		
8,600.00	7,239.18	7,200.18	7,239.18	53.56	249.63	74.20	-239.11	-9,147.50	8,906.24	8,571.80	334.09	24.602		
8,700.00	7,238.79	7,200.21	7,238.79	55.87	249.64	74.25	-239.11	-9,147.50	8,901.38	8,563.02	337.99	24.075		
8,800.00	7,238.39	7,200.61	7,238.39	58.24	249.65	74.30	-239.11	-9,147.50	8,896.52	8,554.24	341.89	23.548		
8,900.00	7,238.00	7,201.00	7,238.00	60.64	249.66	74.35	-239.11	-9,147.50	8,891.66	8,545.46	345.79	23.021		
9,000.00	7,237.61	7,201.39	7,237.61	63.09	249.68	74.40	-239.11	-9,147.50	8,886.80	8,536.68	349.69	22.494		
9,100.00	7,237.21	7,201.79	7,237.21	65.56	249.69	74.45	-239.11	-9,147.50	8,881.94	8,527.90	353.59	21.967		
9,200.00	7,236.82	7,202.18	7,236.82	68.07	249.70	74.50	-239.11	-9,147.50	8,877.08	8,519.12	357.49	21.440		
9,300.00	7,236.43	7,202.57	7,236.43	70.61	249.72	74.55	-239.11	-9,147.50	8,872.22	8,510.34	361.39	20.913		
9,400.00	7,236.03	7,202.97	7,236.03	73.16	249.73	74.60	-239.11	-9,147.50	8,867.36	8,501.56	365.29	20.386		
9,500.00	7,235.64	7,203.36	7,235.64	75.74	249.75	74.65	-239.11	-9,147.50	8,862.50	8,492.78	369.19	19.859		
9,600.00	7,235.25	7,203.75	7,235.25	78.34	249.76	74.70	-239.11	-9,147.50	8,857.64	8,484.00	373.09	19.332		
9,700.00	7,234.85	7,204.15	7,234.85	80.96	249.77	74.75	-239.11	-9,147.50	8,852.78	8,475.22	376.99	18.805		
9,800.00	7,234.46	7,204.54	7,234.46	83.59	249.79	74.80	-239.11	-9,147.50	8,847.92	8,466.44	380.89	18.278		
9,900.00	7,234.07	7,204.93	7,234.07	86.24	249.80	74.85	-239.11	-9,147.50	8,843.06	8,457.66	384.79	17.751		
10,000.00	7,233.67	7,205.33	7,233.67	88.90	249.81	74.90	-239.11	-9,147.50	8,838.20	8,448.88	388.69	17.224		
10,100.00	7,233.28	7,205.72	7,233.28	91.57	249.83	74.95	-239.11	-9,147.50	8,833.34	8,440.10	392.59	16.697		
10,200.00	7,232.89	7,206.11	7,232.89	94.25	249.84	75.00	-239.11	-9,147.50	8,828.48	8,431.32	396.49	16.170		
10,300.00	7,232.49	7,206.51	7,232.49	96.95	249.86	75.05	-239.11	-9,147.50	8,823.62	8,422.54	400.39	15.643		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,232.10	7,206.90	7,232.10	99.65	249.87	93.84	-239.11	-9,147.50	5,597.85	5,314.36	283.49	19.746		
10,500.00	7,231.71	7,207.29	7,231.71	102.36	249.88	93.77	-239.11	-9,147.50	5,498.02	5,214.42	283.60	19.386		
10,600.00	7,231.32	7,207.69	7,231.32	105.08	249.90	93.71	-239.11	-9,147.50	5,398.21	5,114.48	283.72	19.026		
10,700.00	7,230.92	7,208.08	7,230.92	107.80	249.91	93.64	-239.11	-9,147.50	5,298.39	5,014.54	283.85	18.666		
10,800.00	7,230.53	7,208.47	7,230.53	110.53	249.92	93.57	-239.11	-9,147.50	5,198.59	4,914.60	283.98	18.306		
10,900.00	7,230.14	7,208.87	7,230.14	113.27	249.94	93.50	-239.11	-9,147.50	5,098.79	4,814.67	284.12	17.946		
11,000.00	7,229.74	7,209.26	7,229.74	116.02	249.95	93.43	-239.11	-9,147.50	4,999.00	4,714.73	284.27	17.585		
11,100.00	7,229.35	7,209.65	7,229.35	118.77	249.97	93.36	-239.11	-9,147.50	4,899.22	4,614.80	284.42	17.225		
11,200.00	7,228.96	7,189.96	7,228.96	121.52	249.28	93.29	-239.11	-9,147.50	4,799.45	4,515.57	283.89	16.906		
11,300.00	7,228.56	7,189.56	7,228.56	124.28	249.26	93.23	-239.11	-9,147.50	4,699.69	4,415.66	284.03	16.547		
11,400.00	7,228.17	7,189.17	7,228.17	127.04	249.25	93.16	-239.11	-9,147.50	4,599.94	4,315.76	284.18	16.187		
11,500.00	7,227.78	7,188.78	7,227.78	129.81	249.24	93.09	-239.11	-9,147.50	4,500.20	4,215.86	284.34	15.827		
11,600.00	7,227.38	7,188.38	7,227.38	132.58	249.22	93.02	-239.11	-9,147.50	4,400.47	4,115.95	284.52	15.467		
11,700.00	7,226.99	7,187.99	7,226.99	135.36	249.21	92.95	-239.11	-9,147.50	4,300.75	4,016.05	284.70	15.106		
11,800.00	7,226.60	7,187.60	7,226.60	138.14	249.20	92.88	-239.11	-9,147.50	4,201.05	3,916.15	284.90	14.746		
11,900.00	7,226.20	7,187.20	7,226.20	140.92	249.18	92.81	-239.11	-9,147.50	4,101.36	3,816.26	285.11	14.385		
12,000.00	7,225.81	7,186.81	7,225.81	143.70	249.17	92.74	-239.11	-9,147.50	4,001.69	3,716.36	285.33	14.025		
12,100.00	7,225.42	7,186.42	7,225.42	146.49	249.15	92.68	-239.11	-9,147.50	3,902.03	3,616.46	285.58	13.664		
12,200.00	7,225.02	7,186.02	7,225.02	149.28	249.14	92.61	-239.11	-9,147.50	3,802.40	3,516.56	285.84	13.303		
12,300.00	7,224.63	7,185.63	7,224.63	152.08	249.13	92.54	-239.11	-9,147.50	3,702.78	3,416.66	286.12	12.941		
12,400.00	7,224.24	7,185.24	7,224.24	154.87	249.11	92.47	-239.11	-9,147.50	3,603.18	3,316.76	286.42	12.580		
12,500.00	7,223.84	7,184.84	7,223.84	157.67	249.10	92.40	-239.11	-9,147.50	3,503.61	3,216.86	286.75	12.219		
12,600.00	7,223.45	7,184.45	7,223.45	160.47	249.09	92.33	-239.11	-9,147.50	3,404.06	3,116.96	287.10	11.857		
12,700.00	7,223.06	7,184.06	7,223.06	163.27	249.07	92.26	-239.11	-9,147.50	3,304.54	3,017.05	287.48	11.495		
12,800.00	7,222.66	7,183.66	7,222.66	166.07	249.06	92.19	-239.11	-9,147.50	3,205.04	2,917.15	287.90	11.133		
12,900.00	7,222.27	7,183.27	7,222.27	168.88	249.04	92.13	-239.11	-9,147.50	3,105.58	2,817.23	288.35	10.770		
13,000.00	7,221.88	7,182.88	7,221.88	171.69	249.03	92.06	-239.11	-9,147.50	3,006.16	2,717.32	288.84	10.408		
13,100.00	7,221.48	7,182.48	7,221.48	174.49	249.02	91.99	-239.11	-9,147.50	2,906.77	2,617.39	289.38	10.045		
13,200.00	7,221.09	7,182.09	7,221.09	177.30	249.00	91.92	-239.11	-9,147.50	2,807.43	2,517.46	289.97	9.682		
13,300.00	7,220.70	7,181.70	7,220.70	180.12	248.99	91.85	-239.11	-9,147.50	2,708.14	2,417.52	290.62	9.318		
13,400.00	7,220.30	7,181.30	7,220.30	182.93	248.98	91.78	-239.11	-9,147.50	2,608.90	2,317.56	291.34	8.955		
13,500.00	7,219.91	7,180.91	7,219.91	185.74	248.96	91.71	-239.11	-9,147.50	2,509.72	2,217.59	292.13	8.591		
13,600.00	7,219.52	7,180.52	7,219.52	188.56	248.95	91.64	-239.11	-9,147.50	2,410.61	2,117.60	293.01	8.227		
13,700.00	7,219.12	7,180.12	7,219.12	191.38	248.93	91.58	-239.11	-9,147.50	2,311.58	2,017.59	293.98	7.863		
13,800.00	7,218.73	7,179.73	7,218.73	194.20	248.92	91.51	-239.11	-9,147.50	2,212.63	1,917.56	295.08	7.499		
13,900.00	7,218.34	7,179.34	7,218.34	197.02	248.91	91.44	-239.11	-9,147.50	2,113.78	1,817.49	296.30	7.134		
14,000.00	7,217.94	7,178.94	7,217.94	199.84	248.89	91.37	-239.11	-9,147.50	2,015.05	1,717.38	297.67	6.769		
14,100.00	7,217.55	7,178.55	7,217.55	202.66	248.88	91.30	-239.11	-9,147.50	1,916.45	1,617.22	299.22	6.405		
14,200.00	7,217.16	7,178.16	7,217.16	205.48	248.87	91.23	-239.11	-9,147.50	1,817.99	1,517.01	300.99	6.040		
14,300.00	7,216.76	7,177.76	7,216.76	208.30	248.85	91.16	-239.11	-9,147.50	1,719.72	1,416.73	302.99	5.676		
14,400.00	7,216.37	7,177.37	7,216.37	211.13	248.84	91.09	-239.11	-9,147.50	1,621.66	1,316.36	305.30	5.312		
14,500.00	7,215.98	7,176.98	7,215.98	213.96	248.82	91.02	-239.11	-9,147.50	1,523.85	1,215.90	307.95	4.948		
14,600.00	7,215.58	7,176.58	7,215.58	216.78	248.81	90.96	-239.11	-9,147.50	1,426.35	1,115.31	311.03	4.586		
14,700.00	7,215.19	7,176.19	7,215.19	219.61	248.80	90.89	-239.11	-9,147.50	1,329.21	1,014.58	314.63	4.225		
14,800.00	7,214.80	7,175.80	7,214.80	222.44	248.78	90.82	-239.11	-9,147.50	1,232.54	913.67	318.87	3.865		
14,900.00	7,214.40	7,175.40	7,214.40	225.27	248.77	90.75	-239.11	-9,147.50	1,136.43	812.53	323.90	3.509		
15,000.00	7,214.01	7,175.01	7,214.01	228.10	248.76	90.68	-239.11	-9,147.50	1,041.07	711.14	329.93	3.155		
15,002.44	7,214.00	7,175.00	7,214.00	228.16	248.76	90.68	-239.11	-9,147.50	1,038.75	708.66	330.09	3.147	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	26.00	3.28	3.28	-91.68	-268.25	-9,144.73	9,148.70					
100.00	100.00	110.49	136.49	3.28	3.29	-91.68	-268.53	-9,144.37	9,148.39	9,141.81	6.58	1,390.962		
200.00	200.00	185.25	211.25	3.34	3.34	-91.68	-268.45	-9,144.18	9,148.13	9,141.46	6.67	1,371.100		
243.22	243.22	217.22	243.22	3.38	3.36	-91.68	-268.41	-9,144.16	9,148.10	9,141.36	6.74	1,357.430		
300.00	300.00	259.44	285.43	3.44	3.41	-91.68	-268.41	-9,144.20	9,148.15	9,141.30	6.85	1,335.336		
400.00	400.00	346.42	372.42	3.60	3.52	-91.68	-268.49	-9,144.39	9,148.38	9,141.25	7.13	1,283.597		
500.00	500.00	434.84	460.83	3.81	3.68	-91.68	-268.62	-9,144.72	9,148.74	9,141.26	7.49	1,222.054		
600.00	599.98	609.61	635.60	4.03	4.08	70.18	-269.10	-9,145.02	9,148.46	9,140.35	8.11	1,127.967		
700.00	699.84	678.82	704.81	4.29	4.26	70.24	-269.45	-9,144.83	9,146.43	9,137.88	8.54	1,070.438		
800.00	799.54	727.00	752.99	4.57	4.40	70.27	-269.68	-9,144.87	9,143.97	9,135.01	8.96	1,020.473		
900.00	899.23	767.33	793.32	4.87	4.51	70.29	-269.73	-9,145.15	9,142.10	9,132.72	9.38	974.171		
1,000.00	998.92	799.87	825.86	5.20	4.61	70.30	-269.56	-9,145.65	9,140.98	9,131.17	9.81	931.813		
1,100.00	1,098.61	856.00	881.96	5.54	4.78	70.33	-268.84	-9,147.09	9,140.69	9,130.36	10.33	885.049		
1,124.80	1,123.33	856.00	881.96	5.63	4.78	70.33	-268.84	-9,147.09	9,140.66	9,130.24	10.42	877.542		
1,200.00	1,198.30	856.00	881.96	5.90	4.78	70.33	-268.84	-9,147.09	9,140.96	9,130.28	10.69	855.226		
1,300.00	1,298.00	856.00	881.96	6.27	4.78	70.33	-268.84	-9,147.09	9,142.33	9,131.27	11.06	826.558		
1,400.00	1,397.69	912.02	937.92	6.66	4.96	70.37	-267.61	-9,149.41	9,144.10	9,132.49	11.62	787.015		
1,500.00	1,497.38	936.61	962.47	7.05	5.04	70.38	-266.92	-9,150.76	9,146.92	9,134.83	12.09	756.733		
1,600.00	1,597.07	984.00	1,009.72	7.44	5.20	70.42	-265.33	-9,153.94	9,150.67	9,138.03	12.64	724.028		
1,700.00	1,696.76	984.00	1,009.72	7.85	5.20	70.42	-265.33	-9,153.94	9,155.02	9,141.98	13.04	702.126		
1,800.00	1,796.45	984.00	1,009.72	8.25	5.20	70.42	-265.33	-9,153.94	9,160.45	9,147.01	13.44	681.412		
1,900.00	1,896.15	1,041.44	1,066.90	8.67	5.40	70.46	-262.72	-9,158.72	9,166.34	9,152.29	14.05	652.543		
2,000.00	1,995.84	1,069.06	1,094.35	9.08	5.50	70.48	-261.12	-9,161.35	9,173.18	9,158.62	14.55	630.334		
2,100.00	2,095.53	1,112.00	1,136.95	9.50	5.65	70.52	-258.18	-9,165.87	9,180.85	9,165.74	15.12	607.362		
2,200.00	2,195.22	1,112.00	1,136.95	9.92	5.65	70.52	-258.18	-9,165.87	9,189.25	9,173.72	15.53	591.772		
2,300.00	2,294.91	1,169.70	1,194.06	10.35	5.87	70.58	-253.45	-9,172.56	9,198.28	9,182.13	16.15	569.403		
2,400.00	2,394.60	1,241.00	1,264.44	10.77	6.15	70.66	-246.41	-9,181.54	9,208.14	9,191.30	16.84	546.841		
2,500.00	2,494.30	1,255.74	1,278.96	11.20	6.21	70.67	-244.78	-9,183.49	9,218.38	9,201.07	17.31	532.511		
2,600.00	2,593.99	1,325.81	1,347.82	11.63	6.51	70.76	-235.83	-9,192.85	9,229.18	9,211.17	18.01	512.496		
2,700.00	2,693.68	1,369.00	1,390.11	12.07	6.70	70.82	-229.33	-9,198.72	9,240.37	9,221.77	18.60	496.804		
2,800.00	2,793.37	1,426.77	1,446.50	12.50	6.97	70.91	-219.73	-9,206.84	9,252.07	9,232.80	19.27	480.206		
2,900.00	2,893.06	1,498.00	1,515.73	12.93	7.31	71.02	-206.76	-9,217.47	9,264.54	9,244.54	20.00	463.271		
3,000.00	2,992.76	1,498.00	1,515.73	13.37	7.31	71.02	-206.76	-9,217.47	9,277.44	9,257.03	20.41	454.584		
3,100.00	3,092.45	1,547.41	1,563.56	13.81	7.56	71.11	-197.12	-9,225.26	9,291.08	9,270.02	21.06	441.248		
3,200.00	3,192.14	1,585.66	1,600.48	14.25	7.76	71.17	-189.39	-9,231.55	9,305.39	9,283.74	21.65	429.800		
3,300.00	3,291.83	1,626.00	1,639.33	14.68	7.98	71.24	-180.96	-9,238.42	9,320.37	9,298.11	22.25	418.802		
3,400.00	3,391.52	1,666.38	1,678.10	15.12	8.21	71.32	-172.16	-9,245.52	9,335.98	9,313.11	22.87	408.173		
3,500.00	3,491.21	1,708.97	1,718.82	15.56	8.46	71.40	-162.36	-9,253.20	9,352.21	9,328.71	23.50	397.933		
3,600.00	3,590.91	1,754.00	1,761.70	16.00	8.72	71.48	-151.42	-9,261.55	9,369.05	9,344.91	24.14	388.046		
3,700.00	3,690.60	1,754.00	1,761.70	16.45	8.72	71.48	-151.42	-9,261.55	9,386.69	9,362.15	24.54	382.498		
3,800.00	3,790.29	1,806.02	1,810.98	16.89	9.06	71.59	-138.19	-9,271.65	9,404.86	9,379.62	25.24	372.629		
3,900.00	3,889.98	1,832.70	1,836.15	17.33	9.23	71.64	-131.22	-9,277.09	9,423.91	9,398.12	25.79	365.443		
4,000.00	3,989.67	1,883.00	1,883.40	17.77	9.56	71.75	-117.71	-9,287.82	9,443.83	9,417.35	26.47	356.710		
4,100.00	4,089.36	1,921.62	1,919.58	18.22	9.83	71.83	-107.13	-9,296.23	9,464.27	9,437.17	27.10	349.188		
4,200.00	4,189.06	2,094.55	2,081.77	18.66	11.07	72.20	-59.42	-9,332.63	9,484.29	9,455.69	28.60	331.609		
4,300.00	4,288.75	2,180.54	2,162.71	19.10	11.70	72.38	-36.57	-9,350.55	9,504.26	9,474.71	29.55	321.644		
4,400.00	4,388.44	2,250.57	2,228.73	19.55	12.22	72.52	-18.52	-9,365.33	9,524.53	9,494.14	30.39	313.374		
4,500.00	4,488.13	2,382.24	2,353.20	19.99	13.19	72.77	14.15	-9,393.19	9,544.90	9,513.25	31.65	301.610		
4,600.00	4,587.82	2,447.47	2,414.95	20.44	13.69	72.89	30.07	-9,406.91	9,565.19	9,532.73	32.46	294.637		
4,700.00	4,687.51	2,503.61	2,467.93	20.89	14.11	73.00	44.30	-9,418.88	9,585.94	9,552.72	33.22	288.552		
4,800.00	4,787.21	2,598.65	2,557.36	21.33	14.85	73.19	69.13	-9,439.31	9,607.03	9,572.78	34.25	280.461		
4,900.00	4,886.90	2,653.00	2,608.50	21.78	15.28	73.30	83.43	-9,450.91	9,628.18	9,593.18	35.01	275.042		

CC - Min centre to center 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,986.59	2,713.84	2,665.61	22.22	15.77	73.43	99.75	-9,464.06	9,649.76	9,613.94	35.81	269.448		
5,100.00	5,086.28	2,782.00	2,729.29	22.67	16.32	73.57	118.68	-9,479.33	9,672.10	9,635.43	36.67	263.753		
5,200.00	5,185.97	2,842.80	2,786.01	23.12	16.83	73.69	135.67	-9,493.10	9,694.80	9,657.32	37.48	258.666		
5,300.00	5,285.66	3,038.00	2,969.22	23.56	18.42	74.08	187.80	-9,535.76	9,716.57	9,677.30	39.26	247.462		
5,400.00	5,385.36	3,107.03	3,034.16	24.01	18.99	74.22	205.94	-9,550.55	9,738.32	9,698.19	40.13	242.665		
5,500.00	5,485.05	3,167.00	3,090.36	24.46	19.48	74.34	222.11	-9,563.83	9,760.78	9,719.85	40.93	238.486		
5,600.00	5,584.74	5,600.00	3,291.20	24.90	39.16	74.74	276.85	-9,610.20	9,783.01	9,725.49	57.52	170.087		
5,700.00	5,684.43	5,847.14	5,693.23	25.35	34.59	77.49	578.85	-9,878.31	9,800.82	9,745.15	55.67	176.065		
5,800.00	5,784.12	5,961.24	5,807.31	25.80	34.91	77.53	576.74	-9,878.32	9,798.94	9,742.48	56.47	173.534		
5,900.00	5,883.81	6,126.28	5,972.31	26.25	35.37	77.58	573.56	-9,877.76	9,796.75	9,739.34	57.41	170.642		
6,000.00	5,983.51	6,234.64	6,080.65	26.70	35.68	77.62	571.44	-9,876.96	9,794.12	9,735.92	58.20	168.285		
6,100.00	6,083.20	6,327.98	6,173.98	27.14	35.95	77.65	569.86	-9,876.20	9,791.46	9,732.51	58.95	166.096		
6,200.00	6,182.89	6,453.10	6,299.07	27.59	36.31	77.70	567.95	-9,875.16	9,788.82	9,729.02	59.80	163.705		
6,300.00	6,282.58	6,562.35	6,408.31	28.04	36.63	77.74	566.70	-9,873.84	9,785.82	9,725.22	60.60	161.484		
6,400.00	6,382.27	6,645.12	6,491.07	28.49	36.88	77.77	566.12	-9,872.90	9,782.94	9,721.61	61.33	159.516		
6,500.00	6,481.96	6,722.70	6,568.65	28.94	37.12	77.81	565.62	-9,872.17	9,780.28	9,718.23	62.05	157.627		
6,600.00	6,581.66	6,806.86	6,652.81	29.39	37.38	77.84	565.02	-9,871.57	9,777.82	9,715.04	62.79	155.732		
6,700.00	6,681.21	6,890.00	6,735.94	29.83	37.64	39.44	564.62	-9,871.04	9,772.91	9,709.39	63.52	153.848		
6,800.00	6,778.96	6,967.94	6,813.88	30.28	37.89	22.23	564.44	-9,870.66	9,754.13	9,689.90	64.24	151.848		
6,900.00	6,872.51	7,196.09	7,042.02	30.70	38.62	17.46	564.00	-9,868.48	9,720.01	9,654.62	65.38	148.663		
7,000.00	6,959.55	7,282.59	7,128.50	31.10	38.89	15.73	562.93	-9,867.08	9,670.97	9,604.91	66.06	146.403		
7,100.00	7,037.93	7,335.82	7,181.72	31.48	39.05	15.47	562.06	-9,866.31	9,609.15	9,542.57	66.58	144.317		
7,200.00	7,105.74	7,383.54	7,229.42	31.88	39.20	16.39	561.29	-9,865.73	9,536.13	9,469.09	67.04	142.253		
7,300.00	7,161.29	7,443.86	7,289.74	32.41	39.39	18.85	560.33	-9,865.06	9,453.58	9,386.12	67.47	140.125		
7,400.00	7,203.22	7,506.09	7,351.95	33.13	39.59	24.26	559.39	-9,864.24	9,363.39	9,295.55	67.84	138.030		
7,500.00	7,230.50	7,545.32	7,391.17	34.04	39.72	37.58	558.83	-9,863.65	9,267.83	9,199.75	68.08	136.137		
7,600.00	7,242.45	7,551.60	7,397.45	35.13	39.74	79.10	558.74	-9,863.56	9,169.33	9,101.16	68.17	134.502		
7,700.00	7,242.72	7,558.93	7,404.78	36.39	39.76	99.91	558.64	-9,863.43	9,070.12	9,001.88	68.24	132.916		
7,800.00	7,242.33	7,555.93	7,401.78	37.81	39.75	99.76	558.68	-9,863.48	8,970.93	8,902.65	68.28	131.382		
7,900.00	7,241.93	7,552.97	7,398.82	39.40	39.74	99.61	558.72	-9,863.53	8,871.76	8,803.43	68.33	129.836		
8,000.00	7,241.54	7,550.03	7,395.89	41.13	39.73	99.47	558.76	-9,863.58	8,772.61	8,704.22	68.39	128.279		
8,100.00	7,241.15	7,547.13	7,392.99	42.97	39.72	99.32	558.80	-9,863.62	8,673.47	8,605.02	68.45	126.712		
8,200.00	7,240.75	7,544.27	7,390.12	44.92	39.71	99.18	558.84	-9,863.67	8,574.36	8,505.84	68.52	125.134		
8,300.00	7,240.36	7,541.43	7,387.29	46.97	39.70	99.04	558.88	-9,863.71	8,475.26	8,406.66	68.60	123.544		
8,400.00	7,239.97	7,538.63	7,384.48	49.10	39.69	98.90	558.92	-9,863.76	8,376.19	8,307.50	68.69	121.944		
8,500.00	7,239.57	7,535.86	7,381.71	51.29	39.69	98.77	558.96	-9,863.80	8,277.14	8,208.36	68.79	120.332		
8,600.00	7,239.18	7,533.11	7,378.97	53.56	39.68	98.63	559.00	-9,863.84	8,178.11	8,109.22	68.89	118.710		
8,700.00	7,238.79	7,530.40	7,376.26	55.87	39.67	98.50	559.04	-9,863.88	8,079.11	8,010.10	69.01	117.076		
8,800.00	7,238.39	7,527.72	7,373.58	58.24	39.66	98.36	559.08	-9,863.92	7,980.13	7,910.99	69.13	115.431		
8,900.00	7,238.00	7,525.07	7,370.92	60.64	39.65	98.23	559.12	-9,863.96	7,881.17	7,811.90	69.27	113.775		
9,000.00	7,237.61	7,522.44	7,368.30	63.09	39.64	98.10	559.15	-9,864.00	7,782.24	7,712.82	69.42	112.108		
9,100.00	7,237.21	7,519.84	7,365.70	65.56	39.63	97.97	559.19	-9,864.04	7,683.34	7,613.76	69.58	110.429		
9,200.00	7,236.82	7,517.27	7,363.13	68.07	39.63	97.84	559.23	-9,864.08	7,584.46	7,514.71	69.75	108.740		
9,300.00	7,236.43	7,514.73	7,360.59	70.61	39.62	97.72	559.26	-9,864.12	7,485.62	7,415.68	69.93	107.040		
9,400.00	7,236.03	7,512.22	7,358.08	73.16	39.61	97.59	559.30	-9,864.15	7,386.80	7,316.67	70.13	105.329		
9,500.00	7,235.64	7,509.73	7,355.59	75.74	39.60	97.47	559.34	-9,864.19	7,288.02	7,217.68	70.34	103.607		
9,600.00	7,235.25	7,507.26	7,353.13	78.34	39.59	97.34	559.37	-9,864.23	7,189.27	7,118.70	70.57	101.875		
9,700.00	7,234.85	7,504.83	7,350.69	80.96	39.59	97.22	559.41	-9,864.26	7,090.55	7,019.74	70.81	100.132		
9,800.00	7,234.46	7,502.41	7,348.28	83.59	39.58	97.10	559.44	-9,864.30	6,991.87	6,920.80	71.07	98.380		
9,900.00	7,234.07	7,500.03	7,345.89	86.24	39.57	96.98	559.48	-9,864.33	6,893.23	6,821.88	71.35	96.617		
10,000.00	7,233.67	7,497.66	7,343.53	88.90	39.56	96.86	559.51	-9,864.36	6,794.63	6,722.99	71.64	94.845		
10,100.00	7,233.28	7,495.32	7,341.19	91.57	39.56	96.75	559.55	-9,864.40	6,696.06	6,624.11	71.95	93.064		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,232.89	7,493.01	7,338.87	94.25	39.55	96.63	559.58	-9,864.43	6,597.54	6,525.26	72.28	91.274		
10,300.00	7,232.49	7,490.71	7,336.58	96.95	39.54	96.52	559.62	-9,864.46	6,499.07	6,426.43	72.64	89.475		
10,400.00	7,232.10	7,488.44	7,334.31	99.65	39.53	96.40	559.65	-9,864.49	6,400.64	6,327.63	73.01	87.669		
10,500.00	7,231.71	7,486.20	7,332.06	102.36	39.53	96.29	559.68	-9,864.52	6,302.26	6,228.85	73.41	85.854		
10,600.00	7,231.32	7,483.97	7,329.84	105.08	39.52	96.18	559.72	-9,864.55	6,203.93	6,130.10	73.83	84.033		
10,700.00	7,230.92	7,481.77	7,327.63	107.80	39.51	96.07	559.75	-9,864.58	6,105.65	6,031.38	74.27	82.205		
10,800.00	7,230.53	7,479.59	7,325.45	110.53	39.51	95.96	559.78	-9,864.61	6,007.43	5,932.69	74.75	80.371		
10,900.00	7,230.14	7,477.43	7,323.29	113.27	39.50	95.85	559.82	-9,864.64	5,909.27	5,834.03	75.25	78.532		
11,000.00	7,229.74	7,475.29	7,321.15	116.02	39.49	95.74	559.85	-9,864.67	5,811.18	5,735.40	75.78	76.688		
11,100.00	7,229.35	7,473.17	7,319.04	118.77	39.49	95.64	559.88	-9,864.69	5,713.14	5,636.81	76.34	74.840		
11,200.00	7,228.96	7,471.07	7,316.94	121.52	39.48	95.53	559.91	-9,864.72	5,615.18	5,538.25	76.93	72.990		
11,300.00	7,228.56	7,468.99	7,314.86	124.28	39.47	95.43	559.94	-9,864.75	5,517.29	5,439.73	77.56	71.137		
11,400.00	7,228.17	7,466.93	7,312.80	127.04	39.47	95.32	559.97	-9,864.77	5,419.47	5,341.25	78.22	69.283		
11,500.00	7,227.78	7,464.89	7,310.76	129.81	39.46	95.22	560.01	-9,864.80	5,321.74	5,242.82	78.92	67.428		
11,600.00	7,227.38	7,462.87	7,308.74	132.58	39.45	95.12	560.04	-9,864.83	5,224.09	5,144.42	79.67	65.574		
11,700.00	7,226.99	7,460.87	7,306.74	135.36	39.45	95.02	560.07	-9,864.85	5,126.53	5,046.08	80.45	63.722		
11,800.00	7,226.60	7,458.89	7,304.76	138.14	39.44	94.92	560.10	-9,864.88	5,029.07	4,947.79	81.28	61.873		
11,900.00	7,226.20	7,456.93	7,302.80	140.92	39.43	94.82	560.13	-9,864.90	4,931.70	4,849.55	82.16	60.027		
12,000.00	7,225.81	7,454.98	7,300.85	143.70	39.43	94.72	560.16	-9,864.92	4,834.45	4,751.36	83.09	58.187		
12,100.00	7,225.42	7,453.05	7,298.93	146.49	39.42	94.63	560.19	-9,864.95	4,737.31	4,653.24	84.07	56.352		
12,200.00	7,225.02	7,451.14	7,297.02	149.28	39.42	94.53	560.22	-9,864.97	4,640.28	4,555.18	85.10	54.526		
12,300.00	7,224.63	7,449.25	7,295.12	152.08	39.41	94.43	560.25	-9,865.00	4,543.39	4,457.19	86.20	52.708		
12,400.00	7,224.24	7,447.38	7,293.25	154.87	39.40	94.34	560.27	-9,865.02	4,446.63	4,359.28	87.36	50.901		
12,500.00	7,223.84	7,445.52	7,291.39	157.67	39.40	94.25	560.30	-9,865.04	4,350.02	4,261.44	88.59	49.105		
12,600.00	7,223.45	7,443.68	7,289.55	160.47	39.39	94.15	560.33	-9,865.06	4,253.57	4,163.68	89.89	47.322		
12,700.00	7,223.06	7,441.85	7,287.72	163.27	39.39	94.06	560.36	-9,865.08	4,157.28	4,066.02	91.26	45.554		
12,800.00	7,222.66	7,440.04	7,285.92	166.07	39.38	93.97	560.39	-9,865.11	4,061.17	3,968.46	92.72	43.802		
12,900.00	7,222.27	7,438.25	7,284.12	168.88	39.38	93.88	560.42	-9,865.13	3,965.26	3,871.00	94.26	42.067		
13,000.00	7,221.88	7,436.47	7,282.35	171.69	39.37	93.79	560.44	-9,865.15	3,869.54	3,773.65	95.90	40.352		
13,100.00	7,221.48	7,434.71	7,280.59	174.49	39.36	93.70	560.47	-9,865.17	3,774.05	3,676.42	97.63	38.656		
13,200.00	7,221.09	7,432.96	7,278.84	177.30	39.36	93.61	560.50	-9,865.19	3,678.80	3,579.33	99.47	36.984		
13,300.00	7,220.70	7,431.23	7,277.11	180.12	39.35	93.53	560.53	-9,865.21	3,583.81	3,482.39	101.43	35.334		
13,400.00	7,220.30	7,429.52	7,275.39	182.93	39.35	93.44	560.55	-9,865.23	3,489.10	3,385.60	103.50	33.711		
13,500.00	7,219.91	7,427.82	7,273.69	185.74	39.34	93.35	560.58	-9,865.25	3,394.69	3,288.98	105.71	32.114		
13,600.00	7,219.52	7,426.13	7,272.01	188.56	39.34	93.27	560.61	-9,865.27	3,300.61	3,192.55	108.06	30.545		
13,700.00	7,219.12	7,424.46	7,270.34	191.38	39.33	93.18	560.63	-9,865.28	3,206.88	3,096.33	110.56	29.007		
13,800.00	7,218.73	7,422.80	7,268.68	194.20	39.33	93.10	560.66	-9,865.30	3,113.55	3,000.33	113.22	27.500		
13,900.00	7,218.34	7,421.16	7,267.04	197.02	39.32	93.02	560.69	-9,865.32	3,020.64	2,904.58	116.06	26.027		
14,000.00	7,217.94	7,419.53	7,265.41	199.84	39.32	92.94	560.71	-9,865.34	2,928.19	2,809.11	119.09	24.589		
14,100.00	7,217.55	7,417.91	7,263.79	202.66	39.31	92.85	560.74	-9,865.36	2,836.26	2,713.94	122.32	23.187		
14,200.00	7,217.16	7,416.31	7,262.19	205.48	39.31	92.77	560.76	-9,865.37	2,744.89	2,619.11	125.78	21.822		
14,300.00	7,216.76	7,414.72	7,260.60	208.30	39.30	92.69	560.79	-9,865.39	2,654.15	2,524.66	129.48	20.498		
14,400.00	7,216.37	7,413.15	7,259.03	211.13	39.30	92.61	560.81	-9,865.41	2,564.09	2,430.64	133.45	19.214		
14,500.00	7,215.98	7,411.58	7,257.47	213.96	39.29	92.53	560.84	-9,865.42	2,474.79	2,337.09	137.70	17.973		
14,600.00	7,215.58	7,410.04	7,255.92	216.78	39.29	92.46	560.86	-9,865.44	2,386.34	2,244.09	142.26	16.775		
14,700.00	7,215.19	7,408.50	7,254.38	219.61	39.28	92.38	560.89	-9,865.46	2,298.84	2,151.69	147.15	15.623		
14,800.00	7,214.80	7,406.97	7,252.86	222.44	39.28	92.30	560.91	-9,865.47	2,212.40	2,060.00	152.40	14.517		
14,900.00	7,214.40	7,405.46	7,251.34	225.27	39.27	92.23	560.94	-9,865.49	2,127.14	1,969.09	158.05	13.459		
15,000.00	7,214.01	7,403.97	7,249.85	228.10	39.27	92.15	560.96	-9,865.51	2,043.22	1,879.10	164.12	12.449		
15,002.44	7,214.00	7,403.94	7,249.82	228.16	39.27	92.15	560.96	-9,865.51	2,041.20	1,876.92	164.27	12.426 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-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4821.00ft

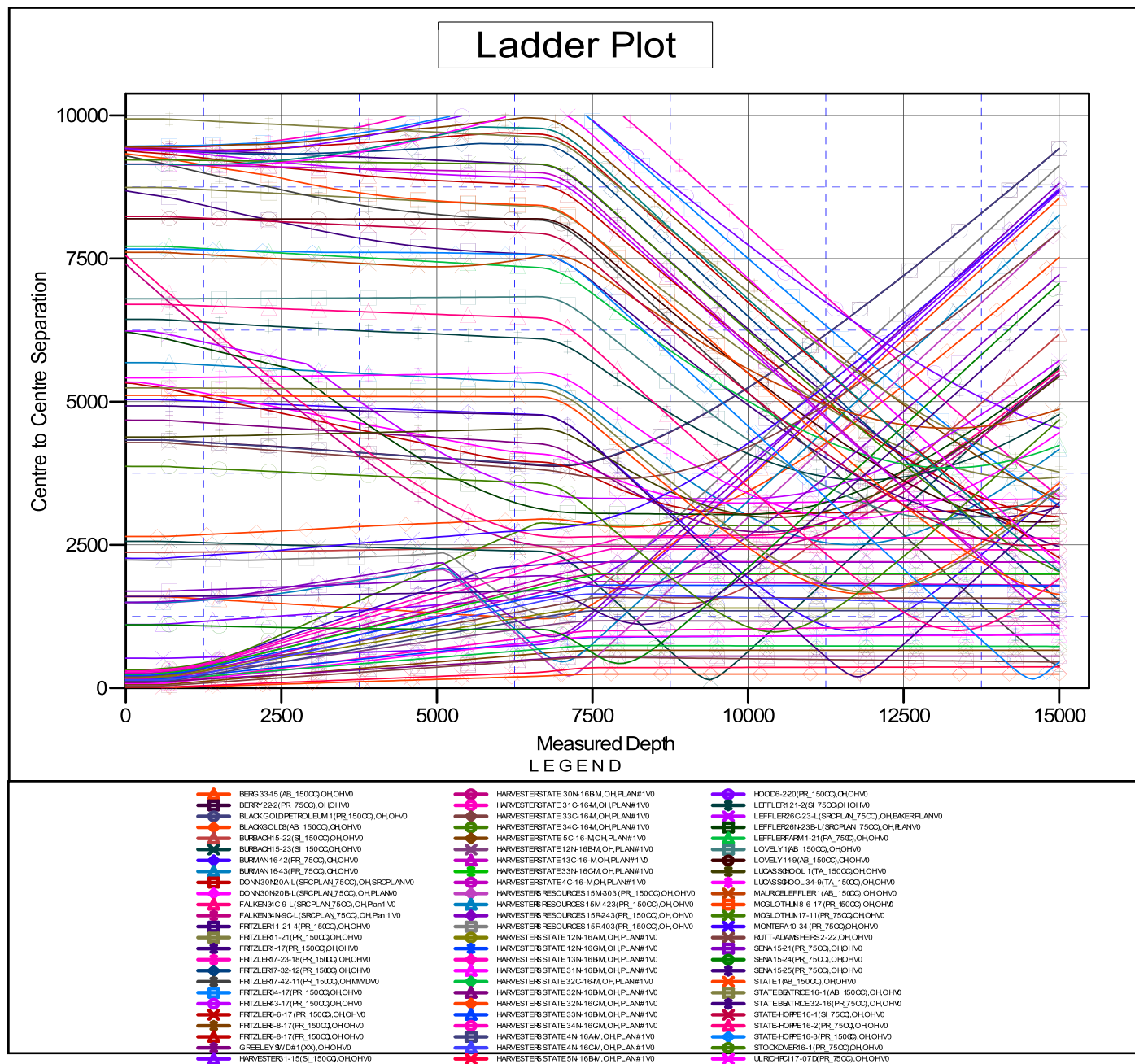
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 32C-16-M2

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°

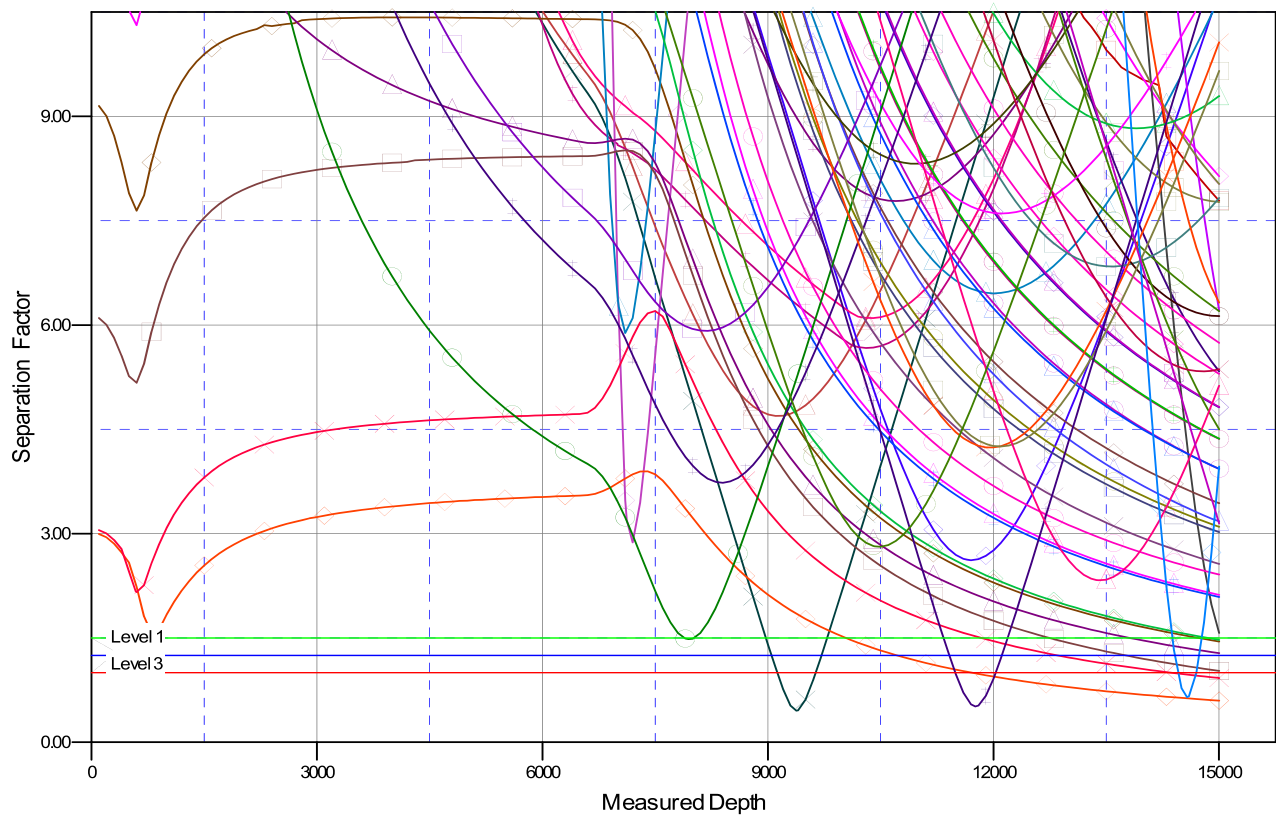


Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 32C-16-M2
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 32C-16-M2	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4821.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 32C-16-M2
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

BERG 33-45 (AB, 1500Q, OH OHV0)	HARVESTERSTATE 30N-16BM, OH, PLAN#1V0	H006-220 (PR, 1500Q, OH OHV0)
BERR 22-2 (PR, 750Q, OH OHV0)	HARVESTERSTATE 31C-16M, OH, PLAN#1V0	LEFFLER 21-2 (SL, 750Q, OH OHV0)
BLACK GOLD/STOLBUM 1 (PR, 1500Q, OH OHV0)	HARVESTERSTATE 33C-16M, OH, PLAN#1V0	LEFFLER 26-23-L (SRC PLAN, 750Q, OH, BAKER PLANV0)
BURBACH 15-22 (SL, 1500Q, OH OHV0)	HARVESTERSTATE 34C-16M, OH, PLAN#1V0	LEFFLER 26N-23B-L (SRC PLAN, 750Q, OH, PLANV0)
BURBACH 15-23 (SL, 1500Q, OH OHV0)	HARVESTERSTATE 5C-16-MOH, PLAN#1V0	LEFFLER FARM 1-21 (PA, 750Q, OH OHV0)
BURMAN 16-42 (PR, 750Q, OH OHV0)	HARVESTERSTATE 12N-16BM, OH, PLAN#1V0	LOVELY 1 (AB, 1500Q, OH OHV0)
BURMAN 16-43 (PR, 750Q, OH OHV0)	HARVESTERSTATE 13C-16-MOH, PLAN#1V0	LOVELY 149 (AB, 1500Q, OH OHV0)
DOHN 02N-04-L (SRC PLAN, 750Q, OH, SRC PLANV0)	HARVESTERSTATE 33N-16CM, OH, PLAN#1V0	LUCAS SCHOOL 1 (TA, 1500Q, OH OHV0)
DOHN 02N-02B-L (SRC PLAN, 750Q, OH, PLANV0)	HARVESTERSTATE 4C-16-MOH, PLAN#1V0	LUCAS SCHOOL 34-9 (TA, 1500Q, OH OHV0)
FALKEN 31N-9C-L (SRC PLAN, 750Q, OH, Plan 1V0)	HARVESTER RESOURCES 15M303 (PR, 1500Q, OH OHV0)	MAIRCE LEFFLER 1 (AB, 1500Q, OH OHV0)
FALKEN 31N-9C-L (SRC PLAN, 750Q, OH, Plan 1V0)	HARVESTER RESOURCES 15M423 (PR, 1500Q, OH OHV0)	MOGLOTHUN 6-17 (PR, 600Q, OH OHV0)
FRTZLER 1-21-4 (PR, 1500Q, OH OHV0)	HARVESTER RESOURCES 15R243 (PR, 1500Q, OH OHV0)	MOGLOTHUN 17-11 (PR, 750Q, OH OHV0)
FRTZLER 1-21 (PR, 1500Q, OH OHV0)	HARVESTER RESOURCES 15R403 (PR, 1500Q, OH OHV0)	MONTERA 10-34 (PR, 750Q, OH OHV0)
FRTZLER 6-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 12N-16AM, OH, PLAN#1V0	RUTT-ADAMS HERS 2-22, OH OHV0
FRTZLER 7-23-16 (PR, 1500Q, OH OHV0)	HARVESTER STATE 12N-16GM, OH, PLAN#1V0	SENA 15-21 (PR, 750Q, OH OHV0)
FRTZLER 7-32-12 (PR, 1500Q, OH OHV0)	HARVESTER STATE 13N-16BM, OH, PLAN#1V0	SENA 15-24 (PR, 750Q, OH OHV0)
FRTZLER 7-42-11 (PR, 1500Q, OH OHV0)	HARVESTER STATE 31N-16BM, OH, PLAN#1V0	SENA 15-25 (PR, 750Q, OH OHV0)
FRTZLER 8-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 32C-16M, OH, PLAN#1V0	STATE 1 (AB, 1500Q, OH OHV0)
FRTZLER 8-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 32N-16BM, OH, PLAN#1V0	STATEBATRICE 16-1 (AB, 1500Q, OH OHV0)
FRTZLER 8-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 32N-16GM, OH, PLAN#1V0	STATEBATRICE 32-16 (PR, 750Q, OH OHV0)
FRTZLER 8-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 33N-16BM, OH, PLAN#1V0	STATE HOPE 16-1 (SL, 750Q, OH OHV0)
FRTZLER 8-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 34N-16GM, OH, PLAN#1V0	STATE HOPE 16-2 (PR, 750Q, OH OHV0)
FRTZLER 8-17 (PR, 1500Q, OH OHV0)	HARVESTER STATE 4N-16AM, OH, PLAN#1V0	STATE HOPE 16-3 (PR, 1500Q, OH OHV0)
GRIELEY 8V0D#1 (XX, OH OHV0)	HARVESTER STATE 4N-16CM, OH, PLAN#1V0	STOCKOVER 6-1 (PR, 750Q, OH OHV0)
HARVESTER 1-15 (SL, 1500Q, OH OHV0)	HARVESTER STATE 5N-16BM, OH, PLAN#1V0	ULRICH 17-07 (PR, 750Q, OH OHV0)