



# **SRC ENERGY**

**SECTION 15, T6N, R66W  
HARVESTERS STATE 7-15 PAD  
HARVESTERS STATE 33N-16B-M**

**OH  
PLAN #1**

## **Anticollision Report**

**03 October, 2017**







## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

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

<b>Survey Tool Program</b>	<b>Date</b>	10/3/2017		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	15,145.11	PLAN #1 (OH)	MWD+IFR1	OWSG MWD + IFR1

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
BERG 33-15 (AB_150CC) - OH - OH	4,932.69	4,694.71	425.25	378.14	9.026	CC
BERG 33-15 (AB_150CC) - OH - OH	5,000.00	4,762.69	425.54	377.76	8.906	ES
BERG 33-15 (AB_150CC) - OH - OH	5,300.00	5,044.48	437.05	386.59	8.661	SF
BERRY 22-2(PR_75CC) - OH - OH	7,205.03	6,822.16	2,210.50	2,145.90	34.219	CC, ES
BERRY 22-2(PR_75CC) - OH - OH	7,600.00	7,004.29	2,289.79	2,221.11	33.339	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,207.67	6,926.59	2,229.20	2,164.20	34.298	CC, ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,600.00	7,146.93	2,305.86	2,236.80	33.392	SF
BLACKGOLD 3(AB_150CC) - OH - OH	0.00	23.89	2,846.94			
BLACKGOLD 3(AB_150CC) - OH - OH	100.00	121.87	2,846.96	2,840.38	432.728	ES
BLACKGOLD 3(AB_150CC) - OH - OH	11,200.00	7,095.68	5,521.89	5,394.19	43.242	SF
BURBACH 15-22(SI_150CC) - OH - OH	200.00	180.00	2,467.46	2,458.52	276.109	CC
BURBACH 15-22(SI_150CC) - OH - OH	400.00	379.84	2,470.34	2,454.78	158.745	ES
BURBACH 15-22(SI_150CC) - OH - OH	9,800.00	7,048.37	3,335.31	3,012.57	10.334	SF
BURBACH 15-23(SI_150CC) - OH - OH	9,499.58	7,034.34	1,934.57	1,617.26	6.097	CC
BURBACH 15-23(SI_150CC) - OH - OH	9,500.00	7,034.34	1,934.57	1,617.25	6.097	ES
BURBACH 15-23(SI_150CC) - OH - OH	9,700.00	7,033.69	1,944.92	1,623.59	6.053	SF
BURMAN 16-42(PR_75CC) - OH - OH	11,768.87	7,015.97	780.61	403.38	2.069	CC, ES
BURMAN 16-42(PR_75CC) - OH - OH	11,800.00	7,015.87	781.23	403.53	2.068	SF
BURMAN 16-43(PR_75CC) - OH - OH	11,784.74	7,012.92	720.25	342.69	1.908	CC
BURMAN 16-43(PR_75CC) - OH - OH	11,800.00	7,012.87	720.42	342.31	1.905	ES, SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	10,101.10	7,293.53	1,246.75	1,122.47	10.032	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,145.13	12,353.29	1,385.23	976.48	3.389	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	10,022.78	7,328.41	1,438.41	1,316.76	11.824	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,145.13	12,426.61	1,523.74	1,114.46	3.723	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	6,196.16	15,933.06	4,268.86	3,995.59	15.621	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	6,300.00	15,935.68	4,270.12	3,994.76	15.507	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,900.00	19,118.26	4,508.07	4,060.15	10.065	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	6,144.22	15,880.37	4,081.55	3,807.67	14.902	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	6,200.00	15,881.99	4,081.94	3,806.86	14.840	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,800.00	19,018.34	4,293.14	3,848.02	9.645	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,051.65	7,083.90	1,207.55	976.57	5.228	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,100.00	7,085.43	1,208.51	975.87	5.195	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,200.00	7,088.61	1,216.62	981.52	5.175	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,651.66	6,985.60	1,873.49	1,416.72	4.102	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,700.00	6,985.45	1,874.11	1,415.87	4.090	ES
FRITZLER 11-21(PR_150CC) - OH - OH	14,800.00	6,985.12	1,879.35	1,418.50	4.078	SF
FRITZLER 1-17(PR_150CC) - OH - OH	15,145.13	7,001.00	967.75	596.88	2.609	CC, ES, SF

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

## Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
HARVESTERS STATE 7-15 PAD						
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,145.13	7,343.98	2,840.42	2,759.19	34.969	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	15,145.13	7,410.36	2,031.44	1,825.54	9.866	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,145.13	7,380.60	1,429.95	1,163.68	5.370	CC, ES, SF
FRITZLER 34-17(PR_150CC) - OH - OH	15,145.13	7,113.67	2,172.05	2,069.36	21.152	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	15,145.13	7,159.22	1,137.75	935.66	5.630	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,145.13	7,037.18	1,498.19	1,417.08	18.473	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,145.13	7,109.59	1,859.35	1,687.77	10.836	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,145.13	7,072.06	1,216.88	959.15	4.721	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,353.59	7,002.57	937.71	599.38	2.772	CC
GREELEY SWD #1(XX) - OH - OH	10,400.00	7,002.42	938.86	599.05	2.763	ES, SF
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,313.09			
HARVESTER 31-15(SI_150CC) - OH - OH	9,100.00	7,219.27	4,182.30	4,098.78	50.075	SF
HARVESTER 32-15(SI_150CC) - OH - OH	100.00	77.26	547.88	541.31	83.399	CC, ES
HARVESTER 32-15(SI_150CC) - OH - OH	6,800.00	6,492.00	2,157.56	2,097.07	35.669	SF
HARVESTER STATE 30C-16-M - OH - PLAN #1	200.00	202.00	419.68	413.01	62.868	CC, ES
HARVESTER STATE 30C-16-M - OH - PLAN #1	15,145.13	15,216.01	3,987.02	3,530.03	8.725	SF
HARVESTER STATE 30N-16B-M - OH - PLAN #1	200.00	202.00	400.02	393.34	59.922	CC, ES
HARVESTER STATE 30N-16B-M - OH - PLAN #1	15,145.13	14,942.37	3,764.00	3,306.71	8.231	SF
HARVESTER STATE 31C-16-M - OH - PLAN #1	200.00	201.00	319.86	313.19	47.920	CC, ES
HARVESTER STATE 31C-16-M - OH - PLAN #1	15,145.13	14,996.07	2,888.35	2,431.92	6.328	SF
HARVESTER STATE 33C-16-M - OH - PLAN #1	989.94	995.41	19.34	8.57	1.796	CC
HARVESTER STATE 33C-16-M - OH - PLAN #1	15,145.13	15,261.37	262.91	-127.40	0.674	Level 1, ES, SF
HARVESTER STATE 34C-16-M - OH - PLAN #1	1,122.99	1,091.36	95.40	83.76	8.193	CC, ES
HARVESTER STATE 34C-16-M - OH - PLAN #1	15,145.13	15,780.93	1,061.27	610.75	2.356	SF
HARVESTER STATE 5C-16-M - OH - PLAN #1	200.00	201.00	279.79	273.11	41.917	CC, ES
HARVESTER STATE 5C-16-M - OH - PLAN #1	15,145.13	14,987.41	2,449.01	1,992.83	5.369	SF
HARVESTER STATE 12N-16B-M - OH - PLAN #1	847.17	860.53	58.46	48.70	5.995	CC, ES
HARVESTER STATE 12N-16B-M - OH - PLAN #1	15,145.13	14,979.18	632.09	175.56	1.385	Level 3, SF
HARVESTER STATE 13C-16-M - OH - PLAN #1	1,106.06	1,092.82	38.01	26.42	3.281	CC
HARVESTER STATE 13C-16-M - OH - PLAN #1	15,145.13	15,432.05	447.06	20.68	1.049	Level 2, ES, SF
HARVESTER STATE 33N-16C-M - OH - PLAN #1	1,100.38	1,093.28	18.87	7.31	1.632	CC
HARVESTER STATE 33N-16C-M - OH - PLAN #1	15,145.13	15,272.14	213.35	-228.31	0.483	Level 1, ES, SF
HARVESTER STATE 4C-16-M - OH - PLAN #1	200.00	202.00	379.98	376.02	95.952	CC, ES
HARVESTER STATE 4C-16-M - OH - PLAN #1	15,145.13	15,116.21	3,583.11	3,126.42	7.846	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,323.98	10,863.05	310.54	219.64	3.416	CC
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,400.00	10,877.94	323.65	215.72	2.999	ES, SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,179.42	10,868.81	604.39	500.82	5.836	CC
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,200.00	10,872.73	605.05	499.21	5.717	ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,300.00	10,898.04	626.47	511.02	5.427	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,041.52	10,821.06	890.21	774.46	7.691	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,200.00	10,870.62	922.00	798.27	7.452	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,014.34	10,873.84	1,270.56	1,152.26	10.741	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,200.00	10,917.58	1,309.29	1,184.96	10.531	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	943.42	953.58	38.55	28.12	3.695	CC
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,145.13	14,915.55	442.20	6.56	1.015	Level 2, ES, SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	723.99	738.48	78.73	69.80	8.809	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,135.42	15,009.76	842.49	385.82	1.845	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	1,111.86	1,092.50	57.12	45.51	4.921	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,145.13	15,335.25	628.03	170.78	1.373	Level 3, SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	200.00	201.00	299.83	293.16	44.920	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,145.13	14,817.75	2,667.60	2,211.34	5.847	SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	664.11	680.62	98.76	90.18	11.511	CC
HARVESTERS STATE 32C-16-M - OH - PLAN #1	700.00	716.22	98.95	90.17	11.272	ES

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

## Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
HARVESTERS STATE 7-15 PAD						
HARVESTERS STATE 32C-16-M - OH - PLAN #1	15,145.13	15,081.89	1,063.64	570.96	2.159	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	200.00	201.00	219.68	213.00	32.911	CC, ES
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	15,130.41	15,011.78	1,789.04	1,333.39	3.926	SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	200.00	200.00	119.86	113.18	17.958	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,132.68	14,878.85	1,251.38	795.07	2.742	SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	200.00	201.00	200.01	193.34	29.965	CC, ES
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,131.38	14,918.55	1,564.55	1,107.99	3.427	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	1,117.66	1,092.16	76.23	64.61	6.557	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	15,145.13	15,480.81	839.95	384.53	1.844	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	200.00	201.00	339.90	333.23	50.922	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,145.13	14,732.12	3,107.40	2,651.03	6.809	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	200.00	201.00	359.94	353.27	53.925	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,145.13	14,969.16	3,225.49	2,769.08	7.067	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	200.00	201.00	239.72	233.05	35.914	CC, ES
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,145.13	14,805.04	2,104.18	1,647.69	4.609	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	200.00	201.00	259.75	253.08	38.915	CC, ES
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,145.13	14,872.41	2,224.70	1,768.34	4.875	SF
HOOD 41-20(PR_150CC) - OH - OH	15,145.13	7,009.00	2,067.38	1,617.77	4.598	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,145.13	7,404.50	2,886.86	2,654.32	12.414	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,997.21	6,983.60	1,847.22	1,676.99	10.851	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,100.00	6,988.85	1,850.07	1,676.79	10.677	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,300.00	6,999.35	1,871.80	1,693.79	10.515	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	7,500.00	10,155.12	1,556.48	1,420.54	11.450	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	7,700.00	9,962.03	1,534.87	1,402.70	11.613	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	9,945.78	7,720.82	1,527.18	1,405.91	12.593	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	7,500.00	10,013.79	1,275.31	1,137.95	9.285	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,948.99	7,583.30	1,236.23	1,113.89	10.105	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	10,000.00	7,550.00	1,236.59	1,113.22	10.023	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,334.89	7,008.12	2,062.25	1,641.72	4.904	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,400.00	7,008.33	2,063.28	1,640.77	4.883	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,600.00	7,008.98	2,079.22	1,651.73	4.864	SF
LOVELY 1(AB_150CC) - OH - OH	13,301.94	7,038.99	4,736.71	4,316.02	11.260	CC
LOVELY 1(AB_150CC) - OH - OH	13,400.00	7,038.67	4,737.72	4,314.49	11.194	ES
LOVELY 1(AB_150CC) - OH - OH	14,300.00	7,035.75	4,840.72	4,397.83	10.930	SF
LOVELY 14-9(AB_150CC) - OH - OH	14,798.61	7,037.13	4,681.55	4,218.85	10.118	CC
LOVELY 14-9(AB_150CC) - OH - OH	14,900.00	7,036.80	4,682.65	4,217.30	10.063	ES
LOVELY 14-9(AB_150CC) - OH - OH	15,145.13	7,036.00	4,694.36	4,223.05	9.960	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	200.00	202.00	4,509.00	4,499.43	470.901	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,700.00	7,067.44	4,770.63	4,420.99	13.644	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	11,800.00	7,063.87	4,924.17	4,550.07	13.163	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,788.89	7,023.90	4,748.13	4,370.07	12.559	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,900.00	7,023.54	4,749.43	4,368.52	12.469	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	12,900.00	7,020.29	4,876.40	4,473.34	12.099	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,348.44	4,452.00	3,150.04	2,936.12	14.726	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,400.00	4,452.00	3,150.46	2,935.53	14.658	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	14,300.00	4,452.00	3,290.62	3,056.64	14.064	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,145.13	7,166.27	271.28	98.17	1.567	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,145.13	7,022.00	3,689.81	3,223.43	7.912	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	225.54	261.69	2,485.92	2,479.16	367.604	CC, ES
MONTERA 10-34 (PR_75CC) - OH - OH	10,700.00	7,142.54	5,966.30	5,855.23	53.715	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,034.78	7,015.10	1,866.72	1,581.63	6.548	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,100.00	7,014.89	1,867.86	1,581.59	6.525	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,300.00	7,014.24	1,885.47	1,595.26	6.497	SF

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

### Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
HARVESTERS STATE 7-15 PAD						
SENA 15-21(PR_75CC) - OH - OH	200.00	204.00	1,857.65	1,848.02	192.807	CC
SENA 15-21(PR_75CC) - OH - OH	300.00	304.02	1,858.93	1,846.03	144.162	ES
SENA 15-21(PR_75CC) - OH - OH	8,900.00	7,067.29	3,610.96	3,309.08	11.962	SF
SENA 15-24(PR_75CC) - OH - OH	200.00	182.00	1,111.68	1,102.69	123.612	CC
SENA 15-24(PR_75CC) - OH - OH	1,000.00	971.64	1,123.32	1,085.58	29.768	ES
SENA 15-24(PR_75CC) - OH - OH	8,300.00	7,055.24	2,232.37	1,942.01	7.688	SF
SENA 15-25(PR_75CC) - OH - OH	200.00	189.00	1,695.94	1,686.74	184.459	CC
SENA 15-25(PR_75CC) - OH - OH	400.00	388.84	1,698.88	1,683.01	107.089	ES
SENA 15-25(PR_75CC) - OH - OH	9,000.00	7,059.97	2,957.49	2,653.27	9.722	SF
STATE 1(AB_150CC) - OH - OH	11,943.38	7,013.40	3,435.11	3,053.15	8.993	CC
STATE 1(AB_150CC) - OH - OH	12,000.00	7,013.22	3,435.57	3,052.19	8.961	ES
STATE 1(AB_150CC) - OH - OH	12,500.00	7,011.59	3,479.91	3,085.58	8.825	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,073.12	7,014.98	3,456.76	3,071.16	8.965	CC
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,200.00	7,014.57	3,459.09	3,070.34	8.898	ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,600.00	7,013.27	3,496.68	3,099.27	8.799	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,880.21	7,008.61	1,983.61	1,603.56	5.219	CC
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,900.00	7,008.54	1,983.71	1,603.20	5.213	ES
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,100.00	7,007.89	1,995.75	1,611.25	5.191	SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,635.99	7,003.35	705.60	248.66	1.544	CC, ES, SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,490.44	7,013.38	778.65	353.58	1.832	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,500.00	7,013.35	778.71	353.47	1.831	ES, SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,692.04	7,027.61	1,942.83	1,697.02	7.904	CC
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,700.00	7,027.75	1,942.84	1,696.84	7.898	ES
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,900.00	7,031.32	1,953.92	1,704.21	7.825	SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,538.66	7,004.97	804.61	461.26	2.343	CC, ES, SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,145.13	7,166.48	2,933.05	2,731.19	14.530	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,145.13	7,013.00	2,318.12	1,863.41	5.098	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	15,145.13	7,281.89	3,364.52	3,130.00	14.346	CC, ES, SF

<b>Offset Design</b> HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												<b>Offset Site Error:</b>	0.00 ft
<b>Survey Program:</b> 100-GYRO-NS												<b>Offset Well Error:</b>	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)	Separation Factor		
0.00	0.00	0.00	37.00	3.28	3.28	165.29	-1,340.29	351.87	1,386.20				
100.00	100.00	60.18	97.18	3.28	3.28	165.29	-1,340.35	351.87	1,385.77	1,379.20	6.57	211.012	
200.00	200.00	158.79	195.79	3.34	3.31	165.29	-1,340.66	351.85	1,386.07	1,379.42	6.65	208.428	
300.00	299.98	260.97	297.97	3.44	3.40	-19.11	-1,340.97	351.64	1,384.67	1,377.82	6.84	202.368	
400.00	399.84	361.54	398.54	3.59	3.54	-19.21	-1,341.09	351.57	1,379.81	1,372.68	7.13	193.441	
500.00	499.45	460.83	497.83	3.79	3.72	-19.39	-1,341.19	351.59	1,371.69	1,364.18	7.51	182.547	
600.00	598.70	556.75	593.75	4.03	3.93	-19.63	-1,341.35	351.72	1,360.39	1,352.42	7.97	170.748	
700.00	697.47	652.91	689.91	4.31	4.18	-19.95	-1,341.83	351.83	1,346.15	1,337.67	8.49	158.601	
800.00	795.62	753.22	790.22	4.64	4.45	-20.34	-1,342.42	351.68	1,328.72	1,319.64	9.08	146.379	
900.00	893.06	853.53	890.52	5.00	4.76	-20.82	-1,342.86	351.14	1,307.87	1,298.15	9.72	134.604	
1,000.00	989.64	951.75	988.74	5.40	5.07	-21.39	-1,343.14	350.64	1,283.74	1,273.35	10.39	123.542	
1,100.00	1,085.27	1,046.45	1,083.44	5.83	5.38	-22.03	-1,343.39	349.98	1,256.48	1,245.39	11.10	113.233	
1,200.00	1,180.44	1,139.94	1,176.93	6.29	5.71	-22.52	-1,343.81	349.43	1,228.12	1,216.31	11.81	103.978	
1,300.00	1,275.61	1,235.56	1,272.54	6.76	6.05	-23.05	-1,344.27	348.81	1,199.87	1,187.31	12.56	95.537	
1,400.00	1,370.78	1,331.61	1,368.59	7.26	6.40	-23.59	-1,344.76	348.05	1,171.69	1,158.36	13.33	87.898	
1,500.00	1,465.95	1,429.28	1,466.26	7.76	6.76	-24.17	-1,345.11	347.27	1,143.48	1,129.35	14.12	80.958	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,600.00	1,561.12	1,526.79	1,563.76	8.27	7.13	-24.79	-1,345.20	346.58	1,115.17	1,100.24	14.93	74.677		
1,700.00	1,656.29	1,622.61	1,659.57	8.80	7.49	-25.42	-1,345.24	345.60	1,086.83	1,071.08	15.75	69.000		
1,800.00	1,751.46	1,715.54	1,752.50	9.32	7.85	-26.06	-1,345.39	344.68	1,058.74	1,042.16	16.57	63.879		
1,900.00	1,846.63	1,809.56	1,846.52	9.86	8.22	-26.74	-1,345.69	343.79	1,030.94	1,013.53	17.41	59.209		
2,000.00	1,941.80	1,905.45	1,942.41	10.40	8.60	-27.47	-1,346.03	342.86	1,003.31	985.05	18.26	54.933		
2,100.00	2,036.96	1,999.21	2,036.15	10.94	8.97	-28.21	-1,346.48	341.81	975.89	956.77	19.12	51.037		
2,200.00	2,132.13	2,094.64	2,131.57	11.49	9.36	-29.00	-1,347.03	340.71	948.71	928.72	19.99	47.458		
2,300.00	2,227.30	2,188.46	2,225.39	12.04	9.73	-29.84	-1,347.51	339.90	921.78	900.91	20.87	44.177		
2,400.00	2,322.47	2,283.32	2,320.25	12.59	10.12	-30.75	-1,348.06	339.25	895.17	873.42	21.75	41.156		
2,500.00	2,417.64	2,381.90	2,418.82	13.15	10.52	-31.74	-1,348.59	338.35	868.67	846.02	22.65	38.353		
2,600.00	2,512.81	2,477.72	2,514.64	13.70	10.91	-32.77	-1,348.81	337.46	842.14	818.59	23.55	35.758		
2,700.00	2,607.98	2,573.20	2,610.12	14.26	11.30	-33.88	-1,348.87	336.85	815.88	791.42	24.46	33.355		
2,800.00	2,703.15	2,667.09	2,704.01	14.82	11.69	-35.06	-1,348.91	336.36	789.97	764.59	25.38	31.129		
2,900.00	2,798.32	2,761.58	2,798.49	15.38	12.08	-36.30	-1,349.16	335.86	764.57	738.27	26.30	29.067		
3,000.00	2,893.49	2,857.01	2,893.92	15.95	12.47	-37.65	-1,349.42	335.37	739.58	712.34	27.24	27.151		
3,100.00	2,988.66	2,951.85	2,988.76	16.51	12.86	-39.08	-1,349.61	334.96	715.00	686.81	28.19	25.368		
3,200.00	3,083.83	3,046.21	3,083.12	17.07	13.26	-40.59	-1,349.97	334.51	690.99	661.85	29.14	23.712		
3,300.00	3,179.00	3,141.15	3,178.06	17.64	13.65	-42.21	-1,350.47	334.05	667.61	637.50	30.11	22.174		
3,400.00	3,274.17	3,236.07	3,274.98	18.21	14.06	-44.01	-1,350.70	333.87	644.75	613.67	31.09	20.741		
3,500.00	3,369.34	3,336.49	3,373.40	18.77	14.47	-45.96	-1,350.58	333.34	622.08	590.00	32.08	19.394		
3,600.00	3,464.51	3,432.37	3,469.27	19.34	14.86	-48.02	-1,350.13	332.73	599.81	566.73	33.08	18.133		
3,700.00	3,559.68	3,526.37	3,563.27	19.91	15.26	-50.16	-1,349.87	332.02	578.41	544.31	34.10	16.964		
3,800.00	3,654.84	3,619.88	3,656.77	20.48	15.65	-52.41	-1,349.92	331.33	558.13	523.00	35.13	15.888		
3,900.00	3,750.01	3,713.40	3,750.29	21.05	16.04	-54.77	-1,350.50	330.57	539.14	502.97	36.17	14.905		
4,000.00	3,845.18	3,808.50	3,845.38	21.62	16.44	-57.31	-1,351.39	329.80	521.36	484.14	37.22	14.006		
4,100.00	3,940.35	3,904.63	3,941.50	22.19	16.85	-60.06	-1,352.07	329.12	504.68	466.39	38.29	13.182		
4,200.00	4,035.52	4,000.44	4,037.31	22.76	17.25	-62.99	-1,352.57	328.44	489.16	449.80	39.36	12.428		
4,300.00	4,130.69	4,096.10	4,132.97	23.33	17.65	-66.08	-1,353.07	327.67	474.98	434.54	40.44	11.745		
4,400.00	4,225.86	4,190.86	4,227.73	23.91	18.05	-69.32	-1,353.45	326.99	462.36	420.83	41.53	11.134		
4,500.00	4,321.03	4,289.10	4,325.96	24.48	18.47	-72.91	-1,353.27	326.29	451.22	408.60	42.61	10.589		
4,600.00	4,416.20	4,383.47	4,420.33	25.05	18.86	-76.55	-1,352.62	325.46	441.64	397.95	43.69	10.108		
4,700.00	4,511.37	4,479.30	4,516.16	25.62	19.27	-80.37	-1,352.09	324.64	434.17	389.41	44.76	9.701		
4,800.00	4,606.54	4,575.62	4,612.46	26.20	19.67	-84.34	-1,351.26	323.59	428.57	382.76	45.80	9.357		
4,900.00	4,701.71	4,665.85	4,702.68	26.77	20.05	-88.20	-1,349.98	322.88	425.45	378.65	46.80	9.091		
4,932.69	4,732.82	4,694.71	4,731.54	26.96	20.17	-89.45	-1,349.60	322.93	425.25	378.14	47.11	9.026 CC		
5,000.00	4,796.88	4,762.69	4,799.51	27.34	20.46	-92.37	-1,348.75	322.93	425.54	377.76	47.78	8.906 ES		
5,100.00	4,892.05	4,860.86	4,897.67	27.92	20.87	-96.51	-1,347.92	321.82	426.86	378.12	48.74	8.758		
5,200.00	4,987.22	4,952.88	4,989.68	28.49	21.26	-100.22	-1,348.27	320.78	430.37	380.75	49.62	8.673		
5,300.00	5,082.39	5,044.48	5,081.29	29.07	21.65	-103.82	-1,348.63	320.83	437.05	386.59	50.46	8.661 SF		
5,400.00	5,177.56	5,137.75	5,174.55	29.64	22.04	-107.48	-1,347.99	321.08	446.15	394.88	51.28	8.701		
5,500.00	5,272.72	5,230.27	5,267.06	30.21	22.43	-111.04	-1,346.69	321.66	457.77	405.73	52.04	8.796		
5,600.00	5,367.89	5,323.88	5,360.65	30.79	22.82	-114.46	-1,345.27	322.54	471.59	418.80	52.80	8.932		
5,700.00	5,463.06	5,419.13	5,455.89	31.36	23.22	-117.68	-1,344.39	323.85	487.30	433.74	53.56	9.099		
5,800.00	5,558.23	5,518.77	5,555.53	31.94	23.64	-120.76	-1,344.36	324.80	503.76	449.39	54.37	9.265		
5,900.00	5,653.40	5,610.97	5,647.72	32.51	24.02	-123.47	-1,344.13	325.52	521.49	466.41	55.09	9.467		
6,000.00	5,748.57	5,703.62	5,740.37	33.09	24.41	-126.02	-1,343.63	326.68	540.94	485.14	55.80	9.694		
6,100.00	5,843.74	5,807.01	5,843.75	33.67	24.85	-128.70	-1,343.16	327.29	560.92	504.26	56.66	9.899		
6,200.00	5,938.91	5,898.38	5,935.12	34.24	25.24	-130.92	-1,342.84	327.52	581.56	524.19	57.37	10.137		
6,300.00	6,034.08	5,987.31	6,024.04	34.82	25.61	-132.89	-1,342.58	328.64	603.79	545.75	58.04	10.403		
6,400.00	6,129.25	6,084.71	6,121.42	35.39	26.02	-134.83	-1,342.60	330.67	627.16	568.32	58.85	10.658		
6,500.00	6,224.42	6,182.07	6,218.77	35.97	26.43	-136.63	-1,342.93	332.35	650.70	591.04	59.66	10.907		
6,600.00	6,319.59	6,272.69	6,309.37	36.54	26.81	-138.24	-1,342.82	333.64	674.92	614.55	60.38	11.179		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,700.00	6,414.76	6,370.35	6,407.01	37.12	27.23	-139.82	-1,342.69	335.61	700.07	638.87	61.21	11.438		
6,800.00	6,509.91	6,472.15	6,508.79	37.70	27.66	-149.02	-1,343.52	337.48	725.25	663.14	62.11	11.677		
6,900.00	6,603.99	6,572.04	6,608.65	38.26	28.08	-174.76	-1,345.35	339.17	757.24	694.21	63.03	12.014		
7,000.00	6,694.76	6,663.49	6,700.09	38.78	28.47	167.89	-1,346.53	339.50	798.22	734.33	63.89	12.494		
7,100.00	6,779.96	6,751.58	6,785.02	39.24	28.84	156.12	-1,347.07	339.32	847.85	783.13	64.73	13.099		
7,200.00	6,857.50	6,826.06	6,862.65	39.65	29.16	147.25	-1,347.93	339.58	905.41	839.89	65.51	13.820		
7,300.00	6,925.48	6,894.05	6,930.64	40.02	29.45	139.42	-1,348.68	339.80	970.26	904.01	66.25	14.645		
7,400.00	6,982.21	6,950.73	6,987.32	40.33	29.69	131.36	-1,349.31	339.98	1,041.64	974.73	66.91	15.568		
7,500.00	7,026.31	6,994.70	7,031.28	40.63	29.88	122.10	-1,349.79	340.12	1,118.54	1,051.07	67.47	16.579		
7,600.00	7,056.68	7,024.88	7,061.46	40.91	30.01	110.99	-1,350.13	340.22	1,199.62	1,131.71	67.92	17.663		
7,700.00	7,072.58	7,040.52	7,077.10	41.25	30.07	98.09	-1,350.30	340.27	1,283.29	1,215.04	68.25	18.803		
7,800.00	7,074.86	7,042.50	7,079.08	41.69	30.08	90.03	-1,350.32	340.28	1,367.94	1,299.46	68.48	19.976		
7,900.00	7,074.54	7,041.86	7,078.44	42.34	30.08	89.98	-1,350.32	340.27	1,454.19	1,385.51	68.69	21.171		
8,000.00	7,074.21	7,041.22	7,077.80	43.27	30.08	89.93	-1,350.31	340.27	1,542.11	1,473.23	68.88	22.389		
8,100.00	7,073.89	7,040.58	7,077.16	44.47	30.07	89.88	-1,350.30	340.27	1,631.41	1,562.35	69.06	23.624		
8,200.00	7,073.57	7,039.93	7,076.52	45.91	30.07	89.83	-1,350.29	340.27	1,721.89	1,652.67	69.22	24.874		
8,300.00	7,073.24	7,039.29	7,075.87	47.53	30.07	89.78	-1,350.29	340.27	1,813.37	1,743.99	69.38	26.137		
8,400.00	7,072.92	7,038.65	7,075.23	49.31	30.06	89.73	-1,350.28	340.26	1,905.71	1,836.19	69.52	27.411		
8,500.00	7,072.59	7,038.01	7,074.59	51.20	30.06	89.67	-1,350.27	340.26	1,998.78	1,929.13	69.66	28.695		
8,600.00	7,072.27	7,037.37	7,073.95	53.19	30.06	89.62	-1,350.27	340.26	2,092.50	2,022.72	69.78	29.987		
8,700.00	7,071.94	7,036.73	7,073.31	55.27	30.06	89.57	-1,350.26	340.26	2,186.77	2,116.87	69.90	31.286		
8,800.00	7,071.62	7,036.09	7,072.67	57.43	30.05	89.52	-1,350.25	340.26	2,281.52	2,211.52	70.01	32.590		
8,900.00	7,071.29	7,035.44	7,072.03	59.64	30.05	89.47	-1,350.24	340.25	2,376.71	2,306.60	70.11	33.900		
9,000.00	7,070.97	7,034.80	7,071.38	61.92	30.05	89.42	-1,350.24	340.25	2,472.28	2,402.07	70.21	35.215		
9,100.00	7,070.64	7,034.16	7,070.74	64.24	30.05	89.36	-1,350.23	340.25	2,568.18	2,497.89	70.30	36.533		
9,200.00	7,070.32	7,033.52	7,070.10	66.61	30.04	89.31	-1,350.22	340.25	2,664.39	2,594.00	70.39	37.854		
9,300.00	7,069.99	7,032.88	7,069.46	69.01	30.04	89.26	-1,350.22	340.25	2,760.86	2,690.40	70.47	39.179		
9,400.00	7,069.67	7,032.24	7,068.82	71.45	30.04	89.21	-1,350.21	340.24	2,857.58	2,787.03	70.55	40.505		
9,500.00	7,069.34	7,031.60	7,068.18	73.92	30.03	89.16	-1,350.20	340.24	2,954.52	2,883.89	70.63	41.834		
9,600.00	7,069.02	7,030.95	7,067.54	76.42	30.03	89.11	-1,350.20	340.24	3,051.65	2,980.95	70.70	43.164		
9,700.00	7,068.69	7,030.31	7,066.89	78.95	30.03	89.06	-1,350.19	340.24	3,148.96	3,078.19	70.77	44.495		
9,800.00	7,068.37	7,029.67	7,066.25	81.49	30.03	89.00	-1,350.18	340.24	3,246.44	3,175.60	70.84	45.828		
9,900.00	7,068.04	7,029.03	7,065.61	84.06	30.02	88.95	-1,350.17	340.23	3,344.06	3,273.16	70.91	47.161		
10,000.00	7,067.72	7,028.39	7,064.97	86.65	30.02	88.90	-1,350.17	340.23	3,441.82	3,370.85	70.97	48.496		
10,100.00	7,067.39	7,027.75	7,064.33	89.25	30.02	88.85	-1,350.16	340.23	3,539.71	3,468.67	71.04	49.830		
10,200.00	7,067.07	7,027.11	7,063.69	91.87	30.02	88.80	-1,350.15	340.23	3,637.71	3,566.61	71.10	51.165		
10,300.00	7,066.74	7,026.46	7,063.05	94.50	30.01	88.75	-1,350.15	340.22	3,735.82	3,664.66	71.16	52.499		
10,400.00	7,066.42	7,025.82	7,062.40	97.14	30.01	88.70	-1,350.14	340.22	3,834.02	3,762.80	71.22	53.834		
10,500.00	7,066.09	7,025.18	7,061.76	99.80	30.01	88.64	-1,350.13	340.22	3,932.32	3,861.04	71.28	55.168		
10,600.00	7,065.77	7,024.54	7,061.12	102.47	30.00	88.59	-1,350.12	340.22	4,030.70	3,959.36	71.34	56.502		
10,700.00	7,065.44	7,023.90	7,060.48	105.15	30.00	88.54	-1,350.12	340.22	4,129.15	4,057.76	71.40	57.835		
10,800.00	7,065.12	7,023.26	7,059.84	107.83	30.00	88.49	-1,350.11	340.21	4,227.68	4,156.23	71.45	59.168		
10,900.00	7,064.79	7,022.62	7,059.20	110.53	30.00	88.44	-1,350.10	340.21	4,326.28	4,254.77	71.51	60.499		
11,000.00	7,064.47	7,021.97	7,058.56	113.23	29.99	88.39	-1,350.10	340.21	4,424.94	4,353.37	71.57	61.830		
11,100.00	7,064.14	7,021.33	7,057.92	115.95	29.99	88.34	-1,350.09	340.21	4,523.65	4,452.03	71.62	63.160		
11,200.00	7,063.82	7,020.69	7,057.27	118.66	29.99	88.28	-1,350.08	340.21	4,622.43	4,550.75	71.68	64.489		
11,300.00	7,063.49	7,020.05	7,056.63	121.39	29.99	88.23	-1,350.07	340.20	4,721.25	4,649.52	71.73	65.817		
11,400.00	7,063.17	7,019.41	7,055.99	124.12	29.98	88.18	-1,350.07	340.20	4,820.13	4,748.34	71.79	67.143		
11,500.00	7,062.84	7,018.77	7,055.35	126.86	29.98	88.13	-1,350.06	340.20	4,919.04	4,847.20	71.84	68.468		
11,600.00	7,062.52	7,018.13	7,054.71	129.60	29.98	88.08	-1,350.05	340.20	5,018.01	4,946.11	71.90	69.792		
11,700.00	7,062.19	7,017.48	7,054.07	132.35	29.97	88.03	-1,350.05	340.20	5,117.01	5,045.05	71.95	71.114		
11,800.00	7,061.87	7,016.84	7,053.43	135.10	29.97	87.98	-1,350.04	340.19	5,216.05	5,144.04	72.01	72.435		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-GYRO-NS													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
11,900.00	7,061.54	7,016.20	7,052.78	137.85	29.97	87.92	-1,350.03	340.19	5,315.12	5,243.06	72.07	73.754		
12,000.00	7,061.22	7,015.56	7,052.14	140.61	29.97	87.87	-1,350.03	340.19	5,414.23	5,342.11	72.12	75.071		
12,100.00	7,060.89	7,014.92	7,051.50	143.38	29.96	87.82	-1,350.02	340.19	5,513.37	5,441.19	72.18	76.386		
12,200.00	7,060.57	7,014.28	7,050.86	146.15	29.96	87.77	-1,350.01	340.19	5,612.54	5,540.31	72.23	77.700		
12,300.00	7,060.24	7,013.64	7,050.22	148.92	29.96	87.72	-1,350.00	340.18	5,711.74	5,639.45	72.29	79.011		
12,400.00	7,059.92	7,012.99	7,049.58	151.69	29.96	87.67	-1,350.00	340.18	5,810.97	5,738.63	72.35	80.321		
12,500.00	7,059.59	7,012.35	7,048.94	154.47	29.95	87.62	-1,349.99	340.18	5,910.23	5,837.82	72.40	81.629		
12,600.00	7,059.27	7,011.71	7,048.29	157.25	29.95	87.56	-1,349.98	340.18	6,009.51	5,937.04	72.46	82.935		
12,700.00	7,058.94	7,011.07	7,047.65	160.03	29.95	87.51	-1,349.98	340.17	6,108.81	6,036.29	72.52	84.238		
12,800.00	7,058.62	7,010.43	7,047.01	162.82	29.94	87.46	-1,349.97	340.17	6,208.13	6,135.56	72.58	85.540		
12,900.00	7,058.29	7,009.79	7,046.37	165.61	29.94	87.41	-1,349.96	340.17	6,307.48	6,234.84	72.63	86.839		
13,000.00	7,057.97	7,009.15	7,045.73	168.40	29.94	87.36	-1,349.95	340.17	6,406.84	6,334.15	72.69	88.136		
13,100.00	7,057.64	7,008.50	7,045.09	171.19	29.94	87.31	-1,349.95	340.17	6,506.23	6,433.48	72.75	89.430		
13,200.00	7,057.32	7,007.86	7,044.45	173.99	29.93	87.26	-1,349.94	340.16	6,605.63	6,532.82	72.81	90.723		
13,300.00	7,057.00	7,007.22	7,043.80	176.78	29.93	87.21	-1,349.93	340.16	6,705.05	6,632.18	72.87	92.013		
13,400.00	7,056.67	7,006.58	7,043.16	179.58	29.93	87.15	-1,349.93	340.16	6,804.49	6,731.56	72.93	93.300		
13,500.00	7,056.35	7,005.94	7,042.52	182.38	29.93	87.10	-1,349.92	340.16	6,903.95	6,830.96	72.99	94.585		
13,600.00	7,056.02	7,005.30	7,041.88	185.19	29.92	87.05	-1,349.91	340.16	7,003.42	6,930.36	73.05	95.867		
13,700.00	7,055.70	7,004.66	7,041.24	187.99	29.92	87.00	-1,349.90	340.15	7,102.90	7,029.79	73.11	97.147		
13,800.00	7,055.37	7,004.01	7,040.60	190.80	29.92	86.95	-1,349.90	340.15	7,202.40	7,129.22	73.18	98.425		
13,900.00	7,055.05	7,003.37	7,039.96	193.60	29.91	86.90	-1,349.89	340.15	7,301.91	7,228.67	73.24	99.699		
14,000.00	7,054.72	7,002.73	7,039.32	196.41	29.91	86.85	-1,349.88	340.15	7,401.44	7,328.14	73.30	100.971		
14,100.00	7,054.40	7,002.09	7,038.67	199.22	29.91	86.80	-1,349.88	340.15	7,500.98	7,427.61	73.37	102.240		
14,200.00	7,054.07	7,001.45	7,038.03	202.03	29.91	86.74	-1,349.87	340.14	7,600.53	7,527.10	73.43	103.507		
14,300.00	7,053.75	7,000.81	7,037.39	204.85	29.90	86.69	-1,349.86	340.14	7,700.09	7,626.60	73.49	104.771		
14,400.00	7,053.42	7,000.17	7,036.75	207.66	29.90	86.64	-1,349.85	340.14	7,799.66	7,726.10	73.56	106.032		
14,500.00	7,053.10	6,999.52	7,036.11	210.48	29.90	86.59	-1,349.85	340.14	7,899.25	7,825.62	73.63	107.290		
14,600.00	7,052.77	6,998.88	7,035.47	213.29	29.90	86.54	-1,349.84	340.14	7,998.84	7,925.15	73.69	108.545		
14,700.00	7,052.45	6,998.24	7,034.83	216.11	29.89	86.49	-1,349.83	340.13	8,098.45	8,024.69	73.76	109.797		
14,800.00	7,052.12	6,997.60	7,034.18	218.93	29.89	86.44	-1,349.83	340.13	8,198.06	8,124.23	73.83	111.046		
14,900.00	7,051.80	6,996.96	7,033.54	221.75	29.89	86.39	-1,349.82	340.13	8,297.68	8,223.79	73.89	112.293		
15,000.00	7,051.47	6,996.32	7,032.90	224.57	29.88	86.33	-1,349.81	340.13	8,397.31	8,323.35	73.96	113.536		
15,100.00	7,051.15	6,995.68	7,032.26	227.39	29.88	86.28	-1,349.81	340.13	8,496.95	8,422.92	74.03	114.777		
15,145.13	7,051.00	6,995.39	7,031.97	228.67	29.88	86.26	-1,349.80	340.12	8,541.92	8,467.86	74.06	115.335		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	69.00	3.28	3.28	172.36	-4,079.49	547.47	4,116.64				
100.00	100.00	30.38	99.38	3.28	3.28	172.36	-4,079.49	547.46	4,116.06	4,109.50	6.57	626.938	
200.00	200.00	126.06	195.06	3.34	3.30	172.36	-4,079.57	547.24	4,116.11	4,109.48	6.63	620.535	
300.00	299.98	216.80	285.79	3.44	3.36	-12.03	-4,079.82	546.98	4,114.65	4,107.85	6.80	605.377	
400.00	399.84	311.82	380.82	3.59	3.47	-12.07	-4,080.23	546.89	4,109.94	4,102.88	7.06	582.301	
500.00	499.45	413.88	482.87	3.79	3.63	-12.13	-4,080.67	546.93	4,101.84	4,094.42	7.42	552.561	
600.00	598.70	511.92	580.92	4.03	3.83	-12.21	-4,081.09	546.94	4,090.35	4,082.48	7.86	520.088	
700.00	697.47	614.05	683.05	4.31	4.08	-12.32	-4,081.53	546.69	4,075.45	4,067.06	8.39	485.959	
800.00	795.62	716.14	785.13	4.64	4.35	-12.45	-4,081.89	546.20	4,057.07	4,048.11	8.97	452.332	
900.00	893.06	807.04	876.03	5.00	4.61	-12.60	-4,082.31	545.51	4,035.43	4,025.86	9.57	421.660	
1,000.00	989.64	906.87	975.85	5.40	4.93	-12.78	-4,082.84	544.46	4,010.51	4,000.27	10.24	391.646	
1,100.00	1,085.27	984.85	1,053.82	5.83	5.18	-12.96	-4,083.45	543.39	3,982.52	3,971.64	10.88	365.967	
1,200.00	1,180.44	1,070.12	1,139.07	6.29	5.47	-13.03	-4,084.46	541.98	3,953.42	3,941.86	11.56	342.065	
1,300.00	1,275.61	1,161.27	1,230.20	6.76	5.79	-13.10	-4,085.72	540.36	3,924.51	3,912.23	12.28	319.642	
1,400.00	1,370.78	1,262.45	1,331.36	7.26	6.15	-13.17	-4,087.14	538.48	3,895.62	3,882.56	13.05	298.422	
1,500.00	1,465.95	1,365.18	1,434.05	7.76	6.53	-13.25	-4,088.39	536.32	3,866.51	3,852.66	13.85	279.085	
1,600.00	1,561.12	1,461.77	1,530.61	8.27	6.89	-13.32	-4,089.45	534.31	3,837.31	3,822.67	14.65	261.963	
1,700.00	1,656.29	1,552.56	1,621.38	8.80	7.23	-13.39	-4,090.48	532.51	3,808.16	3,792.73	15.43	246.726	
1,800.00	1,751.46	1,654.72	1,723.52	9.32	7.63	-13.47	-4,091.72	530.60	3,779.11	3,762.84	16.27	232.253	
1,900.00	1,846.63	1,751.47	1,820.24	9.86	8.00	-13.55	-4,092.59	528.78	3,749.77	3,732.67	17.10	219.305	
2,000.00	1,941.80	1,838.53	1,907.29	10.40	8.35	-13.63	-4,093.55	527.36	3,720.65	3,702.75	17.90	207.859	
2,100.00	2,036.96	1,929.60	1,998.34	10.94	8.71	-13.71	-4,094.68	525.85	3,691.67	3,672.95	18.72	197.179	
2,200.00	2,132.13	2,018.51	2,087.23	11.49	9.06	-13.79	-4,095.95	524.24	3,662.85	3,643.31	19.54	187.413	
2,300.00	2,227.30	2,106.27	2,174.96	12.04	9.41	-13.86	-4,097.40	522.58	3,634.24	3,613.88	20.37	178.428	
2,400.00	2,322.47	2,205.54	2,274.19	12.59	9.81	-13.95	-4,099.12	520.65	3,605.71	3,584.47	21.24	169.790	
2,500.00	2,417.64	2,344.18	2,412.80	13.15	10.38	-14.07	-4,100.54	518.19	3,576.54	3,554.30	22.24	160.824	
2,600.00	2,512.81	2,494.91	2,563.52	13.70	10.99	-14.23	-4,099.99	515.95	3,546.14	3,522.86	23.28	152.353	
2,700.00	2,607.98	2,592.97	2,661.56	14.26	11.39	-14.34	-4,098.73	514.49	3,514.86	3,490.72	24.14	145.580	
2,800.00	2,703.15	2,688.71	2,757.28	14.82	11.78	-14.44	-4,097.48	512.96	3,483.56	3,458.55	25.01	139.300	
2,900.00	2,798.32	2,779.64	2,848.18	15.38	12.16	-14.54	-4,096.35	511.39	3,452.31	3,426.45	25.86	133.500	
3,000.00	2,893.49	2,873.09	2,941.61	15.95	12.54	-14.64	-4,095.30	509.69	3,421.15	3,394.43	26.72	128.024	
3,100.00	2,988.66	2,963.73	3,032.24	16.51	12.92	-14.74	-4,094.33	508.00	3,390.06	3,362.48	27.58	122.917	
3,200.00	3,083.83	3,059.83	3,128.32	17.07	13.32	-14.84	-4,093.42	506.12	3,359.07	3,330.61	28.46	118.045	
3,300.00	3,179.00	3,160.72	3,229.18	17.64	13.74	-14.95	-4,092.32	504.08	3,327.95	3,298.60	29.35	113.400	
3,400.00	3,274.17	3,251.23	3,319.66	18.21	14.12	-15.05	-4,091.24	502.33	3,296.76	3,266.55	30.21	109.126	
3,500.00	3,369.34	3,336.16	3,404.57	18.77	14.47	-15.15	-4,090.48	500.63	3,265.85	3,234.79	31.06	105.144	
3,600.00	3,464.51	3,423.57	3,491.95	19.34	14.84	-15.25	-4,090.00	498.63	3,235.22	3,203.29	31.92	101.352	
3,700.00	3,559.68	3,513.90	3,582.26	19.91	15.21	-15.34	-4,089.70	496.27	3,204.75	3,171.96	32.79	97.734	
3,800.00	3,654.84	3,603.33	3,671.66	20.48	15.59	-15.43	-4,089.57	493.94	3,174.46	3,140.80	33.66	94.309	
3,900.00	3,750.01	3,697.99	3,766.30	21.05	15.99	-15.54	-4,089.44	491.88	3,144.27	3,109.73	34.54	91.020	
4,000.00	3,845.18	3,787.34	3,855.62	21.62	16.36	-15.65	-4,089.38	490.09	3,114.19	3,078.77	35.42	87.928	
4,100.00	3,940.35	3,883.56	3,951.82	22.19	16.77	-15.77	-4,089.41	488.14	3,084.20	3,047.89	36.31	84.944	
4,200.00	4,035.52	3,980.40	4,048.65	22.76	17.17	-15.90	-4,089.33	486.49	3,054.17	3,016.97	37.20	82.096	
4,300.00	4,130.69	4,075.42	4,143.66	23.33	17.57	-16.03	-4,089.19	485.05	3,024.13	2,986.04	38.09	79.388	
4,400.00	4,225.86	4,173.80	4,242.04	23.91	17.99	-16.18	-4,088.84	484.39	2,994.07	2,955.08	38.99	76.787	
4,500.00	4,321.03	4,279.71	4,347.94	24.48	18.43	-16.38	-4,087.97	484.97	2,963.82	2,923.91	39.91	74.264	
4,600.00	4,416.20	4,403.96	4,472.17	25.05	18.95	-16.63	-4,086.06	485.89	2,932.97	2,892.11	40.86	71.775	
4,700.00	4,511.37	4,494.12	4,562.31	25.62	19.32	-16.82	-4,084.25	486.60	2,901.72	2,859.97	41.75	69.507	
4,800.00	4,606.54	4,572.01	4,640.19	26.20	19.65	-16.98	-4,082.94	487.22	2,870.81	2,828.20	42.61	67.376	
4,900.00	4,701.71	4,645.99	4,714.16	26.77	19.96	-17.13	-4,082.23	487.59	2,840.54	2,797.08	43.46	65.354	
5,000.00	4,796.88	4,724.31	4,792.48	27.34	20.29	-17.29	-4,082.12	487.96	2,811.03	2,766.70	44.33	63.412	
5,100.00	4,892.05	4,819.93	4,888.10	27.92	20.69	-17.49	-4,082.15	488.48	2,781.74	2,736.51	45.23	61.500	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,987.22	4,915.23	4,983.40	28.49	21.09	-17.69	-4,082.22	488.76	2,752.48	2,706.35	46.13	59.663	
5,300.00	5,082.39	5,009.68	5,077.85	29.07	21.48	-17.89	-4,082.31	489.06	2,723.27	2,676.23	47.04	57.898	
5,400.00	5,177.56	5,107.88	5,176.05	29.64	21.89	-18.10	-4,082.30	489.62	2,694.04	2,646.10	47.95	56.190	
5,500.00	5,272.72	5,212.96	5,281.13	30.21	22.33	-18.35	-4,082.03	490.33	2,664.65	2,615.78	48.87	54.529	
5,600.00	5,367.89	5,330.42	5,398.57	30.79	22.83	-18.63	-4,080.85	491.32	2,634.63	2,584.82	49.81	52.898	
5,700.00	5,463.06	5,462.56	5,530.65	31.36	23.39	-19.01	-4,077.98	493.95	2,603.93	2,553.17	50.76	51.302	
5,800.00	5,558.23	5,557.15	5,625.13	31.94	23.79	-19.32	-4,074.37	497.00	2,571.97	2,520.30	51.67	49.781	
5,900.00	5,653.40	5,630.38	5,698.30	32.51	24.10	-19.55	-4,072.25	498.94	2,540.77	2,488.22	52.55	48.346	
6,000.00	5,748.57	5,705.39	5,773.28	33.09	24.42	-19.78	-4,070.84	500.34	2,510.39	2,456.95	53.44	46.973	
6,100.00	5,843.74	5,787.86	5,855.75	33.67	24.77	-20.01	-4,069.99	501.18	2,480.65	2,426.31	54.34	45.649	
6,200.00	5,938.91	5,878.04	5,945.91	34.24	25.15	-20.25	-4,069.57	501.53	2,451.31	2,396.06	55.25	44.368	
6,300.00	6,034.08	5,981.41	6,049.29	34.82	25.58	-20.53	-4,069.09	501.69	2,421.98	2,365.81	56.17	43.117	
6,400.00	6,129.25	6,075.31	6,143.18	35.39	25.98	-20.79	-4,068.48	501.59	2,392.45	2,335.37	57.09	41.910	
6,500.00	6,224.42	6,175.57	6,243.45	35.97	26.41	-21.06	-4,067.86	501.40	2,362.98	2,304.98	58.01	40.737	
6,600.00	6,319.59	6,277.28	6,345.14	36.54	26.84	-21.35	-4,066.92	501.16	2,333.26	2,274.33	58.93	39.596	
6,700.00	6,414.76	6,368.61	6,436.47	37.12	27.23	-21.62	-4,065.97	500.91	2,303.48	2,243.63	59.84	38.492	
6,800.00	6,509.91	6,461.12	6,528.98	37.70	27.62	-21.87	-4,065.22	500.66	2,274.10	2,213.34	60.76	37.426	
6,900.00	6,603.99	6,554.74	6,622.60	38.26	28.02	-22.15	-4,064.58	500.09	2,248.39	2,186.68	61.71	36.436	
7,000.00	6,694.76	6,647.97	6,715.82	38.78	28.41	-22.45	-4,063.81	499.86	2,228.49	2,165.83	62.66	35.564	
7,100.00	6,779.96	6,737.91	6,805.75	39.24	28.80	-22.75	-4,062.73	500.11	2,215.46	2,151.85	63.61	34.830	
7,200.00	6,857.50	6,818.57	6,886.41	39.65	29.14	-23.01	-4,061.69	499.98	2,210.51	2,145.96	64.55	34.245	
7,205.03	6,861.17	6,822.16	6,890.00	39.67	29.15	-91.09	-4,061.65	499.97	2,210.50	2,145.90	64.60	34.219 CC, ES	
7,300.00	6,925.48	6,885.06	6,952.89	40.02	29.42	-95.24	-4,060.86	499.79	2,214.88	2,149.37	65.51	33.811	
7,400.00	6,982.21	6,938.47	7,006.30	40.33	29.65	-97.54	-4,060.18	499.77	2,229.41	2,162.90	66.51	33.520	
7,500.00	7,026.31	6,978.38	7,046.21	40.63	29.82	-97.94	-4,059.60	500.05	2,254.46	2,186.89	67.57	33.364	
7,600.00	7,056.68	7,004.29	7,072.11	40.91	29.93	-96.47	-4,059.20	500.36	2,289.79	2,221.11	68.68	33.339 SF	
7,700.00	7,072.58	7,015.89	7,083.71	41.25	29.98	-93.07	-4,059.03	500.52	2,334.60	2,264.79	69.81	33.441	
7,800.00	7,074.86	7,016.59	7,084.41	41.69	29.98	-90.15	-4,059.02	500.53	2,387.18	2,316.26	70.92	33.659	
7,900.00	7,074.54	7,015.21	7,083.03	42.34	29.97	-90.11	-4,059.04	500.51	2,443.45	2,371.40	72.05	33.912	
8,000.00	7,074.21	7,013.84	7,081.66	43.27	29.97	-90.07	-4,059.06	500.49	2,502.46	2,429.26	73.20	34.185	
8,100.00	7,073.89	7,012.48	7,080.30	44.47	29.96	-90.03	-4,059.08	500.47	2,564.01	2,489.65	74.36	34.483	
8,200.00	7,073.57	7,011.12	7,078.94	45.91	29.96	-89.99	-4,059.10	500.45	2,627.92	2,552.43	75.50	34.809	
8,300.00	7,073.24	7,009.77	7,077.59	47.53	29.95	-89.96	-4,059.12	500.43	2,694.03	2,617.42	76.61	35.164	
8,400.00	7,072.92	7,008.43	7,076.25	49.31	29.95	-89.92	-4,059.14	500.41	2,762.18	2,684.48	77.70	35.550	
8,500.00	7,072.59	7,007.09	7,074.91	51.20	29.94	-89.88	-4,059.16	500.39	2,832.22	2,753.47	78.75	35.964	
8,600.00	7,072.27	7,005.76	7,073.58	53.19	29.93	-89.84	-4,059.18	500.38	2,904.01	2,824.25	79.76	36.408	
8,700.00	7,071.94	7,004.44	7,072.26	55.27	29.93	-89.80	-4,059.20	500.36	2,977.43	2,896.69	80.73	36.879	
8,800.00	7,071.62	7,003.11	7,067.83	57.43	29.91	-89.68	-4,059.27	500.30	3,052.36	2,970.70	81.66	37.380	
8,900.00	7,071.29	7,001.77	7,067.83	59.64	29.91	-89.68	-4,059.27	500.30	3,128.69	3,046.14	82.55	37.901	
9,000.00	7,070.97	7,000.44	7,067.83	61.92	29.91	-89.68	-4,059.27	500.30	3,206.32	3,122.92	83.40	38.445	
9,100.00	7,070.64	7,000.11	7,067.83	64.24	29.91	-89.68	-4,059.27	500.30	3,285.16	3,200.95	84.21	39.011	
9,200.00	7,070.32	7,000.11	7,067.83	66.61	29.91	-89.68	-4,059.27	500.30	3,365.13	3,280.14	84.98	39.597	
9,300.00	7,069.99	7,000.11	7,067.83	69.01	29.91	-89.68	-4,059.27	500.30	3,446.14	3,360.42	85.72	40.203	
9,400.00	7,069.67	7,000.11	7,067.83	71.45	29.91	-89.68	-4,059.27	500.30	3,528.12	3,441.71	86.42	40.826	
9,500.00	7,069.34	7,000.11	7,067.83	73.92	29.91	-89.68	-4,059.27	500.30	3,611.02	3,523.93	87.08	41.466	
9,600.00	7,069.02	7,000.11	7,067.83	76.42	29.91	-89.68	-4,059.27	500.30	3,694.76	3,607.04	87.72	42.121	
9,700.00	7,068.69	7,000.11	7,067.83	78.95	29.91	-89.68	-4,059.27	500.30	3,779.29	3,690.97	88.32	42.791	
9,800.00	7,068.37	6,999.24	7,059.06	81.49	29.87	-89.42	-4,059.41	500.19	3,864.55	3,775.68	88.87	43.486	
9,900.00	7,068.04	6,999.20	7,058.02	84.06	29.87	-89.39	-4,059.42	500.17	3,950.50	3,861.09	89.41	44.183	
10,000.00	7,067.72	6,998.17	7,056.99	86.65	29.86	-89.37	-4,059.44	500.16	4,037.11	3,947.18	89.93	44.892	
10,100.00	7,067.39	6,997.17	7,055.99	89.25	29.86	-89.34	-4,059.46	500.15	4,124.32	4,033.89	90.42	45.611	
10,200.00	7,067.07	6,996.19	7,055.01	91.87	29.86	-89.31	-4,059.47	500.14	4,212.10	4,121.20	90.89	46.340	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	6,986.23	7,054.05	94.50	29.85	-89.28	-4,059.48	500.13	4,300.41	4,209.06	91.34	47.079	
10,400.00	7,066.42	6,985.29	7,053.11	97.14	29.85	-89.25	-4,059.50	500.12	4,389.22	4,297.45	91.77	47.827	
10,500.00	7,066.09	6,984.37	7,052.19	99.80	29.84	-89.23	-4,059.51	500.11	4,478.50	4,386.32	92.18	48.582	
10,600.00	7,065.77	6,983.47	7,051.29	102.47	29.84	-89.20	-4,059.53	500.10	4,568.23	4,475.66	92.58	49.345	
10,700.00	7,065.44	6,982.58	7,050.41	105.15	29.84	-89.18	-4,059.54	500.09	4,658.38	4,565.43	92.95	50.116	
10,800.00	7,065.12	6,981.71	7,049.54	107.83	29.83	-89.15	-4,059.55	500.08	4,748.92	4,655.61	93.31	50.892	
10,900.00	7,064.79	6,980.86	7,048.69	110.53	29.83	-89.13	-4,059.57	500.07	4,839.83	4,746.17	93.66	51.675	
11,000.00	7,064.47	6,980.03	7,047.85	113.23	29.83	-89.10	-4,059.58	500.06	4,931.09	4,837.10	93.99	52.464	
11,100.00	7,064.14	6,979.21	7,047.03	115.95	29.82	-89.08	-4,059.59	500.05	5,022.69	4,928.38	94.31	53.259	
11,200.00	7,063.82	6,978.41	7,046.23	118.66	29.82	-89.06	-4,059.60	500.05	5,114.60	5,019.99	94.61	54.058	
11,300.00	7,063.49	6,977.62	7,045.44	121.39	29.81	-89.03	-4,059.62	500.04	5,206.81	5,111.90	94.91	54.862	
11,400.00	7,063.17	6,976.85	7,044.67	124.12	29.81	-89.01	-4,059.63	500.03	5,299.30	5,204.11	95.19	55.670	
11,500.00	7,062.84	6,976.09	7,043.91	126.86	29.81	-88.99	-4,059.64	500.02	5,392.06	5,296.60	95.46	56.483	
11,600.00	7,062.52	6,975.34	7,043.17	129.60	29.81	-88.97	-4,059.65	500.02	5,485.08	5,389.35	95.73	57.299	
11,700.00	7,062.19	6,974.61	7,042.43	132.35	29.80	-88.95	-4,059.66	500.01	5,578.33	5,482.35	95.98	58.119	
11,800.00	7,061.87	6,973.89	7,041.71	135.10	29.80	-88.93	-4,059.67	500.00	5,671.82	5,575.59	96.23	58.943	
11,900.00	7,061.54	6,973.18	7,041.01	137.85	29.80	-88.91	-4,059.68	500.00	5,765.52	5,669.06	96.46	59.769	
12,000.00	7,061.22	6,972.49	7,040.31	140.61	29.79	-88.89	-4,059.69	499.99	5,859.43	5,762.74	96.69	60.599	
12,100.00	7,060.89	6,971.81	7,039.63	143.38	29.79	-88.87	-4,059.70	499.98	5,953.54	5,856.63	96.91	61.431	
12,200.00	7,060.57	6,971.14	7,038.96	146.15	29.79	-88.85	-4,059.71	499.98	6,047.84	5,950.71	97.13	62.266	
12,300.00	7,060.24	6,970.48	7,038.30	148.92	29.78	-88.83	-4,059.72	499.97	6,142.32	6,044.98	97.34	63.104	
12,400.00	7,059.92	6,969.83	7,037.66	151.69	29.78	-88.81	-4,059.73	499.97	6,236.97	6,139.43	97.54	63.943	
12,500.00	7,059.59	6,969.19	7,037.02	154.47	29.78	-88.79	-4,059.74	499.96	6,331.78	6,234.05	97.74	64.785	
12,600.00	7,059.27	6,968.57	7,036.39	157.25	29.78	-88.77	-4,059.75	499.96	6,426.75	6,328.83	97.93	65.629	
12,700.00	7,058.94	6,967.95	7,035.78	160.03	29.77	-88.76	-4,059.76	499.95	6,521.88	6,423.77	98.11	66.474	
12,800.00	7,058.62	6,967.35	7,035.17	162.82	29.77	-88.74	-4,059.77	499.95	6,617.14	6,518.85	98.29	67.322	
12,900.00	7,058.29	6,966.75	7,034.58	165.61	29.77	-88.72	-4,059.78	499.94	6,712.55	6,614.08	98.47	68.171	
13,000.00	7,057.97	6,966.17	7,033.99	168.40	29.77	-88.71	-4,059.79	499.94	6,808.08	6,709.44	98.64	69.021	
13,100.00	7,057.64	6,965.59	7,033.41	171.19	29.76	-88.69	-4,059.79	499.93	6,903.74	6,804.94	98.80	69.873	
13,200.00	7,057.32	6,965.02	7,032.85	173.99	29.76	-88.67	-4,059.80	499.93	6,999.53	6,900.56	98.97	70.726	
13,300.00	7,057.00	6,964.46	7,032.29	176.78	29.76	-88.66	-4,059.81	499.92	7,095.42	6,996.30	99.13	71.580	
13,400.00	7,056.67	6,963.91	7,031.74	179.58	29.76	-88.64	-4,059.82	499.92	7,191.44	7,092.15	99.28	72.435	
13,500.00	7,056.35	6,963.37	7,031.20	182.38	29.75	-88.63	-4,059.83	499.91	7,287.55	7,188.12	99.43	73.291	
13,600.00	7,056.02	6,962.84	7,030.66	185.19	29.75	-88.61	-4,059.83	499.91	7,383.77	7,284.19	99.58	74.149	
13,700.00	7,055.70	6,962.31	7,030.14	187.99	29.75	-88.60	-4,059.84	499.91	7,480.09	7,380.37	99.73	75.006	
13,800.00	7,055.37	6,961.80	7,029.62	190.80	29.75	-88.58	-4,059.85	499.90	7,576.51	7,476.64	99.87	75.865	
13,900.00	7,055.05	6,961.29	7,029.11	193.60	29.75	-88.57	-4,059.86	499.90	7,673.02	7,573.01	100.01	76.725	
14,000.00	7,054.72	6,960.79	7,028.61	196.41	29.74	-88.55	-4,059.86	499.89	7,769.61	7,669.47	100.14	77.584	
14,100.00	7,054.40	6,960.29	7,028.12	199.22	29.74	-88.54	-4,059.87	499.89	7,866.29	7,766.02	100.28	78.445	
14,200.00	7,054.07	6,959.80	7,027.63	202.03	29.74	-88.52	-4,059.88	499.89	7,963.06	7,862.65	100.41	79.306	
14,300.00	7,053.75	6,959.32	7,027.15	204.85	29.74	-88.51	-4,059.88	499.88	8,059.90	7,959.36	100.54	80.167	
14,400.00	7,053.42	6,958.85	7,026.68	207.66	29.74	-88.50	-4,059.89	499.88	8,156.81	8,056.15	100.67	81.029	
14,500.00	7,053.10	6,958.39	7,026.21	210.48	29.73	-88.48	-4,059.90	499.88	8,253.81	8,153.02	100.79	81.891	
14,600.00	7,052.77	6,957.93	7,025.75	213.29	29.73	-88.47	-4,059.90	499.87	8,350.87	8,249.95	100.91	82.753	
14,700.00	7,052.45	6,957.47	7,025.30	216.11	29.73	-88.46	-4,059.91	499.87	8,448.00	8,346.96	101.03	83.616	
14,800.00	7,052.12	6,957.03	7,024.85	218.93	29.73	-88.44	-4,059.92	499.87	8,545.19	8,444.04	101.15	84.478	
14,900.00	7,051.80	6,956.59	7,024.41	221.75	29.73	-88.43	-4,059.92	499.87	8,642.45	8,541.18	101.27	85.341	
15,000.00	7,051.47	6,956.15	7,023.98	224.57	29.72	-88.42	-4,059.93	499.86	8,739.78	8,638.39	101.39	86.204	
15,100.00	7,051.15	6,955.72	7,023.55	227.39	29.72	-88.41	-4,059.94	499.86	8,837.16	8,735.66	101.50	87.066	
15,145.13	7,051.00	6,955.53	7,023.36	228.67	29.72	-88.40	-4,059.94	499.86	8,881.12	8,779.57	101.55	87.456	





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	21.26	-1.74	3.28	3.28	172.36	-4,079.50	547.47	4,116.07					
100.00	100.00	114.48	91.48	3.28	3.29	172.36	-4,079.64	547.36	4,116.20	4,109.62	6.58	625.910		
200.00	200.00	213.53	190.53	3.34	3.35	172.36	-4,079.88	547.25	4,116.43	4,109.74	6.69	615.212		
300.00	299.98	319.50	296.50	3.44	3.48	-12.04	-4,080.06	547.04	4,114.87	4,107.95	6.92	594.879		
400.00	399.84	419.65	396.64	3.59	3.64	-12.07	-4,080.20	546.70	4,109.84	4,102.60	7.23	568.155		
500.00	499.45	521.45	498.45	3.79	3.85	-12.12	-4,080.28	546.39	4,101.35	4,093.71	7.64	536.633		
600.00	598.70	619.10	596.10	4.03	4.09	-12.21	-4,080.38	546.02	4,089.49	4,081.37	8.12	503.708		
700.00	697.47	719.54	696.54	4.31	4.36	-12.31	-4,080.45	545.73	4,074.22	4,065.56	8.67	470.119		
800.00	795.62	814.37	791.36	4.64	4.64	-12.45	-4,080.55	545.53	4,055.64	4,046.39	9.25	438.348		
900.00	893.06	913.22	890.21	5.00	4.95	-12.61	-4,080.67	545.22	4,033.74	4,023.84	9.90	407.632		
1,000.00	989.64	1,008.12	985.12	5.40	5.26	-12.80	-4,080.81	544.94	4,008.54	3,997.98	10.57	379.411		
1,100.00	1,085.27	1,107.58	1,084.57	5.83	5.60	-13.02	-4,080.91	544.67	3,980.06	3,968.77	11.29	352.561		
1,200.00	1,180.44	1,198.23	1,175.23	6.29	5.92	-13.11	-4,081.03	544.34	3,950.15	3,938.16	11.99	329.413		
1,300.00	1,275.61	1,285.99	1,262.98	6.76	6.23	-13.19	-4,081.29	543.97	3,920.40	3,907.69	12.71	308.504		
1,400.00	1,370.78	1,381.78	1,358.77	7.26	6.59	-13.29	-4,081.67	543.52	3,890.75	3,877.28	13.47	288.808		
1,500.00	1,465.95	1,483.21	1,460.20	7.76	6.97	-13.39	-4,082.00	542.93	3,861.03	3,846.76	14.27	270.525		
1,600.00	1,561.12	1,578.29	1,555.28	8.27	7.33	-13.49	-4,082.23	542.29	3,831.22	3,816.15	15.06	254.318		
1,700.00	1,656.29	1,672.81	1,649.79	8.80	7.70	-13.58	-4,082.48	541.68	3,801.44	3,785.58	15.87	239.581		
1,800.00	1,751.46	1,765.18	1,742.16	9.32	8.06	-13.68	-4,082.75	541.08	3,771.72	3,755.04	16.67	226.228		
1,900.00	1,846.63	1,856.05	1,833.03	9.86	8.41	-13.77	-4,083.14	540.38	3,742.10	3,724.62	17.48	214.064		
2,000.00	1,941.80	1,948.75	1,925.72	10.40	8.78	-13.87	-4,083.66	539.53	3,712.60	3,694.29	18.30	202.824		
2,100.00	2,036.96	2,047.92	2,024.88	10.94	9.18	-13.97	-4,084.25	538.36	3,683.11	3,663.95	19.16	192.258		
2,200.00	2,132.13	2,149.85	2,126.81	11.49	9.59	-14.07	-4,084.68	537.12	3,653.45	3,633.42	20.02	182.445		
2,300.00	2,227.30	2,253.17	2,230.11	12.04	10.01	-14.17	-4,084.96	535.71	3,623.64	3,602.74	20.90	173.365		
2,400.00	2,322.47	2,357.82	2,334.76	12.59	10.43	-14.28	-4,084.95	534.36	3,593.58	3,571.79	21.79	164.942		
2,500.00	2,417.64	2,455.29	2,432.22	13.15	10.83	-14.39	-4,084.74	533.19	3,563.36	3,540.71	22.65	157.313		
2,600.00	2,512.81	2,551.29	2,528.21	13.70	11.22	-14.50	-4,084.49	532.26	3,533.15	3,509.63	23.51	150.255		
2,700.00	2,607.98	2,647.77	2,624.69	14.26	11.62	-14.61	-4,084.17	531.44	3,502.89	3,478.51	24.38	143.667		
2,800.00	2,703.15	2,739.95	2,716.87	14.82	12.00	-14.72	-4,083.88	530.64	3,472.66	3,447.42	25.24	137.591		
2,900.00	2,798.32	2,832.23	2,809.14	15.38	12.38	-14.84	-4,083.71	529.89	3,442.57	3,416.47	26.10	131.903		
3,000.00	2,893.49	2,926.19	2,903.10	15.95	12.77	-14.96	-4,083.49	529.22	3,412.47	3,385.50	26.97	126.540		
3,100.00	2,988.66	3,009.16	2,986.07	16.51	13.11	-15.07	-4,083.49	528.78	3,382.63	3,354.82	27.80	121.658		
3,200.00	3,083.83	3,098.52	3,075.43	17.07	13.48	-15.19	-4,083.71	528.35	3,353.05	3,324.38	28.66	116.978		
3,300.00	3,179.00	3,197.45	3,174.35	17.64	13.89	-15.32	-4,084.00	527.83	3,323.52	3,293.96	29.55	112.453		
3,400.00	3,274.17	3,283.77	3,260.67	18.21	14.25	-15.44	-4,084.33	527.34	3,294.07	3,263.66	30.41	108.323		
3,500.00	3,369.34	3,372.09	3,348.99	18.77	14.62	-15.56	-4,084.90	526.79	3,264.88	3,233.61	31.27	104.400		
3,600.00	3,464.51	3,497.53	3,474.43	19.34	15.15	-15.73	-4,085.41	526.07	3,235.53	3,203.29	32.24	100.344		
3,700.00	3,559.68	3,613.18	3,590.08	19.91	15.63	-15.91	-4,084.70	525.86	3,205.28	3,172.10	33.19	96.588		
3,800.00	3,654.84	3,715.75	3,692.64	20.48	16.06	-16.08	-4,083.64	525.66	3,174.65	3,140.56	34.09	93.126		
3,900.00	3,750.01	3,815.72	3,792.60	21.05	16.47	-16.24	-4,082.34	525.46	3,143.80	3,108.81	34.99	89.852		
4,000.00	3,845.18	3,901.48	3,878.35	21.62	16.83	-16.38	-4,081.33	525.22	3,113.06	3,077.21	35.85	86.830		
4,100.00	3,940.35	3,990.36	3,967.23	22.19	17.20	-16.53	-4,080.53	524.87	3,082.57	3,045.85	36.73	83.934		
4,200.00	4,035.52	4,081.17	4,058.03	22.76	17.58	-16.68	-4,079.88	524.41	3,052.27	3,014.66	37.61	81.164		
4,300.00	4,130.69	4,164.57	4,141.43	23.33	17.94	-16.82	-4,079.49	523.90	3,022.20	2,983.73	38.47	78.559		
4,400.00	4,225.86	4,255.16	4,232.02	23.91	18.32	-16.97	-4,079.41	523.36	2,992.50	2,953.14	39.35	76.041		
4,500.00	4,321.03	4,349.11	4,325.97	24.48	18.71	-17.13	-4,079.31	522.84	2,962.82	2,922.57	40.25	73.617		
4,600.00	4,416.20	4,442.41	4,419.27	25.05	19.11	-17.29	-4,079.30	522.38	2,933.25	2,892.12	41.14	71.302		
4,700.00	4,511.37	4,539.12	4,515.98	25.62	19.52	-17.47	-4,079.27	521.96	2,903.71	2,861.67	42.04	69.071		
4,800.00	4,606.54	4,633.50	4,610.36	26.20	19.92	-17.64	-4,079.19	521.50	2,874.13	2,831.20	42.94	66.939		
4,900.00	4,701.71	4,722.28	4,699.14	26.77	20.29	-17.80	-4,079.27	521.04	2,844.73	2,800.91	43.82	64.914		
5,000.00	4,796.88	4,810.27	4,787.12	27.34	20.66	-17.97	-4,079.51	520.90	2,815.60	2,770.89	44.71	62.975		
5,100.00	4,892.05	4,906.12	4,882.98	27.92	21.07	-18.17	-4,079.83	520.94	2,786.60	2,740.99	45.61	61.092		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,001.31	4,978.16	28.49	21.47	-18.36	-4,080.15	520.96	2,757.62	2,711.10	46.52	59.282		
5,300.00	5,082.39	5,093.93	5,070.78	29.07	21.86	-18.56	-4,080.50	520.99	2,728.72	2,681.30	47.42	57.547		
5,400.00	5,177.56	5,187.71	5,164.56	29.64	22.25	-18.76	-4,080.92	521.07	2,699.93	2,651.61	48.32	55.875		
5,500.00	5,272.72	5,286.49	5,263.35	30.21	22.67	-18.98	-4,081.35	521.10	2,671.14	2,621.90	49.23	54.253		
5,600.00	5,367.89	5,382.73	5,359.58	30.79	23.08	-19.19	-4,081.69	521.00	2,642.29	2,592.14	50.14	52.694		
5,700.00	5,463.06	5,475.40	5,452.25	31.36	23.47	-19.40	-4,082.04	520.95	2,613.50	2,562.45	51.05	51.195		
5,800.00	5,558.23	5,597.00	5,573.85	31.94	23.98	-19.69	-4,082.05	521.05	2,584.46	2,532.46	52.00	49.704		
5,900.00	5,653.40	5,694.83	5,671.67	32.51	24.39	-19.94	-4,081.30	521.32	2,554.77	2,501.86	52.91	48.284		
6,000.00	5,748.57	5,777.94	5,754.78	33.09	24.75	-20.15	-4,080.85	521.41	2,525.29	2,471.48	53.81	46.932		
6,100.00	5,843.74	5,866.24	5,843.08	33.67	25.12	-20.38	-4,080.80	521.34	2,496.24	2,441.53	54.71	45.625		
6,200.00	5,938.91	5,962.00	5,938.85	34.24	25.53	-20.62	-4,080.90	521.17	2,467.37	2,411.74	55.63	44.356		
6,300.00	6,034.08	6,056.90	6,033.75	34.82	25.93	-20.86	-4,080.98	520.77	2,438.46	2,381.92	56.54	43.127		
6,400.00	6,129.25	6,151.32	6,128.16	35.39	26.33	-21.11	-4,081.16	520.31	2,409.66	2,352.20	57.46	41.938		
6,500.00	6,224.42	6,253.76	6,230.60	35.97	26.77	-21.38	-4,081.29	519.68	2,380.83	2,322.44	58.38	40.781		
6,600.00	6,319.59	6,358.61	6,335.44	36.54	27.21	-21.65	-4,081.01	518.79	2,351.59	2,292.29	59.30	39.653		
6,700.00	6,414.76	6,455.50	6,432.33	37.12	27.63	-21.92	-4,080.54	517.78	2,322.17	2,261.94	60.22	38.559		
6,800.00	6,509.91	6,554.39	6,531.21	37.70	28.05	-30.17	-4,080.03	516.76	2,292.92	2,231.78	61.15	37.499		
6,900.00	6,603.99	6,651.68	6,628.49	38.26	28.46	-55.85	-4,079.35	515.47	2,267.10	2,205.01	62.09	36.513		
7,000.00	6,694.76	6,742.17	6,718.97	38.78	28.85	-72.89	-4,078.75	514.18	2,247.17	2,184.12	63.04	35.645		
7,100.00	6,779.96	6,832.07	6,808.86	39.24	29.23	-83.84	-4,078.23	512.53	2,234.25	2,170.26	63.98	34.918		
7,200.00	6,857.50	6,920.51	6,897.26	39.65	29.61	-91.07	-4,077.61	510.25	2,229.22	2,164.30	64.92	34.337		
7,207.67	6,863.08	6,926.59	6,903.34	39.68	29.63	-91.50	-4,077.56	510.07	2,229.20	2,164.20	65.00	34.298 CC, ES		
7,300.00	6,925.48	6,995.00	6,971.71	40.02	29.92	-95.63	-4,076.95	508.06	2,233.23	2,167.36	65.88	33.900		
7,400.00	6,982.21	7,061.13	7,037.81	40.33	30.21	-98.22	-4,076.28	505.88	2,247.14	2,180.27	66.87	33.602		
7,500.00	7,026.31	7,114.71	7,091.34	40.63	30.43	-98.98	-4,075.70	503.81	2,271.34	2,203.41	67.93	33.435		
7,600.00	7,056.68	7,146.93	7,123.54	40.91	30.57	-97.77	-4,075.35	502.53	2,305.86	2,236.80	69.05	33.392 SF		
7,700.00	7,072.58	7,166.68	7,143.27	41.25	30.66	-94.70	-4,075.14	501.74	2,350.01	2,279.82	70.20	33.477		
7,800.00	7,074.86	7,172.94	7,149.52	41.69	30.68	-92.00	-4,075.07	501.49	2,402.23	2,330.91	71.32	33.681		
7,900.00	7,074.54	7,176.59	7,153.17	42.34	30.70	-92.11	-4,075.03	501.35	2,458.20	2,385.73	72.47	33.919		
8,000.00	7,074.21	7,180.25	7,156.83	43.27	30.71	-92.21	-4,074.99	501.20	2,516.90	2,443.26	73.64	34.177		
8,100.00	7,073.89	7,183.91	7,160.48	44.47	30.73	-92.32	-4,074.95	501.06	2,578.14	2,503.32	74.82	34.458		
8,200.00	7,073.57	7,187.57	7,164.14	45.91	30.75	-92.42	-4,074.91	500.91	2,641.73	2,565.75	75.99	34.766		
8,300.00	7,073.24	7,191.22	7,167.79	47.53	30.76	-92.52	-4,074.87	500.76	2,707.53	2,630.40	77.13	35.103		
8,400.00	7,072.92	7,194.88	7,171.45	49.31	30.78	-92.63	-4,074.83	500.62	2,775.36	2,697.11	78.25	35.470		
8,500.00	7,072.59	7,198.54	7,175.10	51.20	30.79	-92.73	-4,074.79	500.47	2,845.08	2,765.76	79.33	35.865		
8,600.00	7,072.27	7,202.20	7,178.76	53.19	30.81	-92.84	-4,074.75	500.33	2,916.57	2,836.20	80.37	36.289		
8,700.00	7,071.94	7,205.85	7,182.41	55.27	30.82	-92.94	-4,074.71	500.18	2,989.68	2,908.31	81.38	36.739		
8,800.00	7,071.62	7,209.51	7,186.07	57.43	30.84	-93.04	-4,074.67	500.03	3,064.31	2,981.97	82.34	37.216		
8,900.00	7,071.29	7,213.17	7,189.72	59.64	30.86	-93.15	-4,074.63	499.89	3,140.35	3,057.09	83.26	37.718		
9,000.00	7,070.97	7,216.83	7,193.37	61.92	30.87	-93.25	-4,074.59	499.74	3,217.69	3,133.55	84.14	38.242		
9,100.00	7,070.64	7,220.49	7,197.03	64.24	30.89	-93.35	-4,074.55	499.60	3,296.25	3,211.27	84.98	38.788		
9,200.00	7,070.32	7,224.14	7,200.68	66.61	30.90	-93.46	-4,074.51	499.45	3,375.94	3,290.16	85.78	39.354		
9,300.00	7,069.99	7,227.80	7,204.34	69.01	30.92	-93.56	-4,074.47	499.31	3,456.68	3,370.14	86.55	39.939		
9,400.00	7,069.67	7,231.46	7,207.99	71.45	30.93	-93.67	-4,074.43	499.16	3,538.41	3,451.13	87.28	40.542		
9,500.00	7,069.34	7,235.12	7,211.65	73.92	30.95	-93.77	-4,074.39	499.01	3,621.04	3,533.07	87.97	41.161		
9,600.00	7,069.02	7,238.77	7,215.30	76.42	30.96	-93.87	-4,074.35	498.87	3,704.53	3,615.89	88.63	41.796		
9,700.00	7,068.69	7,242.43	7,218.96	78.95	30.98	-93.98	-4,074.31	498.72	3,788.81	3,699.55	89.27	42.444		
9,800.00	7,068.37	7,246.09	7,222.61	81.49	31.00	-94.08	-4,074.27	498.58	3,873.84	3,783.97	89.87	43.106		
9,900.00	7,068.04	7,249.75	7,226.27	84.06	31.01	-94.18	-4,074.23	498.43	3,959.57	3,869.12	90.44	43.779		
10,000.00	7,067.72	7,253.40	7,229.92	86.65	31.03	-94.29	-4,074.19	498.28	4,045.94	3,954.95	90.99	44.465		
10,100.00	7,067.39	7,257.06	7,233.57	89.25	31.04	-94.39	-4,074.16	498.14	4,132.93	4,041.41	91.52	45.160		
10,200.00	7,067.07	7,260.72	7,237.23	91.87	31.06	-94.50	-4,074.12	497.99	4,220.49	4,128.47	92.02	45.866		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,264.38	7,240.88	94.50	31.07	-94.60	-4,074.08	497.85	4,308.59	4,216.09	92.50	46.580		
10,400.00	7,066.42	7,268.03	7,244.54	97.14	31.09	-94.70	-4,074.04	497.70	4,397.20	4,304.24	92.96	47.303		
10,500.00	7,066.09	7,271.69	7,248.19	99.80	31.11	-94.81	-4,074.00	497.55	4,486.28	4,392.88	93.40	48.034		
10,600.00	7,065.77	7,275.35	7,251.85	102.47	31.12	-94.91	-4,073.96	497.41	4,575.81	4,481.99	93.82	48.773		
10,700.00	7,065.44	7,279.01	7,255.50	105.15	31.14	-95.01	-4,073.92	497.26	4,665.76	4,571.54	94.22	49.518		
10,800.00	7,065.12	7,282.67	7,259.16	107.83	31.15	-95.12	-4,073.88	497.12	4,756.11	4,661.50	94.61	50.269		
10,900.00	7,064.79	7,286.32	7,262.81	110.53	31.17	-95.22	-4,073.84	496.97	4,846.84	4,751.85	94.99	51.027		
11,000.00	7,064.47	7,289.98	7,266.47	113.23	31.18	-95.32	-4,073.80	496.82	4,937.92	4,842.58	95.35	51.790		
11,100.00	7,064.14	7,293.64	7,270.12	115.95	31.20	-95.43	-4,073.76	496.68	5,029.34	4,933.65	95.69	52.558		
11,200.00	7,063.82	7,297.30	7,273.77	118.66	31.22	-95.53	-4,073.72	496.53	5,121.08	5,025.05	96.02	53.331		
11,300.00	7,063.49	7,300.95	7,277.43	121.39	31.23	-95.63	-4,073.68	496.39	5,213.12	5,116.77	96.35	54.108		
11,400.00	7,063.17	7,304.61	7,281.08	124.12	31.25	-95.74	-4,073.64	496.24	5,305.44	5,208.78	96.66	54.890		
11,500.00	7,062.84	7,308.27	7,284.74	126.86	31.26	-95.84	-4,073.60	496.09	5,398.03	5,301.08	96.96	55.675		
11,600.00	7,062.52	7,311.93	7,288.39	129.60	31.28	-95.94	-4,073.56	495.95	5,490.89	5,393.64	97.25	56.464		
11,700.00	7,062.19	7,315.58	7,292.05	132.35	31.29	-96.05	-4,073.52	495.80	5,583.98	5,486.46	97.53	57.257		
11,800.00	7,061.87	7,319.24	7,295.70	135.10	31.31	-96.15	-4,073.48	495.66	5,677.31	5,579.52	97.80	58.052		
11,900.00	7,061.54	7,322.90	7,299.36	137.85	31.32	-96.25	-4,073.44	495.51	5,770.86	5,672.80	98.06	58.851		
12,000.00	7,061.22	7,326.56	7,303.01	140.61	31.34	-96.35	-4,073.40	495.37	5,864.62	5,766.31	98.31	59.652		
12,100.00	7,060.89	7,330.22	7,306.67	143.38	31.36	-96.46	-4,073.36	495.22	5,958.58	5,860.02	98.56	60.456		
12,200.00	7,060.57	7,333.87	7,310.32	146.15	31.37	-96.56	-4,073.32	495.07	6,052.74	5,953.94	98.80	61.262		
12,300.00	7,060.24	7,337.53	7,313.97	148.92	31.39	-96.66	-4,073.28	494.93	6,147.07	6,048.04	99.03	62.070		
12,400.00	7,059.92	7,341.19	7,317.63	151.69	31.40	-96.77	-4,073.24	494.78	6,241.58	6,142.32	99.26	62.880		
12,500.00	7,059.59	7,344.85	7,321.28	154.47	31.42	-96.87	-4,073.20	494.64	6,336.26	6,236.78	99.48	63.693		
12,600.00	7,059.27	7,348.50	7,324.94	157.25	31.43	-96.97	-4,073.16	494.49	6,431.09	6,331.40	99.70	64.506		
12,700.00	7,058.94	7,352.16	7,328.59	160.03	31.45	-97.08	-4,073.12	494.34	6,526.08	6,426.17	99.91	65.322		
12,800.00	7,058.62	7,355.82	7,332.25	162.82	31.47	-97.18	-4,073.08	494.20	6,621.21	6,521.10	100.11	66.139		
12,900.00	7,058.29	7,359.48	7,335.90	165.61	31.48	-97.28	-4,073.04	494.05	6,716.49	6,616.18	100.31	66.957		
13,000.00	7,057.97	7,363.13	7,339.56	168.40	31.50	-97.38	-4,073.00	493.91	6,811.89	6,711.39	100.51	67.776		
13,100.00	7,057.64	7,366.79	7,343.21	171.19	31.51	-97.49	-4,072.96	493.76	6,907.43	6,806.73	100.70	68.597		
13,200.00	7,057.32	7,370.45	7,346.87	173.99	31.53	-97.59	-4,072.92	493.61	7,003.08	6,902.20	100.88	69.418		
13,300.00	7,057.00	7,374.11	7,350.52	176.78	31.54	-97.69	-4,072.88	493.47	7,098.86	6,997.79	101.06	70.241		
13,400.00	7,056.67	7,377.76	7,354.17	179.58	31.56	-97.79	-4,072.84	493.32	7,194.74	7,093.50	101.24	71.064		
13,500.00	7,056.35	7,381.42	7,357.83	182.38	31.57	-97.90	-4,072.80	493.18	7,290.74	7,189.32	101.42	71.888		
13,600.00	7,056.02	7,385.08	7,361.48	185.19	31.59	-98.00	-4,072.76	493.03	7,386.84	7,285.25	101.59	72.713		
13,700.00	7,055.70	7,388.74	7,365.14	187.99	31.61	-98.10	-4,072.72	492.88	7,483.04	7,381.29	101.76	73.538		
13,800.00	7,055.37	7,392.40	7,368.79	190.80	31.62	-98.20	-4,072.68	492.74	7,579.34	7,477.42	101.92	74.364		
13,900.00	7,055.05	7,396.05	7,372.45	193.60	31.64	-98.30	-4,072.64	492.59	7,675.73	7,573.65	102.08	75.190		
14,000.00	7,054.72	7,399.71	7,376.10	196.41	31.65	-98.41	-4,072.60	492.45	7,772.21	7,669.97	102.24	76.016		
14,100.00	7,054.40	7,403.37	7,379.76	199.22	31.67	-98.51	-4,072.56	492.30	7,868.78	7,766.38	102.40	76.843		
14,200.00	7,054.07	7,407.03	7,383.41	202.03	31.68	-98.61	-4,072.52	492.15	7,965.43	7,862.87	102.55	77.670		
14,300.00	7,053.75	7,410.68	7,387.07	204.85	31.70	-98.71	-4,072.48	492.01	8,062.16	7,959.45	102.71	78.497		
14,400.00	7,053.42	7,414.34	7,390.72	207.66	31.72	-98.82	-4,072.44	491.86	8,158.96	8,056.11	102.86	79.325		
14,500.00	7,053.10	7,418.00	7,394.37	210.48	31.73	-98.92	-4,072.40	491.72	8,255.84	8,152.84	103.00	80.152		
14,600.00	7,052.77	7,421.66	7,398.03	213.29	31.75	-99.02	-4,072.37	491.57	8,352.80	8,249.65	103.15	80.979		
14,700.00	7,052.45	7,425.31	7,401.68	216.11	31.76	-99.12	-4,072.33	491.42	8,449.82	8,346.53	103.29	81.807		
14,800.00	7,052.12	7,428.97	7,405.34	218.93	31.78	-99.22	-4,072.29	491.28	8,546.91	8,443.48	103.43	82.634		
14,900.00	7,051.80	7,400.00	7,376.39	221.75	31.65	-98.42	-4,072.60	492.43	8,644.12	8,540.69	103.44	83.570		
15,000.00	7,051.47	7,400.00	7,376.39	224.57	31.65	-98.42	-4,072.60	492.43	8,741.36	8,637.80	103.56	84.410		
15,100.00	7,051.15	7,400.00	7,376.39	227.39	31.65	-98.42	-4,072.60	492.43	8,838.65	8,734.97	103.68	85.251		
15,145.13	7,051.00	7,400.00	7,376.39	228.67	31.65	-98.42	-4,072.60	492.43	8,882.57	8,778.84	103.73	85.631		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	23.89	-0.11	3.28	3.28	-23.91	2,602.61	-1,153.89	2,846.94					
100.00	100.00	121.87	97.87	3.28	3.29	-23.91	2,602.54	-1,154.10	2,846.96	2,840.38	6.58	432.728 ES		
200.00	200.00	219.38	195.38	3.34	3.36	-23.92	2,602.71	-1,154.18	2,847.15	2,840.45	6.70	425.197		
300.00	299.98	329.25	305.25	3.44	3.49	151.71	2,602.70	-1,153.83	2,848.53	2,841.60	6.93	411.022		
400.00	399.84	420.56	396.56	3.59	3.64	151.71	2,602.79	-1,153.71	2,853.18	2,845.94	7.23	394.417		
500.00	499.45	529.03	505.03	3.79	3.87	151.73	2,602.72	-1,153.65	2,860.77	2,853.12	7.66	373.595		
600.00	598.70	635.65	611.64	4.03	4.13	151.76	2,602.56	-1,153.37	2,871.29	2,863.13	8.16	351.924		
700.00	697.47	740.66	716.66	4.31	4.41	151.79	2,602.00	-1,152.78	2,884.39	2,875.67	8.73	330.577		
800.00	795.62	836.21	812.21	4.64	4.70	151.82	2,601.71	-1,152.30	2,900.80	2,891.48	9.32	311.212		
900.00	893.06	942.75	918.74	5.00	5.03	151.87	2,601.07	-1,151.49	2,919.90	2,909.90	10.00	292.026		
1,000.00	989.64	1,031.78	1,007.77	5.40	5.33	151.88	2,600.59	-1,150.92	2,942.16	2,931.50	10.66	276.000		
1,100.00	1,085.27	1,122.78	1,098.76	5.83	5.64	151.90	2,600.30	-1,150.44	2,967.70	2,956.34	11.37	261.110		
1,200.00	1,180.44	1,221.77	1,197.75	6.29	5.99	152.19	2,599.95	-1,149.93	2,994.60	2,982.49	12.11	247.220		
1,300.00	1,275.61	1,316.43	1,292.41	6.76	6.34	152.47	2,599.52	-1,149.50	3,021.50	3,008.64	12.87	234.801		
1,400.00	1,370.78	1,405.68	1,381.66	7.26	6.67	152.72	2,599.31	-1,148.95	3,048.60	3,034.98	13.62	223.813		
1,500.00	1,465.95	1,502.83	1,478.81	7.76	7.03	153.00	2,599.16	-1,148.33	3,075.83	3,061.41	14.42	213.290		
1,600.00	1,561.12	1,608.45	1,584.42	8.27	7.43	153.28	2,598.68	-1,147.86	3,102.92	3,087.65	15.27	203.202		
1,700.00	1,656.29	1,699.30	1,675.27	8.80	7.79	153.52	2,598.02	-1,147.90	3,130.00	3,113.93	16.07	194.777		
1,800.00	1,751.46	1,784.74	1,760.71	9.32	8.12	153.73	2,597.51	-1,148.17	3,157.33	3,140.47	16.85	187.332		
1,900.00	1,846.63	1,902.24	1,878.20	9.86	8.58	154.02	2,596.73	-1,148.35	3,184.61	3,166.83	17.79	179.039		
2,000.00	1,941.80	1,984.16	1,960.12	10.40	8.90	154.21	2,595.96	-1,148.61	3,211.74	3,193.17	18.57	172.946		
2,100.00	2,036.96	2,078.90	2,054.86	10.94	9.28	154.43	2,595.23	-1,149.15	3,239.16	3,219.74	19.42	166.822		
2,200.00	2,132.13	2,184.68	2,160.63	11.49	9.71	154.68	2,594.33	-1,149.49	3,266.46	3,246.14	20.32	160.758		
2,300.00	2,227.30	2,275.74	2,251.69	12.04	10.07	154.88	2,593.42	-1,149.73	3,293.66	3,272.51	21.16	155.667		
2,400.00	2,322.47	2,371.75	2,347.70	12.59	10.46	155.10	2,592.51	-1,150.24	3,321.03	3,299.01	22.02	150.788		
2,500.00	2,417.64	2,466.23	2,442.16	13.15	10.85	155.29	2,591.49	-1,150.97	3,348.40	3,325.51	22.89	146.302		
2,600.00	2,512.81	2,558.31	2,534.23	13.70	11.23	155.48	2,590.51	-1,151.85	3,375.88	3,352.14	23.74	142.200		
2,700.00	2,607.98	2,646.34	2,622.26	14.26	11.59	155.66	2,589.70	-1,152.70	3,403.53	3,378.95	24.58	138.488		
2,800.00	2,703.15	2,730.29	2,706.20	14.82	11.93	155.83	2,589.23	-1,153.41	3,431.50	3,406.10	25.39	135.136		
2,900.00	2,798.32	2,815.32	2,791.23	15.38	12.28	156.00	2,589.03	-1,154.26	3,459.84	3,433.62	26.22	131.977		
3,000.00	2,893.49	2,914.77	2,890.67	15.95	12.69	156.20	2,588.83	-1,155.28	3,488.26	3,461.15	27.11	128.662		
3,100.00	2,988.66	3,010.38	2,986.27	16.51	13.08	156.37	2,588.46	-1,156.62	3,516.66	3,488.67	27.99	125.634		
3,200.00	3,083.83	3,104.82	3,080.70	17.07	13.48	156.54	2,588.05	-1,158.10	3,545.10	3,516.23	28.87	122.810		
3,300.00	3,179.00	3,192.23	3,168.09	17.64	13.84	156.70	2,587.75	-1,159.62	3,573.69	3,543.98	29.71	120.299		
3,400.00	3,274.17	3,281.39	3,257.23	18.21	14.21	156.85	2,587.49	-1,161.55	3,602.49	3,571.93	30.56	117.894		
3,500.00	3,369.34	3,373.91	3,349.72	18.77	14.60	156.99	2,587.26	-1,163.83	3,631.44	3,600.01	31.43	115.555		
3,600.00	3,464.51	3,474.88	3,450.66	19.34	15.02	157.15	2,587.01	-1,166.28	3,660.39	3,628.05	32.34	113.181		
3,700.00	3,559.68	3,566.93	3,542.69	19.91	15.40	157.30	2,586.72	-1,168.35	3,689.27	3,656.06	33.21	111.092		
3,800.00	3,654.84	3,712.87	3,688.59	20.48	16.01	157.52	2,585.67	-1,171.60	3,717.89	3,683.52	34.37	108.179		
3,900.00	3,750.01	3,820.27	3,795.95	21.05	16.47	157.68	2,583.84	-1,173.86	3,745.51	3,710.18	35.32	106.036		
4,000.00	3,845.18	3,915.58	3,891.23	21.62	16.87	157.82	2,582.08	-1,175.76	3,772.97	3,736.75	36.21	104.185		
4,100.00	3,940.35	4,010.60	3,986.21	22.19	17.27	157.95	2,580.28	-1,177.75	3,800.44	3,763.33	37.10	102.425		
4,200.00	4,035.52	4,109.32	4,084.89	22.76	17.68	158.09	2,578.35	-1,179.89	3,827.89	3,789.88	38.02	100.692		
4,300.00	4,130.69	4,207.04	4,182.56	23.33	18.09	158.22	2,576.39	-1,181.97	3,855.31	3,816.39	38.92	99.051		
4,400.00	4,225.86	4,305.93	4,281.41	23.91	18.51	158.36	2,574.35	-1,184.03	3,882.68	3,842.85	39.84	97.467		
4,500.00	4,321.03	4,399.55	4,375.00	24.48	18.91	158.48	2,572.42	-1,185.95	3,910.06	3,869.34	40.72	96.020		
4,600.00	4,416.20	4,497.94	4,473.33	25.05	19.32	158.61	2,570.36	-1,188.06	3,937.46	3,895.82	41.63	94.575		
4,700.00	4,511.37	4,595.69	4,571.04	25.62	19.74	158.73	2,568.23	-1,190.23	3,964.81	3,922.27	42.54	93.197		
4,800.00	4,606.54	4,688.60	4,663.91	26.20	20.13	158.85	2,566.21	-1,192.28	3,992.19	3,948.77	43.42	91.934		
4,900.00	4,701.71	4,808.48	4,783.73	26.77	20.64	159.00	2,563.36	-1,194.86	4,019.38	3,974.92	44.46	90.409		
5,000.00	4,796.88	4,907.28	4,882.47	27.34	21.05	159.12	2,560.68	-1,196.86	4,046.24	4,000.87	45.37	89.175		
5,100.00	4,892.05	4,994.51	4,969.65	27.92	21.42	159.23	2,558.39	-1,198.59	4,073.18	4,026.96	46.23	88.113		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,084.56	5,059.65	28.49	21.81	159.34	2,556.20	-1,200.30	4,100.30	4,053.21	47.09	87.066		
5,300.00	5,082.39	5,171.11	5,146.17	29.07	22.17	159.44	2,554.28	-1,201.86	4,127.60	4,079.66	47.94	86.096		
5,400.00	5,177.56	5,258.35	5,233.38	29.64	22.54	159.55	2,552.54	-1,203.45	4,155.14	4,106.35	48.79	85.159		
5,500.00	5,272.72	5,343.22	5,318.23	30.21	22.90	159.66	2,551.08	-1,204.85	4,182.90	4,133.27	49.63	84.284		
5,600.00	5,367.89	5,429.46	5,404.45	30.79	23.27	159.77	2,549.97	-1,205.86	4,210.96	4,160.48	50.47	83.431		
5,700.00	5,463.06	5,522.78	5,497.76	31.36	23.66	159.89	2,548.85	-1,206.90	4,239.11	4,187.75	51.36	82.543		
5,800.00	5,558.23	5,607.80	5,582.77	31.94	24.03	160.00	2,547.95	-1,207.97	4,267.43	4,215.24	52.19	81.765		
5,900.00	5,653.40	5,683.82	5,658.78	32.51	24.35	160.10	2,547.45	-1,208.80	4,296.11	4,243.14	52.97	81.102		
6,000.00	5,748.57	5,818.60	5,793.55	33.09	24.92	160.28	2,546.71	-1,209.09	4,324.74	4,270.64	54.10	79.938		
6,100.00	5,843.74	5,910.01	5,884.97	33.67	25.31	160.41	2,545.90	-1,208.94	4,352.94	4,297.96	54.97	79.181		
6,200.00	5,938.91	6,049.42	6,024.36	34.24	25.90	160.62	2,544.50	-1,207.70	4,381.00	4,324.87	56.13	78.051		
6,300.00	6,034.08	6,188.35	6,163.22	34.82	26.49	160.84	2,541.38	-1,204.69	4,407.41	4,350.13	57.28	76.947		
6,400.00	6,129.25	6,372.98	6,347.63	35.39	27.28	161.14	2,534.70	-1,199.02	4,432.18	4,373.51	58.68	75.535		
6,500.00	6,224.42	6,433.92	6,408.50	35.97	27.54	161.23	2,532.09	-1,197.65	4,456.90	4,397.51	59.39	75.049		
6,600.00	6,319.59	6,500.00	6,474.55	36.54	27.82	161.32	2,529.99	-1,196.88	4,482.75	4,422.63	60.12	74.563		
6,700.00	6,414.76	6,532.33	6,506.87	37.12	27.96	161.36	2,529.26	-1,196.73	4,509.47	4,448.82	60.65	74.349		
6,800.00	6,509.91	6,600.00	6,574.53	37.70	28.24	153.51	2,528.25	-1,196.64	4,537.07	4,475.69	61.39	73.911		
6,900.00	6,603.99	6,664.21	6,638.74	38.26	28.52	128.58	2,527.66	-1,196.75	4,562.46	4,500.36	62.09	73.476		
7,000.00	6,694.76	6,742.47	6,716.99	38.78	28.85	112.56	2,527.07	-1,197.07	4,583.93	4,521.06	62.87	72.909		
7,100.00	6,779.96	6,800.00	6,774.52	39.24	29.10	102.69	2,526.76	-1,197.51	4,601.27	4,537.77	63.50	72.462		
7,200.00	6,857.50	6,860.10	6,834.62	39.65	29.35	96.57	2,526.70	-1,198.17	4,614.53	4,550.40	64.14	71.950		
7,300.00	6,925.48	6,906.01	6,880.53	40.02	29.55	92.67	2,526.93	-1,198.83	4,623.87	4,559.16	64.71	71.454		
7,400.00	6,982.21	6,969.06	6,943.57	40.33	29.81	90.54	2,527.35	-1,199.75	4,629.14	4,563.66	65.48	70.696		
7,500.00	7,026.31	7,015.90	6,990.40	40.63	30.01	89.42	2,527.62	-1,200.36	4,630.51	4,564.23	66.27	69.869		
7,600.00	7,056.68	7,045.78	7,020.28	40.91	30.14	89.02	2,527.81	-1,200.75	4,628.39	4,561.26	67.13	68.947		
7,700.00	7,072.58	7,062.01	7,036.51	41.25	30.21	89.22	2,527.91	-1,200.96	4,623.11	4,555.03	68.08	67.905		
7,800.00	7,074.86	7,065.37	7,039.87	41.69	30.22	89.58	2,527.93	-1,201.00	4,615.35	4,546.22	69.12	66.769		
7,900.00	7,074.54	7,066.27	7,040.77	42.34	30.22	89.59	2,527.94	-1,201.01	4,608.88	4,538.56	70.32	65.546		
8,000.00	7,074.21	7,067.17	7,041.66	43.27	30.23	89.60	2,527.95	-1,201.02	4,604.57	4,532.92	71.65	64.261		
8,100.00	7,073.89	7,068.07	7,042.56	44.47	30.23	89.61	2,527.95	-1,201.03	4,602.43	4,529.31	73.12	62.940		
8,148.44	7,073.73	7,068.50	7,043.00	45.15	30.23	89.62	2,527.95	-1,201.04	4,602.18	4,528.28	73.89	62.281		
8,200.00	7,073.57	7,068.96	7,043.46	45.91	30.24	89.62	2,527.96	-1,201.04	4,602.47	4,527.76	74.71	61.605		
8,300.00	7,073.24	7,069.86	7,044.35	47.53	30.24	89.63	2,527.96	-1,201.06	4,604.67	4,528.28	76.39	60.276		
8,400.00	7,072.92	7,070.75	7,045.25	49.31	30.24	89.65	2,527.97	-1,201.07	4,609.05	4,530.89	78.16	58.970		
8,500.00	7,072.59	7,071.65	7,046.14	51.20	30.25	89.66	2,527.97	-1,201.08	4,615.58	4,535.59	80.00	57.698		
8,600.00	7,072.27	7,072.54	7,047.04	53.19	30.25	89.67	2,527.98	-1,201.09	4,624.28	4,542.39	81.89	56.471		
8,700.00	7,071.94	7,073.44	7,047.93	55.27	30.26	89.68	2,527.99	-1,201.10	4,635.11	4,551.29	83.82	55.296		
8,800.00	7,071.62	7,074.33	7,048.83	57.43	30.26	89.69	2,527.99	-1,201.11	4,648.07	4,562.28	85.79	54.179		
8,900.00	7,071.29	7,075.23	7,049.72	59.64	30.26	89.70	2,528.00	-1,201.12	4,663.14	4,575.35	87.78	53.122		
9,000.00	7,070.97	7,076.12	7,050.61	61.92	30.27	89.71	2,528.00	-1,201.14	4,680.29	4,590.51	89.79	52.127		
9,100.00	7,070.64	7,077.01	7,051.51	64.24	30.27	89.72	2,528.01	-1,201.15	4,699.51	4,607.72	91.80	51.195		
9,200.00	7,070.32	7,077.91	7,052.40	66.61	30.27	89.73	2,528.02	-1,201.16	4,720.78	4,626.97	93.80	50.326		
9,300.00	7,069.99	7,078.80	7,053.29	69.01	30.28	89.75	2,528.02	-1,201.17	4,744.05	4,648.25	95.80	49.518		
9,400.00	7,069.67	7,079.69	7,054.18	71.45	30.28	89.76	2,528.03	-1,201.18	4,769.31	4,671.52	97.79	48.771		
9,500.00	7,069.34	7,080.58	7,055.08	73.92	30.29	89.77	2,528.03	-1,201.19	4,796.52	4,696.76	99.76	48.083		
9,600.00	7,069.02	7,081.47	7,055.97	76.42	30.29	89.78	2,528.04	-1,201.20	4,825.65	4,723.95	101.70	47.451		
9,700.00	7,068.69	7,082.36	7,056.86	78.95	30.29	89.79	2,528.05	-1,201.22	4,856.66	4,753.05	103.61	46.873		
9,800.00	7,068.37	7,083.25	7,057.75	81.49	30.30	89.80	2,528.05	-1,201.23	4,889.53	4,784.03	105.50	46.347		
9,900.00	7,068.04	7,084.14	7,058.64	84.06	30.30	89.81	2,528.06	-1,201.24	4,924.20	4,816.85	107.35	45.871		
10,000.00	7,067.72	7,085.03	7,059.53	86.65	30.30	89.82	2,528.06	-1,201.25	4,960.65	4,851.48	109.16	45.442		
10,100.00	7,067.39	7,085.92	7,060.42	89.25	30.31	89.83	2,528.07	-1,201.26	4,998.83	4,887.89	110.94	45.059		
10,200.00	7,067.07	7,086.81	7,061.31	91.87	30.31	89.85	2,528.08	-1,201.27	5,038.71	4,926.03	112.68	44.718		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	7,087.70	7,062.19	94.50	30.32	89.86	2,528.08	-1,201.28	5,080.24	4,965.87	114.37	44.418		
10,400.00	7,066.42	7,088.59	7,063.08	97.14	30.32	89.87	2,528.09	-1,201.29	5,123.39	5,007.37	116.03	44.157		
10,500.00	7,066.09	7,089.48	7,063.97	99.80	30.32	89.88	2,528.10	-1,201.31	5,168.12	5,050.48	117.64	43.933		
10,600.00	7,065.77	7,090.36	7,064.86	102.47	30.33	89.89	2,528.10	-1,201.32	5,214.37	5,095.17	119.20	43.743		
10,700.00	7,065.44	7,091.25	7,065.74	105.15	30.33	89.90	2,528.11	-1,201.33	5,262.13	5,141.40	120.73	43.586		
10,800.00	7,065.12	7,092.14	7,066.63	107.83	30.33	89.91	2,528.11	-1,201.34	5,311.33	5,189.12	122.21	43.461		
10,900.00	7,064.79	7,093.02	7,067.52	110.53	30.34	89.92	2,528.12	-1,201.35	5,361.95	5,238.30	123.65	43.366		
11,000.00	7,064.47	7,093.91	7,068.40	113.23	30.34	89.93	2,528.13	-1,201.36	5,413.94	5,288.90	125.04	43.298		
11,100.00	7,064.14	7,094.79	7,069.29	115.95	30.35	89.94	2,528.13	-1,201.37	5,467.27	5,340.88	126.39	43.258		
11,200.00	7,063.82	7,095.68	7,070.17	118.66	30.35	89.96	2,528.14	-1,201.38	5,521.89	5,394.19	127.70	43.242 SF		
11,300.00	7,063.49	7,096.56	7,071.06	121.39	30.35	89.97	2,528.14	-1,201.40	5,577.77	5,448.81	128.96	43.251		
11,400.00	7,063.17	7,097.45	7,071.94	124.12	30.36	89.98	2,528.15	-1,201.41	5,634.87	5,504.69	130.19	43.283		
11,500.00	7,062.84	7,098.33	7,072.82	126.86	30.36	89.99	2,528.16	-1,201.42	5,693.16	5,561.79	131.37	43.336		
11,600.00	7,062.52	7,099.22	7,073.71	129.60	30.36	90.00	2,528.16	-1,201.43	5,752.59	5,620.07	132.52	43.410		
11,700.00	7,062.19	7,100.10	7,074.59	132.35	30.37	90.01	2,528.17	-1,201.44	5,813.14	5,679.51	133.63	43.503		
11,800.00	7,061.87	7,100.98	7,075.47	135.10	30.37	90.02	2,528.17	-1,201.45	5,874.76	5,740.07	134.69	43.615		
11,900.00	7,061.54	7,101.86	7,076.36	137.85	30.38	90.03	2,528.18	-1,201.46	5,937.43	5,801.70	135.73	43.745		
12,000.00	7,061.22	7,102.75	7,077.24	140.61	30.38	90.04	2,528.19	-1,201.47	6,001.11	5,864.39	136.72	43.892		
12,100.00	7,060.89	7,103.63	7,078.12	143.38	30.38	90.05	2,528.19	-1,201.49	6,065.77	5,928.08	137.69	44.055		
12,200.00	7,060.57	7,104.51	7,079.00	146.15	30.39	90.07	2,528.20	-1,201.50	6,131.38	5,992.76	138.62	44.233		
12,300.00	7,060.24	7,105.39	7,079.88	148.92	30.39	90.08	2,528.21	-1,201.51	6,197.91	6,058.40	139.51	44.426		
12,400.00	7,059.92	7,106.27	7,080.76	151.69	30.39	90.09	2,528.21	-1,201.52	6,265.33	6,124.95	140.38	44.632		
12,500.00	7,059.59	7,107.15	7,081.64	154.47	30.39	90.08	2,528.21	-1,201.51	6,333.61	6,192.40	141.20	44.854		
12,600.00	7,059.27	7,108.04	7,082.52	157.25	30.40	90.09	2,528.21	-1,201.52	6,402.72	6,260.71	142.01	45.087		
12,700.00	7,058.94	7,108.93	7,083.40	160.03	30.40	90.10	2,528.22	-1,201.53	6,472.64	6,329.85	142.78	45.332		
12,800.00	7,058.62	7,109.82	7,084.28	162.82	30.40	90.11	2,528.22	-1,201.54	6,543.34	6,399.81	143.53	45.588		
12,900.00	7,058.29	7,110.71	7,085.16	165.61	30.40	90.12	2,528.23	-1,201.55	6,614.80	6,470.54	144.25	45.856		
13,000.00	7,057.97	7,111.60	7,086.04	168.40	30.41	90.13	2,528.23	-1,201.56	6,686.98	6,542.03	144.95	46.133		
13,100.00	7,057.64	7,112.49	7,086.92	171.19	30.41	90.13	2,528.24	-1,201.56	6,759.88	6,614.26	145.62	46.421		
13,200.00	7,057.32	7,113.38	7,087.80	173.99	30.41	90.14	2,528.24	-1,201.57	6,833.46	6,687.20	146.27	46.719		
13,300.00	7,057.00	7,114.27	7,088.68	176.78	30.42	90.15	2,528.25	-1,201.58	6,907.71	6,760.82	146.89	47.026		
13,400.00	7,056.67	7,115.16	7,089.56	179.58	30.42	90.16	2,528.25	-1,201.59	6,982.60	6,835.10	147.49	47.342		
13,500.00	7,056.35	7,116.05	7,090.44	182.38	30.42	90.17	2,528.26	-1,201.60	7,058.11	6,910.03	148.08	47.666		
13,600.00	7,056.02	7,116.94	7,091.32	185.19	30.42	90.18	2,528.26	-1,201.60	7,134.22	6,985.59	148.64	47.998		
13,700.00	7,055.70	7,117.83	7,092.20	187.99	30.43	90.18	2,528.27	-1,201.61	7,210.92	7,061.74	149.18	48.338		
13,800.00	7,055.37	7,118.72	7,093.08	190.80	30.43	90.19	2,528.27	-1,201.62	7,288.18	7,138.48	149.70	48.685		
13,900.00	7,055.05	7,119.61	7,093.96	193.60	30.43	90.20	2,528.28	-1,201.63	7,365.99	7,215.79	150.20	49.040		
14,000.00	7,054.72	7,120.50	7,094.84	196.41	30.44	90.21	2,528.28	-1,201.63	7,444.33	7,293.64	150.69	49.402		
14,100.00	7,054.40	7,121.39	7,095.72	199.22	30.44	90.21	2,528.29	-1,201.64	7,523.18	7,372.02	151.16	49.770		
14,200.00	7,054.07	7,122.28	7,096.60	202.03	30.44	90.22	2,528.29	-1,201.65	7,602.53	7,450.92	151.61	50.144		
14,300.00	7,053.75	7,123.17	7,097.48	204.85	30.44	90.23	2,528.29	-1,201.66	7,682.36	7,530.31	152.05	50.524		
14,400.00	7,053.42	7,124.06	7,098.36	207.66	30.45	90.24	2,528.30	-1,201.66	7,762.66	7,610.19	152.48	50.911		
14,500.00	7,053.10	7,124.95	7,099.24	210.48	30.45	90.25	2,528.30	-1,201.67	7,843.42	7,690.53	152.89	51.303		
14,600.00	7,052.77	7,125.84	7,100.12	213.29	30.45	90.25	2,528.31	-1,201.68	7,924.61	7,771.33	153.28	51.700		
14,700.00	7,052.45	7,126.73	7,101.00	216.11	30.45	90.26	2,528.31	-1,201.69	8,006.22	7,852.56	153.66	52.102		
14,800.00	7,052.12	7,127.62	7,101.88	218.93	30.46	90.27	2,528.32	-1,201.69	8,088.25	7,934.22	154.03	52.510		
14,900.00	7,051.80	7,128.51	7,102.76	221.75	30.46	90.28	2,528.32	-1,201.70	8,170.68	8,016.29	154.39	52.922		
15,000.00	7,051.47	7,129.40	7,103.64	224.57	30.46	90.28	2,528.33	-1,201.71	8,253.50	8,098.76	154.74	53.339		
15,100.00	7,051.15	7,130.29	7,104.52	227.39	30.46	90.29	2,528.33	-1,201.71	8,336.69	8,181.62	155.07	53.761		
15,145.13	7,051.00	7,131.18	7,105.40	228.67	30.46	90.29	2,528.33	-1,201.72	8,374.36	8,219.14	155.22	53.952		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	20.00	3.28	3.28	-61.30	1,184.81	-2,164.39	2,467.54					
100.00	100.00	80.00	100.00	3.28	3.56	-61.30	1,184.81	-2,164.39	2,467.46	2,460.61	6.85	360.235		
200.00	200.00	180.00	200.00	3.34	5.60	-61.30	1,184.81	-2,164.39	2,467.46	2,458.52	8.94	276.109 CC		
300.00	299.98	279.98	299.98	3.44	8.67	114.33	1,184.81	-2,164.39	2,468.18	2,456.07	12.11	203.776		
400.00	399.84	379.84	399.84	3.59	11.97	114.40	1,184.81	-2,164.39	2,470.34	2,454.78	15.56	158.745 ES		
500.00	499.45	479.45	499.45	3.79	15.35	114.52	1,184.81	-2,164.39	2,473.96	2,454.83	19.13	129.296		
600.00	598.70	578.70	598.70	4.03	18.75	114.68	1,184.81	-2,164.39	2,479.07	2,456.29	22.78	108.844		
700.00	697.47	677.47	697.47	4.31	22.15	114.89	1,184.81	-2,164.39	2,485.69	2,459.23	26.46	93.931		
800.00	795.62	775.62	795.62	4.64	25.54	115.13	1,184.81	-2,164.39	2,493.88	2,463.70	30.18	82.639		
900.00	893.06	873.06	893.06	5.00	28.92	115.41	1,184.81	-2,164.39	2,503.69	2,469.78	33.91	73.832		
1,000.00	989.64	969.64	989.64	5.40	32.27	115.72	1,184.81	-2,164.39	2,515.18	2,477.53	37.65	66.800		
1,100.00	1,085.27	1,065.27	1,085.27	5.83	35.59	116.07	1,184.81	-2,164.39	2,528.41	2,487.01	41.40	61.079		
1,200.00	1,180.44	1,160.44	1,180.44	6.29	38.90	116.67	1,184.81	-2,164.39	2,542.59	2,497.45	45.15	56.318		
1,300.00	1,275.61	1,255.61	1,275.61	6.76	42.22	117.26	1,184.81	-2,164.39	2,557.07	2,508.15	48.92	52.275		
1,400.00	1,370.78	1,350.78	1,370.78	7.26	45.53	117.84	1,184.81	-2,164.39	2,571.83	2,519.13	52.70	48.801		
1,500.00	1,465.95	1,445.95	1,465.95	7.76	48.84	118.42	1,184.81	-2,164.39	2,586.87	2,530.37	56.50	45.789		
1,600.00	1,561.12	1,541.12	1,561.12	8.27	52.16	119.00	1,184.81	-2,164.39	2,602.18	2,541.88	60.30	43.154		
1,700.00	1,656.29	1,636.29	1,656.29	8.80	55.47	119.56	1,184.81	-2,164.39	2,617.77	2,553.66	64.11	40.832		
1,800.00	1,751.46	1,731.46	1,751.46	9.32	58.79	120.12	1,184.81	-2,164.39	2,633.62	2,565.69	67.93	38.770		
1,900.00	1,846.63	1,826.63	1,846.63	9.86	62.11	120.68	1,184.81	-2,164.39	2,649.73	2,577.98	71.75	36.930		
2,000.00	1,941.80	1,921.80	1,941.80	10.40	65.43	121.22	1,184.81	-2,164.39	2,666.10	2,590.52	75.58	35.277		
2,100.00	2,036.96	2,016.96	2,036.96	10.94	68.75	121.76	1,184.81	-2,164.39	2,682.72	2,603.32	79.41	33.785		
2,200.00	2,132.13	2,112.13	2,132.13	11.49	72.06	122.30	1,184.81	-2,164.39	2,699.59	2,616.35	83.24	32.433		
2,300.00	2,227.30	2,207.30	2,227.30	12.04	75.38	122.83	1,184.81	-2,164.39	2,716.70	2,629.63	87.07	31.201		
2,400.00	2,322.47	2,302.47	2,322.47	12.59	78.70	123.35	1,184.81	-2,164.39	2,734.05	2,643.14	90.90	30.076		
2,500.00	2,417.64	2,402.36	2,417.64	13.15	82.19	123.87	1,184.81	-2,164.39	2,751.63	2,656.72	94.90	28.994		
2,600.00	2,512.81	2,507.19	2,512.81	13.70	85.84	124.38	1,184.81	-2,164.39	2,769.44	2,670.36	99.08	27.952		
2,700.00	2,607.98	2,587.98	2,607.98	14.26	88.66	124.88	1,184.81	-2,164.39	2,787.47	2,685.06	102.41	27.218		
2,800.00	2,703.15	2,683.15	2,703.15	14.82	91.98	125.38	1,184.81	-2,164.39	2,805.72	2,699.47	106.25	26.407		
2,900.00	2,798.32	2,778.32	2,798.32	15.38	95.30	125.87	1,184.81	-2,164.39	2,824.19	2,714.11	110.09	25.654		
3,000.00	2,893.49	2,873.49	2,893.49	15.95	98.62	126.36	1,184.81	-2,164.39	2,842.88	2,728.95	113.92	24.954		
3,100.00	2,988.66	2,968.66	2,988.66	16.51	101.94	126.84	1,184.81	-2,164.39	2,861.76	2,744.00	117.76	24.301		
3,200.00	3,083.83	3,063.83	3,083.83	17.07	105.26	127.31	1,184.81	-2,164.39	2,880.86	2,759.26	121.60	23.691		
3,300.00	3,179.00	3,159.00	3,179.00	17.64	108.58	127.78	1,184.81	-2,164.39	2,900.15	2,774.71	125.44	23.120		
3,400.00	3,274.17	3,254.17	3,274.17	18.21	111.91	128.24	1,184.81	-2,164.39	2,919.64	2,790.36	129.27	22.585		
3,500.00	3,369.34	3,349.34	3,369.34	18.77	115.23	128.70	1,184.81	-2,164.39	2,939.32	2,806.21	133.11	22.082		
3,600.00	3,464.51	3,444.51	3,464.51	19.34	118.55	129.15	1,184.81	-2,164.39	2,959.18	2,822.24	136.95	21.608		
3,700.00	3,559.68	3,539.68	3,559.68	19.91	121.87	129.59	1,184.81	-2,164.39	2,979.23	2,838.45	140.78	21.162		
3,800.00	3,654.84	3,634.84	3,654.84	20.48	125.19	130.03	1,184.81	-2,164.39	2,999.46	2,854.85	144.62	20.741		
3,900.00	3,750.01	3,730.01	3,750.01	21.05	128.51	130.47	1,184.81	-2,164.39	3,019.87	2,871.42	148.45	20.343		
4,000.00	3,845.18	3,825.18	3,845.18	21.62	131.83	130.90	1,184.81	-2,164.39	3,040.45	2,888.17	152.28	19.966		
4,100.00	3,940.35	3,920.35	3,940.35	22.19	135.15	131.32	1,184.81	-2,164.39	3,061.20	2,905.08	156.12	19.608		
4,200.00	4,035.52	4,015.52	4,035.52	22.76	138.48	131.74	1,184.81	-2,164.39	3,082.12	2,922.17	159.95	19.269		
4,300.00	4,130.69	4,110.69	4,130.69	23.33	141.80	132.15	1,184.81	-2,164.39	3,103.20	2,939.42	163.78	18.947		
4,400.00	4,225.86	4,205.86	4,225.86	23.91	145.12	132.55	1,184.81	-2,164.39	3,124.44	2,956.82	167.61	18.641		
4,500.00	4,321.03	4,301.03	4,321.03	24.48	148.44	132.96	1,184.81	-2,164.39	3,145.83	2,974.39	171.44	18.349		
4,600.00	4,416.20	4,403.80	4,416.20	25.05	152.03	133.35	1,184.81	-2,164.39	3,167.38	2,991.84	175.54	18.044		
4,700.00	4,511.37	4,508.63	4,511.37	25.62	155.69	133.74	1,184.81	-2,164.39	3,189.08	3,009.37	179.71	17.746		
4,800.00	4,606.54	4,586.54	4,606.54	26.20	158.40	134.13	1,184.81	-2,164.39	3,210.92	3,027.99	182.93	17.552		
4,900.00	4,701.71	4,681.71	4,701.71	26.77	161.73	134.51	1,184.81	-2,164.39	3,232.91	3,046.15	186.76	17.310		
5,000.00	4,796.88	4,776.88	4,796.88	27.34	165.05	134.89	1,184.81	-2,164.39	3,255.04	3,064.45	190.59	17.079		
5,100.00	4,892.05	4,872.05	4,892.05	27.92	168.37	135.26	1,184.81	-2,164.39	3,277.31	3,082.89	194.42	16.857		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,967.22	4,987.22	28.49	171.69	135.62	1,184.81	-2,164.39	3,299.72	3,101.47	198.24	16.645		
5,300.00	5,082.39	5,062.39	5,082.39	29.07	175.01	135.99	1,184.81	-2,164.39	3,322.25	3,120.18	202.07	16.441		
5,400.00	5,177.56	5,157.56	5,177.56	29.64	178.34	136.34	1,184.81	-2,164.39	3,344.92	3,139.02	205.90	16.246		
5,500.00	5,272.72	5,252.72	5,272.72	30.21	181.66	136.70	1,184.81	-2,164.39	3,367.71	3,157.99	209.72	16.058		
5,600.00	5,367.89	5,347.89	5,367.89	30.79	184.98	137.04	1,184.81	-2,164.39	3,390.63	3,177.09	213.55	15.878		
5,700.00	5,463.06	5,443.06	5,463.06	31.36	188.30	137.39	1,184.81	-2,164.39	3,413.67	3,196.30	217.37	15.704		
5,800.00	5,558.23	5,538.23	5,558.23	31.94	191.62	137.73	1,184.81	-2,164.39	3,436.84	3,215.64	221.19	15.538		
5,900.00	5,653.40	5,633.40	5,653.40	32.51	194.94	138.06	1,184.81	-2,164.39	3,460.11	3,235.10	225.02	15.377		
6,000.00	5,748.57	5,728.57	5,748.57	33.09	198.27	138.39	1,184.81	-2,164.39	3,483.51	3,254.67	228.84	15.222		
6,100.00	5,843.74	5,823.74	5,843.74	33.67	201.59	138.72	1,184.81	-2,164.39	3,507.01	3,274.35	232.66	15.073		
6,200.00	5,938.91	5,918.91	5,938.91	34.24	204.91	139.04	1,184.81	-2,164.39	3,530.63	3,294.15	236.48	14.930		
6,300.00	6,034.08	6,014.08	6,034.08	34.82	208.23	139.36	1,184.81	-2,164.39	3,554.36	3,314.05	240.31	14.791		
6,400.00	6,129.25	6,109.25	6,129.25	35.39	211.55	139.67	1,184.81	-2,164.39	3,578.19	3,334.06	244.13	14.657		
6,500.00	6,224.42	6,204.42	6,224.42	35.97	214.88	139.98	1,184.81	-2,164.39	3,602.12	3,354.18	247.95	14.528		
6,600.00	6,319.59	6,300.41	6,319.59	36.54	218.23	140.29	1,184.81	-2,164.39	3,626.16	3,374.37	251.80	14.401		
6,700.00	6,414.76	6,405.24	6,414.76	37.12	221.89	140.59	1,184.81	-2,164.39	3,650.30	3,394.35	255.95	14.262		
6,800.00	6,509.91	6,489.91	6,509.91	37.70	224.84	133.15	1,184.81	-2,164.39	3,674.23	3,414.82	259.41	14.164		
6,900.00	6,603.99	6,583.99	6,603.99	38.26	228.13	109.41	1,184.81	-2,164.39	3,691.83	3,428.65	263.19	14.028		
7,000.00	6,694.76	6,674.76	6,694.76	38.78	231.29	94.86	1,184.81	-2,164.39	3,700.67	3,433.85	266.82	13.869		
7,100.00	6,779.96	6,759.96	6,779.96	39.24	234.27	86.81	1,184.81	-2,164.39	3,700.92	3,430.69	270.23	13.696		
7,200.00	6,857.50	6,837.50	6,857.50	39.65	236.97	82.72	1,184.81	-2,164.39	3,693.02	3,419.67	273.34	13.511		
7,300.00	6,925.48	6,905.48	6,925.48	40.02	239.35	81.15	1,184.81	-2,164.39	3,677.65	3,401.52	276.13	13.319		
7,400.00	6,982.21	6,962.21	6,982.21	40.33	241.33	81.30	1,184.81	-2,164.39	3,655.68	3,377.11	278.57	13.123		
7,500.00	7,026.31	7,006.31	7,026.31	40.63	242.87	82.70	1,184.81	-2,164.39	3,628.10	3,347.43	280.67	12.927		
7,600.00	7,056.68	7,036.68	7,056.68	40.91	243.93	85.03	1,184.81	-2,164.39	3,595.94	3,313.53	282.41	12.733		
7,700.00	7,072.58	7,052.58	7,072.58	41.25	244.48	88.04	1,184.81	-2,164.39	3,560.24	3,276.44	283.79	12.545		
7,800.00	7,074.86	7,054.86	7,074.86	41.69	244.56	90.08	1,184.81	-2,164.39	3,522.34	3,237.50	284.84	12.366		
7,900.00	7,074.54	7,054.54	7,074.54	42.34	244.55	90.07	1,184.81	-2,164.39	3,486.08	3,200.13	285.95	12.191		
8,000.00	7,074.21	7,054.21	7,074.21	43.27	244.54	90.06	1,184.81	-2,164.39	3,452.33	3,165.11	287.22	12.020		
8,100.00	7,073.89	7,053.89	7,073.89	44.47	244.53	90.06	1,184.81	-2,164.39	3,421.18	3,132.54	288.64	11.853		
8,200.00	7,073.57	7,053.57	7,073.57	45.91	244.52	90.05	1,184.81	-2,164.39	3,392.69	3,102.49	290.20	11.691		
8,300.00	7,073.24	7,053.24	7,073.24	47.53	244.51	90.05	1,184.81	-2,164.39	3,366.93	3,075.05	291.88	11.535		
8,400.00	7,072.92	7,052.92	7,072.92	49.31	244.49	90.04	1,184.81	-2,164.39	3,343.96	3,050.29	293.67	11.387		
8,500.00	7,072.59	7,052.59	7,072.59	51.20	244.48	90.04	1,184.81	-2,164.39	3,323.85	3,028.29	295.56	11.246		
8,600.00	7,072.27	7,052.27	7,072.27	53.19	244.47	90.03	1,184.81	-2,164.39	3,306.64	3,009.10	297.54	11.113		
8,700.00	7,071.94	7,051.94	7,071.94	55.27	244.46	90.02	1,184.81	-2,164.39	3,292.37	2,992.79	299.58	10.990		
8,800.00	7,071.62	7,051.62	7,071.62	57.43	244.45	90.02	1,184.81	-2,164.39	3,281.10	2,979.42	301.67	10.876		
8,900.00	7,071.29	7,051.29	7,071.29	59.64	244.44	90.01	1,184.81	-2,164.39	3,272.84	2,969.03	303.81	10.773		
9,000.00	7,070.97	7,050.97	7,070.97	61.92	244.43	90.01	1,184.81	-2,164.39	3,267.62	2,961.65	305.97	10.680		
9,100.00	7,070.64	7,050.64	7,070.64	64.24	244.41	90.00	1,184.81	-2,164.39	3,265.46	2,957.32	308.14	10.597		
9,120.64	7,070.57	7,050.57	7,070.57	64.73	244.41	90.00	1,184.81	-2,164.39	3,265.39	2,956.80	308.59	10.582		
9,200.00	7,070.32	7,050.32	7,070.32	66.61	244.40	90.00	1,184.81	-2,164.39	3,266.36	2,956.04	310.31	10.526		
9,300.00	7,069.99	7,049.99	7,069.99	69.01	244.39	89.99	1,184.81	-2,164.39	3,270.32	2,957.84	312.47	10.466		
9,400.00	7,069.67	7,049.67	7,069.67	71.45	244.38	89.98	1,184.81	-2,164.39	3,277.32	2,962.71	314.61	10.417		
9,500.00	7,069.34	7,049.34	7,069.34	73.92	244.37	89.98	1,184.81	-2,164.39	3,287.36	2,970.64	316.71	10.380		
9,600.00	7,069.02	7,049.02	7,069.02	76.42	244.36	89.97	1,184.81	-2,164.39	3,300.39	2,981.61	318.78	10.353		
9,700.00	7,068.69	7,048.69	7,068.69	78.95	244.35	89.97	1,184.81	-2,164.39	3,316.39	2,995.60	320.79	10.338		
9,800.00	7,068.37	7,048.37	7,068.37	81.49	244.34	89.96	1,184.81	-2,164.39	3,335.31	3,012.57	322.75	10.334 SF		
9,900.00	7,068.04	7,048.04	7,068.04	84.06	244.32	89.96	1,184.81	-2,164.39	3,357.11	3,032.47	324.64	10.341		
10,000.00	7,067.72	7,047.72	7,067.72	86.65	244.31	89.95	1,184.81	-2,164.39	3,381.73	3,055.25	326.47	10.358		
10,100.00	7,067.39	7,047.39	7,067.39	89.25	244.30	89.94	1,184.81	-2,164.39	3,409.10	3,080.86	328.23	10.386		
10,200.00	7,067.07	7,047.07	7,067.07	91.87	244.29	89.94	1,184.81	-2,164.39	3,439.16	3,109.24	329.92	10.424		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,066.74	7,046.74	7,066.74	94.50	244.28	89.93	1,184.81	-2,164.39	3,471.84	3,140.31	331.53	10.472	
10,400.00	7,066.42	7,046.42	7,066.42	97.14	244.27	89.93	1,184.81	-2,164.39	3,507.07	3,174.01	333.06	10.530	
10,500.00	7,066.09	7,046.09	7,066.09	99.80	244.26	89.92	1,184.81	-2,164.39	3,544.77	3,210.25	334.52	10.597	
10,600.00	7,065.77	7,045.77	7,065.77	102.47	244.24	89.92	1,184.81	-2,164.39	3,584.87	3,248.97	335.90	10.672	
10,700.00	7,065.44	7,045.44	7,065.44	105.15	244.23	89.91	1,184.81	-2,164.39	3,627.28	3,290.08	337.20	10.757	
10,800.00	7,065.12	7,045.12	7,065.12	107.83	244.22	89.90	1,184.81	-2,164.39	3,671.92	3,333.49	338.43	10.850	
10,900.00	7,064.79	7,044.79	7,064.79	110.53	244.21	89.90	1,184.81	-2,164.39	3,718.72	3,379.13	339.59	10.951	
11,000.00	7,064.47	7,044.47	7,064.47	113.23	244.20	89.89	1,184.81	-2,164.39	3,767.59	3,426.92	340.67	11.059	
11,100.00	7,064.14	7,044.14	7,064.14	115.95	244.19	89.89	1,184.81	-2,164.39	3,818.46	3,476.77	341.69	11.175	
11,200.00	7,063.82	7,043.82	7,063.82	118.66	244.18	89.88	1,184.81	-2,164.39	3,871.24	3,528.60	342.64	11.298	
11,300.00	7,063.49	7,043.49	7,063.49	121.39	244.17	89.88	1,184.81	-2,164.39	3,925.86	3,582.33	343.52	11.428	
11,400.00	7,063.17	7,043.17	7,063.17	124.12	244.15	89.87	1,184.81	-2,164.39	3,982.24	3,637.89	344.35	11.565	
11,500.00	7,062.84	7,042.84	7,062.84	126.86	244.14	89.86	1,184.81	-2,164.39	4,040.31	3,695.19	345.12	11.707	
11,600.00	7,062.52	7,042.52	7,062.52	129.60	244.13	89.86	1,184.81	-2,164.39	4,100.00	3,754.17	345.83	11.856	
11,700.00	7,062.19	7,042.19	7,062.19	132.35	244.12	89.85	1,184.81	-2,164.39	4,161.23	3,814.74	346.49	12.010	
11,800.00	7,061.87	7,041.87	7,061.87	135.10	244.11	89.85	1,184.81	-2,164.39	4,223.94	3,876.84	347.10	12.169	
11,900.00	7,061.54	7,041.54	7,061.54	137.85	244.10	89.84	1,184.81	-2,164.39	4,288.07	3,940.41	347.66	12.334	
12,000.00	7,061.22	7,041.22	7,061.22	140.61	244.09	89.84	1,184.81	-2,164.39	4,353.56	4,005.37	348.19	12.504	
12,100.00	7,060.89	7,040.89	7,060.89	143.38	244.07	89.83	1,184.81	-2,164.39	4,420.33	4,071.66	348.66	12.678	
12,200.00	7,060.57	7,040.57	7,060.57	146.15	244.06	89.82	1,184.81	-2,164.39	4,488.34	4,139.23	349.10	12.857	
12,300.00	7,060.24	7,040.24	7,060.24	148.92	244.05	89.82	1,184.81	-2,164.39	4,557.53	4,208.02	349.51	13.040	
12,400.00	7,059.92	7,039.92	7,059.92	151.69	244.04	89.81	1,184.81	-2,164.39	4,627.84	4,277.96	349.88	13.227	
12,500.00	7,059.59	7,039.59	7,059.59	154.47	244.03	89.81	1,184.81	-2,164.39	4,699.23	4,349.01	350.22	13.418	
12,600.00	7,059.27	7,039.27	7,059.27	157.25	244.02	89.80	1,184.81	-2,164.39	4,771.65	4,421.12	350.53	13.613	
12,700.00	7,058.94	7,038.94	7,058.94	160.03	244.01	89.80	1,184.81	-2,164.39	4,845.05	4,494.24	350.81	13.811	
12,800.00	7,058.62	7,038.62	7,058.62	162.82	244.00	89.79	1,184.81	-2,164.39	4,919.39	4,568.32	351.07	14.013	
12,900.00	7,058.29	7,038.29	7,058.29	165.61	243.98	89.78	1,184.81	-2,164.39	4,994.62	4,643.32	351.30	14.218	
13,000.00	7,057.97	7,037.97	7,057.97	168.40	243.97	89.78	1,184.81	-2,164.39	5,070.71	4,719.20	351.51	14.426	
13,100.00	7,057.64	7,037.64	7,057.64	171.19	243.96	89.77	1,184.81	-2,164.39	5,147.62	4,795.92	351.70	14.636	
13,200.00	7,057.32	7,037.32	7,057.32	173.99	243.95	89.77	1,184.81	-2,164.39	5,225.31	4,873.44	351.87	14.850	
13,300.00	7,057.00	7,037.00	7,057.00	176.78	243.94	89.76	1,184.81	-2,164.39	5,303.74	4,951.72	352.02	15.067	
13,400.00	7,056.67	7,036.67	7,056.67	179.58	243.93	89.76	1,184.81	-2,164.39	5,382.89	5,030.74	352.16	15.285	
13,500.00	7,056.35	7,036.35	7,056.35	182.38	243.92	89.75	1,184.81	-2,164.39	5,462.73	5,110.45	352.28	15.507	
13,600.00	7,056.02	7,036.02	7,056.02	185.19	243.90	89.74	1,184.81	-2,164.39	5,543.22	5,190.83	352.39	15.730	
13,700.00	7,055.70	7,035.70	7,055.70	187.99	243.89	89.74	1,184.81	-2,164.39	5,624.34	5,271.85	352.48	15.956	
13,800.00	7,055.37	7,035.37	7,055.37	190.80	243.88	89.73	1,184.81	-2,164.39	5,706.05	5,353.49	352.56	16.184	
13,900.00	7,055.05	7,035.05	7,055.05	193.60	243.87	89.73	1,184.81	-2,164.39	5,788.34	5,435.70	352.64	16.415	
14,000.00	7,054.72	7,034.72	7,054.72	196.41	243.86	89.72	1,184.81	-2,164.39	5,871.18	5,518.48	352.70	16.647	
14,100.00	7,054.40	7,034.40	7,054.40	199.22	243.85	89.72	1,184.81	-2,164.39	5,954.54	5,601.80	352.75	16.880	
14,200.00	7,054.07	7,034.07	7,054.07	202.03	243.84	89.71	1,184.81	-2,164.39	6,038.42	5,685.63	352.79	17.116	
14,300.00	7,053.75	7,033.75	7,053.75	204.85	243.83	89.70	1,184.81	-2,164.39	6,122.77	5,769.95	352.83	17.354	
14,400.00	7,053.42	7,033.42	7,053.42	207.66	243.81	89.70	1,184.81	-2,164.39	6,207.59	5,854.74	352.85	17.593	
14,500.00	7,053.10	7,033.10	7,053.10	210.48	243.80	89.69	1,184.81	-2,164.39	6,292.86	5,939.98	352.87	17.833	
14,600.00	7,052.77	7,032.77	7,052.77	213.29	243.79	89.69	1,184.81	-2,164.39	6,378.55	6,025.66	352.89	18.075	
14,700.00	7,052.45	7,032.45	7,052.45	216.11	243.78	89.68	1,184.81	-2,164.39	6,464.66	6,111.76	352.90	18.319	
14,800.00	7,052.12	7,032.12	7,052.12	218.93	243.77	89.68	1,184.81	-2,164.39	6,551.16	6,198.25	352.90	18.564	
14,900.00	7,051.80	7,031.80	7,051.80	221.75	243.76	89.67	1,184.81	-2,164.39	6,638.03	6,285.13	352.90	18.810	
15,000.00	7,051.47	7,031.47	7,051.47	224.57	243.75	89.66	1,184.81	-2,164.39	6,725.28	6,372.38	352.89	19.058	
15,100.00	7,051.15	7,031.15	7,051.15	227.39	243.73	89.66	1,184.81	-2,164.39	6,812.87	6,459.99	352.88	19.306	
15,145.13	7,051.00	7,031.00	7,051.00	228.67	243.73	89.66	1,184.81	-2,164.39	6,852.51	6,499.63	352.88	19.419	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-93.35	-148.51	-2,534.43	2,539.02					
100.00	100.00	65.00	100.00	3.28	3.47	-93.35	-148.51	-2,534.43	2,538.78	2,532.03	6.76	375.815		
200.00	200.00	165.00	200.00	3.34	5.18	-93.35	-148.51	-2,534.43	2,538.78	2,530.26	8.52	297.936		
300.00	299.98	264.98	299.98	3.44	8.19	82.30	-148.51	-2,534.43	2,538.55	2,526.92	11.63	218.281		
400.00	399.84	364.84	399.84	3.59	11.47	82.43	-148.51	-2,534.43	2,537.85	2,522.79	15.06	168.535		
500.00	499.45	464.45	499.45	3.79	14.84	82.65	-148.51	-2,534.43	2,536.72	2,518.09	18.62	136.223		
600.00	598.70	563.70	598.70	4.03	18.23	82.95	-148.51	-2,534.43	2,535.18	2,512.92	22.26	113.890		
700.00	697.47	662.47	697.47	4.31	21.63	83.34	-148.51	-2,534.43	2,533.29	2,507.34	25.94	97.641		
800.00	795.62	760.62	795.62	4.64	25.02	83.80	-148.51	-2,534.43	2,531.11	2,501.45	29.66	85.334		
900.00	893.06	858.06	893.06	5.00	28.40	84.34	-148.51	-2,534.43	2,528.73	2,495.33	33.40	75.716		
1,000.00	989.64	954.64	989.64	5.40	31.75	84.96	-148.51	-2,534.43	2,526.23	2,489.08	37.15	68.008		
1,100.00	1,085.27	1,050.27	1,085.27	5.83	35.07	85.64	-148.51	-2,534.43	2,523.72	2,482.82	40.90	61.706		
1,200.00	1,180.44	1,145.44	1,180.44	6.29	38.38	86.30	-148.51	-2,534.43	2,521.45	2,476.79	44.67	56.450		
1,300.00	1,275.61	1,240.61	1,275.61	6.76	41.69	86.96	-148.51	-2,534.43	2,519.56	2,471.10	48.46	51.997		
1,400.00	1,370.78	1,335.78	1,370.78	7.26	45.01	87.62	-148.51	-2,534.43	2,518.03	2,465.77	52.26	48.182		
1,500.00	1,465.95	1,430.95	1,465.95	7.76	48.32	88.29	-148.51	-2,534.43	2,516.88	2,460.80	56.08	44.880		
1,600.00	1,561.12	1,526.12	1,561.12	8.27	51.64	88.95	-148.51	-2,534.43	2,516.11	2,456.20	59.91	41.999		
1,700.00	1,656.29	1,621.29	1,656.29	8.80	54.95	89.62	-148.51	-2,534.43	2,515.71	2,451.96	63.75	39.463		
1,757.11	1,710.64	1,675.64	1,710.64	9.10	56.85	90.00	-148.51	-2,534.43	2,515.65	2,449.70	65.94	38.148		
1,800.00	1,751.46	1,716.46	1,751.46	9.32	58.27	90.29	-148.51	-2,534.43	2,515.68	2,448.09	67.59	37.218		
1,900.00	1,846.63	1,811.63	1,846.63	9.86	61.59	90.95	-148.51	-2,534.43	2,516.03	2,444.58	71.45	35.216		
2,000.00	1,941.80	1,906.80	1,941.80	10.40	64.90	91.62	-148.51	-2,534.43	2,516.75	2,441.45	75.30	33.422		
2,100.00	2,036.96	2,001.96	2,036.96	10.94	68.22	92.28	-148.51	-2,534.43	2,517.85	2,438.68	79.16	31.806		
2,200.00	2,132.13	2,102.87	2,132.13	11.49	71.74	92.95	-148.51	-2,534.43	2,519.32	2,436.09	83.23	30.270		
2,300.00	2,227.30	2,207.70	2,227.30	12.04	75.40	93.61	-148.51	-2,534.43	2,521.16	2,433.73	87.43	28.836		
2,400.00	2,322.47	2,287.47	2,322.47	12.59	78.18	94.27	-148.51	-2,534.43	2,523.38	2,432.61	90.76	27.802		
2,500.00	2,417.64	2,382.64	2,417.64	13.15	81.50	94.93	-148.51	-2,534.43	2,525.97	2,431.33	94.64	26.692		
2,600.00	2,512.81	2,477.81	2,512.81	13.70	84.82	95.59	-148.51	-2,534.43	2,528.92	2,430.41	98.51	25.672		
2,700.00	2,607.98	2,572.98	2,607.98	14.26	88.14	96.25	-148.51	-2,534.43	2,532.25	2,429.87	102.38	24.733		
2,800.00	2,703.15	2,668.15	2,703.15	14.82	91.46	96.91	-148.51	-2,534.43	2,535.94	2,429.69	106.26	23.866		
2,900.00	2,798.32	2,763.32	2,798.32	15.38	94.78	97.56	-148.51	-2,534.43	2,540.00	2,429.87	110.13	23.063		
3,000.00	2,893.49	2,858.49	2,893.49	15.95	98.10	98.22	-148.51	-2,534.43	2,544.43	2,430.42	114.01	22.318		
3,100.00	2,988.66	2,953.66	2,988.66	16.51	101.42	98.87	-148.51	-2,534.43	2,549.21	2,431.33	117.89	21.624		
3,200.00	3,083.83	3,048.83	3,083.83	17.07	104.74	99.51	-148.51	-2,534.43	2,554.36	2,432.60	121.76	20.978		
3,300.00	3,179.00	3,144.00	3,179.00	17.64	108.06	100.16	-148.51	-2,534.43	2,559.86	2,434.22	125.64	20.375		
3,400.00	3,274.17	3,239.17	3,274.17	18.21	111.38	100.80	-148.51	-2,534.43	2,565.72	2,436.21	129.51	19.810		
3,500.00	3,369.34	3,334.34	3,369.34	18.77	114.70	101.44	-148.51	-2,534.43	2,571.94	2,438.55	133.39	19.281		
3,600.00	3,464.51	3,429.51	3,464.51	19.34	118.02	102.08	-148.51	-2,534.43	2,578.50	2,441.23	137.27	18.785		
3,700.00	3,559.68	3,524.68	3,559.68	19.91	121.35	102.72	-148.51	-2,534.43	2,585.41	2,444.27	141.14	18.318		
3,800.00	3,654.84	3,619.84	3,654.84	20.48	124.67	103.35	-148.51	-2,534.43	2,592.67	2,447.65	145.01	17.879		
3,900.00	3,750.01	3,715.01	3,750.01	21.05	127.99	103.98	-148.51	-2,534.43	2,600.27	2,451.38	148.89	17.465		
4,000.00	3,845.18	3,810.18	3,845.18	21.62	131.31	104.60	-148.51	-2,534.43	2,608.21	2,455.45	152.76	17.074		
4,100.00	3,940.35	3,905.35	3,940.35	22.19	134.63	105.22	-148.51	-2,534.43	2,616.48	2,459.85	156.63	16.705		
4,200.00	4,035.52	4,000.52	4,035.52	22.76	137.95	105.84	-148.51	-2,534.43	2,625.09	2,464.59	160.50	16.356		
4,300.00	4,130.69	4,104.31	4,130.69	23.33	141.57	106.46	-148.51	-2,534.43	2,634.03	2,469.36	164.67	15.996		
4,400.00	4,225.86	4,209.14	4,225.86	23.91	145.23	107.07	-148.51	-2,534.43	2,643.29	2,474.42	168.88	15.652		
4,500.00	4,321.03	4,286.03	4,321.03	24.48	147.92	107.67	-148.51	-2,534.43	2,652.88	2,480.77	172.11	15.414		
4,600.00	4,416.20	4,381.20	4,416.20	25.05	151.24	108.27	-148.51	-2,534.43	2,662.79	2,486.81	175.97	15.132		
4,700.00	4,511.37	4,476.37	4,511.37	25.62	154.56	108.87	-148.51	-2,534.43	2,673.01	2,493.17	179.84	14.864		
4,800.00	4,606.54	4,571.54	4,606.54	26.20	157.88	109.47	-148.51	-2,534.43	2,683.54	2,499.84	183.70	14.608		
4,900.00	4,701.71	4,666.71	4,701.71	26.77	161.20	110.06	-148.51	-2,534.43	2,694.39	2,506.83	187.56	14.365		
5,000.00	4,796.88	4,761.88	4,796.88	27.34	164.52	110.64	-148.51	-2,534.43	2,705.54	2,514.12	191.42	14.134		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,892.05	4,857.05	4,892.05	27.92	167.85	111.22	-148.51	-2,534.43	2,716.99	2,521.71	195.28	13.913	
5,200.00	4,987.22	4,952.22	4,987.22	28.49	171.17	111.80	-148.51	-2,534.43	2,728.73	2,529.60	199.14	13.703	
5,300.00	5,082.39	5,047.39	5,082.39	29.07	174.49	112.37	-148.51	-2,534.43	2,740.78	2,537.78	203.00	13.502	
5,400.00	5,177.56	5,142.56	5,177.56	29.64	177.81	112.94	-148.51	-2,534.43	2,753.11	2,546.26	206.85	13.310	
5,500.00	5,272.72	5,237.72	5,272.72	30.21	181.13	113.50	-148.51	-2,534.43	2,765.72	2,555.02	210.71	13.126	
5,600.00	5,367.89	5,332.89	5,367.89	30.79	184.46	114.06	-148.51	-2,534.43	2,778.62	2,564.07	214.56	12.950	
5,700.00	5,463.06	5,428.06	5,463.06	31.36	187.78	114.61	-148.51	-2,534.43	2,791.80	2,573.39	218.41	12.782	
5,800.00	5,558.23	5,523.23	5,558.23	31.94	191.10	115.16	-148.51	-2,534.43	2,805.25	2,582.99	222.26	12.622	
5,900.00	5,653.40	5,618.40	5,653.40	32.51	194.42	115.70	-148.51	-2,534.43	2,818.97	2,592.87	226.11	12.467	
6,000.00	5,748.57	5,713.57	5,748.57	33.09	197.74	116.24	-148.51	-2,534.43	2,832.96	2,603.01	229.96	12.320	
6,100.00	5,843.74	5,808.74	5,843.74	33.67	201.06	116.77	-148.51	-2,534.43	2,847.21	2,613.41	233.80	12.178	
6,200.00	5,938.91	5,903.91	5,938.91	34.24	204.39	117.30	-148.51	-2,534.43	2,861.72	2,624.08	237.65	12.042	
6,300.00	6,034.08	6,000.92	6,034.08	34.82	207.77	117.82	-148.51	-2,534.43	2,876.49	2,634.93	241.55	11.908	
6,400.00	6,129.25	6,105.75	6,129.25	35.39	211.43	118.34	-148.51	-2,534.43	2,891.50	2,645.77	245.73	11.767	
6,500.00	6,224.42	6,189.42	6,224.42	35.97	214.35	118.85	-148.51	-2,534.43	2,906.76	2,657.59	249.17	11.666	
6,600.00	6,319.59	6,284.59	6,319.59	36.54	217.67	119.36	-148.51	-2,534.43	2,922.26	2,669.25	253.01	11.550	
6,700.00	6,414.76	6,379.76	6,414.76	37.12	221.00	119.86	-148.51	-2,534.43	2,938.01	2,681.16	256.85	11.439	
6,800.00	6,509.91	6,474.91	6,509.91	37.70	224.32	112.89	-148.51	-2,534.43	2,953.53	2,692.85	260.69	11.330	
6,900.00	6,603.99	6,568.99	6,603.99	38.26	227.60	90.31	-148.51	-2,534.43	2,969.98	2,695.50	264.48	11.192	
7,000.00	6,694.76	6,659.76	6,694.76	38.78	230.77	76.87	-148.51	-2,534.43	2,954.07	2,685.94	268.13	11.017	
7,100.00	6,779.96	6,744.96	6,779.96	39.24	233.74	69.96	-148.51	-2,534.43	2,936.27	2,664.74	271.53	10.814	
7,200.00	6,857.50	6,822.50	6,857.50	39.65	236.45	67.18	-148.51	-2,534.43	2,907.39	2,632.75	274.64	10.586	
7,300.00	6,925.48	6,909.52	6,925.48	40.02	239.49	67.21	-148.51	-2,534.43	2,868.51	2,590.45	278.06	10.316	
7,400.00	6,982.21	6,947.21	6,982.21	40.33	240.80	69.39	-148.51	-2,534.43	2,820.95	2,541.17	279.78	10.083	
7,500.00	7,026.31	7,008.69	7,026.31	40.63	242.95	73.39	-148.51	-2,534.43	2,766.19	2,483.81	282.38	9.796	
7,600.00	7,056.68	7,021.68	7,056.68	40.91	243.40	78.94	-148.51	-2,534.43	2,705.83	2,422.45	283.38	9.549	
7,700.00	7,072.58	7,037.58	7,072.58	41.25	243.96	85.73	-148.51	-2,534.43	2,641.49	2,356.92	284.57	9.282	
7,800.00	7,074.86	7,039.86	7,074.86	41.69	244.04	90.16	-148.51	-2,534.43	2,575.09	2,289.70	285.39	9.023	
7,900.00	7,074.54	7,039.54	7,074.54	42.34	244.03	90.15	-148.51	-2,534.43	2,510.21	2,223.96	286.26	8.769	
8,000.00	7,074.21	7,039.21	7,074.21	43.27	244.02	90.14	-148.51	-2,534.43	2,447.71	2,160.43	287.28	8.520	
8,100.00	7,073.89	7,038.89	7,073.89	44.47	244.00	90.13	-148.51	-2,534.43	2,387.75	2,099.29	288.46	8.278	
8,200.00	7,073.57	7,038.57	7,073.57	45.91	243.99	90.13	-148.51	-2,534.43	2,330.55	2,040.74	289.81	8.042	
8,300.00	7,073.24	7,038.24	7,073.24	47.53	243.98	90.12	-148.51	-2,534.43	2,276.30	1,984.98	291.32	7.814	
8,400.00	7,072.92	7,037.92	7,072.92	49.31	243.97	90.11	-148.51	-2,534.43	2,225.22	1,932.23	292.99	7.595	
8,500.00	7,072.59	7,037.59	7,072.59	51.20	243.96	90.10	-148.51	-2,534.43	2,177.55	1,882.73	294.82	7.386	
8,600.00	7,072.27	7,037.27	7,072.27	53.19	243.95	90.09	-148.51	-2,534.43	2,133.49	1,836.71	296.78	7.189	
8,700.00	7,071.94	7,036.94	7,071.94	55.27	243.94	90.08	-148.51	-2,534.43	2,093.29	1,794.41	298.88	7.004	
8,800.00	7,071.62	7,036.62	7,071.62	57.43	243.93	90.07	-148.51	-2,534.43	2,057.17	1,756.09	301.09	6.833	
8,900.00	7,071.29	7,036.29	7,071.29	59.64	243.91	90.06	-148.51	-2,534.43	2,025.35	1,721.98	303.38	6.676	
9,000.00	7,070.97	7,035.97	7,070.97	61.92	243.90	90.05	-148.51	-2,534.43	1,998.03	1,692.31	305.73	6.535	
9,100.00	7,070.64	7,035.64	7,070.64	64.24	243.89	90.04	-148.51	-2,534.43	1,975.40	1,667.30	308.11	6.411	
9,200.00	7,070.32	7,035.32	7,070.32	66.61	243.88	90.03	-148.51	-2,534.43	1,957.63	1,647.14	310.49	6.305	
9,300.00	7,069.99	7,034.99	7,069.99	69.01	243.87	90.02	-148.51	-2,534.43	1,944.84	1,632.00	312.84	6.217	
9,400.00	7,069.67	7,034.67	7,069.67	71.45	243.86	90.01	-148.51	-2,534.43	1,937.13	1,622.01	315.12	6.147	
9,499.58	7,069.34	7,034.34	7,069.34	73.91	243.85	90.00	-148.51	-2,534.43	1,934.57	1,617.26	317.31	6.097 CC	
9,500.00	7,069.34	7,034.34	7,069.34	73.92	243.85	90.00	-148.51	-2,534.43	1,934.57	1,617.25	317.32	6.097 ES	
9,600.00	7,069.02	7,034.02	7,069.02	76.42	243.83	89.99	-148.51	-2,534.43	1,937.17	1,617.78	319.40	6.065	
9,700.00	7,068.69	7,033.69	7,068.69	78.95	243.82	89.98	-148.51	-2,534.43	1,944.92	1,623.59	321.34	6.053 SF	
9,800.00	7,068.37	7,033.37	7,068.37	81.49	243.81	89.97	-148.51	-2,534.43	1,957.76	1,634.63	323.12	6.059	
9,900.00	7,068.04	7,033.04	7,068.04	84.06	243.80	89.96	-148.51	-2,534.43	1,975.58	1,650.83	324.74	6.084	
10,000.00	7,067.72	7,032.72	7,067.72	86.65	243.79	89.95	-148.51	-2,534.43	1,998.25	1,672.06	326.19	6.126	
10,100.00	7,067.39	7,032.39	7,067.39	89.25	243.78	89.94	-148.51	-2,534.43	2,025.60	1,698.15	327.45	6.186	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,067.07	7,032.07	7,067.07	91.87	243.77	89.93	-148.51	-2,534.43	2,057.46	1,728.92	328.54	6.262		
10,300.00	7,066.74	7,031.74	7,066.74	94.50	243.76	89.92	-148.51	-2,534.43	2,093.62	1,764.15	329.47	6.355		
10,400.00	7,066.42	7,031.42	7,066.42	97.14	243.74	89.91	-148.51	-2,534.43	2,133.85	1,803.62	330.23	6.462		
10,500.00	7,066.09	7,031.09	7,066.09	99.80	243.73	89.90	-148.51	-2,534.43	2,177.93	1,847.09	330.84	6.583		
10,600.00	7,065.77	7,030.77	7,065.77	102.47	243.72	89.89	-148.51	-2,534.43	2,225.64	1,894.33	331.32	6.718		
10,700.00	7,065.44	7,030.44	7,065.44	105.15	243.71	89.88	-148.51	-2,534.43	2,276.74	1,945.08	331.67	6.865		
10,800.00	7,065.12	7,030.12	7,065.12	107.83	243.70	89.87	-148.51	-2,534.43	2,331.02	1,999.11	331.91	7.023		
10,900.00	7,064.79	7,029.79	7,064.79	110.53	243.69	89.87	-148.51	-2,534.43	2,388.25	2,056.20	332.05	7.192		
11,000.00	7,064.47	7,029.47	7,064.47	113.23	243.68	89.86	-148.51	-2,534.43	2,448.23	2,116.12	332.11	7.372		
11,100.00	7,064.14	7,029.14	7,064.14	115.95	243.66	89.85	-148.51	-2,534.43	2,510.76	2,178.66	332.09	7.560		
11,200.00	7,063.82	7,028.82	7,063.82	118.66	243.65	89.84	-148.51	-2,534.43	2,575.65	2,243.64	332.01	7.758		
11,300.00	7,063.49	7,028.49	7,063.49	121.39	243.64	89.83	-148.51	-2,534.43	2,642.74	2,310.86	331.88	7.963		
11,400.00	7,063.17	7,028.17	7,063.17	124.12	243.63	89.82	-148.51	-2,534.43	2,711.85	2,380.16	331.70	8.176		
11,500.00	7,062.84	7,027.84	7,062.84	126.86	243.62	89.81	-148.51	-2,534.43	2,782.84	2,451.36	331.48	8.395		
11,600.00	7,062.52	7,027.52	7,062.52	129.60	243.61	89.80	-148.51	-2,534.43	2,855.57	2,524.34	331.23	8.621		
11,700.00	7,062.19	7,027.19	7,062.19	132.35	243.60	89.79	-148.51	-2,534.43	2,929.91	2,598.95	330.96	8.853		
11,800.00	7,061.87	7,026.87	7,061.87	135.10	243.59	89.78	-148.51	-2,534.43	3,005.74	2,675.07	330.67	9.090		
11,900.00	7,061.54	7,026.54	7,061.54	137.85	243.57	89.77	-148.51	-2,534.43	3,082.94	2,752.58	330.36	9.332		
12,000.00	7,061.22	7,026.22	7,061.22	140.61	243.56	89.76	-148.51	-2,534.43	3,161.43	2,831.39	330.04	9.579		
12,100.00	7,060.89	7,025.89	7,060.89	143.38	243.55	89.75	-148.51	-2,534.43	3,241.10	2,911.38	329.71	9.830		
12,200.00	7,060.57	7,025.57	7,060.57	146.15	243.54	89.74	-148.51	-2,534.43	3,321.86	2,992.48	329.38	10.085		
12,300.00	7,060.24	7,025.24	7,060.24	148.92	243.53	89.73	-148.51	-2,534.43	3,403.65	3,074.60	329.05	10.344		
12,400.00	7,059.92	7,024.92	7,059.92	151.69	243.52	89.72	-148.51	-2,534.43	3,486.39	3,157.68	328.71	10.606		
12,500.00	7,059.59	7,024.59	7,059.59	154.47	243.51	89.71	-148.51	-2,534.43	3,570.02	3,241.64	328.38	10.872		
12,600.00	7,059.27	7,024.27	7,059.27	157.25	243.49	89.70	-148.51	-2,534.43	3,654.46	3,326.42	328.05	11.140		
12,700.00	7,058.94	7,023.94	7,058.94	160.03	243.48	89.69	-148.51	-2,534.43	3,739.68	3,411.96	327.72	11.411		
12,800.00	7,058.62	7,023.62	7,058.62	162.82	243.47	89.68	-148.51	-2,534.43	3,825.60	3,498.21	327.39	11.685		
12,900.00	7,058.29	7,023.29	7,058.29	165.61	243.46	89.67	-148.51	-2,534.43	3,912.20	3,585.13	327.07	11.961		
13,000.00	7,057.97	7,022.97	7,057.97	168.40	243.45	89.66	-148.51	-2,534.43	3,999.43	3,672.67	326.76	12.240		
13,100.00	7,057.64	7,022.64	7,057.64	171.19	243.44	89.65	-148.51	-2,534.43	4,087.23	3,760.79	326.45	12.520		
13,200.00	7,057.32	7,022.32	7,057.32	173.99	243.43	89.64	-148.51	-2,534.43	4,175.59	3,849.45	326.14	12.803		
13,300.00	7,057.00	7,022.00	7,057.00	176.78	243.41	89.63	-148.51	-2,534.43	4,264.46	3,938.61	325.85	13.087		
13,400.00	7,056.67	7,021.67	7,056.67	179.58	243.40	89.62	-148.51	-2,534.43	4,353.82	4,028.26	325.56	13.373		
13,500.00	7,056.35	7,021.35	7,056.35	182.38	243.39	89.62	-148.51	-2,534.43	4,443.62	4,118.35	325.28	13.661		
13,600.00	7,056.02	7,021.02	7,056.02	185.19	243.38	89.61	-148.51	-2,534.43	4,533.86	4,208.86	325.00	13.950		
13,700.00	7,055.70	7,020.70	7,055.70	187.99	243.37	89.60	-148.51	-2,534.43	4,624.49	4,299.76	324.73	14.241		
13,800.00	7,055.37	7,020.37	7,055.37	190.80	243.36	89.59	-148.51	-2,534.43	4,715.51	4,391.04	324.47	14.533		
13,900.00	7,055.05	7,020.05	7,055.05	193.60	243.35	89.58	-148.51	-2,534.43	4,806.88	4,482.66	324.22	14.826		
14,000.00	7,054.72	7,019.72	7,054.72	196.41	243.34	89.57	-148.51	-2,534.43	4,898.59	4,574.62	323.97	15.120		
14,100.00	7,054.40	7,019.40	7,054.40	199.22	243.32	89.56	-148.51	-2,534.43	4,990.62	4,666.89	323.73	15.416		
14,200.00	7,054.07	7,019.07	7,054.07	202.03	243.31	89.55	-148.51	-2,534.43	5,082.94	4,759.45	323.50	15.712		
14,300.00	7,053.75	7,018.75	7,053.75	204.85	243.30	89.54	-148.51	-2,534.43	5,175.56	4,852.29	323.27	16.010		
14,400.00	7,053.42	7,018.42	7,053.42	207.66	243.29	89.53	-148.51	-2,534.43	5,268.44	4,945.39	323.05	16.308		
14,500.00	7,053.10	7,018.10	7,053.10	210.48	243.28	89.52	-148.51	-2,534.43	5,361.58	5,038.74	322.84	16.608		
14,600.00	7,052.77	7,017.77	7,052.77	213.29	243.27	89.51	-148.51	-2,534.43	5,454.96	5,132.33	322.63	16.908		
14,700.00	7,052.45	7,017.45	7,052.45	216.11	243.26	89.50	-148.51	-2,534.43	5,548.58	5,226.15	322.43	17.209		
14,800.00	7,052.12	7,017.12	7,052.12	218.93	243.24	89.49	-148.51	-2,534.43	5,642.41	5,320.17	322.23	17.510		
14,900.00	7,051.80	7,016.80	7,051.80	221.75	243.23	89.48	-148.51	-2,534.43	5,736.45	5,414.40	322.04	17.813		
15,000.00	7,051.47	7,016.47	7,051.47	224.57	243.22	89.47	-148.51	-2,534.43	5,830.69	5,508.83	321.86	18.115		
15,100.00	7,051.15	7,016.15	7,051.15	227.39	243.21	89.46	-148.51	-2,534.43	5,925.11	5,603.43	321.68	18.419		
15,145.13	7,051.00	7,016.00	7,051.00	228.67	243.21	89.46	-148.51	-2,534.43	5,967.79	5,646.18	321.61	18.556		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	46.00	3.28	3.28	-105.36	-1,317.59	-4,795.96	4,973.87				
100.00	100.00	54.00	100.00	3.28	3.41	-105.36	-1,317.59	-4,795.96	4,973.66	4,966.96	6.70	742.618	
200.00	200.00	154.00	200.00	3.34	4.89	-105.36	-1,317.59	-4,795.96	4,973.66	4,965.43	8.23	604.342	
300.00	299.98	253.98	299.98	3.44	7.84	70.28	-1,317.59	-4,795.96	4,973.07	4,961.79	11.28	440.898	
400.00	399.84	353.84	399.84	3.59	11.10	70.37	-1,317.59	-4,795.96	4,971.31	4,956.61	14.69	338.385	
500.00	499.45	453.45	499.45	3.79	14.46	70.52	-1,317.59	-4,795.96	4,968.38	4,950.13	18.25	272.267	
600.00	598.70	552.70	598.70	4.03	17.85	70.73	-1,317.59	-4,795.96	4,964.31	4,942.43	21.88	226.860	
700.00	697.47	651.47	697.47	4.31	21.25	71.00	-1,317.59	-4,795.96	4,959.12	4,933.56	25.57	193.979	
800.00	795.62	749.62	795.62	4.64	24.64	71.32	-1,317.59	-4,795.96	4,952.86	4,923.58	29.28	169.162	
900.00	893.06	847.06	893.06	5.00	28.02	71.70	-1,317.59	-4,795.96	4,945.55	4,912.54	33.01	149.812	
1,000.00	989.64	943.64	989.64	5.40	31.37	72.13	-1,317.59	-4,795.96	4,937.26	4,900.51	36.76	134.326	
1,100.00	1,085.27	1,039.27	1,085.27	5.83	34.69	72.61	-1,317.59	-4,795.96	4,928.05	4,887.55	40.50	121.667	
1,200.00	1,180.44	1,134.44	1,180.44	6.29	38.00	72.94	-1,317.59	-4,795.96	4,918.54	4,874.27	44.26	111.116	
1,300.00	1,275.61	1,229.61	1,275.61	6.76	41.31	73.26	-1,317.59	-4,795.96	4,909.20	4,861.15	48.05	102.176	
1,400.00	1,370.78	1,324.78	1,370.78	7.26	44.62	73.59	-1,317.59	-4,795.96	4,900.04	4,848.19	51.85	94.513	
1,500.00	1,465.95	1,419.95	1,465.95	7.76	47.94	73.92	-1,317.59	-4,795.96	4,891.05	4,835.39	55.66	87.878	
1,600.00	1,561.12	1,515.12	1,561.12	8.27	51.25	74.25	-1,317.59	-4,795.96	4,882.24	4,822.76	59.48	82.081	
1,700.00	1,656.29	1,610.29	1,656.29	8.80	54.57	74.59	-1,317.59	-4,795.96	4,873.61	4,810.29	63.31	76.975	
1,800.00	1,751.46	1,705.46	1,751.46	9.32	57.89	74.92	-1,317.59	-4,795.96	4,865.15	4,798.00	67.16	72.447	
1,900.00	1,846.63	1,800.63	1,846.63	9.86	61.20	75.25	-1,317.59	-4,795.96	4,856.87	4,785.87	71.00	68.404	
2,000.00	1,941.80	1,904.20	1,941.80	10.40	64.81	75.59	-1,317.59	-4,795.96	4,848.78	4,773.63	75.15	64.522	
2,100.00	2,036.96	2,009.04	2,036.96	10.94	68.47	75.92	-1,317.59	-4,795.96	4,840.87	4,761.52	79.35	61.010	
2,200.00	2,132.13	2,086.13	2,132.13	11.49	71.16	76.26	-1,317.59	-4,795.96	4,833.13	4,750.56	82.58	58.528	
2,300.00	2,227.30	2,181.30	2,227.30	12.04	74.48	76.60	-1,317.59	-4,795.96	4,825.58	4,739.14	86.44	55.823	
2,400.00	2,322.47	2,276.47	2,322.47	12.59	77.80	76.94	-1,317.59	-4,795.96	4,818.22	4,727.90	90.31	53.349	
2,500.00	2,417.64	2,371.64	2,417.64	13.15	81.12	77.28	-1,317.59	-4,795.96	4,811.04	4,716.85	94.19	51.079	
2,600.00	2,512.81	2,466.81	2,512.81	13.70	84.43	77.62	-1,317.59	-4,795.96	4,804.04	4,705.98	98.06	48.989	
2,700.00	2,607.98	2,561.98	2,607.98	14.26	87.75	77.96	-1,317.59	-4,795.96	4,797.24	4,695.29	101.94	47.059	
2,800.00	2,703.15	2,657.15	2,703.15	14.82	91.07	78.30	-1,317.59	-4,795.96	4,790.61	4,684.79	105.82	45.271	
2,900.00	2,798.32	2,752.32	2,798.32	15.38	94.40	78.65	-1,317.59	-4,795.96	4,784.18	4,674.48	109.70	43.610	
3,000.00	2,893.49	2,847.49	2,893.49	15.95	97.72	78.99	-1,317.59	-4,795.96	4,777.93	4,664.35	113.59	42.064	
3,100.00	2,988.66	2,942.66	2,988.66	16.51	101.04	79.33	-1,317.59	-4,795.96	4,771.88	4,654.41	117.47	40.621	
3,200.00	3,083.83	3,037.83	3,083.83	17.07	104.36	79.68	-1,317.59	-4,795.96	4,766.01	4,644.65	121.36	39.272	
3,300.00	3,179.00	3,133.00	3,179.00	17.64	107.68	80.03	-1,317.59	-4,795.96	4,760.34	4,635.09	125.25	38.007	
3,400.00	3,274.17	3,228.17	3,274.17	18.21	111.00	80.37	-1,317.59	-4,795.96	4,754.86	4,625.72	129.14	36.820	
3,500.00	3,369.34	3,323.34	3,369.34	18.77	114.32	80.72	-1,317.59	-4,795.96	4,749.57	4,616.54	133.03	35.704	
3,600.00	3,464.51	3,418.51	3,464.51	19.34	117.64	81.07	-1,317.59	-4,795.96	4,744.47	4,607.55	136.92	34.652	
3,700.00	3,559.68	3,513.68	3,559.68	19.91	120.96	81.42	-1,317.59	-4,795.96	4,739.56	4,598.75	140.81	33.659	
3,800.00	3,654.84	3,608.84	3,654.84	20.48	124.28	81.77	-1,317.59	-4,795.96	4,734.85	4,590.15	144.70	32.721	
3,900.00	3,750.01	3,704.01	3,750.01	21.05	127.60	82.12	-1,317.59	-4,795.96	4,730.34	4,581.74	148.60	31.833	
4,000.00	3,845.18	3,800.22	3,845.18	21.62	130.98	82.47	-1,317.59	-4,795.96	4,726.02	4,573.47	152.55	30.980	
4,100.00	3,940.35	3,905.65	3,940.35	22.19	134.64	82.82	-1,317.59	-4,795.96	4,721.89	4,565.11	156.78	30.118	
4,200.00	4,035.52	3,989.52	4,035.52	22.76	137.57	83.18	-1,317.59	-4,795.96	4,717.96	4,557.68	160.28	29.435	
4,300.00	4,130.69	4,084.69	4,130.69	23.33	140.89	83.53	-1,317.59	-4,795.96	4,714.23	4,550.05	164.18	28.714	
4,400.00	4,225.86	4,179.86	4,225.86	23.91	144.21	83.88	-1,317.59	-4,795.96	4,710.69	4,542.62	168.08	28.027	
4,500.00	4,321.03	4,275.03	4,321.03	24.48	147.53	84.24	-1,317.59	-4,795.96	4,707.36	4,535.38	171.97	27.373	
4,600.00	4,416.20	4,370.20	4,416.20	25.05	150.85	84.59	-1,317.59	-4,795.96	4,704.22	4,528.35	175.87	26.748	
4,700.00	4,511.37	4,465.37	4,511.37	25.62	154.18	84.95	-1,317.59	-4,795.96	4,701.28	4,521.51	179.77	26.152	
4,800.00	4,606.54	4,560.54	4,606.54	26.20	157.50	85.30	-1,317.59	-4,795.96	4,698.53	4,514.87	183.67	25.582	
4,900.00	4,701.71	4,655.71	4,701.71	26.77	160.82	85.66	-1,317.59	-4,795.96	4,695.99	4,508.43	187.56	25.037	
5,000.00	4,796.88	4,750.88	4,796.88	27.34	164.14	86.01	-1,317.59	-4,795.96	4,693.65	4,502.19	191.46	24.515	
5,100.00	4,892.05	4,846.05	4,892.05	27.92	167.46	86.37	-1,317.59	-4,795.96	4,691.50	4,496.14	195.36	24.014	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,941.22	4,987.22	28.49	170.78	86.72	-1,317.59	-4,795.96	4,689.56	4,490.30	199.26	23.535		
5,300.00	5,082.39	5,036.39	5,082.39	29.07	174.11	87.08	-1,317.59	-4,795.96	4,687.82	4,484.66	203.16	23.075		
5,400.00	5,177.56	5,131.56	5,177.56	29.64	177.43	87.44	-1,317.59	-4,795.96	4,686.28	4,479.22	207.06	22.633		
5,500.00	5,272.72	5,226.72	5,272.72	30.21	180.75	87.79	-1,317.59	-4,795.96	4,684.93	4,473.98	210.96	22.208		
5,600.00	5,367.89	5,321.89	5,367.89	30.79	184.07	88.15	-1,317.59	-4,795.96	4,683.79	4,468.94	214.85	21.800		
5,700.00	5,463.06	5,417.06	5,463.06	31.36	187.39	88.51	-1,317.59	-4,795.96	4,682.85	4,464.10	218.75	21.407		
5,800.00	5,558.23	5,512.23	5,558.23	31.94	190.72	88.87	-1,317.59	-4,795.96	4,682.11	4,459.46	222.65	21.029		
5,900.00	5,653.40	5,607.40	5,653.40	32.51	194.04	89.22	-1,317.59	-4,795.96	4,681.58	4,455.03	226.55	20.665		
6,000.00	5,748.57	5,702.57	5,748.57	33.09	197.36	89.58	-1,317.59	-4,795.96	4,681.24	4,450.79	230.45	20.314		
6,100.00	5,843.74	5,802.26	5,843.74	33.67	200.84	89.94	-1,317.59	-4,795.96	4,681.11	4,446.60	234.50	19.962		
6,116.94	5,859.86	5,813.86	5,859.86	33.76	201.24	90.00	-1,317.59	-4,795.96	4,681.10	4,446.10	235.01	19.919		
6,200.00	5,938.91	5,907.09	5,938.91	34.24	204.50	90.30	-1,317.59	-4,795.96	4,681.17	4,442.43	238.74	19.608		
6,300.00	6,034.08	5,988.08	6,034.08	34.82	207.32	90.65	-1,317.59	-4,795.96	4,681.44	4,439.30	242.14	19.333		
6,400.00	6,129.25	6,083.25	6,129.25	35.39	210.65	91.01	-1,317.59	-4,795.96	4,681.91	4,435.87	246.04	19.029		
6,500.00	6,224.42	6,178.42	6,224.42	35.97	213.97	91.37	-1,317.59	-4,795.96	4,682.58	4,432.64	249.94	18.735		
6,600.00	6,319.59	6,273.59	6,319.59	36.54	217.29	91.73	-1,317.59	-4,795.96	4,683.45	4,429.62	253.83	18.451		
6,700.00	6,414.76	6,368.76	6,414.76	37.12	220.61	92.08	-1,317.59	-4,795.96	4,684.52	4,426.80	257.73	18.176		
6,800.00	6,509.91	6,463.91	6,509.91	37.70	223.93	92.44	-1,317.59	-4,795.96	4,685.25	4,423.62	261.62	17.908		
6,900.00	6,603.99	6,557.99	6,603.99	38.26	227.22	92.81	-1,317.59	-4,795.96	4,686.22	4,420.35	265.47	17.610		
7,000.00	6,694.76	6,648.76	6,694.76	38.78	230.39	93.17	-1,317.59	-4,795.96	4,687.43	4,417.17	269.16	17.274		
7,100.00	6,779.96	6,733.96	6,779.96	39.24	233.36	93.54	-1,317.59	-4,795.96	4,688.88	4,414.03	272.60	16.909		
7,200.00	6,857.50	6,811.50	6,857.50	39.65	236.07	93.91	-1,317.59	-4,795.96	4,690.48	4,410.94	275.72	16.524		
7,300.00	6,925.48	6,879.48	6,925.48	40.02	238.44	94.28	-1,317.59	-4,795.96	4,692.24	4,407.90	278.46	16.127		
7,400.00	6,982.21	6,936.21	6,982.21	40.33	240.42	94.65	-1,317.59	-4,795.96	4,694.16	4,404.91	280.75	15.724		
7,500.00	7,026.31	6,980.31	7,026.31	40.63	241.96	95.02	-1,317.59	-4,795.96	4,696.24	4,402.06	282.57	15.324		
7,600.00	7,056.68	7,010.68	7,056.68	40.91	243.02	95.39	-1,317.59	-4,795.96	4,698.48	4,400.36	283.86	14.932		
7,700.00	7,072.58	7,026.58	7,072.58	41.25	243.57	95.76	-1,317.59	-4,795.96	4,700.88	4,398.81	284.60	14.556		
7,800.00	7,074.86	7,028.86	7,074.86	41.69	243.65	96.13	-1,317.59	-4,795.96	4,703.44	4,397.39	284.84	14.200		
7,900.00	7,074.54	7,028.54	7,074.54	42.34	243.64	96.50	-1,317.59	-4,795.96	4,706.16	4,396.02	284.99	13.849		
8,000.00	7,074.21	7,028.21	7,074.21	43.27	243.63	96.87	-1,317.59	-4,795.96	4,709.04	4,394.70	285.17	13.497		
8,100.00	7,073.89	7,027.89	7,073.89	44.47	243.62	97.24	-1,317.59	-4,795.96	4,712.08	4,393.43	285.36	13.145		
8,200.00	7,073.57	7,027.57	7,073.57	45.91	243.61	97.61	-1,317.59	-4,795.96	4,715.28	4,392.21	285.57	12.793		
8,300.00	7,073.24	7,027.24	7,073.24	47.53	243.60	98.03	-1,317.59	-4,795.96	4,718.64	4,391.04	285.81	12.440		
8,400.00	7,072.92	7,026.92	7,072.92	49.31	243.59	98.50	-1,317.59	-4,795.96	4,722.16	4,389.91	286.08	12.088		
8,500.00	7,072.59	7,026.59	7,072.59	51.20	243.58	99.02	-1,317.59	-4,795.96	4,725.84	4,388.82	286.37	11.736		
8,600.00	7,072.27	7,026.27	7,072.27	53.19	243.56	99.59	-1,317.59	-4,795.96	4,729.58	4,387.78	286.70	11.383		
8,700.00	7,071.94	7,025.94	7,071.94	55.27	243.55	100.21	-1,317.59	-4,795.96	4,733.38	4,386.79	287.07	11.030		
8,800.00	7,071.62	7,025.62	7,071.62	57.43	243.54	100.88	-1,317.59	-4,795.96	4,737.24	4,385.84	287.49	10.678		
8,900.00	7,071.29	7,025.29	7,071.29	59.64	243.53	101.60	-1,317.59	-4,795.96	4,741.16	4,384.94	287.95	10.325		
9,000.00	7,070.97	7,024.97	7,070.97	61.92	243.52	102.37	-1,317.59	-4,795.96	4,745.14	4,384.09	288.47	9.973		
9,100.00	7,070.64	7,024.64	7,070.64	64.24	243.51	103.19	-1,317.59	-4,795.96	4,749.18	4,383.28	289.04	9.620		
9,200.00	7,070.32	7,024.32	7,070.32	66.61	243.50	104.06	-1,317.59	-4,795.96	4,753.28	4,382.51	289.69	9.268		
9,300.00	7,069.99	7,023.99	7,069.99	69.01	243.48	104.99	-1,317.59	-4,795.96	4,757.44	4,381.78	290.41	8.916		
9,400.00	7,069.67	7,023.67	7,069.67	71.45	243.47	105.97	-1,317.59	-4,795.96	4,761.66	4,381.09	291.23	8.564		
9,500.00	7,069.34	7,023.34	7,069.34	73.92	243.46	107.00	-1,317.59	-4,795.96	4,765.94	4,380.44	292.14	8.213		
9,600.00	7,069.02	7,023.02	7,069.02	76.42	243.45	108.08	-1,317.59	-4,795.96	4,770.28	4,379.83	293.16	7.863		
9,700.00	7,068.69	7,022.69	7,068.69	78.95	243.44	109.21	-1,317.59	-4,795.96	4,774.68	4,379.26	294.32	7.513		
9,800.00	7,068.37	7,022.37	7,068.37	81.49	243.43	110.39	-1,317.59	-4,795.96	4,779.14	4,378.73	295.62	7.164		
9,900.00	7,068.04	7,022.04	7,068.04	84.06	243.42	111.62	-1,317.59	-4,795.96	4,783.66	4,378.24	297.09	6.817		
10,000.00	7,067.72	7,021.72	7,067.72	86.65	243.41	112.90	-1,317.59	-4,795.96	4,788.24	4,377.79	298.75	6.472		
10,100.00	7,067.39	7,021.39	7,067.39	89.25	243.39	114.23	-1,317.59	-4,795.96	4,792.88	4,377.38	300.63	6.129		
10,200.00	7,067.07	7,021.07	7,067.07	91.87	243.38	115.61	-1,317.59	-4,795.96	4,797.58	4,376.99	302.75	5.788		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,066.74	7,020.74	7,066.74	94.50	243.37	90.35	-1,317.59	-4,795.96	1,663.40	1,358.24	305.16	5.451	
10,400.00	7,066.42	7,020.42	7,066.42	97.14	243.36	90.33	-1,317.59	-4,795.96	1,575.79	1,267.90	307.89	5.118	
10,500.00	7,066.09	7,020.09	7,066.09	99.80	243.35	90.30	-1,317.59	-4,795.96	1,489.75	1,178.76	310.99	4.790	
10,600.00	7,065.77	7,019.77	7,065.77	102.47	243.34	90.28	-1,317.59	-4,795.96	1,405.55	1,091.07	314.49	4.469	
10,700.00	7,065.44	7,019.44	7,065.44	105.15	243.33	90.25	-1,317.59	-4,795.96	1,323.56	1,005.11	318.45	4.156	
10,800.00	7,065.12	7,019.12	7,065.12	107.83	243.31	90.23	-1,317.59	-4,795.96	1,244.20	921.30	322.91	3.853	
10,900.00	7,064.79	7,018.79	7,064.79	110.53	243.30	90.21	-1,317.59	-4,795.96	1,168.02	840.12	327.90	3.562	
11,000.00	7,064.47	7,018.47	7,064.47	113.23	243.29	90.18	-1,317.59	-4,795.96	1,095.67	762.22	333.45	3.286	
11,100.00	7,064.14	7,018.14	7,064.14	115.95	243.28	90.16	-1,317.59	-4,795.96	1,027.97	688.45	339.52	3.028	
11,200.00	7,063.82	7,017.82	7,063.82	118.66	243.27	90.14	-1,317.59	-4,795.96	965.90	619.85	346.05	2.791	
11,300.00	7,063.49	7,017.49	7,063.49	121.39	243.26	90.11	-1,317.59	-4,795.96	910.59	557.74	352.85	2.581	
11,400.00	7,063.17	7,017.17	7,063.17	124.12	243.25	90.09	-1,317.59	-4,795.96	863.37	503.72	359.65	2.401	
11,500.00	7,062.84	7,016.84	7,062.84	126.86	243.24	90.06	-1,317.59	-4,795.96	825.61	459.58	366.04	2.256	
11,600.00	7,062.52	7,016.52	7,062.52	129.60	243.22	90.04	-1,317.59	-4,795.96	798.66	427.17	371.50	2.150	
11,700.00	7,062.19	7,016.19	7,062.19	132.35	243.21	90.02	-1,317.59	-4,795.96	783.64	408.13	375.51	2.087	
11,768.87	7,061.97	7,015.97	7,061.97	134.24	243.20	90.00	-1,317.59	-4,795.96	780.61	403.38	377.23	2.069 CC, ES	
11,800.00	7,061.87	7,015.87	7,061.87	135.10	243.20	89.99	-1,317.59	-4,795.96	781.23	403.53	377.70	2.068 SF	
11,900.00	7,061.54	7,015.54	7,061.54	137.85	243.19	89.97	-1,317.59	-4,795.96	791.55	413.65	377.90	2.095	
12,000.00	7,061.22	7,015.22	7,061.22	140.61	243.18	89.94	-1,317.59	-4,795.96	814.11	437.85	376.26	2.164	
12,100.00	7,060.89	7,014.89	7,060.89	143.38	243.17	89.92	-1,317.59	-4,795.96	847.94	474.81	373.13	2.273	
12,200.00	7,060.57	7,014.57	7,060.57	146.15	243.16	89.90	-1,317.59	-4,795.96	891.75	522.78	368.97	2.417	
12,300.00	7,060.24	7,014.24	7,060.24	148.92	243.14	89.87	-1,317.59	-4,795.96	944.17	579.93	364.24	2.592	
12,400.00	7,059.92	7,013.92	7,059.92	151.69	243.13	89.85	-1,317.59	-4,795.96	1,003.83	644.54	359.29	2.794	
12,500.00	7,059.59	7,013.59	7,059.59	154.47	243.12	89.83	-1,317.59	-4,795.96	1,069.53	715.16	354.37	3.018	
12,600.00	7,059.27	7,013.27	7,059.27	157.25	243.11	89.80	-1,317.59	-4,795.96	1,140.23	790.57	349.66	3.261	
12,700.00	7,058.94	7,012.94	7,058.94	160.03	243.10	89.78	-1,317.59	-4,795.96	1,215.05	869.81	345.24	3.519	
12,800.00	7,058.62	7,012.62	7,058.62	162.82	243.09	89.75	-1,317.59	-4,795.96	1,293.28	952.13	341.15	3.791	
12,900.00	7,058.29	7,012.29	7,058.29	165.61	243.08	89.73	-1,317.59	-4,795.96	1,374.34	1,036.93	337.41	4.073	
13,000.00	7,057.97	7,011.97	7,057.97	168.40	243.06	89.71	-1,317.59	-4,795.96	1,457.75	1,123.75	334.00	4.365	
13,100.00	7,057.64	7,011.64	7,057.64	171.19	243.05	89.68	-1,317.59	-4,795.96	1,543.13	1,212.23	330.90	4.663	
13,200.00	7,057.32	7,011.32	7,057.32	173.99	243.04	89.66	-1,317.59	-4,795.96	1,630.17	1,302.08	328.09	4.969	
13,300.00	7,057.00	7,011.00	7,057.00	176.78	243.03	89.63	-1,317.59	-4,795.96	1,718.63	1,393.08	325.55	5.279	
13,400.00	7,056.67	7,010.67	7,056.67	179.58	243.02	89.61	-1,317.59	-4,795.96	1,808.29	1,485.05	323.24	5.594	
13,500.00	7,056.35	7,010.35	7,056.35	182.38	243.01	89.59	-1,317.59	-4,795.96	1,898.98	1,577.84	321.14	5.913	
13,600.00	7,056.02	7,010.02	7,056.02	185.19	243.00	89.56	-1,317.59	-4,795.96	1,990.57	1,671.33	319.24	6.235	
13,700.00	7,055.70	7,009.70	7,055.70	187.99	242.99	89.54	-1,317.59	-4,795.96	2,082.93	1,765.43	317.50	6.560	
13,800.00	7,055.37	7,009.37	7,055.37	190.80	242.97	89.52	-1,317.59	-4,795.96	2,175.96	1,860.04	315.92	6.888	
13,900.00	7,055.05	7,009.05	7,055.05	193.60	242.96	89.49	-1,317.59	-4,795.96	2,269.59	1,955.12	314.47	7.217	
14,000.00	7,054.72	7,008.72	7,054.72	196.41	242.95	89.47	-1,317.59	-4,795.96	2,363.74	2,050.59	313.15	7.548	
14,100.00	7,054.40	7,008.40	7,054.40	199.22	242.94	89.44	-1,317.59	-4,795.96	2,458.35	2,146.42	311.93	7.881	
14,200.00	7,054.07	7,008.07	7,054.07	202.03	242.93	89.42	-1,317.59	-4,795.96	2,553.37	2,242.56	310.81	8.215	
14,300.00	7,053.75	7,007.75	7,053.75	204.85	242.92	89.40	-1,317.59	-4,795.96	2,648.76	2,338.97	309.79	8.550	
14,400.00	7,053.42	7,007.42	7,053.42	207.66	242.91	89.37	-1,317.59	-4,795.96	2,744.47	2,435.64	308.84	8.886	
14,500.00	7,053.10	7,007.10	7,053.10	210.48	242.89	89.35	-1,317.59	-4,795.96	2,840.49	2,532.52	307.96	9.223	
14,600.00	7,052.77	7,006.77	7,052.77	213.29	242.88	89.32	-1,317.59	-4,795.96	2,936.76	2,629.61	307.16	9.561	
14,700.00	7,052.45	7,006.45	7,052.45	216.11	242.87	89.30	-1,317.59	-4,795.96	3,033.28	2,726.88	306.41	9.900	
14,800.00	7,052.12	7,006.12	7,052.12	218.93	242.86	89.28	-1,317.59	-4,795.96	3,130.02	2,824.31	305.71	10.239	
14,900.00	7,051.80	7,005.80	7,051.80	221.75	242.85	89.25	-1,317.59	-4,795.96	3,226.96	2,921.89	305.07	10.578	
15,000.00	7,051.47	7,005.47	7,051.47	224.57	242.84	89.23	-1,317.59	-4,795.96	3,324.07	3,019.61	304.47	10.918	
15,100.00	7,051.15	7,005.15	7,051.15	227.39	242.83	89.21	-1,317.59	-4,795.96	3,421.36	3,117.45	303.91	11.258	
15,145.13	7,051.00	7,005.00	7,051.00	228.67	242.82	89.19	-1,317.59	-4,795.96	3,465.31	3,161.64	303.67	11.412	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	49.00	3.28	3.28	-120.41	-2,818.53	-4,801.82	5,568.12					
100.00	100.00	51.00	100.00	3.28	3.40	-120.41	-2,818.53	-4,801.82	5,567.90	5,561.22	6.68	833.097		
200.00	200.00	151.00	200.00	3.34	4.82	-120.41	-2,818.53	-4,801.82	5,567.90	5,559.75	8.15	682.954		
300.00	299.98	250.98	299.98	3.44	7.75	55.23	-2,818.53	-4,801.82	5,566.91	5,555.72	11.18	497.730		
400.00	399.84	350.84	399.84	3.59	11.00	55.33	-2,818.53	-4,801.82	5,563.92	5,549.33	14.59	381.297		
500.00	499.45	450.45	499.45	3.79	14.36	55.48	-2,818.53	-4,801.82	5,558.96	5,540.81	18.15	306.321		
600.00	598.70	549.70	598.70	4.03	17.75	55.70	-2,818.53	-4,801.82	5,552.04	5,530.26	21.78	254.904		
700.00	697.47	648.47	697.47	4.31	21.15	55.98	-2,818.53	-4,801.82	5,543.18	5,517.72	25.46	217.710		
800.00	795.62	746.62	795.62	4.64	24.54	56.32	-2,818.53	-4,801.82	5,532.41	5,503.24	29.17	189.654		
900.00	893.06	844.06	893.06	5.00	27.91	56.72	-2,818.53	-4,801.82	5,519.78	5,486.88	32.90	167.783		
1,000.00	989.64	940.64	989.64	5.40	31.26	57.19	-2,818.53	-4,801.82	5,505.32	5,468.69	36.63	150.279		
1,100.00	1,085.27	1,036.27	1,085.27	5.83	34.59	57.70	-2,818.53	-4,801.82	5,489.09	5,448.72	40.37	135.962		
1,200.00	1,180.44	1,131.44	1,180.44	6.29	37.90	57.96	-2,818.53	-4,801.82	5,472.16	5,428.05	44.12	124.038		
1,300.00	1,275.61	1,226.61	1,275.61	6.76	41.21	58.22	-2,818.53	-4,801.82	5,455.35	5,407.47	47.88	113.934		
1,400.00	1,370.78	1,321.78	1,370.78	7.26	44.52	58.49	-2,818.53	-4,801.82	5,438.66	5,387.00	51.66	105.272		
1,500.00	1,465.95	1,416.95	1,465.95	7.76	47.83	58.76	-2,818.53	-4,801.82	5,422.10	5,366.64	55.46	97.769		
1,600.00	1,561.12	1,512.12	1,561.12	8.27	51.15	59.02	-2,818.53	-4,801.82	5,405.65	5,346.39	59.26	91.212		
1,700.00	1,656.29	1,607.29	1,656.29	8.80	54.46	59.29	-2,818.53	-4,801.82	5,389.33	5,326.25	63.08	85.436		
1,800.00	1,751.46	1,702.46	1,751.46	9.32	57.78	59.57	-2,818.53	-4,801.82	5,373.14	5,306.24	66.90	80.310		
1,900.00	1,846.63	1,802.37	1,846.63	9.86	61.26	59.84	-2,818.53	-4,801.82	5,357.08	5,286.17	70.90	75.557		
2,000.00	1,941.80	1,907.20	1,941.80	10.40	64.92	60.11	-2,818.53	-4,801.82	5,341.14	5,266.06	75.08	71.143		
2,100.00	2,036.96	1,987.96	2,036.96	10.94	67.73	60.39	-2,818.53	-4,801.82	5,325.33	5,246.92	78.42	67.912		
2,200.00	2,132.13	2,083.13	2,132.13	11.49	71.05	60.67	-2,818.53	-4,801.82	5,309.65	5,227.39	82.26	64.545		
2,300.00	2,227.30	2,178.30	2,227.30	12.04	74.37	60.95	-2,818.53	-4,801.82	5,294.11	5,207.99	86.11	61.478		
2,400.00	2,322.47	2,273.47	2,322.47	12.59	77.69	61.23	-2,818.53	-4,801.82	5,278.70	5,188.73	89.97	58.672		
2,500.00	2,417.64	2,368.64	2,417.64	13.15	81.01	61.51	-2,818.53	-4,801.82	5,263.42	5,169.59	93.83	56.097		
2,600.00	2,512.81	2,463.81	2,512.81	13.70	84.33	61.79	-2,818.53	-4,801.82	5,248.27	5,150.58	97.69	53.725		
2,700.00	2,607.98	2,558.98	2,607.98	14.26	87.65	62.08	-2,818.53	-4,801.82	5,233.27	5,131.71	101.55	51.533		
2,800.00	2,703.15	2,654.15	2,703.15	14.82	90.97	62.36	-2,818.53	-4,801.82	5,218.40	5,112.98	105.42	49.501		
2,900.00	2,798.32	2,749.32	2,798.32	15.38	94.29	62.65	-2,818.53	-4,801.82	5,203.66	5,094.38	109.29	47.614		
3,000.00	2,893.49	2,844.49	2,893.49	15.95	97.61	62.94	-2,818.53	-4,801.82	5,189.07	5,075.91	113.16	45.856		
3,100.00	2,988.66	2,939.66	2,988.66	16.51	100.93	63.23	-2,818.53	-4,801.82	5,174.62	5,057.59	117.03	44.215		
3,200.00	3,083.83	3,034.83	3,083.83	17.07	104.25	63.53	-2,818.53	-4,801.82	5,160.31	5,039.41	120.91	42.680		
3,300.00	3,179.00	3,130.00	3,179.00	17.64	107.57	63.82	-2,818.53	-4,801.82	5,146.15	5,021.37	124.78	41.241		
3,400.00	3,274.17	3,225.17	3,274.17	18.21	110.89	64.12	-2,818.53	-4,801.82	5,132.13	5,003.47	128.66	39.888		
3,500.00	3,369.34	3,320.34	3,369.34	18.77	114.21	64.41	-2,818.53	-4,801.82	5,118.26	4,985.71	132.54	38.616		
3,600.00	3,464.51	3,415.51	3,464.51	19.34	117.54	64.71	-2,818.53	-4,801.82	5,104.53	4,968.11	136.42	37.417		
3,700.00	3,559.68	3,510.68	3,559.68	19.91	120.86	65.01	-2,818.53	-4,801.82	5,090.95	4,950.64	140.31	36.284		
3,800.00	3,654.84	3,605.84	3,654.84	20.48	124.18	65.31	-2,818.53	-4,801.82	5,077.52	4,933.33	144.19	35.214		
3,900.00	3,750.01	3,701.01	3,750.01	21.05	127.50	65.62	-2,818.53	-4,801.82	5,064.24	4,916.16	148.08	34.200		
4,000.00	3,845.18	3,803.82	3,845.18	21.62	131.09	65.92	-2,818.53	-4,801.82	5,051.11	4,898.88	152.23	33.181		
4,100.00	3,940.35	3,908.65	3,940.35	22.19	134.75	66.23	-2,818.53	-4,801.82	5,038.14	4,881.68	156.45	32.202		
4,200.00	4,035.52	3,986.52	4,035.52	22.76	137.46	66.53	-2,818.53	-4,801.82	5,025.32	4,865.58	159.74	31.459		
4,300.00	4,130.69	4,081.69	4,130.69	23.33	140.78	66.84	-2,818.53	-4,801.82	5,012.65	4,849.02	163.63	30.634		
4,400.00	4,225.86	4,176.86	4,225.86	23.91	144.11	67.15	-2,818.53	-4,801.82	5,000.15	4,832.62	167.52	29.848		
4,500.00	4,321.03	4,272.03	4,321.03	24.48	147.43	67.46	-2,818.53	-4,801.82	4,987.79	4,816.38	171.41	29.098		
4,600.00	4,416.20	4,367.20	4,416.20	25.05	150.75	67.78	-2,818.53	-4,801.82	4,975.60	4,800.29	175.31	28.382		
4,700.00	4,511.37	4,462.37	4,511.37	25.62	154.07	68.09	-2,818.53	-4,801.82	4,963.57	4,784.37	179.20	27.698		
4,800.00	4,606.54	4,557.54	4,606.54	26.20	157.39	68.41	-2,818.53	-4,801.82	4,951.70	4,768.60	183.10	27.044		
4,900.00	4,701.71	4,652.71	4,701.71	26.77	160.71	68.73	-2,818.53	-4,801.82	4,939.99	4,753.00	186.99	26.418		
5,000.00	4,796.88	4,747.88	4,796.88	27.34	164.04	69.04	-2,818.53	-4,801.82	4,928.45	4,737.55	190.89	25.818		
5,100.00	4,892.05	4,843.05	4,892.05	27.92	167.36	69.36	-2,818.53	-4,801.82	4,917.06	4,722.28	194.79	25.243		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,938.22	4,987.22	28.49	170.68	69.69	-2,818.53	-4,801.82	4,905.85	4,707.16	198.69	24.691		
5,300.00	5,082.39	5,033.39	5,082.39	29.07	174.00	70.01	-2,818.53	-4,801.82	4,894.80	4,692.22	202.59	24.162		
5,400.00	5,177.56	5,128.56	5,177.56	29.64	177.32	70.33	-2,818.53	-4,801.82	4,883.92	4,677.44	206.49	23.652		
5,500.00	5,272.72	5,223.72	5,272.72	30.21	180.64	70.66	-2,818.53	-4,801.82	4,873.21	4,662.82	210.39	23.163		
5,600.00	5,367.89	5,318.89	5,367.89	30.79	183.97	70.98	-2,818.53	-4,801.82	4,862.67	4,648.38	214.29	22.692		
5,700.00	5,463.06	5,414.06	5,463.06	31.36	187.29	71.31	-2,818.53	-4,801.82	4,852.30	4,634.11	218.19	22.239		
5,800.00	5,558.23	5,509.23	5,558.23	31.94	190.61	71.64	-2,818.53	-4,801.82	4,842.11	4,620.01	222.09	21.802		
5,900.00	5,653.40	5,604.40	5,653.40	32.51	193.93	71.97	-2,818.53	-4,801.82	4,832.08	4,606.09	226.00	21.381		
6,000.00	5,748.57	5,700.43	5,748.57	33.09	197.28	72.30	-2,818.53	-4,801.82	4,822.24	4,592.30	229.93	20.972		
6,100.00	5,843.74	5,805.26	5,843.74	33.67	200.94	72.64	-2,818.53	-4,801.82	4,812.56	4,578.39	234.17	20.551		
6,200.00	5,938.91	5,899.91	5,938.91	34.24	203.90	72.97	-2,818.53	-4,801.82	4,803.07	4,565.36	237.71	20.205		
6,300.00	6,034.08	5,985.08	6,034.08	34.82	207.22	73.31	-2,818.53	-4,801.82	4,793.75	4,552.13	241.62	19.840		
6,400.00	6,129.25	6,080.25	6,129.25	35.39	210.54	73.64	-2,818.53	-4,801.82	4,784.61	4,539.09	245.52	19.487		
6,500.00	6,224.42	6,175.42	6,224.42	35.97	213.86	73.98	-2,818.53	-4,801.82	4,775.65	4,526.22	249.43	19.146		
6,600.00	6,319.59	6,270.59	6,319.59	36.54	217.19	74.32	-2,818.53	-4,801.82	4,766.87	4,513.54	253.34	18.816		
6,700.00	6,414.76	6,365.76	6,414.76	37.12	220.51	74.66	-2,818.53	-4,801.82	4,758.28	4,501.03	257.25	18.497		
6,800.00	6,509.91	6,460.91	6,509.91	37.70	223.83	75.00	-2,818.53	-4,801.82	4,749.32	4,488.17	261.15	18.186		
6,900.00	6,603.99	6,554.99	6,603.99	38.26	227.11	75.34	-2,818.53	-4,801.82	4,739.39	4,474.39	265.00	17.847		
7,000.00	6,694.76	6,645.76	6,694.76	38.78	230.28	75.68	-2,818.53	-4,801.82	4,729.39	4,460.39	268.67	17.474		
7,100.00	6,779.96	6,730.96	6,779.96	39.24	233.26	76.02	-2,818.53	-4,801.82	4,719.39	4,446.39	272.08	17.076		
7,200.00	6,857.50	6,808.50	6,857.50	39.65	235.96	76.36	-2,818.53	-4,801.82	4,709.39	4,432.39	275.16	16.663		
7,300.00	6,925.48	6,876.48	6,925.48	40.02	238.34	76.70	-2,818.53	-4,801.82	4,699.39	4,418.39	278.16	16.241		
7,400.00	6,982.21	6,933.21	6,982.21	40.33	240.32	77.04	-2,818.53	-4,801.82	4,689.39	4,404.39	281.16	15.820		
7,500.00	7,026.31	6,977.31	7,026.31	40.63	241.86	77.38	-2,818.53	-4,801.82	4,679.39	4,390.39	284.16	15.408		
7,600.00	7,056.68	7,007.68	7,056.68	40.91	242.92	77.72	-2,818.53	-4,801.82	4,669.39	4,376.39	287.16	15.011		
7,700.00	7,072.58	7,023.58	7,072.58	41.25	243.47	78.06	-2,818.53	-4,801.82	4,659.39	4,362.39	290.16	14.637		
7,800.00	7,074.86	7,025.86	7,074.86	41.69	243.55	78.40	-2,818.53	-4,801.82	4,649.39	4,348.39	293.16	14.288		
7,900.00	7,074.54	7,025.54	7,074.54	42.34	243.54	78.74	-2,818.53	-4,801.82	4,639.39	4,334.39	296.16	13.945		
8,000.00	7,074.21	7,025.21	7,074.21	43.27	243.53	79.08	-2,818.53	-4,801.82	4,629.39	4,320.39	299.16	13.601		
8,100.00	7,073.89	7,024.89	7,073.89	44.47	243.52	79.42	-2,818.53	-4,801.82	4,619.39	4,306.39	302.16	13.257		
8,200.00	7,073.57	7,024.57	7,073.57	45.91	243.50	79.76	-2,818.53	-4,801.82	4,609.39	4,292.39	305.16	12.913		
8,300.00	7,073.24	7,024.24	7,073.24	47.53	243.49	80.10	-2,818.53	-4,801.82	4,599.39	4,278.39	308.16	12.569		
8,400.00	7,072.92	7,023.92	7,072.92	49.31	243.48	80.44	-2,818.53	-4,801.82	4,589.39	4,264.39	311.16	12.224		
8,500.00	7,072.59	7,023.59	7,072.59	51.20	243.47	80.78	-2,818.53	-4,801.82	4,579.39	4,250.39	314.16	11.879		
8,600.00	7,072.27	7,023.27	7,072.27	53.19	243.46	81.12	-2,818.53	-4,801.82	4,569.39	4,236.39	317.16	11.534		
8,700.00	7,071.94	7,022.94	7,071.94	55.27	243.45	81.46	-2,818.53	-4,801.82	4,559.39	4,222.39	320.16	11.189		
8,800.00	7,071.62	7,022.62	7,071.62	57.43	243.44	81.80	-2,818.53	-4,801.82	4,549.39	4,208.39	323.16	10.843		
8,900.00	7,071.29	7,022.29	7,071.29	59.64	243.43	82.14	-2,818.53	-4,801.82	4,539.39	4,194.39	326.16	10.497		
9,000.00	7,070.97	7,021.97	7,070.97	61.92	243.41	82.48	-2,818.53	-4,801.82	4,529.39	4,180.39	329.16	10.151		
9,100.00	7,070.64	7,021.64	7,070.64	64.24	243.40	82.82	-2,818.53	-4,801.82	4,519.39	4,166.39	332.16	9.804		
9,200.00	7,070.32	7,021.32	7,070.32	66.61	243.39	83.16	-2,818.53	-4,801.82	4,509.39	4,152.39	335.16	9.456		
9,300.00	7,069.99	7,020.99	7,069.99	69.01	243.38	83.50	-2,818.53	-4,801.82	4,499.39	4,138.39	338.16	9.109		
9,400.00	7,069.67	7,020.67	7,069.67	71.45	243.37	83.84	-2,818.53	-4,801.82	4,489.39	4,124.39	341.16	8.761		
9,500.00	7,069.34	7,020.34	7,069.34	73.92	243.36	84.18	-2,818.53	-4,801.82	4,479.39	4,110.39	344.16	8.412		
9,600.00	7,069.02	7,020.02	7,069.02	76.42	243.35	84.52	-2,818.53	-4,801.82	4,469.39	4,096.39	347.16	8.063		
9,700.00	7,068.69	7,019.69	7,068.69	78.95	243.33	84.86	-2,818.53	-4,801.82	4,459.39	4,082.39	350.16	7.714		
9,800.00	7,068.37	7,019.37	7,068.37	81.49	243.32	85.20	-2,818.53	-4,801.82	4,449.39	4,068.39	353.16	7.365		
9,900.00	7,068.04	7,019.04	7,068.04	84.06	243.31	85.54	-2,818.53	-4,801.82	4,439.39	4,054.39	356.16	7.015		
10,000.00	7,067.72	7,018.72	7,067.72	86.65	243.30	85.88	-2,818.53	-4,801.82	4,429.39	4,040.39	359.16	6.666		
10,100.00	7,067.39	7,018.39	7,067.39	89.25	243.29	86.22	-2,818.53	-4,801.82	4,419.39	4,026.39	362.16	6.317		
10,200.00	7,067.07	7,018.07	7,067.07	91.87	243.28	86.56	-2,818.53	-4,801.82	4,409.39	4,012.39	365.16	5.969		
10,300.00	7,066.74	7,017.74	7,066.74	94.50	243.27	86.90	-2,818.53	-4,801.82	4,399.39	4,000.00	368.16	5.622		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,017.42	7,066.42	97.14	243.26	-90.36	-2,818.53	-4,801.82	1,560.85	1,265.07	295.78	5.277		
10,500.00	7,066.09	7,017.09	7,066.09	99.80	243.24	-90.33	-2,818.53	-4,801.82	1,472.86	1,174.42	298.43	4.935		
10,600.00	7,065.77	7,016.77	7,065.77	102.47	243.23	-90.31	-2,818.53	-4,801.82	1,386.49	1,084.93	301.57	4.598		
10,700.00	7,065.44	7,016.44	7,065.44	105.15	243.22	-90.28	-2,818.53	-4,801.82	1,302.08	996.84	305.25	4.266		
10,800.00	7,065.12	7,016.12	7,065.12	107.83	243.21	-90.25	-2,818.53	-4,801.82	1,220.03	910.48	309.55	3.941		
10,900.00	7,064.79	7,015.79	7,064.79	110.53	243.20	-90.23	-2,818.53	-4,801.82	1,140.84	826.29	314.55	3.627		
11,000.00	7,064.47	7,015.47	7,064.47	113.23	243.19	-90.20	-2,818.53	-4,801.82	1,065.17	744.85	320.31	3.325		
11,100.00	7,064.14	7,015.14	7,064.14	115.95	243.18	-90.18	-2,818.53	-4,801.82	993.80	666.92	326.88	3.040		
11,200.00	7,063.82	7,014.82	7,063.82	118.66	243.16	-90.15	-2,818.53	-4,801.82	927.73	593.50	334.23	2.776		
11,300.00	7,063.49	7,014.49	7,063.49	121.39	243.15	-90.13	-2,818.53	-4,801.82	868.18	525.91	342.27	2.537		
11,400.00	7,063.17	7,014.17	7,063.17	124.12	243.14	-90.10	-2,818.53	-4,801.82	816.57	465.84	350.73	2.328		
11,500.00	7,062.84	7,013.84	7,062.84	126.86	243.13	-90.07	-2,818.53	-4,801.82	774.49	415.29	359.20	2.156		
11,600.00	7,062.52	7,013.52	7,062.52	129.60	243.12	-90.05	-2,818.53	-4,801.82	743.57	376.52	367.05	2.026		
11,700.00	7,062.19	7,013.19	7,062.19	132.35	243.11	-90.02	-2,818.53	-4,801.82	725.22	351.65	373.57	1.941		
11,784.74	7,061.92	7,012.92	7,061.92	134.68	243.10	-90.00	-2,818.53	-4,801.82	720.25	342.69	377.56	1.908 CC		
11,800.00	7,061.87	7,012.87	7,061.87	135.10	243.10	-90.00	-2,818.53	-4,801.82	720.42	342.31	378.11	1.905 ES, SF		
11,900.00	7,061.54	7,012.54	7,061.54	137.85	243.09	-89.97	-2,818.53	-4,801.82	729.42	349.12	380.30	1.918		
12,000.00	7,061.22	7,012.22	7,061.22	140.61	243.07	-89.94	-2,818.53	-4,801.82	751.73	371.55	380.19	1.977		
12,100.00	7,060.89	7,011.89	7,060.89	143.38	243.06	-89.92	-2,818.53	-4,801.82	786.23	408.08	378.15	2.079		
12,200.00	7,060.57	7,011.57	7,060.57	146.15	243.05	-89.89	-2,818.53	-4,801.82	831.39	456.65	374.73	2.219		
12,300.00	7,060.24	7,011.24	7,060.24	148.92	243.04	-89.87	-2,818.53	-4,801.82	885.58	515.08	370.50	2.390		
12,400.00	7,059.92	7,010.92	7,059.92	151.69	243.03	-89.84	-2,818.53	-4,801.82	947.26	581.36	365.90	2.589		
12,500.00	7,059.59	7,010.59	7,059.59	154.47	243.02	-89.82	-2,818.53	-4,801.82	1,015.06	653.82	361.25	2.810		
12,600.00	7,059.27	7,010.27	7,059.27	157.25	243.01	-89.79	-2,818.53	-4,801.82	1,087.84	731.10	356.75	3.049		
12,700.00	7,058.94	7,009.94	7,058.94	160.03	242.99	-89.76	-2,818.53	-4,801.82	1,164.67	812.17	352.50	3.304		
12,800.00	7,058.62	7,009.62	7,058.62	162.82	242.98	-89.74	-2,818.53	-4,801.82	1,244.79	896.22	348.57	3.571		
12,900.00	7,058.29	7,009.29	7,058.29	165.61	242.97	-89.71	-2,818.53	-4,801.82	1,327.61	982.64	344.97	3.849		
13,000.00	7,057.97	7,008.97	7,057.97	168.40	242.96	-89.69	-2,818.53	-4,801.82	1,412.66	1,070.98	341.68	4.134		
13,100.00	7,057.64	7,008.64	7,057.64	171.19	242.95	-89.66	-2,818.53	-4,801.82	1,499.55	1,160.86	338.69	4.427		
13,200.00	7,057.32	7,008.32	7,057.32	173.99	242.94	-89.63	-2,818.53	-4,801.82	1,587.99	1,252.01	335.98	4.726		
13,300.00	7,057.00	7,008.00	7,057.00	176.78	242.93	-89.61	-2,818.53	-4,801.82	1,677.72	1,344.21	333.52	5.030		
13,400.00	7,056.67	7,007.67	7,056.67	179.58	242.91	-89.58	-2,818.53	-4,801.82	1,768.56	1,437.28	331.28	5.339		
13,500.00	7,056.35	7,007.35	7,056.35	182.38	242.90	-89.56	-2,818.53	-4,801.82	1,860.34	1,531.10	329.24	5.650		
13,600.00	7,056.02	7,007.02	7,056.02	185.19	242.89	-89.53	-2,818.53	-4,801.82	1,952.92	1,625.54	327.38	5.965		
13,700.00	7,055.70	7,006.70	7,055.70	187.99	242.88	-89.51	-2,818.53	-4,801.82	2,046.20	1,720.51	325.69	6.283		
13,800.00	7,055.37	7,006.37	7,055.37	190.80	242.87	-89.48	-2,818.53	-4,801.82	2,140.09	1,815.95	324.14	6.602		
13,900.00	7,055.05	7,006.05	7,055.05	193.60	242.86	-89.45	-2,818.53	-4,801.82	2,234.51	1,911.79	322.72	6.924		
14,000.00	7,054.72	7,005.72	7,054.72	196.41	242.85	-89.43	-2,818.53	-4,801.82	2,329.40	2,007.99	321.41	7.247		
14,100.00	7,054.40	7,005.40	7,054.40	199.22	242.84	-89.40	-2,818.53	-4,801.82	2,424.69	2,104.49	320.21	7.572		
14,200.00	7,054.07	7,005.07	7,054.07	202.03	242.82	-89.38	-2,818.53	-4,801.82	2,520.35	2,201.26	319.10	7.898		
14,300.00	7,053.75	7,004.75	7,053.75	204.85	242.81	-89.35	-2,818.53	-4,801.82	2,616.34	2,298.27	318.07	8.226		
14,400.00	7,053.42	7,004.42	7,053.42	207.66	242.80	-89.32	-2,818.53	-4,801.82	2,712.61	2,395.49	317.12	8.554		
14,500.00	7,053.10	7,004.10	7,053.10	210.48	242.79	-89.30	-2,818.53	-4,801.82	2,809.15	2,492.91	316.24	8.883		
14,600.00	7,052.77	7,003.77	7,052.77	213.29	242.78	-89.27	-2,818.53	-4,801.82	2,905.92	2,590.50	315.42	9.213		
14,700.00	7,052.45	7,003.45	7,052.45	216.11	242.77	-89.25	-2,818.53	-4,801.82	3,002.90	2,688.24	314.66	9.543		
14,800.00	7,052.12	7,003.12	7,052.12	218.93	242.76	-89.22	-2,818.53	-4,801.82	3,100.07	2,786.12	313.95	9.874		
14,900.00	7,051.80	7,002.80	7,051.80	221.75	242.74	-89.19	-2,818.53	-4,801.82	3,197.42	2,884.13	313.29	10.206		
15,000.00	7,051.47	7,002.47	7,051.47	224.57	242.73	-89.17	-2,818.53	-4,801.82	3,294.93	2,982.26	312.67	10.538		
15,100.00	7,051.15	7,002.15	7,051.15	227.39	242.72	-89.14	-2,818.53	-4,801.82	3,392.58	3,080.49	312.09	10.870		
15,145.13	7,051.00	7,002.00	7,051.00	228.67	242.72	-89.13	-2,818.53	-4,801.82	3,436.69	3,124.85	311.84	11.021		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	67.00	3.28	3.28	-140.69	-3,989.65	-3,266.46	5,156.70					
100.00	100.00	887.76	924.73	3.28	5.10	-140.86	-3,942.72	-3,209.19	5,150.16	5,141.74	8.42	611.824		
200.00	200.00	986.42	1,022.07	3.34	5.51	-140.89	-3,932.50	-3,196.73	5,134.15	5,125.34	8.80	583.199		
300.00	299.98	1,084.86	1,119.18	3.44	5.94	34.90	-3,922.31	-3,184.29	5,116.72	5,107.46	9.26	552.759		
400.00	399.84	1,182.79	1,215.79	3.59	6.39	35.13	-3,912.17	-3,171.92	5,096.49	5,086.72	9.77	521.626		
500.00	499.45	1,280.08	1,311.78	3.79	6.85	35.42	-3,902.10	-3,159.63	5,073.47	5,063.13	10.34	490.843		
600.00	598.70	1,376.62	1,407.02	4.03	7.31	35.78	-3,892.10	-3,147.43	5,047.69	5,036.74	10.95	461.115		
700.00	697.47	1,472.29	1,501.41	4.31	7.78	36.20	-3,882.20	-3,135.35	5,019.19	5,007.59	11.60	432.871		
800.00	795.62	1,566.98	1,594.82	4.64	8.25	36.68	-3,872.39	-3,123.38	4,988.01	4,975.74	12.28	406.333		
900.00	893.06	1,660.56	1,687.15	5.00	8.72	37.24	-3,862.70	-3,111.56	4,954.20	4,941.22	12.98	381.574		
1,000.00	989.64	1,752.93	1,778.28	5.40	9.19	37.86	-3,853.14	-3,099.89	4,917.82	4,904.10	13.71	358.573		
1,100.00	1,085.27	1,843.97	1,868.10	5.83	9.65	38.53	-3,843.71	-3,088.39	4,878.92	4,864.45	14.47	337.115		
1,200.00	1,180.44	1,934.40	1,957.31	6.29	10.12	38.72	-3,834.35	-3,076.96	4,838.95	4,823.72	15.23	317.713		
1,300.00	1,275.61	2,025.19	2,046.52	6.76	10.59	38.91	-3,824.99	-3,065.54	4,799.02	4,783.01	16.01	299.744		
1,400.00	1,370.78	2,115.25	2,135.73	7.26	11.06	39.11	-3,815.63	-3,054.12	4,759.15	4,742.34	16.80	283.215		
1,500.00	1,465.95	2,205.67	2,224.94	7.76	11.53	39.31	-3,806.27	-3,042.69	4,719.32	4,701.71	17.61	267.935		
1,600.00	1,561.12	2,296.10	2,314.15	8.27	12.01	39.51	-3,796.90	-3,031.27	4,679.55	4,661.11	18.44	253.832		
1,700.00	1,656.29	2,386.52	2,403.36	8.80	12.49	39.72	-3,787.54	-3,019.84	4,639.82	4,620.56	19.27	240.804		
1,800.00	1,751.46	2,476.95	2,492.57	9.32	12.96	39.93	-3,778.18	-3,008.42	4,600.16	4,580.05	20.11	228.753		
1,900.00	1,846.63	2,567.37	2,581.78	9.86	13.44	40.14	-3,768.82	-2,997.00	4,560.54	4,539.58	20.96	217.591		
2,000.00	1,941.80	2,657.79	2,670.99	10.40	13.92	40.36	-3,759.45	-2,985.57	4,520.98	4,499.17	21.82	207.234		
2,100.00	2,036.96	2,748.22	2,760.20	10.94	14.41	40.58	-3,750.09	-2,974.15	4,481.48	4,458.80	22.68	197.609		
2,200.00	2,132.13	2,838.64	2,849.41	11.49	14.89	40.80	-3,740.73	-2,962.72	4,442.04	4,418.49	23.55	188.647		
2,300.00	2,227.30	2,929.07	2,938.62	12.04	15.37	41.03	-3,731.37	-2,951.30	4,402.66	4,378.24	24.42	180.289		
2,400.00	2,322.47	3,030.52	3,027.83	12.59	15.92	41.27	-3,722.01	-2,939.88	4,363.34	4,337.99	25.35	172.142		
2,500.00	2,417.64	3,109.92	3,117.04	13.15	16.34	41.50	-3,712.64	-2,928.45	4,324.08	4,297.90	26.18	165.170		
2,600.00	2,512.81	3,200.34	3,206.25	13.70	16.83	41.74	-3,703.28	-2,917.03	4,284.90	4,257.83	27.07	158.318		
2,700.00	2,607.98	3,290.77	3,295.46	14.26	17.32	41.99	-3,693.92	-2,905.60	4,245.77	4,217.82	27.95	151.884		
2,800.00	2,703.15	3,381.19	3,384.67	14.82	17.80	42.24	-3,684.56	-2,894.18	4,206.72	4,177.88	28.85	145.832		
2,900.00	2,798.32	3,471.62	3,473.88	15.38	18.29	42.49	-3,675.19	-2,882.76	4,167.74	4,138.00	29.74	140.131		
3,000.00	2,893.49	3,562.04	3,563.09	15.95	18.78	42.75	-3,665.83	-2,871.33	4,128.84	4,098.20	30.64	134.754		
3,100.00	2,988.66	3,652.47	3,652.30	16.51	19.27	43.02	-3,656.47	-2,859.91	4,090.01	4,058.47	31.54	129.674		
3,200.00	3,083.83	3,742.89	3,741.51	17.07	19.76	43.29	-3,647.11	-2,848.48	4,051.26	4,018.81	32.44	124.868		
3,300.00	3,179.00	3,833.32	3,830.72	17.64	20.25	43.56	-3,637.74	-2,837.06	4,012.58	3,979.23	33.35	120.316		
3,400.00	3,274.17	3,923.74	3,919.94	18.21	20.74	43.84	-3,628.38	-2,825.64	3,973.99	3,939.73	34.26	115.999		
3,500.00	3,369.34	4,014.17	4,009.15	18.77	21.23	44.12	-3,619.02	-2,814.21	3,935.49	3,900.32	35.17	111.900		
3,600.00	3,464.51	4,104.59	4,098.36	19.34	21.72	44.41	-3,609.66	-2,802.79	3,897.07	3,860.99	36.08	108.004		
3,700.00	3,559.68	4,195.01	4,187.57	19.91	22.21	44.71	-3,600.30	-2,791.36	3,858.74	3,821.75	37.00	104.296		
3,800.00	3,654.84	4,285.44	4,276.78	20.48	22.70	45.01	-3,590.93	-2,779.94	3,820.51	3,782.59	37.92	100.763		
3,900.00	3,750.01	4,375.86	4,365.99	21.05	23.19	45.31	-3,581.57	-2,768.52	3,782.37	3,743.53	38.84	97.394		
4,000.00	3,845.18	4,466.29	4,455.20	21.62	23.68	45.63	-3,572.21	-2,757.09	3,744.33	3,704.57	39.76	94.179		
4,100.00	3,940.35	4,556.71	4,544.41	22.19	24.18	45.94	-3,562.85	-2,745.67	3,706.39	3,665.71	40.68	91.106		
4,200.00	4,035.52	4,647.14	4,633.62	22.76	24.67	46.27	-3,553.48	-2,734.24	3,668.56	3,626.95	41.61	88.168		
4,300.00	4,130.69	4,737.56	4,722.83	23.33	25.16	46.60	-3,544.12	-2,722.82	3,630.83	3,588.29	42.54	85.356		
4,400.00	4,225.86	4,827.99	4,812.04	23.91	25.65	46.94	-3,534.76	-2,711.40	3,593.22	3,549.75	43.47	82.662		
4,500.00	4,321.03	4,918.41	4,901.25	24.48	26.14	47.28	-3,525.40	-2,699.97	3,555.72	3,511.25	44.40	79.971		
4,600.00	4,416.20	5,008.84	4,990.46	25.05	26.64	47.63	-3,516.04	-2,688.55	3,518.33	3,473.00	45.34	77.601		
4,700.00	4,511.37	5,100.74	5,079.67	25.62	27.14	47.99	-3,506.67	-2,677.12	3,481.08	3,434.79	46.28	75.212		
4,800.00	4,606.54	5,189.69	5,168.88	26.20	27.62	48.36	-3,497.31	-2,665.70	3,443.94	3,396.72	47.22	72.937		
4,900.00	4,701.71	5,280.11	5,258.09	26.77	28.12	48.73	-3,487.95	-2,654.28	3,406.94	3,358.78	48.16	70.740		
5,000.00	4,796.88	5,370.54	5,347.30	27.34	28.61	49.11	-3,478.59	-2,642.85	3,370.07	3,320.96	49.11	68.626		
5,100.00	4,892.05	5,460.96	5,436.51	27.92	29.10	49.50	-3,469.22	-2,631.43	3,333.34	3,283.29	50.06	66.592		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,551.39	5,525.72	28.49	29.60	49.90	-3,459.86	-2,620.00	3,296.76	3,245.75	51.01	64.632		
5,300.00	5,082.39	5,641.81	5,614.93	29.07	30.09	50.30	-3,450.50	-2,608.58	3,260.32	3,208.36	51.96	62.744		
5,400.00	5,177.56	5,732.23	5,704.14	29.64	30.59	50.72	-3,441.14	-2,597.16	3,224.04	3,171.12	52.92	60.923		
5,500.00	5,272.72	5,827.36	5,793.35	30.21	31.11	51.14	-3,431.78	-2,585.73	3,187.92	3,134.02	53.90	59.142		
5,600.00	5,367.89	5,913.08	5,882.56	30.79	31.57	51.57	-3,422.41	-2,574.31	3,151.96	3,097.12	54.84	57.470		
5,700.00	5,463.06	6,003.51	5,971.77	31.36	32.07	52.02	-3,413.05	-2,562.88	3,116.17	3,060.36	55.81	55.833		
5,800.00	5,558.23	6,093.93	6,060.98	31.94	32.56	52.47	-3,403.69	-2,551.46	3,080.56	3,023.78	56.78	54.252		
5,900.00	5,653.40	6,184.36	6,150.19	32.51	33.06	52.93	-3,394.33	-2,540.04	3,045.13	2,987.37	57.76	52.723		
6,000.00	5,748.57	6,260.38	6,225.19	33.09	33.47	53.32	-3,386.45	-2,530.43	3,009.93	2,951.21	58.72	51.263		
6,100.00	5,843.74	6,282.01	6,246.57	33.67	33.58	53.44	-3,384.22	-2,528.06	2,976.31	2,916.72	59.59	49.946		
6,200.00	5,938.91	6,300.00	6,264.41	34.24	33.68	53.55	-3,382.37	-2,526.65	2,945.14	2,884.70	60.44	48.729		
6,300.00	6,034.08	6,325.01	6,289.27	34.82	33.79	53.70	-3,379.81	-2,525.53	2,916.50	2,855.22	61.28	47.593		
6,400.00	6,129.25	6,338.74	6,302.92	35.39	33.85	53.79	-3,378.41	-2,525.33	2,890.38	2,828.32	62.06	46.573		
6,500.00	6,224.42	6,350.00	6,314.12	35.97	33.90	53.87	-3,377.27	-2,525.39	2,866.99	2,804.19	62.80	45.654		
6,600.00	6,319.59	6,376.85	6,340.81	36.54	33.99	54.06	-3,374.57	-2,526.33	2,846.20	2,782.65	63.55	44.786		
6,700.00	6,414.76	6,400.00	6,363.79	37.12	34.08	54.23	-3,372.26	-2,528.06	2,828.25	2,763.99	64.26	44.015		
6,800.00	6,509.91	6,414.86	6,378.50	37.70	34.12	46.87	-3,370.80	-2,529.60	2,812.62	2,747.74	64.88	43.351		
6,900.00	6,603.99	6,425.01	6,388.52	38.26	34.16	23.01	-3,369.80	-2,530.86	2,790.28	2,724.89	65.39	42.674		
7,000.00	6,694.76	6,450.00	6,413.10	38.78	34.23	6.99	-3,367.38	-2,534.63	2,757.73	2,691.87	65.86	41.872		
7,100.00	6,779.96	6,471.51	6,434.13	39.24	34.28	-4.03	-3,365.33	-2,538.65	2,715.65	2,649.44	66.21	41.015		
7,200.00	6,857.50	6,500.00	6,461.76	39.65	34.34	-12.67	-3,362.66	-2,545.07	2,664.75	2,598.23	66.52	40.061		
7,300.00	6,925.48	6,500.00	6,461.76	40.02	34.34	-20.56	-3,362.66	-2,545.07	2,605.63	2,539.10	66.53	39.163		
7,400.00	6,982.21	6,525.01	6,485.76	40.33	34.39	-28.74	-3,360.36	-2,551.72	2,539.53	2,472.86	66.67	38.092		
7,500.00	7,026.31	6,538.29	6,498.39	40.63	34.42	-37.83	-3,359.16	-2,555.63	2,467.73	2,401.06	66.67	37.012		
7,600.00	7,056.68	6,550.00	6,509.46	40.91	34.44	-48.22	-3,358.11	-2,559.31	2,391.70	2,325.03	66.67	35.876		
7,700.00	7,072.58	6,550.00	6,509.46	41.25	34.44	-59.47	-3,358.11	-2,559.31	2,313.28	2,246.68	66.61	34.731		
7,800.00	7,074.86	6,571.93	6,530.00	41.69	34.47	-67.04	-3,356.19	-2,566.73	2,234.03	2,167.21	66.83	33.430		
7,900.00	7,074.54	6,581.09	6,538.51	42.34	34.48	-67.36	-3,355.40	-2,570.04	2,156.29	2,089.22	67.07	32.152		
8,000.00	7,074.21	6,600.00	6,555.91	43.27	34.51	-68.00	-3,353.79	-2,577.26	2,080.35	2,012.82	67.53	30.806		
8,100.00	7,073.89	6,600.00	6,555.91	44.47	34.51	-68.00	-3,353.79	-2,577.26	2,006.18	1,938.16	68.02	29.493		
8,200.00	7,073.57	6,613.30	6,568.02	45.91	34.52	-68.46	-3,352.67	-2,582.65	1,934.18	1,865.37	68.82	28.106		
8,300.00	7,073.24	6,625.01	6,578.58	47.53	34.53	-68.85	-3,351.71	-2,587.60	1,864.51	1,794.68	69.83	26.701		
8,400.00	7,072.92	6,639.73	6,591.73	49.31	34.54	-69.36	-3,350.52	-2,594.10	1,797.38	1,726.27	71.11	25.276		
8,500.00	7,072.59	6,650.00	6,600.82	51.20	34.55	-69.70	-3,349.70	-2,598.82	1,733.07	1,660.43	72.64	23.858		
8,600.00	7,072.27	6,671.39	6,619.49	53.19	34.56	-70.43	-3,348.03	-2,609.11	1,671.79	1,597.26	74.52	22.434		
8,700.00	7,071.94	6,700.00	6,643.92	55.27	34.58	-71.39	-3,345.87	-2,623.85	1,613.95	1,537.24	76.71	21.038		
8,800.00	7,071.62	6,709.79	6,652.12	57.43	34.58	-71.71	-3,345.15	-2,629.14	1,559.57	1,480.42	79.15	19.703		
8,900.00	7,071.29	6,732.12	6,670.53	59.64	34.59	-72.45	-3,343.56	-2,641.69	1,509.19	1,427.27	81.92	18.423		
9,000.00	7,070.97	6,750.00	6,684.94	61.92	34.59	-73.03	-3,342.33	-2,652.19	1,463.03	1,378.07	84.96	17.220		
9,100.00	7,070.64	6,784.61	6,711.98	64.24	34.59	-74.14	-3,340.06	-2,673.67	1,421.21	1,332.97	88.25	16.105		
9,200.00	7,070.32	6,815.51	6,735.12	66.61	34.59	-75.10	-3,338.17	-2,694.06	1,384.06	1,292.34	91.72	15.090		
9,300.00	7,069.99	6,850.00	6,759.75	69.01	34.59	-76.14	-3,336.21	-2,718.12	1,351.66	1,256.32	95.34	14.178		
9,400.00	7,069.67	6,888.72	6,785.81	71.45	34.58	-77.25	-3,334.20	-2,746.68	1,324.05	1,225.01	99.03	13.370		
9,500.00	7,069.34	6,931.93	6,812.80	73.92	34.57	-78.42	-3,332.22	-2,780.35	1,301.17	1,198.42	102.75	12.664		
9,600.00	7,069.02	6,980.07	6,840.11	76.42	34.58	-79.61	-3,330.33	-2,819.93	1,282.84	1,176.40	106.44	12.053		
9,700.00	7,068.69	7,033.37	6,866.79	78.95	34.60	-80.80	-3,328.66	-2,866.03	1,268.77	1,158.71	110.06	11.528		
9,800.00	7,068.37	7,091.84	6,891.55	81.49	34.67	-81.91	-3,327.35	-2,918.96	1,258.57	1,144.93	113.64	11.075		
9,900.00	7,068.04	7,155.15	6,912.78	84.06	34.82	-82.88	-3,326.54	-2,978.57	1,251.79	1,134.62	117.17	10.684		
10,000.00	7,067.72	7,222.53	6,928.80	86.65	35.11	-83.61	-3,326.40	-3,043.98	1,247.97	1,127.28	120.69	10.340		
10,100.00	7,067.39	7,292.75	6,938.08	89.25	35.58	-84.05	-3,327.04	-3,113.55	1,246.75	1,122.51	124.24	10.035		
10,101.10	7,067.39	7,293.53	6,938.14	89.28	35.59	-84.05	-3,327.05	-3,114.33	1,246.75	1,122.47	124.27	10.032 CC		
10,200.00	7,067.07	7,371.80	6,939.90	91.87	36.32	-84.15	-3,328.66	-3,192.53	1,247.79	1,119.93	127.86	9.759		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,471.79	6,939.48	94.50	37.57	-84.15	-3,330.98	-3,292.49	1,249.45	1,117.65	131.80	9.480		
10,400.00	7,066.42	7,571.77	6,939.06	97.14	39.11	-84.15	-3,333.31	-3,392.45	1,251.11	1,115.13	135.98	9.200		
10,500.00	7,066.09	7,671.76	6,938.65	99.80	40.89	-84.16	-3,335.63	-3,492.41	1,252.77	1,112.37	140.40	8.923		
10,600.00	7,065.77	7,771.75	6,938.23	102.47	42.86	-84.16	-3,337.96	-3,592.37	1,254.43	1,109.43	145.00	8.651		
10,700.00	7,065.44	7,871.73	6,937.81	105.15	45.00	-84.16	-3,340.28	-3,692.32	1,256.09	1,106.31	149.78	8.386		
10,800.00	7,065.12	7,971.72	6,937.39	107.83	47.28	-84.17	-3,342.61	-3,792.28	1,257.74	1,103.04	154.71	8.130		
10,900.00	7,064.79	8,071.70	6,936.98	110.53	49.67	-84.17	-3,344.93	-3,892.24	1,259.40	1,099.64	159.76	7.883		
11,000.00	7,064.47	8,171.69	6,936.56	113.23	52.17	-84.17	-3,347.26	-3,992.20	1,261.06	1,096.13	164.93	7.646		
11,100.00	7,064.14	8,271.68	6,936.14	115.95	54.75	-84.18	-3,349.58	-4,092.16	1,262.72	1,092.52	170.20	7.419		
11,200.00	7,063.82	8,371.66	6,935.73	118.66	57.41	-84.18	-3,351.91	-4,192.12	1,264.38	1,088.83	175.54	7.203		
11,300.00	7,063.49	8,471.65	6,935.31	121.39	60.13	-84.19	-3,354.23	-4,292.07	1,266.04	1,085.07	180.97	6.996		
11,400.00	7,063.17	8,571.64	6,934.89	124.12	62.91	-84.19	-3,356.56	-4,392.03	1,267.70	1,081.24	186.45	6.799		
11,500.00	7,062.84	8,671.62	6,934.48	126.86	65.74	-84.19	-3,358.88	-4,491.99	1,269.36	1,077.36	192.00	6.611		
11,600.00	7,062.52	8,771.61	6,934.06	129.60	68.62	-84.20	-3,361.21	-4,591.95	1,271.01	1,073.42	197.59	6.433		
11,700.00	7,062.19	8,871.59	6,933.64	132.35	71.53	-84.20	-3,363.53	-4,691.91	1,272.67	1,069.45	203.23	6.262		
11,800.00	7,061.87	8,971.58	6,933.22	135.10	74.48	-84.20	-3,365.86	-4,791.87	1,274.33	1,065.43	208.90	6.100		
11,900.00	7,061.54	9,071.57	6,932.81	137.85	77.46	-84.21	-3,368.18	-4,891.82	1,275.99	1,061.38	214.61	5.946		
12,000.00	7,061.22	9,171.55	6,932.39	140.61	80.46	-84.21	-3,370.51	-4,991.78	1,277.65	1,057.29	220.36	5.798		
12,100.00	7,060.89	9,271.54	6,931.97	143.38	83.49	-84.21	-3,372.83	-5,091.74	1,279.31	1,053.18	226.13	5.658		
12,200.00	7,060.57	9,371.52	6,931.56	146.15	86.54	-84.22	-3,375.16	-5,191.70	1,280.97	1,049.05	231.92	5.523		
12,300.00	7,060.24	9,471.51	6,931.14	148.92	89.61	-84.22	-3,377.48	-5,291.66	1,282.63	1,044.89	237.74	5.395		
12,400.00	7,059.92	9,571.50	6,930.72	151.69	92.70	-84.22	-3,379.81	-5,391.62	1,284.28	1,040.71	243.58	5.273		
12,500.00	7,059.59	9,671.48	6,930.30	154.47	95.80	-84.23	-3,382.13	-5,491.57	1,285.94	1,036.51	249.44	5.155		
12,600.00	7,059.27	9,771.47	6,929.89	157.25	98.92	-84.23	-3,384.46	-5,591.53	1,287.60	1,032.29	255.31	5.043		
12,700.00	7,058.94	9,871.46	6,929.47	160.03	102.05	-84.23	-3,386.78	-5,691.49	1,289.26	1,028.06	261.20	4.936		
12,800.00	7,058.62	9,971.44	6,929.05	162.82	105.20	-84.24	-3,389.11	-5,791.45	1,290.92	1,023.81	267.11	4.833		
12,900.00	7,058.29	10,071.43	6,928.64	165.61	108.35	-84.24	-3,391.43	-5,891.41	1,292.58	1,019.55	273.02	4.734		
13,000.00	7,057.97	10,171.41	6,928.22	168.40	111.51	-84.24	-3,393.76	-5,991.37	1,294.24	1,015.28	278.95	4.640		
13,100.00	7,057.64	10,271.40	6,927.80	171.19	114.69	-84.25	-3,396.08	-6,091.32	1,295.90	1,011.00	284.90	4.549		
13,200.00	7,057.32	10,371.39	6,927.38	173.99	117.87	-84.25	-3,398.41	-6,191.28	1,297.56	1,006.71	290.85	4.461		
13,300.00	7,057.00	10,471.37	6,926.97	176.78	121.06	-84.25	-3,400.73	-6,291.24	1,299.21	1,002.40	296.81	4.377		
13,400.00	7,056.67	10,571.36	6,926.55	179.58	124.25	-84.26	-3,403.05	-6,391.19	1,300.86	1,000.00	301.45	4.321		
13,500.00	7,056.35	10,671.34	6,926.13	182.38	127.44	-84.27	-3,405.37	-6,491.14	1,302.51	999.58	307.41	4.252		
13,600.00	7,056.02	10,771.33	6,925.71	185.19	129.16	-84.29	-3,413.23	-6,545.08	1,311.56	998.49	313.07	4.189		
13,700.00	7,055.70	10,871.31	6,925.29	187.99	131.53	-84.31	-3,418.57	-6,619.35	1,317.94	999.98	317.96	4.145		
13,800.00	7,055.37	10,971.30	6,924.87	190.80	133.06	-84.33	-3,423.60	-6,667.59	1,327.27	1,005.87	321.40	4.130		
13,900.00	7,055.05	11,071.28	6,924.45	193.60	134.90	-84.35	-3,431.30	-6,725.62	1,339.72	1,014.71	325.01	4.122		
14,000.00	7,054.72	11,171.27	6,924.03	196.41	136.70	-84.39	-3,440.69	-6,782.89	1,355.17	1,026.88	328.29	4.128		
14,100.00	7,054.40	11,271.25	6,923.61	199.22	139.14	-84.45	-3,455.59	-6,860.62	1,373.18	1,040.36	332.82	4.126		
14,200.00	7,054.07	11,371.24	6,923.19	202.03	141.57	-84.57	-3,490.95	-7,088.45	1,389.12	1,042.56	346.57	4.008		
14,300.00	7,053.75	11,471.22	6,922.77	204.85	153.91	-84.59	-3,499.77	-7,321.45	1,390.89	1,033.32	357.57	3.890		
14,400.00	7,053.42	11,571.21	6,922.35	207.66	157.16	-84.59	-3,499.76	-7,421.45	1,390.22	1,026.60	363.61	3.823		
14,500.00	7,053.10	11,671.20	6,921.93	210.48	160.42	-84.58	-3,499.75	-7,521.44	1,389.55	1,019.89	369.66	3.759		
14,600.00	7,052.77	11,771.19	6,921.51	213.29	163.68	-84.57	-3,499.73	-7,621.44	1,388.88	1,013.17	375.71	3.697		
14,700.00	7,052.45	11,871.18	6,921.09	216.11	166.95	-84.57	-3,499.72	-7,721.44	1,388.21	1,006.45	381.76	3.636		
14,800.00	7,052.12	11,971.17	6,920.67	218.93	170.21	-84.56	-3,499.71	-7,821.43	1,387.54	999.72	387.82	3.578		
14,900.00	7,051.80	12,071.16	6,920.25	221.75	173.48	-84.55	-3,499.69	-7,921.43	1,386.87	992.99	393.88	3.521		
15,000.00	7,051.47	12,171.15	6,919.83	224.57	176.75	-84.55	-3,499.68	-8,021.43	1,386.20	986.26	399.95	3.466		
15,100.00	7,051.15	12,271.14	6,919.41	227.39	180.03	-84.54	-3,499.67	-8,121.42	1,385.54	979.52	406.01	3.413		
15,145.13	7,051.00	12,353.29	6,919.11	228.67	181.51	-84.54	-3,499.66	-8,166.55	1,385.23	976.48	408.75	3.389 ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	67.00	3.28	0.00	-140.83	-4,009.68	-3,266.46	5,172.22					
100.00	100.00	58.00	100.00	3.28	0.07	-140.83	-4,009.68	-3,266.46	5,171.78	5,168.43	3.36	1,540.493		
200.00	200.00	875.53	914.35	3.34	3.71	-141.03	-3,982.01	-3,220.61	5,170.98	5,163.86	7.12	726.233		
300.00	299.98	974.28	1,012.02	3.44	4.21	34.71	-3,974.52	-3,208.20	5,155.74	5,148.08	7.66	672.881		
400.00	399.84	1,072.61	1,109.29	3.59	4.72	34.90	-3,967.07	-3,195.84	5,137.68	5,129.43	8.25	622.459		
500.00	499.45	1,170.40	1,206.03	3.79	5.22	35.14	-3,959.65	-3,183.56	5,116.82	5,107.93	8.89	575.572		
600.00	598.70	1,267.54	1,302.11	4.03	5.73	35.45	-3,952.29	-3,171.35	5,093.17	5,083.60	9.56	532.521		
700.00	697.47	1,363.90	1,397.43	4.31	6.23	35.81	-3,944.98	-3,159.24	5,066.76	5,056.49	10.27	493.312		
800.00	795.62	1,459.37	1,491.86	4.64	6.73	36.24	-3,937.74	-3,147.25	5,037.65	5,026.64	11.00	457.760		
900.00	893.06	1,553.83	1,585.30	5.00	7.22	36.74	-3,930.58	-3,135.38	5,005.86	4,994.10	11.76	425.583		
1,000.00	989.64	1,647.17	1,677.63	5.40	7.71	37.30	-3,923.50	-3,123.65	4,971.45	4,958.92	12.54	396.460		
1,100.00	1,085.27	1,739.27	1,768.73	5.83	8.19	37.91	-3,916.52	-3,112.08	4,934.48	4,921.14	13.34	369.905		
1,200.00	1,180.44	1,830.79	1,859.26	6.29	8.67	38.07	-3,909.58	-3,100.58	4,896.41	4,882.27	14.14	346.320		
1,300.00	1,275.61	1,927.69	1,949.79	6.76	9.18	38.24	-3,902.64	-3,089.08	4,858.37	4,843.40	14.98	324.338		
1,400.00	1,370.78	2,013.84	2,040.33	7.26	9.64	38.41	-3,895.70	-3,077.58	4,820.37	4,804.59	15.79	305.375		
1,500.00	1,465.95	2,105.36	2,130.86	7.76	10.12	38.58	-3,888.76	-3,066.08	4,782.41	4,765.79	16.63	287.612		
1,600.00	1,561.12	2,196.88	2,221.39	8.27	10.60	38.76	-3,881.82	-3,054.58	4,744.49	4,727.01	17.48	271.406		
1,700.00	1,656.29	2,288.40	2,311.92	8.80	11.08	38.94	-3,874.88	-3,043.08	4,706.61	4,688.26	18.34	256.587		
1,800.00	1,751.46	2,379.93	2,402.45	9.32	11.57	39.12	-3,867.94	-3,031.58	4,668.76	4,649.55	19.21	243.006		
1,900.00	1,846.63	2,471.45	2,492.98	9.86	12.05	39.30	-3,861.00	-3,020.08	4,630.96	4,610.87	20.09	230.530		
2,000.00	1,941.80	2,562.97	2,583.51	10.40	12.53	39.49	-3,854.06	-3,008.58	4,593.20	4,572.23	20.97	219.039		
2,100.00	2,036.96	2,654.49	2,674.05	10.94	13.02	39.68	-3,847.12	-2,997.08	4,555.48	4,533.63	21.86	208.431		
2,200.00	2,132.13	2,746.02	2,764.58	11.49	13.50	39.87	-3,840.18	-2,985.58	4,517.81	4,495.06	22.75	198.614		
2,300.00	2,227.30	2,837.54	2,855.11	12.04	13.99	40.07	-3,833.24	-2,974.08	4,480.18	4,456.54	23.64	189.508		
2,400.00	2,322.47	2,929.06	2,945.64	12.59	14.47	40.26	-3,826.30	-2,962.58	4,442.60	4,418.07	24.54	181.043		
2,500.00	2,417.64	3,020.58	3,036.17	13.15	14.95	40.47	-3,819.36	-2,951.08	4,405.07	4,379.63	25.44	173.156		
2,600.00	2,512.81	3,112.11	3,126.70	13.70	15.44	40.67	-3,812.42	-2,939.58	4,367.59	4,341.25	26.34	165.793		
2,700.00	2,607.98	3,203.63	3,217.23	14.26	15.92	40.88	-3,805.48	-2,928.08	4,330.16	4,302.91	27.25	158.906		
2,800.00	2,703.15	3,295.15	3,307.77	14.82	16.41	41.09	-3,798.54	-2,916.58	4,292.78	4,264.62	28.16	152.451		
2,900.00	2,798.32	3,386.67	3,398.30	15.38	16.89	41.31	-3,791.60	-2,905.09	4,255.45	4,226.38	29.07	146.391		
3,000.00	2,893.49	3,478.19	3,488.83	15.95	17.37	41.53	-3,784.66	-2,893.59	4,218.18	4,188.20	29.98	140.691		
3,100.00	2,988.66	3,569.72	3,579.36	16.51	17.86	41.76	-3,777.72	-2,882.09	4,180.96	4,150.07	30.90	135.322		
3,200.00	3,083.83	3,661.24	3,669.89	17.07	18.34	41.98	-3,770.78	-2,870.59	4,143.80	4,111.99	31.81	130.256		
3,300.00	3,179.00	3,752.76	3,760.42	17.64	18.83	42.21	-3,763.84	-2,859.09	4,106.71	4,073.97	32.73	125.468		
3,400.00	3,274.17	3,844.28	3,850.95	18.21	19.31	42.45	-3,756.90	-2,847.59	4,069.67	4,036.02	33.65	120.939		
3,500.00	3,369.34	3,935.81	3,941.49	18.77	19.80	42.69	-3,749.96	-2,836.09	4,032.69	3,998.12	34.57	116.646		
3,600.00	3,464.51	4,027.33	4,032.02	19.34	20.28	42.94	-3,743.02	-2,824.59	3,995.78	3,960.28	35.49	112.574		
3,700.00	3,559.68	4,113.16	4,122.55	19.91	20.83	43.18	-3,736.08	-2,813.09	3,958.93	3,922.46	36.48	108.535		
3,800.00	3,654.84	4,210.37	4,213.08	20.48	21.25	43.44	-3,729.14	-2,801.59	3,922.15	3,884.81	37.34	105.026		
3,900.00	3,750.01	4,301.90	4,303.61	21.05	21.74	43.70	-3,722.20	-2,790.09	3,885.45	3,847.17	38.27	101.522		
4,000.00	3,845.18	4,393.42	4,394.14	21.62	22.22	43.96	-3,715.26	-2,778.59	3,848.81	3,809.61	39.20	98.183		
4,100.00	3,940.35	4,484.94	4,484.67	22.19	22.71	44.23	-3,708.32	-2,767.09	3,812.25	3,772.11	40.13	94.997		
4,200.00	4,035.52	4,576.46	4,575.21	22.76	23.19	44.50	-3,701.38	-2,755.59	3,775.76	3,734.70	41.06	91.954		
4,300.00	4,130.69	4,667.99	4,665.74	23.33	23.68	44.78	-3,694.44	-2,744.09	3,739.35	3,697.36	41.99	89.044		
4,400.00	4,225.86	4,759.51	4,756.27	23.91	24.16	45.06	-3,687.50	-2,732.59	3,703.02	3,660.09	42.93	86.261		
4,500.00	4,321.03	4,851.03	4,846.80	24.48	24.65	45.35	-3,680.56	-2,721.09	3,666.78	3,622.91	43.86	83.595		
4,600.00	4,416.20	4,942.55	4,937.33	25.05	25.13	45.64	-3,673.62	-2,709.59	3,630.62	3,585.81	44.80	81.039		
4,700.00	4,511.37	5,034.08	5,027.86	25.62	25.62	45.94	-3,666.68	-2,698.09	3,594.54	3,548.80	45.74	78.588		
4,800.00	4,606.54	5,125.60	5,118.39	26.20	26.10	46.25	-3,659.74	-2,686.59	3,558.56	3,511.88	46.68	76.235		
4,900.00	4,701.71	5,217.12	5,208.93	26.77	26.59	46.56	-3,652.80	-2,675.09	3,522.67	3,475.05	47.62	73.974		
5,000.00	4,796.88	5,308.64	5,299.46	27.34	27.07	46.88	-3,645.86	-2,663.59	3,486.88	3,438.32	48.56	71.801		
5,100.00	4,892.05	5,400.17	5,389.99	27.92	27.56	47.20	-3,638.92	-2,652.09	3,451.19	3,401.68	49.51	69.710		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,491.69	5,480.52	28.49	28.04	47.53	-3,631.98	-2,640.59	3,415.60	3,365.15	50.45	67.698		
5,300.00	5,082.39	5,583.21	5,571.05	29.07	28.53	47.87	-3,625.04	-2,629.09	3,380.11	3,328.71	51.40	65.759		
5,400.00	5,177.56	5,674.73	5,661.58	29.64	29.01	48.21	-3,618.10	-2,617.59	3,344.74	3,292.39	52.35	63.891		
5,500.00	5,272.72	5,766.25	5,752.11	30.21	29.50	48.56	-3,611.16	-2,606.09	3,309.48	3,256.17	53.30	62.089		
5,600.00	5,367.89	5,857.78	5,842.65	30.79	29.98	48.92	-3,604.22	-2,594.59	3,274.33	3,220.07	54.25	60.351		
5,700.00	5,463.06	5,949.30	5,933.18	31.36	30.47	49.29	-3,597.28	-2,583.09	3,239.30	3,184.09	55.21	58.673		
5,800.00	5,558.23	6,040.82	6,023.71	31.94	30.95	49.66	-3,590.34	-2,571.59	3,204.40	3,148.23	56.17	57.052		
5,900.00	5,653.40	6,132.34	6,114.24	32.51	31.44	50.04	-3,583.40	-2,560.09	3,169.62	3,112.50	57.13	55.485		
6,000.00	5,748.57	6,226.16	6,204.77	33.09	31.94	50.43	-3,576.46	-2,548.59	3,134.98	3,076.88	58.10	53.961		
6,100.00	5,843.74	6,315.39	6,295.30	33.67	32.41	50.83	-3,569.52	-2,537.10	3,100.47	3,041.42	59.05	52.506		
6,200.00	5,938.91	6,374.99	6,354.26	34.24	32.72	51.09	-3,565.00	-2,529.61	3,066.27	3,006.30	59.97	51.131		
6,300.00	6,034.08	6,400.00	6,379.05	34.82	32.85	51.21	-3,563.11	-2,526.95	3,033.88	2,973.05	60.83	49.878		
6,400.00	6,129.25	6,425.01	6,403.94	35.39	32.97	51.34	-3,561.24	-2,525.28	3,003.94	2,942.28	61.66	48.715		
6,500.00	6,224.42	6,438.75	6,417.63	35.97	33.03	51.41	-3,560.22	-2,524.77	2,976.43	2,913.98	62.45	47.662		
6,600.00	6,319.59	6,450.00	6,428.85	36.54	33.08	51.48	-3,559.39	-2,524.58	2,951.52	2,888.33	63.19	46.708		
6,700.00	6,414.76	6,477.29	6,456.06	37.12	33.18	51.64	-3,557.39	-2,524.94	2,929.09	2,865.15	63.94	45.808		
6,800.00	6,509.91	6,500.00	6,478.68	37.70	33.26	44.23	-3,555.75	-2,526.13	2,908.93	2,844.28	64.65	44.995		
6,900.00	6,603.99	6,525.01	6,503.52	38.26	33.34	20.09	-3,553.97	-2,528.38	2,882.24	2,816.95	65.29	44.148		
7,000.00	6,694.76	6,534.93	6,513.35	38.78	33.37	3.56	-3,553.27	-2,529.54	2,845.76	2,780.01	65.75	43.280		
7,100.00	6,779.96	6,550.00	6,528.24	39.24	33.41	-7.99	-3,552.22	-2,531.60	2,800.31	2,734.17	66.13	42.343		
7,200.00	6,857.50	6,571.60	6,549.49	39.65	33.46	-17.25	-3,550.74	-2,535.17	2,746.53	2,680.08	66.45	41.330		
7,300.00	6,925.48	6,600.00	6,577.23	40.02	33.53	-25.91	-3,548.83	-2,540.95	2,685.55	2,618.81	66.74	40.240		
7,400.00	6,982.21	6,600.00	6,577.23	40.33	33.53	-34.72	-3,548.83	-2,540.95	2,618.21	2,551.41	66.80	39.196		
7,500.00	7,026.31	6,625.01	6,601.42	40.63	33.58	-44.63	-3,547.19	-2,547.07	2,546.19	2,479.22	66.97	38.019		
7,600.00	7,056.68	6,625.01	6,601.42	40.91	33.58	-55.11	-3,547.19	-2,547.07	2,470.99	2,403.98	67.00	36.879		
7,700.00	7,072.58	6,650.00	6,625.34	41.25	33.63	-66.75	-3,545.59	-2,554.12	2,394.41	2,327.17	67.24	35.609		
7,800.00	7,074.86	6,650.00	6,625.34	41.69	33.63	-73.11	-3,545.59	-2,554.12	2,318.34	2,250.91	67.43	34.380		
7,900.00	7,074.54	6,650.00	6,625.34	42.34	33.63	-73.11	-3,545.59	-2,554.12	2,244.11	2,176.33	67.78	33.108		
8,000.00	7,074.21	6,650.00	6,625.34	43.27	33.63	-73.11	-3,545.59	-2,554.12	2,171.95	2,103.63	68.31	31.795		
8,100.00	7,073.89	6,675.59	6,649.52	44.47	33.66	-73.97	-3,543.99	-2,562.31	2,101.53	2,032.35	69.17	30.380		
8,200.00	7,073.57	6,700.00	6,672.28	45.91	33.70	-74.78	-3,542.52	-2,571.03	2,033.83	1,963.59	70.24	28.955		
8,300.00	7,073.24	6,700.00	6,672.28	47.53	33.70	-74.78	-3,542.52	-2,571.03	1,968.36	1,896.90	71.45	27.548		
8,400.00	7,072.92	6,708.95	6,680.53	49.31	33.71	-75.08	-3,541.99	-2,574.45	1,905.82	1,832.86	72.97	26.120		
8,500.00	7,072.59	6,725.01	6,695.23	51.20	33.73	-75.61	-3,541.05	-2,580.87	1,846.34	1,771.56	74.78	24.692		
8,600.00	7,072.27	6,737.11	6,706.18	53.19	33.74	-76.01	-3,540.36	-2,585.94	1,790.14	1,713.28	76.86	23.292		
8,700.00	7,071.94	6,750.00	6,717.75	55.27	33.75	-76.43	-3,539.64	-2,591.58	1,737.51	1,658.29	79.22	21.932		
8,800.00	7,071.62	6,771.79	6,737.04	57.43	33.77	-77.14	-3,538.45	-2,601.65	1,688.69	1,606.83	81.86	20.628		
8,900.00	7,071.29	6,800.00	6,761.49	59.64	33.79	-78.05	-3,536.97	-2,615.64	1,644.00	1,559.27	84.73	19.402		
9,000.00	7,070.97	6,815.27	6,774.46	61.92	33.80	-78.54	-3,536.20	-2,623.67	1,603.55	1,515.71	87.84	18.256		
9,100.00	7,070.64	6,841.27	6,796.08	64.24	33.81	-79.35	-3,534.94	-2,638.04	1,567.64	1,476.54	91.10	17.208		
9,200.00	7,070.32	6,870.77	6,819.89	66.61	33.82	-80.25	-3,533.59	-2,655.41	1,536.39	1,441.91	94.48	16.262		
9,300.00	7,069.99	6,904.37	6,845.99	69.01	33.84	-81.25	-3,532.15	-2,676.51	1,509.86	1,411.95	97.91	15.421		
9,400.00	7,069.67	6,942.76	6,874.42	71.45	33.85	-82.35	-3,530.65	-2,702.26	1,488.02	1,386.67	101.35	14.681		
9,500.00	7,069.34	6,986.69	6,904.98	73.92	33.87	-83.54	-3,529.13	-2,733.77	1,470.73	1,365.98	104.75	14.040		
9,600.00	7,069.02	7,036.94	6,937.18	76.42	33.91	-84.80	-3,527.64	-2,772.29	1,457.72	1,349.64	108.07	13.488		
9,700.00	7,068.69	7,094.19	6,970.06	78.95	33.97	-86.10	-3,526.30	-2,819.13	1,448.56	1,337.26	111.31	13.014		
9,800.00	7,068.37	7,158.90	7,002.00	81.49	34.11	-87.37	-3,525.25	-2,875.36	1,442.73	1,328.25	114.48	12.603		
9,900.00	7,068.04	7,231.01	7,030.68	84.06	34.36	-88.52	-3,524.66	-2,941.48	1,439.57	1,321.93	117.64	12.237		
10,000.00	7,067.72	7,309.72	7,053.26	86.65	34.79	-89.42	-3,524.74	-3,016.82	1,438.45	1,317.56	120.89	11.899		
10,022.78	7,067.64	7,328.41	7,057.25	87.24	34.92	-89.59	-3,524.87	-3,035.08	1,438.41	1,316.76	121.65	11.824 CC		
10,100.00	7,067.39	7,393.28	7,066.91	89.25	35.44	-89.98	-3,525.64	-3,099.20	1,438.78	1,314.48	124.30	11.575		
10,200.00	7,067.07	7,482.21	7,069.88	91.87	36.34	-90.11	-3,527.48	-3,188.00	1,440.17	1,312.24	127.93	11.257		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,582.20	7,069.27	94.50	37.63	-90.10	-3,529.83	-3,287.96	1,441.86	1,309.96	131.89	10.932		
10,400.00	7,066.42	7,682.18	7,068.67	97.14	39.17	-90.09	-3,532.19	-3,387.91	1,443.55	1,307.45	136.10	10.607		
10,500.00	7,066.09	7,782.17	7,068.07	99.80	40.94	-90.08	-3,534.55	-3,487.87	1,445.23	1,304.71	140.53	10.284		
10,600.00	7,065.77	7,882.15	7,067.47	102.47	42.90	-90.06	-3,536.90	-3,587.83	1,446.92	1,301.77	145.15	9.968		
10,700.00	7,065.44	7,982.14	7,066.87	105.15	45.01	-90.05	-3,539.26	-3,687.78	1,448.61	1,298.66	149.95	9.661		
10,800.00	7,065.12	8,082.12	7,066.26	107.83	47.27	-90.04	-3,541.62	-3,787.74	1,450.30	1,295.40	154.90	9.363		
10,900.00	7,064.79	8,182.11	7,065.66	110.53	49.65	-90.03	-3,543.97	-3,887.69	1,451.99	1,292.02	159.97	9.077		
11,000.00	7,064.47	8,282.09	7,065.06	113.23	52.13	-90.02	-3,546.33	-3,987.65	1,453.68	1,288.52	165.16	8.802		
11,100.00	7,064.14	8,382.08	7,064.46	115.95	54.71	-90.01	-3,548.69	-4,087.61	1,455.37	1,284.92	170.45	8.539		
11,200.00	7,063.82	8,482.06	7,063.85	118.66	57.35	-90.00	-3,551.04	-4,187.56	1,457.06	1,281.24	175.82	8.287		
11,300.00	7,063.49	8,582.05	7,063.25	121.39	60.07	-89.99	-3,553.40	-4,287.52	1,458.75	1,277.49	181.26	8.048		
11,400.00	7,063.17	8,682.03	7,062.65	124.12	62.84	-89.98	-3,555.75	-4,387.47	1,460.44	1,273.67	186.77	7.819		
11,500.00	7,062.84	8,782.02	7,062.05	126.86	65.67	-89.97	-3,558.11	-4,487.43	1,462.13	1,269.79	192.34	7.602		
11,600.00	7,062.52	8,882.01	7,061.45	129.60	68.54	-89.95	-3,560.47	-4,587.38	1,463.82	1,265.86	197.95	7.395		
11,700.00	7,062.19	8,981.99	7,060.84	132.35	71.45	-89.94	-3,562.82	-4,687.34	1,465.51	1,261.89	203.61	7.197		
11,800.00	7,061.87	9,081.98	7,060.24	135.10	74.39	-89.93	-3,565.18	-4,787.30	1,467.20	1,257.88	209.31	7.010		
11,900.00	7,061.54	9,181.96	7,059.64	137.85	77.37	-89.92	-3,567.54	-4,887.25	1,468.89	1,253.83	215.05	6.830		
12,000.00	7,061.22	9,281.95	7,059.04	140.61	80.37	-89.91	-3,569.89	-4,987.21	1,470.58	1,249.76	220.82	6.660		
12,100.00	7,060.89	9,381.93	7,058.44	143.38	83.39	-89.90	-3,572.25	-5,087.16	1,472.26	1,245.65	226.61	6.497		
12,200.00	7,060.57	9,481.92	7,057.83	146.15	86.44	-89.89	-3,574.60	-5,187.12	1,473.95	1,241.52	232.44	6.341		
12,300.00	7,060.24	9,581.90	7,057.23	148.92	89.51	-89.88	-3,576.96	-5,287.07	1,475.64	1,237.36	238.28	6.193		
12,400.00	7,059.92	9,681.89	7,056.63	151.69	92.60	-89.87	-3,579.32	-5,387.03	1,477.33	1,233.19	244.15	6.051		
12,500.00	7,059.59	9,781.87	7,056.03	154.47	95.70	-89.86	-3,581.67	-5,486.99	1,479.02	1,228.99	250.03	5.915		
12,600.00	7,059.27	9,881.86	7,055.43	157.25	98.81	-89.85	-3,584.03	-5,586.94	1,480.71	1,224.78	255.93	5.786		
12,700.00	7,058.94	9,981.84	7,054.82	160.03	101.94	-89.84	-3,586.39	-5,686.90	1,482.40	1,220.56	261.85	5.661		
12,800.00	7,058.62	10,081.83	7,054.22	162.82	105.09	-89.83	-3,588.74	-5,786.85	1,484.09	1,216.31	267.78	5.542		
12,900.00	7,058.29	10,181.81	7,053.62	165.61	108.24	-89.82	-3,591.10	-5,886.81	1,485.78	1,212.06	273.73	5.428		
13,000.00	7,057.97	10,281.80	7,053.02	168.40	111.40	-89.81	-3,593.46	-5,986.76	1,487.47	1,207.79	279.68	5.318		
13,100.00	7,057.64	10,381.79	7,052.42	171.19	114.57	-89.80	-3,595.81	-6,086.72	1,489.17	1,203.51	285.65	5.213		
13,200.00	7,057.32	10,481.77	7,051.81	173.99	117.75	-89.79	-3,598.17	-6,186.68	1,490.86	1,199.22	291.63	5.112		
13,300.00	7,057.00	10,581.76	7,051.21	176.78	120.94	-89.77	-3,600.52	-6,286.63	1,492.55	1,194.92	297.62	5.015		
13,400.00	7,056.67	10,681.74	7,050.61	179.58	124.14	-89.76	-3,602.88	-6,386.59	1,494.24	1,190.61	303.62	4.921		
13,500.00	7,056.35	10,781.73	7,050.01	182.38	127.34	-89.75	-3,605.24	-6,486.54	1,495.93	1,186.30	309.63	4.831		
13,600.00	7,056.02	10,881.71	7,049.41	185.19	130.55	-89.74	-3,607.59	-6,586.50	1,497.62	1,181.97	315.64	4.745		
13,700.00	7,055.70	10,981.70	7,048.80	187.99	133.76	-89.73	-3,609.95	-6,686.46	1,499.31	1,177.64	321.67	4.661		
13,800.00	7,055.37	11,081.68	7,048.20	190.80	136.98	-89.72	-3,612.31	-6,786.41	1,501.00	1,173.30	327.69	4.580		
13,900.00	7,055.05	11,181.67	7,047.60	193.60	140.21	-89.71	-3,614.66	-6,886.37	1,502.69	1,168.96	333.73	4.503		
14,000.00	7,054.72	11,281.65	7,047.00	196.41	143.44	-89.70	-3,617.02	-6,986.32	1,504.38	1,164.61	339.77	4.428		
14,100.00	7,054.40	11,381.64	7,046.40	199.22	146.67	-89.69	-3,619.37	-7,086.28	1,506.07	1,160.25	345.82	4.355		
14,200.00	7,054.07	11,481.62	7,045.79	202.03	149.91	-89.68	-3,621.73	-7,186.23	1,507.76	1,155.89	351.87	4.285		
14,300.00	7,053.75	11,581.61	7,045.19	204.85	153.15	-89.67	-3,624.09	-7,286.19	1,509.45	1,151.53	357.93	4.217		
14,400.00	7,053.42	11,681.59	7,044.59	207.66	156.39	-89.66	-3,626.44	-7,386.15	1,511.14	1,147.15	363.99	4.152		
14,500.00	7,053.10	11,781.58	7,043.99	210.48	159.64	-89.65	-3,628.80	-7,486.10	1,512.83	1,142.78	370.06	4.088		
14,600.00	7,052.77	11,881.57	7,043.39	213.29	162.89	-89.64	-3,631.16	-7,586.06	1,514.53	1,138.40	376.13	4.027		
14,700.00	7,052.45	11,981.55	7,042.78	216.11	166.15	-89.63	-3,633.51	-7,686.01	1,516.22	1,134.02	382.20	3.967		
14,800.00	7,052.12	12,081.54	7,042.18	218.93	169.41	-89.62	-3,635.87	-7,785.97	1,517.91	1,129.63	388.28	3.909		
14,900.00	7,051.80	12,181.52	7,041.58	221.75	172.67	-89.61	-3,638.22	-7,885.92	1,519.60	1,125.24	394.36	3.853		
15,000.00	7,051.47	12,281.51	7,040.98	224.57	175.93	-89.60	-3,640.58	-7,985.88	1,521.29	1,120.84	400.45	3.799		
15,100.00	7,051.15	12,381.49	7,040.38	227.39	179.19	-89.59	-3,642.94	-8,085.84	1,522.98	1,116.45	406.54	3.746		
15,145.13	7,051.00	12,426.61	7,040.10	228.67	180.67	-89.59	-3,644.00	-8,130.94	1,523.74	1,114.46	409.28	3.723 ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,808.89	7,242.40	3.28	248.33	0.53	2,363.45	21.94	7,618.32					
100.00	100.00	15,808.65	7,242.41	3.28	248.32	0.53	2,363.45	21.69	7,523.32	7,400.50	122.82	61.254		
200.00	200.00	15,808.40	7,242.41	3.34	248.32	0.52	2,363.46	21.45	7,428.45	7,305.13	123.32	60.237		
300.00	299.98	15,808.03	7,242.41	3.44	248.31	176.48	2,363.46	21.08	7,334.30	7,210.43	123.87	59.211		
400.00	399.84	15,807.39	7,242.41	3.59	248.29	176.76	2,363.46	20.44	7,241.55	7,117.05	124.50	58.166		
500.00	499.45	15,806.50	7,242.41	3.79	248.26	176.99	2,363.46	19.55	7,150.39	7,025.16	125.23	57.100		
600.00	598.70	15,805.35	7,242.41	4.03	248.23	177.17	2,363.46	18.39	7,060.98	6,934.93	126.05	56.016		
700.00	697.47	15,803.94	7,242.42	4.31	248.19	177.32	2,363.46	16.98	6,973.50	6,846.52	126.99	54.916		
800.00	795.62	15,802.27	7,242.42	4.64	248.14	177.44	2,363.47	15.32	6,888.14	6,760.11	128.03	53.800		
900.00	893.06	15,800.35	7,242.43	5.00	248.09	177.55	2,363.47	13.40	6,805.08	6,675.88	129.20	52.672		
1,000.00	989.64	15,801.88	7,242.43	5.40	248.13	177.63	2,363.47	11.23	6,724.51	6,593.97	130.54	51.513		
1,100.00	1,085.27	15,804.30	7,242.44	5.83	248.20	177.69	2,363.48	8.81	6,646.61	6,514.59	132.02	50.344		
1,200.00	1,180.44	15,806.82	7,242.44	6.29	248.27	177.66	2,363.48	6.28	6,570.30	6,436.66	133.65	49.162		
1,300.00	1,275.61	15,809.35	7,242.45	6.76	248.34	177.62	2,363.49	3.76	6,494.63	6,359.29	135.34	47.987		
1,400.00	1,370.78	15,811.88	7,242.46	7.26	248.42	177.59	2,363.49	1.23	6,419.63	6,282.52	137.11	46.820		
1,500.00	1,465.95	15,814.40	7,242.46	7.76	248.49	177.56	2,363.50	-1.30	6,345.32	6,206.35	138.96	45.662		
1,600.00	1,561.12	15,816.93	7,242.47	8.27	248.56	177.52	2,363.50	-3.82	6,271.71	6,130.83	140.89	44.515		
1,700.00	1,656.29	15,819.46	7,242.47	8.80	248.63	177.49	2,363.50	-6.35	6,198.85	6,055.96	142.89	43.382		
1,800.00	1,751.46	15,821.98	7,242.48	9.32	248.70	177.45	2,363.51	-8.88	6,126.75	5,981.78	144.97	42.262		
1,900.00	1,846.63	15,824.51	7,242.49	9.86	248.77	177.42	2,363.51	-11.40	6,055.44	5,908.32	147.13	41.158		
2,000.00	1,941.80	15,827.04	7,242.49	10.40	248.84	177.39	2,363.52	-13.93	5,984.96	5,835.60	149.36	40.072		
2,100.00	2,036.96	15,829.56	7,242.50	10.94	248.92	177.35	2,363.52	-16.46	5,915.32	5,763.66	151.66	39.004		
2,200.00	2,132.13	15,832.09	7,242.50	11.49	248.99	177.32	2,363.53	-18.98	5,846.56	5,692.53	154.04	37.956		
2,300.00	2,227.30	15,834.62	7,242.51	12.04	249.06	177.28	2,363.53	-21.51	5,778.72	5,622.23	156.48	36.929		
2,400.00	2,322.47	15,837.14	7,242.52	12.59	249.13	177.25	2,363.54	-24.04	5,711.81	5,552.81	159.00	35.923		
2,500.00	2,417.64	15,839.67	7,242.52	13.15	249.20	177.22	2,363.54	-26.56	5,645.89	5,484.30	161.59	34.940		
2,600.00	2,512.81	15,842.20	7,242.53	13.70	249.27	177.18	2,363.55	-29.09	5,580.98	5,416.73	164.24	33.980		
2,700.00	2,607.98	15,844.72	7,242.54	14.26	249.34	177.15	2,363.55	-31.62	5,517.11	5,350.15	166.96	33.044		
2,800.00	2,703.15	15,847.25	7,242.54	14.82	249.42	177.12	2,363.55	-34.14	5,454.33	5,284.58	169.75	32.132		
2,900.00	2,798.32	15,849.78	7,242.55	15.38	249.49	177.08	2,363.56	-36.67	5,392.67	5,220.08	172.59	31.245		
3,000.00	2,893.49	15,852.30	7,242.55	15.95	249.56	177.05	2,363.56	-39.20	5,332.18	5,156.68	175.50	30.383		
3,100.00	2,988.66	15,854.83	7,242.56	16.51	249.63	177.01	2,363.57	-41.72	5,272.88	5,094.42	178.46	29.546		
3,200.00	3,083.83	15,857.36	7,242.57	17.07	249.70	176.98	2,363.57	-44.25	5,214.83	5,033.34	181.48	28.734		
3,300.00	3,179.00	15,859.88	7,242.57	17.64	249.77	176.95	2,363.58	-46.77	5,158.06	4,973.50	184.56	27.949		
3,400.00	3,274.17	15,862.41	7,242.58	18.21	249.84	176.91	2,363.58	-49.30	5,102.62	4,914.94	187.68	27.188		
3,500.00	3,369.34	15,864.94	7,242.58	18.77	249.92	176.88	2,363.59	-51.83	5,048.55	4,857.70	190.84	26.454		
3,600.00	3,464.51	15,867.46	7,242.59	19.34	249.99	176.84	2,363.59	-54.35	4,995.89	4,801.84	194.05	25.745		
3,700.00	3,559.68	15,869.99	7,242.60	19.91	250.06	176.81	2,363.60	-56.88	4,944.70	4,747.39	197.30	25.062		
3,800.00	3,654.84	15,872.52	7,242.60	20.48	250.13	176.78	2,363.60	-59.41	4,895.01	4,694.42	200.58	24.404		
3,900.00	3,750.01	15,875.04	7,242.61	21.05	250.20	176.74	2,363.60	-61.93	4,846.87	4,642.98	203.90	23.771		
4,000.00	3,845.18	15,877.57	7,242.62	21.62	250.27	176.71	2,363.61	-64.46	4,800.34	4,593.10	207.23	23.164		
4,100.00	3,940.35	15,880.10	7,242.62	22.19	250.34	176.67	2,363.61	-66.99	4,755.45	4,544.86	210.59	22.582		
4,200.00	4,035.52	15,882.62	7,242.63	22.76	250.42	176.64	2,363.62	-69.51	4,712.25	4,498.29	213.96	22.024		
4,300.00	4,130.69	15,885.15	7,242.63	23.33	250.49	176.61	2,363.62	-72.04	4,670.79	4,453.46	217.34	21.491		
4,400.00	4,225.86	15,887.68	7,242.64	23.91	250.56	176.57	2,363.63	-74.57	4,631.12	4,410.41	220.72	20.982		
4,500.00	4,321.03	15,909.86	7,242.65	24.48	251.19	176.54	2,363.63	-77.09	4,593.29	4,368.76	224.53	20.457		
4,600.00	4,416.20	15,907.33	7,242.65	25.05	251.12	176.51	2,363.64	-79.62	4,557.33	4,329.55	227.78	20.007		
4,700.00	4,511.37	15,904.81	7,242.66	25.62	251.04	176.47	2,363.64	-82.15	4,523.30	4,292.29	231.01	19.580		
4,800.00	4,606.54	15,902.28	7,242.67	26.20	250.97	176.44	2,363.65	-84.67	4,491.24	4,257.02	234.21	19.176		
4,900.00	4,701.71	15,900.31	7,242.67	26.77	250.92	176.40	2,363.65	-87.20	4,461.18	4,223.79	237.39	18.793		
5,000.00	4,796.88	15,902.84	7,242.68	27.34	250.99	176.37	2,363.65	-89.73	4,433.18	4,192.55	240.62	18.424		
5,100.00	4,892.05	15,905.36	7,242.68	27.92	251.06	176.34	2,363.66	-92.25	4,407.26	4,163.45	243.81	18.077		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	15,907.89	7,242.69	28.49	251.13	176.30	2,363.66	-94.78	4,383.48	4,136.54	246.94	17.751		
5,300.00	5,082.39	15,910.42	7,242.70	29.07	251.20	176.27	2,363.67	-97.31	4,361.85	4,111.85	250.00	17.447		
5,400.00	5,177.56	15,912.94	7,242.70	29.64	251.27	176.23	2,363.67	-99.83	4,342.42	4,089.44	252.99	17.165		
5,500.00	5,272.72	15,915.47	7,242.71	30.21	251.35	176.20	2,363.68	-102.36	4,325.22	4,069.33	255.89	16.903		
5,600.00	5,367.89	15,918.00	7,242.71	30.79	251.42	176.17	2,363.68	-104.89	4,310.26	4,051.55	258.71	16.661		
5,700.00	5,463.06	15,920.52	7,242.72	31.36	251.49	176.13	2,363.69	-107.41	4,297.58	4,036.15	261.43	16.439		
5,800.00	5,558.23	15,923.05	7,242.73	31.94	251.56	176.10	2,363.69	-109.94	4,287.19	4,023.15	264.04	16.237		
5,900.00	5,653.40	15,925.58	7,242.73	32.51	251.63	176.06	2,363.70	-112.47	4,279.12	4,012.57	266.55	16.054		
6,000.00	5,748.57	15,928.10	7,242.74	33.09	251.70	176.03	2,363.70	-114.99	4,273.36	4,004.43	268.94	15.890		
6,100.00	5,843.74	15,930.63	7,242.75	33.67	251.77	176.00	2,363.70	-117.52	4,269.94	3,998.74	271.21	15.744		
6,196.16	5,935.26	15,933.06	7,242.75	34.22	251.84	175.96	2,363.71	-119.95	4,268.86	3,995.59	273.27	15.621 CC		
6,200.00	5,938.91	15,933.16	7,242.75	34.24	251.85	175.96	2,363.71	-120.05	4,268.86	3,995.51	273.35	15.617		
6,300.00	6,034.08	15,935.68	7,242.76	34.82	251.92	175.93	2,363.71	-122.57	4,270.12	3,994.76	275.36	15.507 ES		
6,400.00	6,129.25	15,938.21	7,242.76	35.39	251.99	175.90	2,363.72	-125.10	4,273.72	3,996.48	277.24	15.415		
6,500.00	6,224.42	15,940.74	7,242.77	35.97	252.06	175.86	2,363.72	-127.63	4,279.65	4,000.66	278.99	15.340		
6,600.00	6,319.59	15,943.26	7,242.78	36.54	252.13	175.83	2,363.73	-130.15	4,287.91	4,007.31	280.60	15.281		
6,700.00	6,414.76	15,945.79	7,242.78	37.12	252.20	175.79	2,363.73	-132.68	4,298.47	4,016.41	282.06	15.239		
6,800.00	6,509.91	15,948.87	7,242.79	37.70	252.29	168.14	2,363.74	-135.76	4,311.33	4,027.92	283.41	15.212		
6,900.00	6,603.99	15,963.37	7,242.83	38.26	252.70	143.73	2,363.76	-150.26	4,326.39	4,041.47	284.93	15.184		
7,000.00	6,694.76	16,006.92	7,242.90	38.78	253.93	127.33	2,363.82	-180.03	4,343.16	4,056.06	287.10	15.128		
7,100.00	6,779.96	16,037.47	7,243.01	39.24	254.80	116.47	2,363.90	-224.36	4,360.90	4,072.15	288.74	15.103		
7,200.00	6,857.50	16,104.81	7,243.15	39.65	256.70	108.79	2,364.00	-282.15	4,378.74	4,087.45	291.29	15.032		
7,300.00	6,925.48	16,165.08	7,243.32	40.02	258.41	103.09	2,364.13	-351.97	4,395.74	4,102.19	293.56	14.974		
7,400.00	6,982.21	16,245.21	7,243.51	40.33	260.68	98.79	2,364.27	-432.10	4,410.99	4,114.61	296.38	14.883		
7,500.00	7,026.31	16,333.69	7,243.73	40.63	263.18	95.63	2,364.43	-520.58	4,423.60	4,124.11	299.50	14.770		
7,600.00	7,056.68	16,428.33	7,243.96	40.91	265.86	93.51	2,364.60	-615.22	4,432.88	4,129.96	302.92	14.634		
7,700.00	7,072.58	16,526.81	7,244.20	41.25	268.65	92.39	2,364.77	-713.70	4,438.29	4,131.66	306.62	14.475		
7,800.00	7,074.86	16,626.73	7,244.45	41.69	271.48	92.19	2,364.95	-813.62	4,439.89	4,129.36	310.53	14.298		
7,900.00	7,074.54	16,726.72	7,244.69	42.34	274.32	92.19	2,365.13	-913.61	4,440.76	4,126.14	314.62	14.115		
8,000.00	7,074.21	16,826.72	7,244.94	43.27	277.15	92.20	2,365.31	-1,013.60	4,441.63	4,122.77	318.86	13.930		
8,100.00	7,073.89	16,926.71	7,245.18	44.47	279.98	92.21	2,365.49	-1,113.60	4,442.50	4,119.25	323.25	13.743		
8,200.00	7,073.57	17,026.71	7,245.42	45.91	282.82	92.22	2,365.67	-1,213.59	4,443.37	4,115.60	327.77	13.557		
8,300.00	7,073.24	17,126.70	7,245.67	47.53	285.66	92.22	2,365.85	-1,313.59	4,444.24	4,111.84	332.40	13.370		
8,400.00	7,072.92	17,226.70	7,245.91	49.31	288.49	92.23	2,366.03	-1,413.58	4,445.10	4,107.98	337.13	13.185		
8,500.00	7,072.59	17,326.69	7,246.16	51.20	291.33	92.24	2,366.21	-1,513.58	4,445.97	4,104.02	341.95	13.002		
8,600.00	7,072.27	17,426.69	7,246.40	53.19	294.17	92.24	2,366.39	-1,613.57	4,446.84	4,099.99	346.85	12.821		
8,700.00	7,071.94	17,526.68	7,246.65	55.27	297.00	92.25	2,366.57	-1,713.56	4,447.71	4,095.88	351.83	12.642		
8,800.00	7,071.62	17,626.68	7,246.89	57.43	299.84	92.26	2,366.75	-1,813.55	4,448.58	4,091.71	356.86	12.466		
8,900.00	7,071.29	17,726.67	7,247.13	59.64	302.68	92.26	2,366.93	-1,913.55	4,449.45	4,087.49	361.96	12.293		
9,000.00	7,070.97	17,826.67	7,247.38	61.92	305.52	92.27	2,367.11	-2,013.55	4,450.32	4,083.21	367.10	12.123		
9,100.00	7,070.64	17,926.66	7,247.62	64.24	308.36	92.28	2,367.29	-2,113.54	4,451.18	4,078.90	372.29	11.956		
9,200.00	7,070.32	18,026.66	7,247.87	66.61	311.20	92.28	2,367.47	-2,213.54	4,452.05	4,074.54	377.52	11.793		
9,300.00	7,069.99	18,126.65	7,248.11	69.01	314.04	92.29	2,367.65	-2,313.53	4,452.92	4,070.14	382.78	11.633		
9,400.00	7,069.67	18,226.65	7,248.36	71.45	316.88	92.30	2,367.83	-2,413.53	4,453.79	4,065.71	388.08	11.477		
9,500.00	7,069.34	18,326.64	7,248.60	73.92	319.72	92.30	2,368.00	-2,513.52	4,454.66	4,061.26	393.40	11.323		
9,600.00	7,069.02	18,426.64	7,248.84	76.42	322.56	92.31	2,368.18	-2,613.51	4,455.53	4,056.78	398.75	11.174		
9,700.00	7,068.69	18,526.63	7,249.09	78.95	325.40	92.32	2,368.36	-2,713.51	4,456.40	4,052.27	404.13	11.027		
9,800.00	7,068.37	18,626.62	7,249.33	81.49	328.24	92.33	2,368.54	-2,813.50	4,457.27	4,047.74	409.52	10.884		
9,900.00	7,068.04	18,726.62	7,249.58	84.06	331.09	92.33	2,368.72	-2,913.50	4,458.14	4,043.20	414.94	10.744		
10,000.00	7,067.72	18,826.61	7,249.82	86.65	333.93	92.34	2,368.90	-3,013.49	4,459.01	4,038.63	420.37	10.607		
10,100.00	7,067.39	18,926.61	7,250.07	89.25	336.77	92.35	2,369.08	-3,113.49	4,459.88	4,034.05	425.82	10.474		
10,200.00	7,067.07	19,026.60	7,250.31	91.87	339.61	92.35	2,369.26	-3,213.48	4,460.75	4,029.46	431.29	10.343		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	19,118.26	7,250.53	94.50	342.22	92.36	2,369.43	-3,305.13	4,461.62	4,025.10	436.52	10.221	
10,400.00	7,066.42	19,118.26	7,250.53	97.14	342.22	92.36	2,369.43	-3,305.13	4,463.80	4,024.87	438.93	10.170	
10,500.00	7,066.09	19,118.26	7,250.53	99.80	342.22	92.36	2,369.43	-3,305.13	4,468.22	4,027.07	441.15	10.129	
10,600.00	7,065.77	19,118.26	7,250.53	102.47	342.22	92.36	2,369.43	-3,305.13	4,474.86	4,031.71	443.15	10.098	
10,700.00	7,065.44	19,118.26	7,250.53	105.15	342.22	92.36	2,369.43	-3,305.13	4,483.73	4,038.78	444.95	10.077	
10,800.00	7,065.12	19,118.26	7,250.53	107.83	342.22	92.36	2,369.43	-3,305.13	4,494.80	4,048.26	446.54	10.066	
10,900.00	7,064.79	19,118.26	7,250.53	110.53	342.22	92.36	2,369.43	-3,305.13	4,508.07	4,060.15	447.92	10.065 SF	
11,000.00	7,064.47	19,118.26	7,250.53	113.23	342.22	92.36	2,369.43	-3,305.13	4,523.50	4,074.42	449.09	10.073	
11,100.00	7,064.14	19,118.26	7,250.53	115.95	342.22	92.36	2,369.43	-3,305.13	4,541.09	4,091.04	450.05	10.090	
11,200.00	7,063.82	19,118.26	7,250.53	118.66	342.22	92.36	2,369.43	-3,305.13	4,560.81	4,110.00	450.81	10.117	
11,300.00	7,063.49	19,118.26	7,250.53	121.39	342.22	92.36	2,369.43	-3,305.13	4,582.62	4,131.25	451.37	10.153	
11,400.00	7,063.17	19,118.26	7,250.53	124.12	342.22	92.36	2,369.43	-3,305.13	4,606.50	4,154.76	451.73	10.197	
11,500.00	7,062.84	19,118.26	7,250.53	126.86	342.22	92.36	2,369.43	-3,305.13	4,632.41	4,180.51	451.90	10.251	
11,600.00	7,062.52	19,118.26	7,250.53	129.60	342.22	92.36	2,369.43	-3,305.13	4,660.33	4,208.44	451.89	10.313	
11,700.00	7,062.19	19,118.26	7,250.53	132.35	342.22	92.36	2,369.43	-3,305.13	4,690.21	4,238.51	451.70	10.384	
11,800.00	7,061.87	19,118.26	7,250.53	135.10	342.22	92.36	2,369.43	-3,305.13	4,722.02	4,270.69	451.33	10.462	
11,900.00	7,061.54	19,118.26	7,250.53	137.85	342.22	92.36	2,369.43	-3,305.13	4,755.73	4,304.92	450.80	10.549	
12,000.00	7,061.22	19,118.26	7,250.53	140.61	342.22	92.36	2,369.43	-3,305.13	4,791.28	4,341.16	450.12	10.644	
12,100.00	7,060.89	19,118.26	7,250.53	143.38	342.22	92.36	2,369.43	-3,305.13	4,828.64	4,379.36	449.28	10.747	
12,200.00	7,060.57	19,118.26	7,250.53	146.15	342.22	92.36	2,369.43	-3,305.13	4,867.77	4,419.47	448.30	10.858	
12,300.00	7,060.24	19,118.26	7,250.53	148.92	342.22	92.36	2,369.43	-3,305.13	4,908.63	4,461.44	447.19	10.977	
12,400.00	7,059.92	19,118.26	7,250.53	151.69	342.22	92.36	2,369.43	-3,305.13	4,951.17	4,505.22	445.95	11.102	
12,500.00	7,059.59	19,118.26	7,250.53	154.47	342.22	92.36	2,369.43	-3,305.13	4,995.35	4,550.75	444.60	11.236	
12,600.00	7,059.27	19,118.26	7,250.53	157.25	342.22	92.36	2,369.43	-3,305.13	5,041.13	4,597.99	443.13	11.376	
12,700.00	7,058.94	19,118.26	7,250.53	160.03	342.22	92.36	2,369.43	-3,305.13	5,088.45	4,646.89	441.57	11.524	
12,800.00	7,058.62	19,118.26	7,250.53	162.82	342.22	92.36	2,369.43	-3,305.13	5,137.30	4,697.39	439.91	11.678	
12,900.00	7,058.29	19,118.26	7,250.53	165.61	342.22	92.36	2,369.43	-3,305.13	5,187.60	4,749.44	438.16	11.840	
13,000.00	7,057.97	19,118.26	7,250.53	168.40	342.22	92.36	2,369.43	-3,305.13	5,239.34	4,803.01	436.33	12.008	
13,100.00	7,057.64	19,118.26	7,250.53	171.19	342.22	92.36	2,369.43	-3,305.13	5,292.46	4,858.02	434.43	12.182	
13,200.00	7,057.32	19,118.26	7,250.53	173.99	342.22	92.36	2,369.43	-3,305.13	5,346.92	4,914.45	432.47	12.364	
13,300.00	7,057.00	19,118.26	7,250.53	176.78	342.22	92.36	2,369.43	-3,305.13	5,402.68	4,972.23	430.45	12.551	
13,400.00	7,056.67	19,118.26	7,250.53	179.58	342.22	92.36	2,369.43	-3,305.13	5,459.70	5,031.33	428.37	12.745	
13,500.00	7,056.35	19,118.26	7,250.53	182.38	342.22	92.36	2,369.43	-3,305.13	5,517.95	5,091.70	426.25	12.945	
13,600.00	7,056.02	19,118.26	7,250.53	185.19	342.22	92.36	2,369.43	-3,305.13	5,577.39	5,153.30	424.09	13.151	
13,700.00	7,055.70	19,118.26	7,250.53	187.99	342.22	92.36	2,369.43	-3,305.13	5,637.97	5,216.08	421.89	13.364	
13,800.00	7,055.37	19,118.26	7,250.53	190.80	342.22	92.36	2,369.43	-3,305.13	5,699.66	5,279.99	419.66	13.582	
13,900.00	7,055.05	19,118.26	7,250.53	193.60	342.22	92.36	2,369.43	-3,305.13	5,762.42	5,345.01	417.41	13.805	
14,000.00	7,054.72	19,118.26	7,250.53	196.41	342.22	92.36	2,369.43	-3,305.13	5,826.23	5,411.10	415.13	14.035	
14,100.00	7,054.40	19,118.26	7,250.53	199.22	342.22	92.36	2,369.43	-3,305.13	5,891.04	5,478.20	412.84	14.270	
14,200.00	7,054.07	19,118.26	7,250.53	202.03	342.22	92.36	2,369.43	-3,305.13	5,956.83	5,546.29	410.54	14.510	
14,300.00	7,053.75	19,118.26	7,250.53	204.85	342.22	92.36	2,369.43	-3,305.13	6,023.56	5,615.33	408.22	14.756	
14,400.00	7,053.42	19,118.26	7,250.53	207.66	342.22	92.36	2,369.43	-3,305.13	6,091.19	5,685.29	405.90	15.007	
14,500.00	7,053.10	19,118.26	7,250.53	210.48	342.22	92.36	2,369.43	-3,305.13	6,159.71	5,756.14	403.58	15.263	
14,600.00	7,052.77	19,118.26	7,250.53	213.29	342.22	92.36	2,369.43	-3,305.13	6,229.09	5,827.83	401.25	15.524	
14,700.00	7,052.45	19,118.26	7,250.53	216.11	342.22	92.36	2,369.43	-3,305.13	6,299.28	5,900.35	398.93	15.790	
14,800.00	7,052.12	19,118.26	7,250.53	218.93	342.22	92.36	2,369.43	-3,305.13	6,370.27	5,973.65	396.62	16.061	
14,900.00	7,051.80	19,118.26	7,250.53	221.75	342.22	92.36	2,369.43	-3,305.13	6,442.03	6,047.72	394.31	16.337	
15,000.00	7,051.47	19,118.26	7,250.53	224.57	342.22	92.36	2,369.43	-3,305.13	6,514.54	6,122.53	392.01	16.618	
15,100.00	7,051.15	19,118.26	7,250.53	227.39	342.22	92.36	2,369.43	-3,305.13	6,587.77	6,198.04	389.73	16.904	
15,145.13	7,051.00	19,118.26	7,250.53	228.67	342.22	92.36	2,369.43	-3,305.13	6,621.04	6,232.34	388.70	17.034	





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	15,719.52	7,134.46	3.28	248.12	-0.13	2,203.15	-5.14	7,466.89					
100.00	100.00	15,719.76	7,134.46	3.28	248.13	-0.14	2,203.15	-5.39	7,371.40	7,250.62	120.78	61.031		
200.00	200.00	15,720.01	7,134.46	3.34	248.13	-0.15	2,203.14	-5.63	7,276.03	7,154.78	121.25	60.007		
300.00	299.98	15,720.40	7,134.46	3.44	248.15	175.90	2,203.14	-6.03	7,181.34	7,059.56	121.78	58.971		
400.00	399.84	15,721.10	7,134.46	3.59	248.17	176.24	2,203.13	-6.73	7,088.00	6,965.60	122.39	57.911		
500.00	499.45	15,722.10	7,134.46	3.79	248.19	176.51	2,203.12	-7.73	6,996.17	6,873.06	123.11	56.827		
600.00	598.70	15,723.40	7,134.47	4.03	248.23	176.73	2,203.11	-9.03	6,906.03	6,782.09	123.94	55.721		
700.00	697.47	15,725.00	7,134.47	4.31	248.28	176.91	2,203.09	-10.62	6,817.76	6,692.87	124.88	54.594		
800.00	795.62	15,726.89	7,134.48	4.64	248.33	177.06	2,203.07	-12.52	6,731.54	6,605.59	125.95	53.448		
900.00	893.06	15,729.08	7,134.48	5.00	248.39	177.18	2,203.05	-14.71	6,647.55	6,520.41	127.14	52.286		
1,000.00	989.64	15,731.56	7,134.49	5.40	248.46	177.28	2,203.02	-17.19	6,566.00	6,437.53	128.47	51.109		
1,100.00	1,085.27	15,734.33	7,134.49	5.83	248.54	177.36	2,203.00	-19.95	6,487.05	6,357.12	129.93	49.925		
1,200.00	1,180.44	15,737.23	7,134.50	6.29	248.62	177.31	2,202.97	-22.85	6,409.67	6,278.13	131.54	48.728		
1,300.00	1,275.61	15,740.12	7,134.51	6.76	248.70	177.27	2,202.94	-25.74	6,332.92	6,199.69	133.22	47.536		
1,400.00	1,370.78	15,743.02	7,134.52	7.26	248.78	177.23	2,202.91	-28.64	6,256.82	6,121.83	134.99	46.351		
1,500.00	1,465.95	15,745.91	7,134.52	7.76	248.87	177.19	2,202.88	-31.53	6,181.40	6,044.57	136.83	45.176		
1,600.00	1,561.12	15,748.81	7,134.53	8.27	248.95	177.15	2,202.85	-34.43	6,106.69	5,967.94	138.75	44.012		
1,700.00	1,656.29	15,751.70	7,134.54	8.80	249.03	177.11	2,202.82	-37.32	6,032.71	5,891.95	140.75	42.860		
1,800.00	1,751.46	15,754.60	7,134.54	9.32	249.11	177.07	2,202.79	-40.22	5,959.49	5,816.65	142.84	41.722		
1,900.00	1,846.63	15,757.49	7,134.55	9.86	249.19	177.03	2,202.76	-43.11	5,887.05	5,742.05	145.00	40.599		
2,000.00	1,941.80	15,760.39	7,134.56	10.40	249.28	176.99	2,202.73	-46.01	5,815.43	5,668.18	147.25	39.494		
2,100.00	2,036.96	15,763.28	7,134.57	10.94	249.36	176.95	2,202.70	-48.90	5,744.65	5,595.09	149.57	38.408		
2,200.00	2,132.13	15,766.18	7,134.57	11.49	249.44	176.91	2,202.67	-51.80	5,674.76	5,522.79	151.97	37.341		
2,300.00	2,227.30	15,769.07	7,134.58	12.04	249.52	176.87	2,202.64	-54.70	5,605.77	5,451.32	154.45	36.295		
2,400.00	2,322.47	15,771.97	7,134.59	12.59	249.60	176.83	2,202.61	-57.59	5,537.73	5,380.73	157.00	35.272		
2,500.00	2,417.64	15,774.86	7,134.59	13.15	249.68	176.79	2,202.58	-60.49	5,470.67	5,311.04	159.63	34.271		
2,600.00	2,512.81	15,777.76	7,134.60	13.70	249.77	176.75	2,202.55	-63.38	5,404.63	5,242.30	162.33	33.293		
2,700.00	2,607.98	15,780.65	7,134.61	14.26	249.85	176.71	2,202.52	-66.28	5,339.64	5,174.53	165.11	32.340		
2,800.00	2,703.15	15,783.55	7,134.61	14.82	249.93	176.67	2,202.49	-69.17	5,275.75	5,107.79	167.95	31.412		
2,900.00	2,798.32	15,786.44	7,134.62	15.38	250.01	176.62	2,202.46	-72.07	5,212.98	5,042.12	170.86	30.510		
3,000.00	2,893.49	15,789.34	7,134.63	15.95	250.09	176.58	2,202.43	-74.96	5,151.40	4,977.55	173.84	29.632		
3,100.00	2,988.66	15,807.83	7,134.64	16.51	250.62	176.54	2,202.40	-77.86	5,091.03	4,913.86	177.17	28.736		
3,200.00	3,083.83	15,804.93	7,134.64	17.07	250.53	176.50	2,202.37	-80.75	5,031.92	4,851.75	180.17	27.929		
3,300.00	3,179.00	15,802.04	7,134.65	17.64	250.45	176.46	2,202.34	-83.65	4,974.12	4,790.89	183.23	27.147		
3,400.00	3,274.17	15,800.92	7,134.66	18.21	250.42	176.42	2,202.31	-86.54	4,917.67	4,731.30	186.37	26.386		
3,500.00	3,369.34	15,803.82	7,134.66	18.77	250.50	176.38	2,202.28	-89.44	4,862.62	4,672.98	189.65	25.641		
3,600.00	3,464.51	15,806.71	7,134.67	19.34	250.58	176.34	2,202.25	-92.33	4,809.02	4,616.06	192.97	24.922		
3,700.00	3,559.68	15,809.61	7,134.68	19.91	250.67	176.30	2,202.22	-95.23	4,756.92	4,560.59	196.33	24.229		
3,800.00	3,654.84	15,812.50	7,134.69	20.48	250.75	176.26	2,202.19	-98.12	4,706.36	4,506.63	199.73	23.563		
3,900.00	3,750.01	15,815.40	7,134.69	21.05	250.83	176.22	2,202.17	-101.02	4,657.40	4,454.23	203.17	22.924		
4,000.00	3,845.18	15,818.29	7,134.70	21.62	250.91	176.18	2,202.14	-103.91	4,610.09	4,403.45	206.64	22.310		
4,100.00	3,940.35	15,821.19	7,134.71	22.19	250.99	176.14	2,202.11	-106.81	4,564.47	4,354.34	210.13	21.722		
4,200.00	4,035.52	15,824.08	7,134.71	22.76	251.07	176.10	2,202.08	-109.70	4,520.61	4,306.97	213.64	21.160		
4,300.00	4,130.69	15,826.98	7,134.72	23.33	251.16	176.06	2,202.05	-112.60	4,478.55	4,261.39	217.16	20.624		
4,400.00	4,225.86	15,829.87	7,134.73	23.91	251.24	176.02	2,202.02	-115.49	4,438.34	4,217.66	220.68	20.112		
4,500.00	4,321.03	15,832.77	7,134.74	24.48	251.32	175.98	2,201.99	-118.39	4,400.03	4,175.84	224.19	19.626		
4,600.00	4,416.20	15,835.66	7,134.74	25.05	251.40	175.93	2,201.96	-121.28	4,363.68	4,135.98	227.70	19.164		
4,700.00	4,511.37	15,838.56	7,134.75	25.62	251.48	175.89	2,201.93	-124.18	4,329.33	4,098.15	231.18	18.727		
4,800.00	4,606.54	15,841.45	7,134.76	26.20	251.57	175.85	2,201.90	-127.07	4,297.03	4,062.39	234.64	18.313		
4,900.00	4,701.71	15,844.35	7,134.76	26.77	251.65	175.81	2,201.87	-129.97	4,266.83	4,028.78	238.06	17.924		
5,000.00	4,796.88	15,847.24	7,134.77	27.34	251.73	175.77	2,201.84	-132.86	4,238.78	3,997.35	241.43	17.557		
5,100.00	4,892.05	15,850.14	7,134.78	27.92	251.81	175.73	2,201.81	-135.76	4,212.90	3,968.16	244.74	17.214		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	15,853.03	7,134.78	28.49	251.89	175.69	2,201.78	-138.65	4,189.26	3,941.26	247.99	16.893		
5,300.00	5,082.39	15,855.93	7,134.79	29.07	251.97	175.65	2,201.75	-141.55	4,167.88	3,916.71	251.17	16.594		
5,400.00	5,177.56	15,858.82	7,134.80	29.64	252.06	175.61	2,201.72	-144.44	4,148.79	3,894.53	254.26	16.317		
5,500.00	5,272.72	15,861.72	7,134.81	30.21	252.14	175.57	2,201.69	-147.34	4,132.04	3,874.77	257.27	16.061		
5,600.00	5,367.89	15,864.61	7,134.81	30.79	252.22	175.53	2,201.66	-150.23	4,117.65	3,857.48	260.17	15.827		
5,700.00	5,463.06	15,867.51	7,134.82	31.36	252.30	175.49	2,201.63	-153.13	4,105.64	3,842.67	262.96	15.613		
5,800.00	5,558.23	15,870.41	7,134.83	31.94	252.38	175.45	2,201.60	-156.02	4,096.03	3,830.39	265.64	15.419		
5,900.00	5,653.40	15,873.30	7,134.83	32.51	252.47	175.41	2,201.57	-158.92	4,088.85	3,820.65	268.20	15.246		
6,000.00	5,748.57	15,876.20	7,134.84	33.09	252.55	175.37	2,201.54	-161.81	4,084.10	3,813.47	270.63	15.091		
6,100.00	5,843.74	15,879.09	7,134.85	33.67	252.63	175.33	2,201.51	-164.71	4,081.79	3,808.88	272.92	14.956		
6,144.22	5,885.82	15,880.37	7,134.85	33.92	252.67	175.31	2,201.50	-165.99	4,081.55	3,807.67	273.89	14.902 CC		
6,200.00	5,938.91	15,881.99	7,134.86	34.24	252.71	175.28	2,201.48	-167.60	4,081.94	3,806.86	275.07	14.840 ES		
6,300.00	6,034.08	15,884.88	7,134.86	34.82	252.79	175.24	2,201.45	-170.50	4,084.52	3,807.44	277.08	14.741		
6,400.00	6,129.25	15,887.78	7,134.87	35.39	252.87	175.20	2,201.42	-173.39	4,089.55	3,810.61	278.94	14.661		
6,500.00	6,224.42	15,909.39	7,134.88	35.97	253.49	175.16	2,201.39	-176.29	4,097.02	3,815.85	281.17	14.571		
6,600.00	6,319.59	15,906.50	7,134.88	36.54	253.40	175.12	2,201.36	-179.18	4,106.90	3,824.33	282.57	14.534		
6,700.00	6,414.76	15,903.60	7,134.89	37.12	253.32	175.08	2,201.33	-182.08	4,119.19	3,835.37	283.82	14.514		
6,800.00	6,509.91	15,899.91	7,134.90	37.70	253.22	167.38	2,201.30	-185.53	4,133.85	3,848.96	284.89	14.510		
6,900.00	6,603.99	15,914.77	7,134.94	38.26	253.64	142.79	2,201.15	-200.39	4,150.64	3,864.32	286.32	14.496		
7,000.00	6,694.76	15,944.90	7,135.01	38.78	254.49	126.23	2,200.84	-230.51	4,168.96	3,880.94	288.02	14.475		
7,100.00	6,779.96	15,989.56	7,135.12	39.24	255.75	115.22	2,200.38	-275.17	4,188.01	3,898.06	289.95	14.444		
7,200.00	6,857.50	16,047.65	7,135.26	39.65	257.39	107.42	2,199.78	-333.25	4,206.89	3,914.75	292.14	14.400		
7,300.00	6,925.48	16,117.73	7,135.43	40.02	259.37	101.63	2,199.07	-403.34	4,224.61	3,930.02	294.58	14.341		
7,400.00	6,982.21	16,201.97	7,135.63	40.33	261.76	97.28	2,198.24	-483.69	4,240.20	3,942.77	297.44	14.256		
7,500.00	7,026.31	16,286.75	7,135.84	40.63	264.15	94.12	2,197.33	-572.34	4,252.79	3,952.40	300.38	14.158		
7,600.00	7,056.68	16,381.51	7,136.08	40.91	266.84	92.03	2,196.36	-667.10	4,261.64	3,957.88	303.76	14.029		
7,700.00	7,072.58	16,480.05	7,136.32	41.25	269.62	90.97	2,195.35	-765.64	4,266.24	3,958.80	307.44	13.877		
7,800.00	7,074.86	16,579.98	7,136.56	41.69	272.45	90.83	2,194.33	-865.56	4,266.69	3,955.34	311.35	13.704		
7,900.00	7,074.54	16,679.98	7,136.81	42.34	275.28	90.84	2,193.30	-965.55	4,266.34	3,950.90	315.44	13.525		
8,000.00	7,074.21	16,779.98	7,137.05	43.27	278.11	90.84	2,192.28	-1,065.55	4,265.99	3,946.31	319.69	13.344		
8,100.00	7,073.89	16,879.98	7,137.29	44.47	280.94	90.85	2,191.26	-1,165.54	4,265.64	3,941.56	324.08	13.162		
8,200.00	7,073.57	16,979.98	7,137.54	45.91	283.78	90.86	2,190.23	-1,265.53	4,265.30	3,936.69	328.60	12.980		
8,300.00	7,073.24	17,079.97	7,137.78	47.53	286.61	90.87	2,189.21	-1,365.52	4,264.95	3,931.71	333.24	12.799		
8,400.00	7,072.92	17,179.97	7,138.03	49.31	289.44	90.88	2,188.18	-1,465.51	4,264.60	3,926.62	337.97	12.618		
8,500.00	7,072.59	17,279.97	7,138.27	51.20	292.28	90.88	2,187.16	-1,565.51	4,264.25	3,921.45	342.80	12.439		
8,600.00	7,072.27	17,379.97	7,138.52	53.19	295.11	90.89	2,186.13	-1,665.50	4,263.90	3,916.19	347.71	12.263		
8,700.00	7,071.94	17,479.96	7,138.76	55.27	297.94	90.90	2,185.11	-1,765.49	4,263.55	3,910.86	352.69	12.089		
8,800.00	7,071.62	17,579.96	7,139.00	57.43	300.78	90.91	2,184.08	-1,865.48	4,263.20	3,905.47	357.73	11.917		
8,900.00	7,071.29	17,679.96	7,139.25	59.64	303.61	90.91	2,183.06	-1,965.48	4,262.86	3,900.02	362.83	11.749		
9,000.00	7,070.97	17,779.96	7,139.49	61.92	306.45	90.92	2,182.03	-2,065.47	4,262.51	3,894.53	367.98	11.584		
9,100.00	7,070.64	17,879.96	7,139.74	64.24	309.29	90.93	2,181.01	-2,165.46	4,262.16	3,888.99	373.17	11.421		
9,200.00	7,070.32	17,979.95	7,139.98	66.61	312.12	90.94	2,179.98	-2,265.45	4,261.81	3,883.41	378.41	11.263		
9,300.00	7,069.99	18,079.95	7,140.23	69.01	314.96	90.95	2,178.96	-2,365.44	4,261.46	3,877.79	383.68	11.107		
9,400.00	7,069.67	18,179.95	7,140.47	71.45	317.80	90.95	2,177.93	-2,465.44	4,261.12	3,872.14	388.98	10.955		
9,500.00	7,069.34	18,279.95	7,140.71	73.92	320.63	90.96	2,176.91	-2,565.43	4,260.77	3,866.46	394.31	10.806		
9,600.00	7,069.02	18,379.94	7,140.96	76.42	323.47	90.97	2,175.88	-2,665.42	4,260.42	3,860.76	399.66	10.660		
9,700.00	7,068.69	18,479.94	7,141.20	78.95	326.31	90.98	2,174.86	-2,765.41	4,260.07	3,855.03	405.04	10.518		
9,800.00	7,068.37	18,579.94	7,141.45	81.49	329.15	90.98	2,173.83	-2,865.41	4,259.73	3,849.28	410.44	10.378		
9,900.00	7,068.04	18,679.94	7,141.69	84.06	331.99	90.99	2,172.81	-2,965.40	4,259.38	3,843.52	415.86	10.242		
10,000.00	7,067.72	18,779.93	7,141.94	86.65	334.83	91.00	2,171.79	-3,065.39	4,259.03	3,837.73	421.30	10.109		
10,100.00	7,067.39	18,879.93	7,142.18	89.25	337.67	91.01	2,170.76	-3,165.38	4,258.68	3,831.93	426.75	9.979		
10,200.00	7,067.07	18,979.93	7,142.43	91.87	340.50	91.01	2,169.74	-3,265.37	4,258.34	3,826.12	432.22	9.852		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
10,253.13	7,066.89	19,018.34	7,142.52	93.26	341.60	91.02	2,169.34	-3,303.78	4,258.18	3,823.48	434.70	9.796		
10,300.00	7,066.74	19,018.34	7,142.52	94.50	341.60	91.02	2,169.34	-3,303.78	4,258.44	3,822.58	435.85	9.770		
10,400.00	7,066.42	19,018.34	7,142.52	97.14	341.60	91.02	2,169.34	-3,303.78	4,260.71	3,822.55	438.16	9.724		
10,500.00	7,066.09	19,018.34	7,142.52	99.80	341.60	91.02	2,169.34	-3,303.78	4,265.32	3,825.09	440.24	9.689		
10,600.00	7,065.77	19,018.34	7,142.52	102.47	341.60	91.02	2,169.34	-3,303.78	4,272.28	3,830.18	442.09	9.664		
10,700.00	7,065.44	19,018.34	7,142.52	105.15	341.60	91.02	2,169.34	-3,303.78	4,281.56	3,837.83	443.72	9.649		
10,800.00	7,065.12	19,018.34	7,142.52	107.83	341.60	91.02	2,169.34	-3,303.78	4,293.14	3,848.02	445.12	9.645 SF		
10,900.00	7,064.79	19,018.34	7,142.52	110.53	341.60	91.02	2,169.34	-3,303.78	4,307.02	3,860.73	446.29	9.651		
11,000.00	7,064.47	19,018.34	7,142.52	113.23	341.60	91.02	2,169.34	-3,303.78	4,323.17	3,875.93	447.24	9.666		
11,100.00	7,064.14	19,018.34	7,142.52	115.95	341.60	91.02	2,169.34	-3,303.78	4,341.56	3,893.60	447.96	9.692		
11,200.00	7,063.82	19,018.34	7,142.52	118.66	341.60	91.02	2,169.34	-3,303.78	4,362.17	3,913.71	448.46	9.727		
11,300.00	7,063.49	19,018.34	7,142.52	121.39	341.60	91.02	2,169.34	-3,303.78	4,384.96	3,936.22	448.75	9.772		
11,400.00	7,063.17	19,018.34	7,142.52	124.12	341.60	91.02	2,169.34	-3,303.78	4,409.90	3,961.08	448.82	9.825		
11,500.00	7,062.84	19,018.34	7,142.52	126.86	341.60	91.02	2,169.34	-3,303.78	4,436.96	3,988.26	448.70	9.889		
11,600.00	7,062.52	19,018.34	7,142.52	129.60	341.60	91.02	2,169.34	-3,303.78	4,466.09	4,017.71	448.38	9.961		
11,700.00	7,062.19	19,018.34	7,142.52	132.35	341.60	91.02	2,169.34	-3,303.78	4,497.26	4,049.39	447.87	10.041		
11,800.00	7,061.87	19,018.34	7,142.52	135.10	341.60	91.02	2,169.34	-3,303.78	4,530.42	4,083.24	447.18	10.131		
11,900.00	7,061.54	19,018.34	7,142.52	137.85	341.60	91.02	2,169.34	-3,303.78	4,565.53	4,119.21	446.32	10.229		
12,000.00	7,061.22	19,018.34	7,142.52	140.61	341.60	91.02	2,169.34	-3,303.78	4,602.54	4,157.24	445.30	10.336		
12,100.00	7,060.89	19,018.34	7,142.52	143.38	341.60	91.02	2,169.34	-3,303.78	4,641.42	4,197.29	444.13	10.451		
12,200.00	7,060.57	19,018.34	7,142.52	146.15	341.60	91.02	2,169.34	-3,303.78	4,682.11	4,239.30	442.81	10.574		
12,300.00	7,060.24	19,018.34	7,142.52	148.92	341.60	91.02	2,169.34	-3,303.78	4,724.56	4,283.20	441.36	10.705		
12,400.00	7,059.92	19,018.34	7,142.52	151.69	341.60	91.02	2,169.34	-3,303.78	4,768.74	4,328.95	439.78	10.843		
12,500.00	7,059.59	19,018.34	7,142.52	154.47	341.60	91.02	2,169.34	-3,303.78	4,814.58	4,376.49	438.09	10.990		
12,600.00	7,059.27	19,018.34	7,142.52	157.25	341.60	91.02	2,169.34	-3,303.78	4,862.06	4,425.76	436.30	11.144		
12,700.00	7,058.94	19,018.34	7,142.52	160.03	341.60	91.02	2,169.34	-3,303.78	4,911.10	4,476.70	434.40	11.305		
12,800.00	7,058.62	19,018.34	7,142.52	162.82	341.60	91.02	2,169.34	-3,303.78	4,961.68	4,529.27	432.42	11.474		
12,900.00	7,058.29	19,018.34	7,142.52	165.61	341.60	91.02	2,169.34	-3,303.78	5,013.75	4,583.40	430.35	11.650		
13,000.00	7,057.97	19,018.34	7,142.52	168.40	341.60	91.02	2,169.34	-3,303.78	5,067.25	4,639.04	428.21	11.834		
13,100.00	7,057.64	19,018.34	7,142.52	171.19	341.60	91.02	2,169.34	-3,303.78	5,122.15	4,696.14	426.01	12.024		
13,200.00	7,057.32	19,018.34	7,142.52	173.99	341.60	91.02	2,169.34	-3,303.78	5,178.39	4,754.65	423.75	12.220		
13,300.00	7,057.00	19,018.34	7,142.52	176.78	341.60	91.02	2,169.34	-3,303.78	5,235.95	4,814.51	421.44	12.424		
13,400.00	7,056.67	19,018.34	7,142.52	179.58	341.60	91.02	2,169.34	-3,303.78	5,294.76	4,875.68	419.08	12.634		
13,500.00	7,056.35	19,018.34	7,142.52	182.38	341.60	91.02	2,169.34	-3,303.78	5,354.80	4,938.11	416.68	12.851		
13,600.00	7,056.02	19,018.34	7,142.52	185.19	341.60	91.02	2,169.34	-3,303.78	5,416.01	5,001.76	414.26	13.074		
13,700.00	7,055.70	19,018.34	7,142.52	187.99	341.60	91.02	2,169.34	-3,303.78	5,478.37	5,066.57	411.81	13.303		
13,800.00	7,055.37	19,018.34	7,142.52	190.80	341.60	91.02	2,169.34	-3,303.78	5,541.83	5,132.50	409.33	13.539		
13,900.00	7,055.05	19,018.34	7,142.52	193.60	341.60	91.02	2,169.34	-3,303.78	5,606.36	5,199.52	406.84	13.780		
14,000.00	7,054.72	19,018.34	7,142.52	196.41	341.60	91.02	2,169.34	-3,303.78	5,671.92	5,267.58	404.34	14.028		
14,100.00	7,054.40	19,018.34	7,142.52	199.22	341.60	91.02	2,169.34	-3,303.78	5,738.47	5,336.64	401.83	14.281		
14,200.00	7,054.07	19,018.34	7,142.52	202.03	341.60	91.02	2,169.34	-3,303.78	5,805.98	5,406.66	399.32	14.540		
14,300.00	7,053.75	19,018.34	7,142.52	204.85	341.60	91.02	2,169.34	-3,303.78	5,874.41	5,477.61	396.80	14.804		
14,400.00	7,053.42	19,018.34	7,142.52	207.66	341.60	91.02	2,169.34	-3,303.78	5,943.74	5,549.46	394.29	15.075		
14,500.00	7,053.10	19,018.34	7,142.52	210.48	341.60	91.02	2,169.34	-3,303.78	6,013.94	5,622.16	391.78	15.350		
14,600.00	7,052.77	19,018.34	7,142.52	213.29	341.60	91.02	2,169.34	-3,303.78	6,084.97	5,695.68	389.29	15.631		
14,700.00	7,052.45	19,018.34	7,142.52	216.11	341.60	91.02	2,169.34	-3,303.78	6,156.80	5,770.00	386.80	15.917		
14,800.00	7,052.12	19,018.34	7,142.52	218.93	341.60	91.02	2,169.34	-3,303.78	6,229.41	5,845.08	384.33	16.209		
14,900.00	7,051.80	19,018.34	7,142.52	221.75	341.60	91.02	2,169.34	-3,303.78	6,302.77	5,920.90	381.87	16.505		
15,000.00	7,051.47	19,018.34	7,142.52	224.57	341.60	91.02	2,169.34	-3,303.78	6,376.85	5,997.43	379.43	16.806		
15,100.00	7,051.15	19,018.34	7,142.52	227.39	341.60	91.02	2,169.34	-3,303.78	6,451.64	6,074.63	377.01	17.113		
15,145.13	7,051.00	19,018.34	7,142.52	228.67	341.60	91.02	2,169.34	-3,303.78	6,485.61	6,109.69	375.92	17.253		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	1,491.48	1,539.02	3.28	8.02	-117.04	-3,837.04	-7,518.92	8,580.54					
100.00	100.00	1,522.74	1,569.73	3.28	8.18	-117.02	-3,832.70	-7,514.99	8,562.99	8,552.16	10.83	790.780		
200.00	200.00	1,584.00	1,630.02	3.34	8.51	-116.99	-3,824.47	-7,507.93	8,546.38	8,535.26	11.12	768.382		
300.00	299.98	1,593.33	1,639.22	3.44	8.56	58.92	-3,823.24	-7,506.92	8,529.32	8,518.08	11.24	759.095		
400.00	399.84	1,708.57	1,752.65	3.59	9.16	59.34	-3,807.14	-7,494.51	8,510.64	8,498.77	11.88	716.551		
500.00	499.45	1,773.00	1,816.12	3.79	9.49	59.76	-3,798.42	-7,487.72	8,490.64	8,478.30	12.34	688.129		
600.00	598.70	1,859.07	1,901.00	4.03	9.94	60.24	-3,787.49	-7,478.52	8,469.22	8,456.28	12.94	654.491		
700.00	697.47	1,916.55	1,957.70	4.31	10.23	60.73	-3,780.31	-7,472.38	8,446.26	8,432.81	13.45	627.750		
800.00	795.62	2,115.23	2,153.61	4.64	11.27	61.51	-3,754.86	-7,451.31	8,421.93	8,407.28	14.65	574.994		
900.00	893.06	2,299.55	2,335.01	5.00	12.27	62.35	-3,731.65	-7,428.33	8,394.16	8,378.35	15.81	530.903		
1,000.00	989.64	2,504.49	2,536.19	5.40	13.42	63.34	-3,704.30	-7,400.46	8,363.45	8,346.34	17.11	488.875		
1,100.00	1,085.27	2,556.94	2,587.67	5.83	13.72	64.03	-3,697.42	-7,393.16	8,331.52	8,313.78	17.74	469.565		
1,200.00	1,180.44	2,877.35	2,901.29	6.29	15.59	64.84	-3,651.50	-7,346.58	8,298.17	8,278.54	19.63	422.774		
1,300.00	1,275.61	2,920.38	2,943.29	6.76	15.85	64.96	-3,644.87	-7,340.00	8,263.81	8,243.55	20.26	407.798		
1,400.00	1,370.78	2,963.72	2,985.65	7.26	16.11	65.07	-3,638.44	-7,333.51	8,230.07	8,209.15	20.92	393.364		
1,500.00	1,465.95	1,500.00	3,110.81	7.76	7.67	65.40	-3,620.45	-7,313.97	8,196.54	8,181.85	14.69	558.050		
1,600.00	1,561.12	3,159.22	3,176.84	8.27	17.27	65.57	-3,611.21	-7,303.09	8,162.68	8,139.91	22.77	358.480		
1,700.00	1,656.29	3,200.00	3,216.79	8.80	17.52	65.67	-3,605.87	-7,296.89	8,129.71	8,106.25	23.46	346.607		
1,800.00	1,751.46	3,314.99	3,329.43	9.32	18.19	65.96	-3,590.79	-7,279.39	8,096.97	8,072.49	24.48	330.791		
1,900.00	1,846.63	3,370.04	3,383.36	9.86	18.51	66.10	-3,583.55	-7,271.02	8,064.33	8,039.09	25.24	319.443		
2,000.00	1,941.80	3,391.00	3,403.90	10.40	18.64	66.16	-3,580.81	-7,267.89	8,032.31	8,006.44	25.87	310.476		
2,100.00	2,036.96	3,428.63	3,440.83	10.94	18.85	66.25	-3,575.92	-7,262.56	8,001.03	7,974.45	26.58	301.048		
2,200.00	2,132.13	3,451.95	3,463.75	11.49	18.98	66.32	-3,572.88	-7,259.53	7,970.67	7,943.44	27.23	292.742		
2,300.00	2,227.30	3,486.00	3,497.27	12.04	19.18	66.41	-3,568.46	-7,255.47	7,941.22	7,913.29	27.93	284.315		
2,400.00	2,322.47	2,400.00	3,583.59	12.59	13.18	66.64	-3,556.75	-7,245.27	7,912.15	7,888.77	23.38	338.399		
2,500.00	2,417.64	3,581.00	3,590.77	13.15	19.70	66.66	-3,555.78	-7,244.42	7,883.67	7,854.19	29.47	267.478		
2,600.00	2,512.81	3,636.05	3,644.95	13.70	20.01	66.82	-3,548.12	-7,238.44	7,855.61	7,825.32	30.29	259.362		
2,700.00	2,607.98	4,076.33	4,076.66	14.26	22.54	68.13	-3,477.37	-7,189.76	7,827.32	7,794.46	32.86	238.204		
2,800.00	2,703.15	4,124.30	4,123.65	14.82	22.82	68.26	-3,470.53	-7,182.96	7,796.49	7,762.83	33.65	231.659		
2,900.00	2,798.32	4,248.00	4,244.85	15.38	23.56	68.60	-3,454.16	-7,164.42	7,765.33	7,730.56	34.78	223.300		
3,000.00	2,893.49	4,302.58	4,298.29	15.95	23.88	68.75	-3,446.85	-7,156.05	7,734.40	7,698.79	35.60	217.235		
3,100.00	2,988.66	4,343.00	4,337.99	16.51	24.11	68.87	-3,441.68	-7,150.51	7,704.70	7,668.32	36.38	211.808		
3,200.00	3,083.83	4,371.37	4,365.89	17.07	24.28	68.94	-3,438.09	-7,146.82	7,675.74	7,638.64	37.10	206.894		
3,300.00	3,179.00	4,439.00	4,432.35	17.64	24.66	69.14	-3,429.15	-7,138.07	7,647.12	7,609.13	37.99	201.271		
3,400.00	3,274.17	4,500.03	4,492.34	18.21	25.01	69.31	-3,420.96	-7,130.43	7,618.98	7,580.11	38.86	196.037		
3,500.00	3,369.34	4,549.29	4,540.83	18.77	25.28	69.46	-3,414.51	-7,124.60	7,591.57	7,551.89	39.69	191.286		
3,600.00	3,464.51	4,621.26	4,611.75	19.34	25.68	69.66	-3,405.79	-7,116.05	7,564.65	7,524.04	40.60	186.300		
3,700.00	3,559.68	4,629.00	4,619.39	19.91	25.72	69.68	-3,404.91	-7,115.13	7,538.43	7,497.18	41.25	182.738		
3,800.00	3,654.84	4,681.71	4,671.44	20.48	26.00	69.83	-3,399.10	-7,109.17	7,512.86	7,470.77	42.09	178.504		
3,900.00	3,750.01	4,724.00	4,713.28	21.05	26.23	69.95	-3,394.67	-7,104.94	7,488.37	7,445.48	42.88	174.630		
4,000.00	3,845.18	4,827.89	4,816.15	21.62	26.76	70.23	-3,384.48	-7,094.56	7,464.43	7,420.51	43.93	169.928		
4,100.00	3,940.35	4,855.36	4,843.37	22.19	26.90	70.31	-3,381.93	-7,091.83	7,440.69	7,396.03	44.66	166.612		
4,200.00	4,035.52	4,915.00	4,902.51	22.76	27.19	70.47	-3,376.61	-7,086.38	7,417.90	7,372.37	45.52	162.949		
4,300.00	4,130.69	4,915.00	4,902.51	23.33	27.19	70.47	-3,376.61	-7,086.38	7,395.75	7,349.61	46.14	160.281		
4,400.00	4,225.86	4,975.37	4,962.46	23.91	27.48	70.64	-3,371.42	-7,081.46	7,374.42	7,327.41	47.01	156.874		
4,500.00	4,321.03	5,021.94	5,008.74	24.48	27.70	70.76	-3,367.50	-7,077.98	7,353.82	7,306.00	47.82	153.785		
4,600.00	4,416.20	5,104.00	5,090.34	25.05	28.09	70.99	-3,360.79	-7,072.52	7,334.11	7,285.34	48.78	150.360		
4,700.00	4,511.37	5,104.00	5,090.34	25.62	28.09	70.99	-3,360.79	-7,072.52	7,314.81	7,265.42	49.39	148.089		
4,800.00	4,606.54	5,154.22	5,140.33	26.20	28.31	71.13	-3,356.99	-7,069.60	7,296.44	7,246.23	50.21	145.308		
4,900.00	4,701.71	5,194.89	5,180.85	26.77	28.49	71.24	-3,354.23	-7,067.47	7,278.89	7,227.90	50.99	142.743		
5,000.00	4,796.88	5,235.83	5,221.67	27.34	28.67	71.35	-3,351.76	-7,065.55	7,262.16	7,210.39	51.77	140.270		
5,100.00	4,892.05	5,294.00	5,279.71	27.92	28.92	71.50	-3,348.75	-7,063.18	7,246.28	7,193.66	52.62	137.701		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	5,330.13	5,315.78	28.49	29.07	71.59	-3,347.12	-7,061.89	7,231.09	7,177.72	53.37	135.480		
5,300.00	5,082.39	5,391.56	5,377.13	29.07	29.31	71.75	-3,344.57	-7,059.85	7,216.52	7,162.30	54.23	133.084		
5,400.00	5,177.56	5,453.22	5,438.71	29.64	29.55	71.91	-3,342.29	-7,058.01	7,202.51	7,147.43	55.08	130.771		
5,500.00	5,272.72	5,515.11	5,500.54	30.21	29.80	72.07	-3,340.28	-7,056.38	7,189.05	7,133.12	55.93	128.537		
5,600.00	5,367.89	5,579.00	5,564.40	30.79	30.05	72.23	-3,338.50	-7,054.91	7,176.15	7,119.36	56.79	126.362		
5,700.00	5,463.06	5,639.06	5,624.43	31.36	30.27	72.38	-3,337.07	-7,053.74	7,163.81	7,106.18	57.63	124.313		
5,800.00	5,558.23	5,701.06	5,686.41	31.94	30.50	72.53	-3,335.80	-7,052.77	7,152.03	7,093.56	58.47	122.318		
5,900.00	5,653.40	5,763.23	5,748.56	32.51	30.73	72.68	-3,334.74	-7,052.04	7,140.80	7,081.49	59.31	120.389		
6,000.00	5,748.57	5,825.55	5,810.88	33.09	30.96	72.84	-3,333.90	-7,051.54	7,130.14	7,069.98	60.16	118.523		
6,100.00	5,843.74	5,891.50	5,876.82	33.67	31.20	73.00	-3,333.21	-7,051.27	7,120.02	7,059.01	61.01	116.698		
6,200.00	5,938.91	5,963.07	5,948.39	34.24	31.45	73.17	-3,332.54	-7,051.21	7,110.36	7,048.48	61.88	114.899		
6,300.00	6,034.08	6,034.67	6,019.99	34.82	31.70	73.35	-3,331.90	-7,051.38	7,101.15	7,038.39	62.75	113.158		
6,400.00	6,129.25	6,106.31	6,091.62	35.39	31.95	73.53	-3,331.30	-7,051.78	7,092.37	7,028.74	63.62	111.472		
6,500.00	6,224.42	6,190.36	6,175.67	35.97	32.25	73.73	-3,330.62	-7,052.51	7,084.00	7,019.45	64.55	109.753		
6,600.00	6,319.59	6,294.86	6,280.16	36.54	32.62	73.99	-3,329.65	-7,053.40	7,075.72	7,010.17	65.55	107.947		
6,700.00	6,414.76	6,399.25	6,384.54	37.12	32.98	74.25	-3,328.50	-7,054.17	7,067.44	7,000.89	66.55	106.196		
6,800.00	6,509.91	6,489.93	6,475.21	37.70	33.30	74.51	-3,327.38	-7,054.80	7,058.68	6,991.18	67.50	104.570		
6,900.00	6,603.99	6,572.03	6,557.30	38.26	33.60	74.77	-3,326.32	-7,055.50	7,049.05	6,979.66	68.39	102.919		
7,000.00	6,694.76	6,651.39	6,636.65	38.78	33.88	75.03	-3,325.24	-7,056.32	7,039.70	6,965.65	69.22	101.200		
7,100.00	6,779.96	6,726.12	6,711.37	39.24	34.15	75.29	-3,324.19	-7,057.22	7,029.90	6,950.90	69.96	99.446		
7,200.00	6,857.50	6,779.95	6,765.18	39.65	34.34	75.55	-3,323.48	-7,058.01	7,019.90	6,936.35	70.54	97.767		
7,300.00	6,925.48	6,828.20	6,813.42	40.02	34.51	75.81	-3,322.91	-7,058.85	7,009.90	6,921.65	71.03	96.088		
7,400.00	6,982.21	6,889.03	6,874.25	40.33	34.65	76.07	-3,322.50	-7,059.67	7,000.00	6,907.13	71.41	94.440		
7,500.00	7,026.31	6,901.40	6,886.61	40.63	34.76	76.33	-3,322.20	-7,060.38	6,990.00	6,892.61	71.67	92.853		
7,600.00	7,056.68	6,924.42	6,909.62	40.91	34.84	76.59	-3,322.02	-7,060.93	6,980.00	6,883.16	71.82	91.347		
7,700.00	7,072.58	6,937.42	6,922.61	41.25	34.89	76.85	-3,321.92	-7,061.25	6,970.00	6,873.61	71.86	89.941		
7,800.00	7,074.86	6,940.84	6,926.03	41.69	34.90	77.11	-3,321.90	-7,061.33	6,960.00	6,864.06	71.81	88.636		
7,900.00	7,074.54	6,942.42	6,927.61	42.34	34.91	77.37	-3,321.88	-7,061.37	6,950.00	6,854.51	71.75	87.342		
8,000.00	7,074.21	6,944.01	6,929.20	43.27	34.91	77.63	-3,321.87	-7,061.41	6,940.00	6,844.96	71.70	86.037		
8,100.00	7,073.89	6,945.62	6,930.81	44.47	34.92	77.89	-3,321.86	-7,061.46	6,930.00	6,835.41	71.66	84.720		
8,200.00	7,073.57	6,947.24	6,932.43	45.91	34.92	78.15	-3,321.85	-7,061.50	6,920.00	6,825.86	71.63	83.391		
8,300.00	7,073.24	6,948.87	6,934.06	47.53	34.93	78.41	-3,321.84	-7,061.54	6,910.00	6,816.31	71.60	82.050		
8,400.00	7,072.92	6,950.52	6,935.70	49.31	34.93	78.67	-3,321.83	-7,061.58	6,900.00	6,806.76	71.59	80.696		
8,500.00	7,072.59	6,952.18	6,937.36	51.20	34.94	78.93	-3,321.82	-7,061.62	6,890.00	6,797.21	71.60	79.328		
8,600.00	7,072.27	6,953.85	6,939.04	53.19	34.95	79.19	-3,321.80	-7,061.67	6,880.00	6,787.66	71.61	77.945		
8,700.00	7,071.94	6,955.54	6,940.73	55.27	34.95	79.45	-3,321.79	-7,061.71	6,870.00	6,778.11	71.65	76.547		
8,800.00	7,071.62	6,957.24	6,942.43	57.43	34.96	79.71	-3,321.78	-7,061.76	6,860.00	6,768.56	71.70	75.133		
8,900.00	7,071.29	6,958.96	6,944.15	59.64	34.96	79.97	-3,321.77	-7,061.80	6,850.00	6,759.01	71.77	73.703		
9,000.00	7,070.97	6,960.70	6,945.88	61.92	34.97	80.23	-3,321.76	-7,061.85	6,840.00	6,749.46	71.86	72.256		
9,100.00	7,070.64	6,962.44	6,947.63	64.24	34.98	80.49	-3,321.75	-7,061.89	6,830.00	6,739.91	71.97	70.792		
9,200.00	7,070.32	6,964.21	6,949.39	66.61	34.98	80.75	-3,321.74	-7,061.94	6,820.00	6,730.36	72.11	69.309		
9,300.00	7,069.99	6,965.99	6,951.17	69.01	34.99	81.01	-3,321.72	-7,061.99	6,810.00	6,720.81	72.28	67.807		
9,400.00	7,069.67	6,967.78	6,952.96	71.45	34.99	81.27	-3,321.71	-7,062.04	6,800.00	6,711.26	72.48	66.286		
9,500.00	7,069.34	6,969.59	6,954.77	73.92	35.00	81.53	-3,321.70	-7,062.08	6,790.00	6,701.71	72.71	64.745		
9,600.00	7,069.02	6,971.42	6,956.60	76.42	35.01	81.79	-3,321.69	-7,062.13	6,780.00	6,692.16	72.98	63.184		
9,700.00	7,068.69	6,973.26	6,958.44	78.95	35.01	82.05	-3,321.68	-7,062.18	6,770.00	6,682.61	73.28	61.603		
9,800.00	7,068.37	6,975.12	6,960.30	81.49	35.02	82.31	-3,321.67	-7,062.23	6,760.00	6,673.06	73.64	60.002		
9,900.00	7,068.04	6,976.99	6,962.17	84.06	35.03	82.57	-3,321.66	-7,062.29	6,750.00	6,663.51	74.03	58.381		
10,000.00	7,067.72	6,978.89	6,964.07	86.65	35.03	82.83	-3,321.64	-7,062.34	6,740.00	6,653.96	74.49	56.739		
10,100.00	7,067.39	6,980.80	6,965.98	89.25	35.04	83.09	-3,321.63	-7,062.39	6,730.00	6,644.41	74.99	55.079		
10,200.00	7,067.07	6,982.73	6,967.90	91.87	35.05	83.35	-3,321.62	-7,062.44	6,720.00	6,634.86	75.56	53.400		
10,300.00	7,066.74	6,984.67	6,969.85	94.50	35.05	83.61	-3,321.61	-7,062.50	6,710.00	6,625.31	76.20	51.703		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	6,986.63	6,971.81	97.14	35.06	-86.08	-3,321.60	-7,062.55	3,844.78	3,767.87	76.91	49.989	
10,500.00	7,066.09	6,988.62	6,973.79	99.80	35.07	-86.18	-3,321.59	-7,062.61	3,750.00	3,672.30	77.70	48.261	
10,600.00	7,065.77	6,990.61	6,975.79	102.47	35.07	-86.27	-3,321.58	-7,062.66	3,655.50	3,576.92	78.58	46.520	
10,700.00	7,065.44	6,992.63	6,977.81	105.15	35.08	-86.36	-3,321.57	-7,062.72	3,561.30	3,481.75	79.55	44.769	
10,800.00	7,065.12	6,994.67	6,979.84	107.83	35.09	-86.46	-3,321.55	-7,062.78	3,467.42	3,386.80	80.62	43.009	
10,900.00	7,064.79	6,996.73	6,981.90	110.53	35.10	-86.56	-3,321.54	-7,062.84	3,373.89	3,292.09	81.80	41.244	
11,000.00	7,064.47	6,998.80	6,983.97	113.23	35.10	-86.66	-3,321.53	-7,062.90	3,280.74	3,197.64	83.10	39.477	
11,100.00	7,064.14	7,000.90	6,986.07	115.95	35.11	-86.76	-3,321.52	-7,062.96	3,188.01	3,103.47	84.54	37.712	
11,200.00	7,063.82	7,003.01	6,988.18	118.66	35.12	-86.86	-3,321.51	-7,063.02	3,095.72	3,009.62	86.11	35.952	
11,300.00	7,063.49	7,005.15	6,990.32	121.39	35.13	-86.96	-3,321.50	-7,063.08	3,003.93	2,916.10	87.83	34.202	
11,400.00	7,063.17	7,007.31	6,992.47	124.12	35.13	-87.06	-3,321.49	-7,063.14	2,912.68	2,822.96	89.71	32.466	
11,500.00	7,062.84	7,009.48	6,994.65	126.86	35.14	-87.16	-3,321.48	-7,063.20	2,822.01	2,730.24	91.78	30.748	
11,600.00	7,062.52	7,012.07	6,997.24	129.60	35.15	-87.28	-3,321.46	-7,063.28	2,732.00	2,637.97	94.04	29.053	
11,700.00	7,062.19	7,014.80	6,999.96	132.35	35.16	-87.41	-3,321.45	-7,063.36	2,642.70	2,546.20	96.50	27.386	
11,800.00	7,061.87	7,017.54	7,002.70	135.10	35.17	-87.54	-3,321.43	-7,063.44	2,554.20	2,455.01	99.19	25.751	
11,900.00	7,061.54	7,020.30	7,005.46	137.85	35.18	-87.67	-3,321.42	-7,063.52	2,466.56	2,364.45	102.12	24.154	
12,000.00	7,061.22	7,023.08	7,008.24	140.61	35.19	-87.80	-3,321.40	-7,063.61	2,379.91	2,274.60	105.31	22.599	
12,100.00	7,060.89	7,025.87	7,011.03	143.38	35.20	-87.94	-3,321.38	-7,063.69	2,294.33	2,185.54	108.78	21.091	
12,200.00	7,060.57	7,028.68	7,013.84	146.15	35.21	-88.07	-3,321.37	-7,063.77	2,209.96	2,097.40	112.56	19.633	
12,300.00	7,060.24	7,031.50	7,016.66	148.92	35.22	-88.20	-3,321.35	-7,063.86	2,126.94	2,010.28	116.67	18.231	
12,400.00	7,059.92	7,034.35	7,019.50	151.69	35.23	-88.34	-3,321.33	-7,063.94	2,045.44	1,924.32	121.12	16.888	
12,500.00	7,059.59	7,037.21	7,022.36	154.47	35.24	-88.47	-3,321.31	-7,064.03	1,965.65	1,839.70	125.94	15.608	
12,600.00	7,059.27	7,040.08	7,025.24	157.25	35.25	-88.61	-3,321.28	-7,064.11	1,887.77	1,756.61	131.16	14.393	
12,700.00	7,058.94	7,042.98	7,028.13	160.03	35.26	-88.75	-3,321.26	-7,064.20	1,812.07	1,675.28	136.78	13.248	
12,800.00	7,058.62	7,045.89	7,031.04	162.82	35.27	-88.88	-3,321.24	-7,064.29	1,738.81	1,595.98	142.83	12.174	
12,900.00	7,058.29	7,048.82	7,033.97	165.61	35.28	-89.02	-3,321.21	-7,064.38	1,668.33	1,519.02	149.31	11.174	
13,000.00	7,057.97	7,051.77	7,036.91	168.40	35.29	-89.16	-3,321.19	-7,064.47	1,601.00	1,444.79	156.21	10.249	
13,100.00	7,057.64	7,054.74	7,039.88	171.19	35.30	-89.30	-3,321.16	-7,064.56	1,537.22	1,373.71	163.51	9.402	
13,200.00	7,057.32	7,057.72	7,042.86	173.99	35.31	-89.45	-3,321.13	-7,064.65	1,477.45	1,306.30	171.15	8.632	
13,300.00	7,057.00	7,060.72	7,045.86	176.78	35.32	-89.59	-3,321.10	-7,064.74	1,422.20	1,243.13	179.08	7.942	
13,400.00	7,056.67	7,063.74	7,048.88	179.58	35.33	-89.73	-3,321.08	-7,064.83	1,372.03	1,184.85	187.17	7.330	
13,500.00	7,056.35	7,066.78	7,051.92	182.38	35.34	-89.88	-3,321.04	-7,064.93	1,327.49	1,132.20	195.29	6.798	
13,600.00	7,056.02	7,069.84	7,054.98	185.19	35.35	-90.02	-3,321.01	-7,065.02	1,289.18	1,085.94	203.24	6.343	
13,700.00	7,055.70	7,072.92	7,058.06	187.99	35.36	-90.17	-3,320.98	-7,065.12	1,257.67	1,046.85	210.81	5.966	
13,800.00	7,055.37	7,076.02	7,061.15	190.80	35.37	-90.31	-3,320.95	-7,065.21	1,233.47	1,015.71	217.76	5.664	
13,900.00	7,055.05	7,079.14	7,064.27	193.60	35.39	-90.46	-3,320.91	-7,065.31	1,217.03	993.18	223.85	5.437	
14,000.00	7,054.72	7,082.28	7,067.40	196.41	35.40	-90.61	-3,320.88	-7,065.41	1,208.65	979.79	228.86	5.281	
14,051.65	7,054.55	7,083.90	7,069.03	197.86	35.40	-90.69	-3,320.86	-7,065.46	1,207.55	976.57	230.98	5.228 CC	
14,100.00	7,054.40	7,085.43	7,070.56	199.22	35.41	-90.76	-3,320.84	-7,065.51	1,208.51	975.87	232.64	5.195 ES	
14,200.00	7,054.07	7,088.61	7,073.74	202.03	35.42	-90.91	-3,320.80	-7,065.61	1,216.62	981.52	235.10	5.175 SF	
14,300.00	7,053.75	7,091.81	7,076.93	204.85	35.43	-91.06	-3,320.76	-7,065.71	1,232.80	996.57	236.23	5.219	
14,400.00	7,053.42	7,095.03	7,080.15	207.66	35.44	-91.21	-3,320.72	-7,065.81	1,256.75	1,020.64	236.11	5.323	
14,500.00	7,053.10	7,098.26	7,083.38	210.48	35.45	-91.37	-3,320.68	-7,065.91	1,288.02	1,053.16	234.87	5.484	
14,600.00	7,052.77	7,101.52	7,086.64	213.29	35.46	-91.52	-3,320.63	-7,066.02	1,326.12	1,093.44	232.68	5.699	
14,700.00	7,052.45	7,104.80	7,089.92	216.11	35.48	-91.68	-3,320.59	-7,066.12	1,370.46	1,140.71	229.74	5.965	
14,800.00	7,052.12	7,108.11	7,093.22	218.93	35.49	-91.83	-3,320.54	-7,066.23	1,420.45	1,194.22	226.24	6.279	
14,900.00	7,051.80	7,111.43	7,096.54	221.75	35.50	-91.99	-3,320.50	-7,066.33	1,475.54	1,253.20	222.34	6.637	
15,000.00	7,051.47	7,114.77	7,099.89	224.57	35.51	-92.15	-3,320.45	-7,066.44	1,535.16	1,316.97	218.19	7.036	
15,100.00	7,051.15	7,118.14	7,103.25	227.39	35.52	-92.31	-3,320.40	-7,066.55	1,598.81	1,384.90	213.91	7.474	
15,145.13	7,051.00	7,119.67	7,104.78	228.67	35.53	-92.38	-3,320.38	-7,066.60	1,628.73	1,416.76	211.97	7.684	





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	67.00	3.28	3.28	-117.52	-3,990.87	-7,660.96	8,638.39					
100.00	100.00	33.00	100.00	3.28	3.33	-117.52	-3,990.87	-7,660.96	8,638.13	8,631.52	6.61	1,305.857		
200.00	200.00	133.00	200.00	3.34	4.38	-117.52	-3,990.87	-7,660.96	8,638.13	8,630.42	7.71	1,119.862		
300.00	299.98	232.98	299.98	3.44	7.18	58.12	-3,990.87	-7,660.96	8,637.21	8,626.59	10.62	813.279		
400.00	399.84	332.84	399.84	3.59	10.40	58.20	-3,990.87	-7,660.96	8,634.45	8,620.45	13.99	617.020		
500.00	499.45	432.45	499.45	3.79	13.75	58.32	-3,990.87	-7,660.96	8,629.85	8,612.31	17.54	492.116		
600.00	598.70	531.70	598.70	4.03	17.13	58.50	-3,990.87	-7,660.96	8,623.43	8,602.27	21.16	407.468		
700.00	697.47	630.47	697.47	4.31	20.53	58.73	-3,990.87	-7,660.96	8,615.21	8,590.37	24.84	346.816		
800.00	795.62	728.62	795.62	4.64	23.92	59.01	-3,990.87	-7,660.96	8,605.21	8,576.66	28.55	301.416		
900.00	893.06	826.06	893.06	5.00	27.29	59.34	-3,990.87	-7,660.96	8,593.46	8,561.19	32.28	266.247		
1,000.00	989.64	922.64	989.64	5.40	30.64	59.72	-3,990.87	-7,660.96	8,580.00	8,543.99	36.01	238.251		
1,100.00	1,085.27	1,018.27	1,085.27	5.83	33.96	60.13	-3,990.87	-7,660.96	8,564.86	8,525.11	39.75	215.457		
1,200.00	1,180.44	1,113.44	1,180.44	6.29	37.27	60.30	-3,990.87	-7,660.96	8,549.04	8,505.54	43.50	196.536		
1,300.00	1,275.61	1,208.61	1,275.61	6.76	40.58	60.48	-3,990.87	-7,660.96	8,533.30	8,486.03	47.27	180.539		
1,400.00	1,370.78	1,303.78	1,370.78	7.26	43.89	60.65	-3,990.87	-7,660.96	8,517.64	8,466.59	51.05	166.851		
1,500.00	1,465.95	1,401.05	1,465.95	7.76	47.28	60.82	-3,990.87	-7,660.96	8,502.06	8,447.14	54.92	154.809		
1,600.00	1,561.12	1,505.88	1,561.12	8.27	50.93	61.00	-3,990.87	-7,660.96	8,486.56	8,427.50	59.06	143.683		
1,700.00	1,656.29	1,589.29	1,656.29	8.80	53.84	61.17	-3,990.87	-7,660.96	8,471.15	8,408.68	62.47	135.599		
1,800.00	1,751.46	1,684.46	1,751.46	9.32	57.15	61.35	-3,990.87	-7,660.96	8,455.82	8,389.52	66.30	127.543		
1,900.00	1,846.63	1,779.63	1,846.63	9.86	60.47	61.52	-3,990.87	-7,660.96	8,440.57	8,370.44	70.13	120.356		
2,000.00	1,941.80	1,874.80	1,941.80	10.40	63.79	61.70	-3,990.87	-7,660.96	8,425.41	8,351.44	73.97	113.906		
2,100.00	2,036.96	1,969.96	2,036.96	10.94	67.11	61.88	-3,990.87	-7,660.96	8,410.33	8,332.52	77.81	108.087		
2,200.00	2,132.13	2,065.13	2,132.13	11.49	70.42	62.06	-3,990.87	-7,660.96	8,395.34	8,313.68	81.66	102.811		
2,300.00	2,227.30	2,160.30	2,227.30	12.04	73.74	62.23	-3,990.87	-7,660.96	8,380.44	8,294.93	85.51	98.006		
2,400.00	2,322.47	2,255.47	2,322.47	12.59	77.06	62.41	-3,990.87	-7,660.96	8,365.62	8,276.25	89.36	93.613		
2,500.00	2,417.64	2,350.64	2,417.64	13.15	80.38	62.59	-3,990.87	-7,660.96	8,350.88	8,257.66	93.22	89.581		
2,600.00	2,512.81	2,445.81	2,512.81	13.70	83.70	62.77	-3,990.87	-7,660.96	8,336.24	8,239.16	97.08	85.868		
2,700.00	2,607.98	2,540.98	2,607.98	14.26	87.02	62.95	-3,990.87	-7,660.96	8,321.68	8,220.73	100.94	82.438		
2,800.00	2,703.15	2,636.15	2,703.15	14.82	90.34	63.14	-3,990.87	-7,660.96	8,307.21	8,202.40	104.81	79.260		
2,900.00	2,798.32	2,731.32	2,798.32	15.38	93.66	63.32	-3,990.87	-7,660.96	8,292.83	8,184.15	108.68	76.307		
3,000.00	2,893.49	2,826.49	2,893.49	15.95	96.98	63.50	-3,990.87	-7,660.96	8,278.53	8,165.99	112.55	73.557		
3,100.00	2,988.66	2,921.66	2,988.66	16.51	100.30	63.68	-3,990.87	-7,660.96	8,264.33	8,147.91	116.42	70.989		
3,200.00	3,083.83	3,016.83	3,083.83	17.07	103.62	63.87	-3,990.87	-7,660.96	8,250.22	8,129.93	120.29	68.587		
3,300.00	3,179.00	3,112.00	3,179.00	17.64	106.94	64.05	-3,990.87	-7,660.96	8,236.19	8,112.03	124.16	66.334		
3,400.00	3,274.17	3,207.17	3,274.17	18.21	110.27	64.24	-3,990.87	-7,660.96	8,222.26	8,094.22	128.04	64.217		
3,500.00	3,369.34	3,302.34	3,369.34	18.77	113.59	64.42	-3,990.87	-7,660.96	8,208.42	8,076.50	131.91	62.225		
3,600.00	3,464.51	3,402.49	3,464.51	19.34	117.08	64.61	-3,990.87	-7,660.96	8,194.67	8,058.70	135.97	60.270		
3,700.00	3,559.68	3,507.32	3,559.68	19.91	120.74	64.79	-3,990.87	-7,660.96	8,181.01	8,040.83	140.18	58.360		
3,800.00	3,654.84	3,587.84	3,654.84	20.48	123.55	64.98	-3,990.87	-7,660.96	8,167.44	8,023.89	143.55	56.896		
3,900.00	3,750.01	3,683.01	3,750.01	21.05	126.87	65.17	-3,990.87	-7,660.96	8,153.97	8,006.54	147.43	55.307		
4,000.00	3,845.18	3,778.18	3,845.18	21.62	130.19	65.36	-3,990.87	-7,660.96	8,140.59	7,989.28	151.31	53.799		
4,100.00	3,940.35	3,873.35	3,940.35	22.19	133.51	65.55	-3,990.87	-7,660.96	8,127.31	7,972.11	155.20	52.367		
4,200.00	4,035.52	3,968.52	4,035.52	22.76	136.84	65.74	-3,990.87	-7,660.96	8,114.12	7,955.03	159.08	51.006		
4,300.00	4,130.69	4,063.69	4,130.69	23.33	140.16	65.93	-3,990.87	-7,660.96	8,101.02	7,938.05	162.97	49.710		
4,400.00	4,225.86	4,158.86	4,225.86	23.91	143.48	66.12	-3,990.87	-7,660.96	8,088.02	7,921.17	166.85	48.474		
4,500.00	4,321.03	4,254.03	4,321.03	24.48	146.80	66.31	-3,990.87	-7,660.96	8,075.12	7,904.38	170.74	47.295		
4,600.00	4,416.20	4,349.20	4,416.20	25.05	150.12	66.50	-3,990.87	-7,660.96	8,062.31	7,887.68	174.63	46.169		
4,700.00	4,511.37	4,444.37	4,511.37	25.62	153.44	66.69	-3,990.87	-7,660.96	8,049.60	7,871.08	178.51	45.092		
4,800.00	4,606.54	4,539.54	4,606.54	26.20	156.76	66.89	-3,990.87	-7,660.96	8,036.98	7,854.58	182.40	44.062		
4,900.00	4,701.71	4,634.71	4,701.71	26.77	160.09	67.08	-3,990.87	-7,660.96	8,024.47	7,838.17	186.29	43.075		
5,000.00	4,796.88	4,729.88	4,796.88	27.34	163.41	67.27	-3,990.87	-7,660.96	8,012.05	7,821.87	190.18	42.128		
5,100.00	4,892.05	4,825.05	4,892.05	27.92	166.73	67.47	-3,990.87	-7,660.96	7,999.73	7,805.65	194.07	41.220		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,920.22	4,987.22	28.49	170.05	67.66	-3,990.87	-7,660.96	7,987.51	7,789.54	197.97	40.348		
5,300.00	5,082.39	5,015.39	5,082.39	29.07	173.37	67.86	-3,990.87	-7,660.96	7,975.39	7,773.53	201.86	39.510		
5,400.00	5,177.56	5,110.56	5,177.56	29.64	176.69	68.05	-3,990.87	-7,660.96	7,963.36	7,757.61	205.75	38.704		
5,500.00	5,272.72	5,205.72	5,272.72	30.21	180.02	68.25	-3,990.87	-7,660.96	7,951.44	7,741.80	209.64	37.928		
5,600.00	5,367.89	5,300.89	5,367.89	30.79	183.34	68.45	-3,990.87	-7,660.96	7,939.62	7,726.09	213.54	37.181		
5,700.00	5,463.06	5,403.94	5,463.06	31.36	186.94	68.65	-3,990.87	-7,660.96	7,927.90	7,710.20	217.71	36.416		
5,800.00	5,558.23	5,508.77	5,558.23	31.94	190.59	68.84	-3,990.87	-7,660.96	7,916.29	7,694.35	221.94	35.669		
5,900.00	5,653.40	5,586.40	5,653.40	32.51	193.30	69.04	-3,990.87	-7,660.96	7,904.77	7,679.55	225.22	35.098		
6,000.00	5,748.57	5,681.57	5,748.57	33.09	196.63	69.24	-3,990.87	-7,660.96	7,893.36	7,664.24	229.12	34.451		
6,100.00	5,843.74	5,776.74	5,843.74	33.67	199.95	69.44	-3,990.87	-7,660.96	7,882.05	7,649.04	233.02	33.826		
6,200.00	5,938.91	5,871.91	5,938.91	34.24	203.27	69.64	-3,990.87	-7,660.96	7,870.85	7,633.93	236.91	33.223		
6,300.00	6,034.08	5,967.08	6,034.08	34.82	206.59	69.84	-3,990.87	-7,660.96	7,859.74	7,618.93	240.81	32.639		
6,400.00	6,129.25	6,062.25	6,129.25	35.39	209.91	70.04	-3,990.87	-7,660.96	7,848.75	7,604.04	244.71	32.074		
6,500.00	6,224.42	6,157.42	6,224.42	35.97	213.24	70.25	-3,990.87	-7,660.96	7,837.86	7,589.25	248.61	31.527		
6,600.00	6,319.59	6,252.59	6,319.59	36.54	216.56	70.45	-3,990.87	-7,660.96	7,827.07	7,574.56	252.51	30.998		
6,700.00	6,414.76	6,347.76	6,414.76	37.12	219.88	70.65	-3,990.87	-7,660.96	7,816.39	7,559.98	256.41	30.484		
6,800.00	6,509.91	6,442.91	6,509.91	37.70	223.20	63.50	-3,990.87	-7,660.96	7,805.28	7,544.97	260.30	29.985		
6,900.00	6,603.99	6,536.99	6,603.99	38.26	226.49	40.31	-3,990.87	-7,660.96	7,783.34	7,519.20	264.14	29.467		
7,000.00	6,694.76	6,627.76	6,694.76	38.78	229.65	25.06	-3,990.87	-7,660.96	7,746.99	7,479.19	267.80	28.928		
7,100.00	6,779.96	6,712.96	6,779.96	39.24	232.63	14.99	-3,990.87	-7,660.96	7,697.08	7,425.88	271.20	28.382		
7,200.00	6,857.50	6,809.50	6,857.50	39.65	236.00	7.41	-3,990.87	-7,660.96	7,634.80	7,359.88	274.92	27.771		
7,300.00	6,925.48	6,858.48	6,925.48	40.02	237.71	0.47	-3,990.87	-7,660.96	7,561.68	7,284.77	276.91	27.307		
7,400.00	6,982.21	6,915.21	6,982.21	40.33	239.69	-7.49	-3,990.87	-7,660.96	7,479.50	7,200.41	279.10	26.799		
7,500.00	7,026.31	6,959.31	7,026.31	40.63	241.23	-18.93	-3,990.87	-7,660.96	7,390.29	7,109.54	280.75	26.323		
7,600.00	7,056.68	6,989.68	7,056.68	40.91	242.29	-38.49	-3,990.87	-7,660.96	7,296.28	7,014.42	281.86	25.886		
7,700.00	7,072.58	7,005.58	7,072.58	41.25	242.84	-70.44	-3,990.87	-7,660.96	7,199.80	6,917.41	282.39	25.496		
7,800.00	7,074.86	7,007.86	7,074.86	41.69	242.92	-90.68	-3,990.87	-7,660.96	7,103.15	6,820.74	282.41	25.152		
7,900.00	7,074.54	7,007.54	7,074.54	42.34	242.91	-90.67	-3,990.87	-7,660.96	7,006.74	6,724.40	282.34	24.816		
8,000.00	7,074.21	7,007.21	7,074.21	43.27	242.90	-90.66	-3,990.87	-7,660.96	6,910.43	6,628.14	282.29	24.479		
8,100.00	7,073.89	7,006.89	7,073.89	44.47	242.89	-90.65	-3,990.87	-7,660.96	6,814.23	6,531.97	282.26	24.141		
8,200.00	7,073.57	7,006.57	7,073.57	45.91	242.88	-90.64	-3,990.87	-7,660.96	6,718.14	6,435.89	282.25	23.802		
8,300.00	7,073.24	7,006.24	7,073.24	47.53	242.86	-90.63	-3,990.87	-7,660.96	6,622.17	6,339.90	282.27	23.461		
8,400.00	7,072.92	7,005.92	7,072.92	49.31	242.85	-90.62	-3,990.87	-7,660.96	6,526.32	6,244.01	282.30	23.118		
8,500.00	7,072.59	7,005.59	7,072.59	51.20	242.84	-90.61	-3,990.87	-7,660.96	6,430.59	6,148.23	282.36	22.774		
8,600.00	7,072.27	7,005.27	7,072.27	53.19	242.83	-90.60	-3,990.87	-7,660.96	6,335.00	6,052.54	282.45	22.429		
8,700.00	7,071.94	7,004.94	7,071.94	55.27	242.82	-90.59	-3,990.87	-7,660.96	6,239.54	5,956.97	282.57	22.081		
8,800.00	7,071.62	7,004.62	7,071.62	57.43	242.81	-90.58	-3,990.87	-7,660.96	6,144.23	5,861.50	282.72	21.732		
8,900.00	7,071.29	7,004.29	7,071.29	59.64	242.80	-90.57	-3,990.87	-7,660.96	6,049.07	5,766.16	282.91	21.382		
9,000.00	7,070.97	7,003.97	7,070.97	61.92	242.79	-90.56	-3,990.87	-7,660.96	5,954.07	5,670.93	283.13	21.029		
9,100.00	7,070.64	7,003.64	7,070.64	64.24	242.77	-90.55	-3,990.87	-7,660.96	5,859.23	5,575.83	283.40	20.675		
9,200.00	7,070.32	7,003.32	7,070.32	66.61	242.76	-90.54	-3,990.87	-7,660.96	5,764.57	5,480.86	283.70	20.319		
9,300.00	7,069.99	7,002.99	7,069.99	69.01	242.75	-90.53	-3,990.87	-7,660.96	5,670.09	5,386.03	284.06	19.961		
9,400.00	7,069.67	7,002.67	7,069.67	71.45	242.74	-90.52	-3,990.87	-7,660.96	5,575.81	5,291.35	284.46	19.602		
9,500.00	7,069.34	7,002.34	7,069.34	73.92	242.73	-90.51	-3,990.87	-7,660.96	5,481.72	5,196.81	284.91	19.240		
9,600.00	7,069.02	7,002.02	7,069.02	76.42	242.72	-90.50	-3,990.87	-7,660.96	5,387.85	5,102.44	285.42	18.877		
9,700.00	7,068.69	7,001.69	7,068.69	78.95	242.71	-90.49	-3,990.87	-7,660.96	5,294.21	5,008.22	285.98	18.512		
9,800.00	7,068.37	7,001.37	7,068.37	81.49	242.69	-90.48	-3,990.87	-7,660.96	5,200.80	4,914.19	286.61	18.146		
9,900.00	7,068.04	7,001.04	7,068.04	84.06	242.68	-90.47	-3,990.87	-7,660.96	5,107.64	4,820.33	287.31	17.778		
10,000.00	7,067.72	7,000.72	7,067.72	86.65	242.67	-90.46	-3,990.87	-7,660.96	5,014.75	4,726.68	288.07	17.408		
10,100.00	7,067.39	7,000.39	7,067.39	89.25	242.66	-90.45	-3,990.87	-7,660.96	4,922.13	4,633.22	288.91	17.037		
10,200.00	7,067.07	7,000.07	7,067.07	91.87	242.65	-90.44	-3,990.87	-7,660.96	4,829.81	4,539.99	289.82	16.665		
10,300.00	7,066.74	7,000.26	7,066.74	94.50	242.66	-90.43	-3,990.87	-7,660.96	4,737.80	4,446.96	290.83	16.291		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,000.58	7,066.42	97.14	242.67	-90.42	-3,990.87	-7,660.96	4,646.11	4,354.18	291.93	15.915		
10,500.00	7,066.09	7,000.91	7,066.09	99.80	242.68	-90.41	-3,990.87	-7,660.96	4,554.78	4,261.66	293.12	15.539		
10,600.00	7,065.77	7,001.23	7,065.77	102.47	242.69	-90.40	-3,990.87	-7,660.96	4,463.83	4,169.42	294.41	15.162		
10,700.00	7,065.44	7,001.56	7,065.44	105.15	242.70	-90.39	-3,990.87	-7,660.96	4,373.26	4,077.47	295.79	14.785		
10,800.00	7,065.12	7,001.88	7,065.12	107.83	242.71	-90.38	-3,990.87	-7,660.96	4,283.12	3,985.84	297.28	14.408		
10,900.00	7,064.79	7,002.21	7,064.79	110.53	242.72	-90.37	-3,990.87	-7,660.96	4,193.42	3,894.55	298.87	14.031		
11,000.00	7,064.47	7,002.53	7,064.47	113.23	242.74	-90.36	-3,990.87	-7,660.96	4,104.20	3,803.62	300.57	13.655		
11,100.00	7,064.14	7,002.86	7,064.14	115.95	242.75	-90.35	-3,990.87	-7,660.96	4,015.48	3,713.09	302.40	13.279		
11,200.00	7,063.82	7,003.18	7,063.82	118.66	242.76	-90.34	-3,990.87	-7,660.96	3,927.31	3,622.97	304.34	12.904		
11,300.00	7,063.49	7,003.51	7,063.49	121.39	242.77	-90.33	-3,990.87	-7,660.96	3,839.72	3,533.30	306.42	12.531		
11,400.00	7,063.17	7,003.83	7,063.17	124.12	242.78	-90.32	-3,990.87	-7,660.96	3,752.75	3,444.12	308.63	12.160		
11,500.00	7,062.84	7,004.16	7,062.84	126.86	242.79	-90.31	-3,990.87	-7,660.96	3,666.44	3,355.47	310.98	11.790		
11,600.00	7,062.52	7,004.48	7,062.52	129.60	242.80	-90.30	-3,990.87	-7,660.96	3,580.85	3,267.38	313.47	11.423		
11,700.00	7,062.19	7,004.81	7,062.19	132.35	242.81	-90.29	-3,990.87	-7,660.96	3,496.02	3,179.90	316.12	11.059		
11,800.00	7,061.87	7,005.13	7,061.87	135.10	242.83	-90.28	-3,990.87	-7,660.96	3,412.01	3,093.08	318.93	10.698		
11,900.00	7,061.54	7,005.46	7,061.54	137.85	242.84	-90.27	-3,990.87	-7,660.96	3,328.89	3,006.98	321.91	10.341		
12,000.00	7,061.22	7,005.78	7,061.22	140.61	242.85	-90.26	-3,990.87	-7,660.96	3,246.72	2,921.66	325.06	9.988		
12,100.00	7,060.89	7,006.11	7,060.89	143.38	242.86	-90.25	-3,990.87	-7,660.96	3,165.57	2,837.18	328.39	9.640		
12,200.00	7,060.57	7,006.43	7,060.57	146.15	242.87	-90.24	-3,990.87	-7,660.96	3,085.54	2,753.63	331.91	9.296		
12,300.00	7,060.24	7,006.76	7,060.24	148.92	242.88	-90.23	-3,990.87	-7,660.96	3,006.69	2,671.08	335.62	8.959		
12,400.00	7,059.92	7,007.08	7,059.92	151.69	242.89	-90.22	-3,990.87	-7,660.96	2,929.14	2,589.62	339.53	8.627		
12,500.00	7,059.59	7,007.41	7,059.59	154.47	242.91	-90.21	-3,990.87	-7,660.96	2,852.99	2,509.35	343.64	8.302		
12,600.00	7,059.27	7,007.73	7,059.27	157.25	242.92	-90.20	-3,990.87	-7,660.96	2,778.35	2,430.38	347.96	7.985		
12,700.00	7,058.94	7,008.06	7,058.94	160.03	242.93	-90.19	-3,990.87	-7,660.96	2,705.34	2,352.84	352.50	7.675		
12,800.00	7,058.62	7,008.38	7,058.62	162.82	242.94	-90.18	-3,990.87	-7,660.96	2,634.11	2,276.86	357.25	7.373		
12,900.00	7,058.29	7,008.71	7,058.29	165.61	242.95	-90.17	-3,990.87	-7,660.96	2,564.81	2,202.59	362.21	7.081		
13,000.00	7,057.97	7,009.03	7,057.97	168.40	242.96	-90.16	-3,990.87	-7,660.96	2,497.58	2,130.19	367.39	6.798		
13,100.00	7,057.64	7,009.36	7,057.64	171.19	242.97	-90.15	-3,990.87	-7,660.96	2,432.61	2,059.84	372.76	6.526		
13,200.00	7,057.32	7,009.68	7,057.32	173.99	242.99	-90.14	-3,990.87	-7,660.96	2,370.07	1,991.74	378.33	6.265		
13,300.00	7,057.00	7,009.00	7,057.00	176.78	242.30	-90.13	-3,990.87	-7,660.96	2,310.18	1,926.80	383.38	6.026		
13,400.00	7,056.67	7,008.32	7,056.67	179.58	242.29	-90.12	-3,990.87	-7,660.96	2,253.13	1,863.87	389.26	5.788		
13,500.00	7,056.35	7,007.64	7,056.35	182.38	242.28	-90.11	-3,990.87	-7,660.96	2,199.15	1,803.89	395.26	5.564		
13,600.00	7,056.02	7,006.96	7,056.02	185.19	242.26	-90.10	-3,990.87	-7,660.96	2,148.47	1,747.11	401.36	5.353		
13,700.00	7,055.70	7,006.28	7,055.70	187.99	242.25	-90.09	-3,990.87	-7,660.96	2,101.33	1,693.83	407.50	5.157		
13,800.00	7,055.37	7,005.60	7,055.37	190.80	242.24	-90.08	-3,990.87	-7,660.96	2,057.98	1,644.32	413.65	4.975		
13,900.00	7,055.05	7,004.92	7,055.05	193.60	242.23	-90.07	-3,990.87	-7,660.96	2,018.65	1,598.90	419.74	4.809		
14,000.00	7,054.72	7,004.24	7,054.72	196.41	242.22	-90.06	-3,990.87	-7,660.96	1,983.58	1,557.87	425.71	4.659		
14,100.00	7,054.40	7,003.56	7,054.40	199.22	242.21	-90.05	-3,990.87	-7,660.96	1,953.02	1,521.53	431.49	4.526		
14,200.00	7,054.07	7,002.88	7,054.07	202.03	242.20	-90.04	-3,990.87	-7,660.96	1,927.16	1,490.15	437.00	4.410		
14,300.00	7,053.75	7,002.20	7,053.75	204.85	242.18	-90.03	-3,990.87	-7,660.96	1,906.20	1,464.02	442.18	4.311		
14,400.00	7,053.42	7,001.52	7,053.42	207.66	242.17	-90.03	-3,990.87	-7,660.96	1,890.31	1,443.36	446.96	4.229		
14,500.00	7,053.10	7,000.84	7,053.10	210.48	242.16	-90.02	-3,990.87	-7,660.96	1,879.61	1,428.36	451.26	4.165		
14,600.00	7,052.77	7,000.16	7,052.77	213.29	242.15	-90.01	-3,990.87	-7,660.96	1,874.20	1,419.16	455.03	4.119		
14,651.66	7,052.60	7,000.00	7,052.60	214.75	242.14	-90.00	-3,990.87	-7,660.96	1,873.49	1,416.72	456.76	4.102 CC		
14,700.00	7,052.45	6,999.84	7,052.45	216.11	242.14	-90.00	-3,990.87	-7,660.96	1,874.11	1,415.87	458.24	4.090 ES		
14,800.00	7,052.12	6,999.68	7,052.12	218.93	242.13	-89.99	-3,990.87	-7,660.96	1,879.35	1,418.50	460.85	4.078 SF		
14,900.00	7,051.80	6,999.52	7,051.80	221.75	242.12	-89.98	-3,990.87	-7,660.96	1,889.87	1,427.02	462.85	4.083		
15,000.00	7,051.47	6,999.36	7,051.47	224.57	242.11	-89.97	-3,990.87	-7,660.96	1,905.59	1,441.35	464.25	4.105		
15,100.00	7,051.15	6,999.20	7,051.15	227.39	242.09	-89.96	-3,990.87	-7,660.96	1,926.38	1,461.33	465.05	4.142		
15,145.13	7,051.00	6,999.04	7,051.00	228.67	242.09	-89.95	-3,990.87	-7,660.96	1,937.38	1,472.16	465.23	4.164		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	52.00	3.28	3.28	-106.61	-2,673.47	-8,961.28	9,351.72					
100.00	100.00	48.00	100.00	3.28	3.39	-106.61	-2,673.47	-8,961.28	9,351.57	9,344.90	6.67	1,402.026		
200.00	200.00	148.00	200.00	3.34	4.74	-106.61	-2,673.47	-8,961.28	9,351.57	9,343.50	8.08	1,157.870		
300.00	299.98	247.98	299.98	3.44	7.65	69.02	-2,673.47	-8,961.28	9,350.95	9,339.86	11.09	843.212		
400.00	399.84	347.84	399.84	3.59	10.90	69.09	-2,673.47	-8,961.28	9,349.08	9,334.58	14.49	645.147		
500.00	499.45	447.45	499.45	3.79	14.26	69.20	-2,673.47	-8,961.28	9,345.96	9,327.92	18.04	517.945		
600.00	598.70	546.70	598.70	4.03	17.65	69.35	-2,673.47	-8,961.28	9,341.62	9,319.94	21.68	430.948		
700.00	697.47	645.47	697.47	4.31	21.04	69.54	-2,673.47	-8,961.28	9,336.07	9,310.71	25.36	368.167		
800.00	795.62	743.62	795.62	4.64	24.44	69.77	-2,673.47	-8,961.28	9,329.32	9,300.25	29.07	320.917		
900.00	893.06	841.06	893.06	5.00	27.81	70.05	-2,673.47	-8,961.28	9,321.42	9,288.62	32.80	284.165		
1,000.00	989.64	937.64	989.64	5.40	31.16	70.37	-2,673.47	-8,961.28	9,312.38	9,275.84	36.55	254.814		
1,100.00	1,085.27	1,033.27	1,085.27	5.83	34.48	70.71	-2,673.47	-8,961.28	9,302.25	9,261.96	40.29	230.866		
1,200.00	1,180.44	1,128.44	1,180.44	6.29	37.79	70.88	-2,673.47	-8,961.28	9,291.70	9,247.65	44.05	210.929		
1,300.00	1,275.61	1,223.61	1,275.61	6.76	41.10	71.05	-2,673.47	-8,961.28	9,281.23	9,233.40	47.83	194.044		
1,400.00	1,370.78	1,318.78	1,370.78	7.26	44.41	71.22	-2,673.47	-8,961.28	9,270.86	9,219.23	51.63	179.576		
1,500.00	1,465.95	1,413.95	1,465.95	7.76	47.73	71.39	-2,673.47	-8,961.28	9,260.57	9,205.14	55.44	167.051		
1,600.00	1,561.12	1,509.12	1,561.12	8.27	51.04	71.57	-2,673.47	-8,961.28	9,250.38	9,191.12	59.26	156.108		
1,700.00	1,656.29	1,604.29	1,656.29	8.80	54.36	71.74	-2,673.47	-8,961.28	9,240.28	9,177.19	63.09	146.471		
1,800.00	1,751.46	1,700.54	1,751.46	9.32	57.71	71.91	-2,673.47	-8,961.28	9,230.26	9,163.30	66.96	137.845		
1,900.00	1,846.63	1,805.37	1,846.63	9.86	61.37	72.09	-2,673.47	-8,961.28	9,220.34	9,149.20	71.14	129.605		
2,000.00	1,941.80	1,889.80	1,941.80	10.40	64.31	72.26	-2,673.47	-8,961.28	9,210.51	9,135.90	74.62	123.437		
2,100.00	2,036.96	1,984.96	2,036.96	10.94	67.63	72.43	-2,673.47	-8,961.28	9,200.78	9,122.31	78.47	117.250		
2,200.00	2,132.13	2,080.13	2,132.13	11.49	70.95	72.61	-2,673.47	-8,961.28	9,191.13	9,108.80	82.33	111.637		
2,300.00	2,227.30	2,175.30	2,227.30	12.04	74.27	72.78	-2,673.47	-8,961.28	9,181.58	9,095.39	86.19	106.524		
2,400.00	2,322.47	2,270.47	2,322.47	12.59	77.59	72.96	-2,673.47	-8,961.28	9,172.12	9,082.06	90.06	101.846		
2,500.00	2,417.64	2,365.64	2,417.64	13.15	80.91	73.13	-2,673.47	-8,961.28	9,162.75	9,068.83	93.93	97.552		
2,600.00	2,512.81	2,460.81	2,512.81	13.70	84.23	73.31	-2,673.47	-8,961.28	9,153.48	9,055.68	97.80	93.596		
2,700.00	2,607.98	2,555.98	2,607.98	14.26	87.55	73.49	-2,673.47	-8,961.28	9,144.30	9,042.63	101.67	89.940		
2,800.00	2,703.15	2,651.15	2,703.15	14.82	90.87	73.66	-2,673.47	-8,961.28	9,135.22	9,029.67	105.55	86.552		
2,900.00	2,798.32	2,746.32	2,798.32	15.38	94.19	73.84	-2,673.47	-8,961.28	9,126.23	9,016.80	109.42	83.403		
3,000.00	2,893.49	2,841.49	2,893.49	15.95	97.51	74.02	-2,673.47	-8,961.28	9,117.33	9,004.03	113.30	80.469		
3,100.00	2,988.66	2,936.66	2,988.66	16.51	100.83	74.19	-2,673.47	-8,961.28	9,108.53	8,991.34	117.18	77.729		
3,200.00	3,083.83	3,031.83	3,083.83	17.07	104.15	74.37	-2,673.47	-8,961.28	9,099.82	8,978.76	121.06	75.165		
3,300.00	3,179.00	3,127.00	3,179.00	17.64	107.47	74.55	-2,673.47	-8,961.28	9,091.21	8,966.26	124.95	72.760		
3,400.00	3,274.17	3,222.17	3,274.17	18.21	110.79	74.73	-2,673.47	-8,961.28	9,082.69	8,953.86	128.83	70.500		
3,500.00	3,369.34	3,317.34	3,369.34	18.77	114.11	74.91	-2,673.47	-8,961.28	9,074.27	8,941.56	132.72	68.373		
3,600.00	3,464.51	3,412.51	3,464.51	19.34	117.43	75.09	-2,673.47	-8,961.28	9,065.95	8,929.35	136.60	66.366		
3,700.00	3,559.68	3,507.68	3,559.68	19.91	120.75	75.26	-2,673.47	-8,961.28	9,057.72	8,917.23	140.49	64.472		
3,800.00	3,654.84	3,602.84	3,654.84	20.48	124.07	75.44	-2,673.47	-8,961.28	9,049.59	8,905.21	144.38	62.679		
3,900.00	3,750.01	3,701.99	3,750.01	21.05	127.53	75.62	-2,673.47	-8,961.28	9,041.56	8,893.15	148.41	60.924		
4,000.00	3,845.18	3,806.82	3,845.18	21.62	131.19	75.80	-2,673.47	-8,961.28	9,033.62	8,880.99	152.64	59.184		
4,100.00	3,940.35	3,888.35	3,940.35	22.19	134.04	75.98	-2,673.47	-8,961.28	9,025.78	8,869.73	156.05	57.839		
4,200.00	4,035.52	3,983.52	4,035.52	22.76	137.36	76.17	-2,673.47	-8,961.28	9,018.04	8,858.10	159.94	56.383		
4,300.00	4,130.69	4,078.69	4,130.69	23.33	140.68	76.35	-2,673.47	-8,961.28	9,010.40	8,846.57	163.83	54.997		
4,400.00	4,225.86	4,173.86	4,225.86	23.91	144.00	76.53	-2,673.47	-8,961.28	9,002.86	8,835.13	167.73	53.676		
4,500.00	4,321.03	4,269.03	4,321.03	24.48	147.32	76.71	-2,673.47	-8,961.28	8,995.41	8,823.79	171.62	52.415		
4,600.00	4,416.20	4,364.20	4,416.20	25.05	150.64	76.89	-2,673.47	-8,961.28	8,988.06	8,812.55	175.51	51.210		
4,700.00	4,511.37	4,459.37	4,511.37	25.62	153.97	77.07	-2,673.47	-8,961.28	8,980.81	8,801.41	179.41	50.058		
4,800.00	4,606.54	4,554.54	4,606.54	26.20	157.29	77.26	-2,673.47	-8,961.28	8,973.66	8,790.36	183.30	48.955		
4,900.00	4,701.71	4,649.71	4,701.71	26.77	160.61	77.44	-2,673.47	-8,961.28	8,966.61	8,779.42	187.20	47.899		
5,000.00	4,796.88	4,744.88	4,796.88	27.34	163.93	77.62	-2,673.47	-8,961.28	8,959.66	8,768.57	191.09	46.886		
5,100.00	4,892.05	4,840.05	4,892.05	27.92	167.25	77.80	-2,673.47	-8,961.28	8,952.81	8,757.82	194.99	45.914		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,935.22	4,987.22	28.49	170.57	77.99	-2,673.47	-8,961.28	8,946.06	8,747.18	198.89	44.980		
5,300.00	5,082.39	5,030.39	5,082.39	29.07	173.90	78.17	-2,673.47	-8,961.28	8,939.41	8,736.63	202.78	44.083		
5,400.00	5,177.56	5,125.56	5,177.56	29.64	177.22	78.35	-2,673.47	-8,961.28	8,932.86	8,726.18	206.68	43.220		
5,500.00	5,272.72	5,220.72	5,272.72	30.21	180.54	78.54	-2,673.47	-8,961.28	8,926.42	8,715.84	210.58	42.390		
5,600.00	5,367.89	5,315.89	5,367.89	30.79	183.86	78.72	-2,673.47	-8,961.28	8,920.07	8,705.59	214.48	41.590		
5,700.00	5,463.06	5,411.06	5,463.06	31.36	187.18	78.91	-2,673.47	-8,961.28	8,913.82	8,695.45	218.38	40.818		
5,800.00	5,558.23	5,506.23	5,558.23	31.94	190.51	79.09	-2,673.47	-8,961.28	8,907.68	8,685.40	222.28	40.075		
5,900.00	5,653.40	5,601.40	5,653.40	32.51	193.83	79.28	-2,673.47	-8,961.28	8,901.63	8,675.46	226.18	39.357		
6,000.00	5,748.57	5,703.43	5,748.57	33.09	197.39	79.46	-2,673.47	-8,961.28	8,895.69	8,665.38	230.31	38.624		
6,100.00	5,843.74	5,808.26	5,843.74	33.67	201.05	79.65	-2,673.47	-8,961.28	8,889.85	8,655.30	234.55	37.902		
6,200.00	5,938.91	5,886.91	5,938.91	34.24	203.79	79.83	-2,673.47	-8,961.28	8,884.12	8,646.24	237.87	37.348		
6,300.00	6,034.08	5,982.08	6,034.08	34.82	207.12	80.02	-2,673.47	-8,961.28	8,878.48	8,636.71	241.78	36.722		
6,400.00	6,129.25	6,077.25	6,129.25	35.39	210.44	80.21	-2,673.47	-8,961.28	8,872.95	8,627.28	245.68	36.117		
6,500.00	6,224.42	6,172.42	6,224.42	35.97	213.76	80.39	-2,673.47	-8,961.28	8,867.52	8,617.95	249.58	35.530		
6,600.00	6,319.59	6,267.59	6,319.59	36.54	217.08	80.58	-2,673.47	-8,961.28	8,862.20	8,608.72	253.48	34.962		
6,700.00	6,414.76	6,362.76	6,414.76	37.12	220.40	80.77	-2,673.47	-8,961.28	8,856.98	8,599.60	257.38	34.412		
6,800.00	6,509.91	6,457.91	6,509.91	37.70	223.72	73.66	-2,673.47	-8,961.28	8,851.30	8,590.02	261.28	33.877		
6,900.00	6,603.99	6,551.99	6,603.99	38.26	227.01	50.87	-2,673.47	-8,961.28	8,834.38	8,569.26	265.12	33.322		
7,000.00	6,694.76	6,642.76	6,694.76	38.78	230.18	36.33	-2,673.47	-8,961.28	8,802.40	8,533.60	268.80	32.747		
7,100.00	6,779.96	6,727.96	6,779.96	39.24	233.15	27.40	-2,673.47	-8,961.28	8,756.12	8,483.90	272.22	32.166		
7,200.00	6,857.50	6,805.50	6,857.50	39.65	235.86	21.56	-2,673.47	-8,961.28	8,696.66	8,421.35	275.31	31.589		
7,300.00	6,925.48	6,873.48	6,925.48	40.02	238.23	17.34	-2,673.47	-8,961.28	8,625.45	8,347.45	278.00	31.027		
7,400.00	6,982.21	6,930.21	6,982.21	40.33	240.21	13.75	-2,673.47	-8,961.28	8,544.23	8,264.00	280.23	30.491		
7,500.00	7,026.31	6,974.31	7,026.31	40.63	241.75	9.78	-2,673.47	-8,961.28	8,454.98	8,173.04	281.94	29.989		
7,600.00	7,056.68	7,004.68	7,056.68	40.91	242.81	2.87	-2,673.47	-8,961.28	8,359.87	8,076.77	283.10	29.530		
7,700.00	7,072.58	7,020.58	7,072.58	41.25	243.37	-24.06	-2,673.47	-8,961.28	8,261.26	7,977.57	283.69	29.121		
7,800.00	7,074.86	7,022.86	7,074.86	41.69	243.45	-92.77	-2,673.47	-8,961.28	8,161.50	7,877.75	283.75	28.763		
7,900.00	7,074.54	7,022.54	7,074.54	42.34	243.43	-92.73	-2,673.47	-8,961.28	8,061.73	7,778.01	283.72	28.415		
8,000.00	7,074.21	7,022.21	7,074.21	43.27	243.42	-92.70	-2,673.47	-8,961.28	7,961.96	7,678.28	283.68	28.066		
8,100.00	7,073.89	7,021.89	7,073.89	44.47	243.41	-92.67	-2,673.47	-8,961.28	7,862.20	7,578.56	283.65	27.718		
8,200.00	7,073.57	7,021.57	7,073.57	45.91	243.40	-92.63	-2,673.47	-8,961.28	7,762.45	7,478.84	283.62	27.370		
8,300.00	7,073.24	7,021.24	7,073.24	47.53	243.39	-92.60	-2,673.47	-8,961.28	7,662.70	7,379.12	283.58	27.021		
8,400.00	7,072.92	7,020.92	7,072.92	49.31	243.38	-92.56	-2,673.47	-8,961.28	7,562.96	7,279.41	283.55	26.672		
8,500.00	7,072.59	7,020.59	7,072.59	51.20	243.37	-92.53	-2,673.47	-8,961.28	7,463.23	7,179.70	283.53	26.323		
8,600.00	7,072.27	7,020.27	7,072.27	53.19	243.35	-92.50	-2,673.47	-8,961.28	7,363.50	7,080.00	283.50	25.974		
8,700.00	7,071.94	7,019.94	7,071.94	55.27	243.34	-92.46	-2,673.47	-8,961.28	7,263.78	6,980.31	283.47	25.624		
8,800.00	7,071.62	7,019.62	7,071.62	57.43	243.33	-92.43	-2,673.47	-8,961.28	7,164.07	6,880.62	283.45	25.274		
8,900.00	7,071.29	7,019.29	7,071.29	59.64	243.32	-92.39	-2,673.47	-8,961.28	7,064.37	6,780.94	283.43	24.925		
9,000.00	7,070.97	7,018.97	7,070.97	61.92	243.31	-92.36	-2,673.47	-8,961.28	6,964.68	6,681.27	283.41	24.575		
9,100.00	7,070.64	7,018.64	7,070.64	64.24	243.30	-92.33	-2,673.47	-8,961.28	6,864.99	6,581.60	283.39	24.224		
9,200.00	7,070.32	7,018.32	7,070.32	66.61	243.29	-92.29	-2,673.47	-8,961.28	6,765.31	6,481.94	283.38	23.874		
9,300.00	7,069.99	7,017.99	7,069.99	69.01	243.28	-92.26	-2,673.47	-8,961.28	6,665.65	6,382.28	283.36	23.523		
9,400.00	7,069.67	7,017.67	7,069.67	71.45	243.26	-92.22	-2,673.47	-8,961.28	6,565.99	6,282.64	283.36	23.172		
9,500.00	7,069.34	7,017.34	7,069.34	73.92	243.25	-92.19	-2,673.47	-8,961.28	6,466.34	6,183.00	283.35	22.821		
9,600.00	7,069.02	7,017.02	7,069.02	76.42	243.24	-92.16	-2,673.47	-8,961.28	6,366.71	6,083.37	283.34	22.470		
9,700.00	7,068.69	7,016.69	7,068.69	78.95	243.23	-92.12	-2,673.47	-8,961.28	6,267.09	5,983.74	283.34	22.118		
9,800.00	7,068.37	7,016.37	7,068.37	81.49	243.22	-92.09	-2,673.47	-8,961.28	6,167.48	5,884.13	283.35	21.767		
9,900.00	7,068.04	7,016.04	7,068.04	84.06	243.21	-92.05	-2,673.47	-8,961.28	6,067.88	5,784.53	283.35	21.415		
10,000.00	7,067.72	7,015.72	7,067.72	86.65	243.20	-92.02	-2,673.47	-8,961.28	5,968.29	5,684.93	283.36	21.062		
10,100.00	7,067.39	7,015.39	7,067.39	89.25	243.18	-91.99	-2,673.47	-8,961.28	5,868.72	5,585.34	283.38	20.710		
10,200.00	7,067.07	7,015.07	7,067.07	91.87	243.17	-91.95	-2,673.47	-8,961.28	5,769.17	5,485.77	283.40	20.357		
10,300.00	7,066.74	7,014.74	7,066.74	94.50	243.16	-91.92	-2,673.47	-8,961.28	5,669.63	5,386.20	283.42	20.004		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,014.42	7,066.42	97.14	243.15	-91.88	-2,673.47	-8,961.28	5,570.10	5,286.65	283.45	19.651		
10,500.00	7,066.09	7,014.09	7,066.09	99.80	243.14	-91.85	-2,673.47	-8,961.28	5,470.60	5,187.11	283.49	19.297		
10,600.00	7,065.77	7,013.77	7,065.77	102.47	243.13	-91.82	-2,673.47	-8,961.28	5,371.11	5,087.57	283.53	18.944		
10,700.00	7,065.44	7,013.44	7,065.44	105.15	243.12	-91.78	-2,673.47	-8,961.28	5,271.64	4,988.06	283.58	18.589		
10,800.00	7,065.12	7,013.12	7,065.12	107.83	243.11	-91.75	-2,673.47	-8,961.28	5,172.19	4,888.55	283.64	18.235		
10,900.00	7,064.79	7,012.79	7,064.79	110.53	243.09	-91.71	-2,673.47	-8,961.28	5,072.76	4,789.05	283.71	17.880		
11,000.00	7,064.47	7,012.47	7,064.47	113.23	243.08	-91.68	-2,673.47	-8,961.28	4,973.36	4,689.57	283.79	17.525		
11,100.00	7,064.14	7,012.14	7,064.14	115.95	243.07	-91.65	-2,673.47	-8,961.28	4,873.98	4,590.11	283.87	17.170		
11,200.00	7,063.82	7,011.82	7,063.82	118.66	243.06	-91.61	-2,673.47	-8,961.28	4,774.63	4,490.66	283.97	16.814		
11,300.00	7,063.49	7,011.49	7,063.49	121.39	243.05	-91.58	-2,673.47	-8,961.28	4,675.30	4,391.22	284.08	16.458		
11,400.00	7,063.17	7,011.17	7,063.17	124.12	243.04	-91.54	-2,673.47	-8,961.28	4,576.00	4,291.80	284.21	16.101		
11,500.00	7,062.84	7,010.84	7,062.84	126.86	243.03	-91.51	-2,673.47	-8,961.28	4,476.74	4,192.39	284.35	15.744		
11,600.00	7,062.52	7,010.52	7,062.52	129.60	243.01	-91.48	-2,673.47	-8,961.28	4,377.51	4,093.00	284.50	15.386		
11,700.00	7,062.19	7,010.19	7,062.19	132.35	243.00	-91.44	-2,673.47	-8,961.28	4,278.31	3,993.63	284.68	15.029		
11,800.00	7,061.87	7,009.87	7,061.87	135.10	242.99	-91.41	-2,673.47	-8,961.28	4,179.15	3,894.28	284.87	14.670		
11,900.00	7,061.54	7,009.54	7,061.54	137.85	242.98	-91.37	-2,673.47	-8,961.28	4,080.04	3,794.94	285.09	14.311		
12,000.00	7,061.22	7,009.22	7,061.22	140.61	242.97	-91.34	-2,673.47	-8,961.28	3,980.96	3,695.63	285.34	13.952		
12,100.00	7,060.89	7,008.89	7,060.89	143.38	242.96	-91.31	-2,673.47	-8,961.28	3,881.94	3,596.33	285.61	13.592		
12,200.00	7,060.57	7,008.57	7,060.57	146.15	242.95	-91.27	-2,673.47	-8,961.28	3,782.96	3,497.06	285.91	13.231		
12,300.00	7,060.24	7,008.24	7,060.24	148.92	242.93	-91.24	-2,673.47	-8,961.28	3,684.05	3,397.80	286.24	12.870		
12,400.00	7,059.92	7,007.92	7,059.92	151.69	242.92	-91.20	-2,673.47	-8,961.28	3,585.19	3,298.57	286.62	12.509		
12,500.00	7,059.59	7,007.59	7,059.59	154.47	242.91	-91.17	-2,673.47	-8,961.28	3,486.39	3,199.36	287.04	12.146		
12,600.00	7,059.27	7,007.27	7,059.27	157.25	242.90	-91.14	-2,673.47	-8,961.28	3,387.67	3,100.17	287.50	11.783		
12,700.00	7,058.94	7,006.94	7,058.94	160.03	242.89	-91.10	-2,673.47	-8,961.28	3,289.03	3,001.01	288.02	11.420		
12,800.00	7,058.62	7,006.62	7,058.62	162.82	242.88	-91.07	-2,673.47	-8,961.28	3,190.46	2,901.87	288.59	11.055		
12,900.00	7,058.29	7,006.29	7,058.29	165.61	242.87	-91.03	-2,673.47	-8,961.28	3,092.00	2,802.76	289.23	10.690		
13,000.00	7,057.97	7,005.97	7,057.97	168.40	242.86	-91.00	-2,673.47	-8,961.28	2,993.63	2,703.68	289.95	10.325		
13,100.00	7,057.64	7,005.64	7,057.64	171.19	242.84	-90.97	-2,673.47	-8,961.28	2,895.37	2,604.62	290.75	9.958		
13,200.00	7,057.32	7,005.32	7,057.32	173.99	242.83	-90.93	-2,673.47	-8,961.28	2,797.24	2,505.59	291.65	9.591		
13,300.00	7,057.00	7,005.00	7,057.00	176.78	242.82	-90.90	-2,673.47	-8,961.28	2,699.25	2,406.59	292.65	9.223		
13,400.00	7,056.67	7,004.67	7,056.67	179.58	242.81	-90.86	-2,673.47	-8,961.28	2,601.40	2,307.63	293.77	8.855		
13,500.00	7,056.35	7,004.35	7,056.35	182.38	242.80	-90.83	-2,673.47	-8,961.28	2,503.73	2,208.70	295.03	8.486		
13,600.00	7,056.02	7,004.02	7,056.02	185.19	242.79	-90.80	-2,673.47	-8,961.28	2,406.25	2,109.80	296.45	8.117		
13,700.00	7,055.70	7,003.70	7,055.70	187.99	242.78	-90.76	-2,673.47	-8,961.28	2,308.99	2,010.95	298.04	7.747		
13,800.00	7,055.37	7,003.37	7,055.37	190.80	242.76	-90.73	-2,673.47	-8,961.28	2,211.96	1,912.14	299.83	7.377		
13,900.00	7,055.05	7,003.05	7,055.05	193.60	242.75	-90.69	-2,673.47	-8,961.28	2,115.22	1,813.37	301.85	7.008		
14,000.00	7,054.72	7,002.72	7,054.72	196.41	242.74	-90.66	-2,673.47	-8,961.28	2,018.79	1,714.66	304.13	6.638		
14,100.00	7,054.40	7,002.40	7,054.40	199.22	242.73	-90.63	-2,673.47	-8,961.28	1,922.73	1,616.02	306.72	6.269		
14,200.00	7,054.07	7,002.07	7,054.07	202.03	242.72	-90.59	-2,673.47	-8,961.28	1,827.09	1,517.44	309.65	5.900		
14,300.00	7,053.75	7,001.75	7,053.75	204.85	242.71	-90.56	-2,673.47	-8,961.28	1,731.95	1,418.96	312.99	5.534		
14,400.00	7,053.42	7,001.42	7,053.42	207.66	242.70	-90.52	-2,673.47	-8,961.28	1,637.38	1,320.58	316.80	5.168		
14,500.00	7,053.10	7,001.10	7,053.10	210.48	242.69	-90.49	-2,673.47	-8,961.28	1,543.50	1,222.34	321.16	4.806		
14,600.00	7,052.77	7,000.77	7,052.77	213.29	242.67	-90.46	-2,673.47	-8,961.28	1,450.43	1,124.28	326.16	4.447		
14,700.00	7,052.45	7,000.45	7,052.45	216.11	242.66	-90.42	-2,673.47	-8,961.28	1,358.35	1,026.44	331.91	4.093		
14,800.00	7,052.12	7,000.12	7,052.12	218.93	242.65	-90.39	-2,673.47	-8,961.28	1,267.48	928.92	338.56	3.744		
14,900.00	7,051.80	7,000.20	7,051.80	221.75	242.65	-90.35	-2,673.47	-8,961.28	1,178.08	831.81	346.27	3.402		
15,000.00	7,051.47	7,000.53	7,051.47	224.57	242.67	-90.32	-2,673.47	-8,961.28	1,090.52	735.30	355.22	3.070		
15,100.00	7,051.15	7,000.85	7,051.15	227.39	242.68	-90.29	-2,673.47	-8,961.28	1,005.29	639.65	365.64	2.749		
15,145.13	7,051.00	7,001.00	7,051.00	228.67	242.68	-90.27	-2,673.47	-8,961.28	967.75	596.88	370.87	2.609 CC, ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 121-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-106.36	-2,640.31	-8,993.53	9,373.16					
100.00	100.00	29.60	64.60	3.28	3.28	-106.36	-2,640.38	-8,993.57	9,373.22	9,366.65	6.57	1,427.686		
200.00	200.00	75.14	110.14	3.34	3.28	-106.36	-2,640.73	-8,993.79	9,373.89	9,367.27	6.62	1,415.835		
300.00	299.98	121.00	155.99	3.44	3.29	69.24	-2,641.40	-8,994.19	9,374.52	9,367.79	6.73	1,393.263		
400.00	399.84	165.87	200.85	3.59	3.31	69.25	-2,642.17	-8,994.82	9,374.49	9,367.59	6.90	1,358.963		
500.00	499.45	208.00	242.97	3.79	3.34	69.28	-2,642.85	-8,995.67	9,373.82	9,366.69	7.13	1,315.436		
600.00	598.70	208.00	242.97	4.03	3.34	69.30	-2,642.85	-8,995.67	9,372.77	9,365.40	7.37	1,271.516		
700.00	697.47	256.89	291.82	4.31	3.39	69.37	-2,643.45	-8,997.28	9,371.02	9,363.31	7.70	1,216.659		
800.00	795.62	300.00	334.88	4.64	3.44	69.46	-2,643.74	-8,999.46	9,369.08	9,361.01	8.08	1,159.927		
900.00	893.06	300.00	334.88	5.00	3.44	69.51	-2,643.74	-8,999.46	9,366.58	9,358.14	8.44	1,109.830		
1,000.00	989.64	300.00	334.88	5.40	3.44	69.56	-2,643.74	-8,999.46	9,363.91	9,355.08	8.84	1,059.587		
1,100.00	1,085.27	351.36	386.12	5.83	3.52	69.70	-2,643.68	-9,003.02	9,360.54	9,351.20	9.34	1,002.401		
1,200.00	1,180.44	391.00	425.60	6.29	3.59	69.78	-2,643.27	-9,006.47	9,357.67	9,347.81	9.86	949.313		
1,300.00	1,275.61	391.00	425.60	6.76	3.59	69.78	-2,643.27	-9,006.47	9,355.53	9,345.20	10.33	905.434		
1,400.00	1,370.78	391.00	425.60	7.26	3.59	69.78	-2,643.27	-9,006.47	9,354.46	9,343.64	10.82	864.316		
1,500.00	1,465.95	446.11	480.39	7.76	3.70	69.89	-2,642.13	-9,012.28	9,353.82	9,342.40	11.42	818.782		
1,502.41	1,468.25	446.68	480.96	7.77	3.70	69.89	-2,642.12	-9,012.34	9,353.82	9,342.38	11.44	817.825		
1,600.00	1,561.12	481.00	515.00	8.27	3.78	69.97	-2,641.05	-9,016.56	9,354.24	9,342.24	12.00	779.219		
1,700.00	1,656.29	481.00	515.00	8.80	3.78	69.97	-2,641.05	-9,016.56	9,355.48	9,342.95	12.52	747.059		
1,800.00	1,751.46	520.08	553.69	9.32	3.88	70.05	-2,639.59	-9,021.86	9,357.48	9,344.35	13.13	712.456		
1,900.00	1,846.63	572.00	604.97	9.86	4.02	70.17	-2,637.35	-9,029.65	9,360.47	9,346.68	13.79	678.917		
2,000.00	1,941.80	572.00	604.97	10.40	4.02	70.17	-2,637.35	-9,029.65	9,364.00	9,349.68	14.32	653.914		
2,100.00	2,036.96	572.00	604.97	10.94	4.02	70.17	-2,637.35	-9,029.65	9,368.60	9,353.74	14.86	630.650		
2,200.00	2,132.13	572.00	604.97	11.49	4.02	70.17	-2,637.35	-9,029.65	9,374.26	9,358.87	15.39	608.987		
2,300.00	2,227.30	633.80	665.79	12.04	4.23	70.31	-2,634.39	-9,040.17	9,380.08	9,363.98	16.10	582.606		
2,400.00	2,322.47	693.00	723.80	12.59	4.44	70.45	-2,631.36	-9,051.62	9,387.51	9,370.69	16.81	558.333		
2,500.00	2,417.64	693.00	723.80	13.15	4.44	70.45	-2,631.36	-9,051.62	9,395.16	9,377.81	17.35	541.399		
2,600.00	2,512.81	693.00	723.80	13.70	4.44	70.45	-2,631.36	-9,051.62	9,403.87	9,385.98	17.89	525.547		
2,700.00	2,607.98	720.67	750.83	14.26	4.55	70.51	-2,629.96	-9,057.38	9,413.49	9,394.96	18.52	508.258		
2,800.00	2,703.15	761.00	790.15	14.82	4.72	70.61	-2,628.12	-9,066.15	9,423.96	9,404.77	19.19	491.023		
2,900.00	2,798.32	761.00	790.15	15.38	4.72	70.61	-2,628.12	-9,066.15	9,435.17	9,415.44	19.73	478.220		
3,000.00	2,893.49	804.74	832.68	15.95	4.92	70.71	-2,625.99	-9,076.12	9,447.13	9,426.70	20.43	462.482		
3,100.00	2,988.66	855.00	881.38	16.51	5.16	70.83	-2,622.85	-9,088.16	9,459.89	9,438.75	21.14	447.517		
3,200.00	3,083.83	855.00	881.38	17.07	5.16	70.83	-2,622.85	-9,088.16	9,473.31	9,451.64	21.67	437.145		
3,300.00	3,179.00	855.00	881.38	17.64	5.16	70.83	-2,622.85	-9,088.16	9,487.77	9,465.57	22.20	427.361		
3,400.00	3,274.17	907.18	931.70	18.21	5.44	70.97	-2,619.15	-9,101.45	9,502.65	9,479.72	22.93	414.401		
3,500.00	3,369.34	949.00	971.84	18.77	5.67	71.07	-2,616.10	-9,112.77	9,518.67	9,495.03	23.63	402.778		
3,600.00	3,464.51	949.00	971.84	19.34	5.67	71.07	-2,616.10	-9,112.77	9,535.31	9,511.16	24.15	394.761		
3,700.00	3,559.68	995.05	1,015.88	19.91	5.95	71.19	-2,612.42	-9,125.70	9,552.76	9,527.88	24.87	384.039		
3,800.00	3,654.84	1,044.00	1,062.55	20.48	6.25	71.32	-2,607.90	-9,139.79	9,570.80	9,545.19	25.61	373.673		
3,900.00	3,750.01	1,044.00	1,062.55	21.05	6.25	71.32	-2,607.90	-9,139.79	9,589.61	9,563.48	26.13	367.058		
4,000.00	3,845.18	1,086.57	1,102.96	21.62	6.54	71.43	-2,603.62	-9,152.45	9,609.05	9,582.21	26.84	358.030		
4,100.00	3,940.35	1,139.00	1,152.47	22.19	6.90	71.58	-2,598.15	-9,168.81	9,629.55	9,601.95	27.60	348.853		
4,200.00	4,035.52	1,139.00	1,152.47	22.76	6.90	71.58	-2,598.15	-9,168.81	9,650.49	9,622.38	28.11	343.364		
4,300.00	4,130.69	1,139.00	1,152.47	23.33	6.90	71.58	-2,598.15	-9,168.81	9,672.41	9,643.81	28.60	338.152		
4,400.00	4,225.86	1,176.53	1,187.71	23.91	7.18	71.68	-2,593.99	-9,181.02	9,695.04	9,665.75	29.29	330.950		
4,500.00	4,321.03	1,198.99	1,208.71	24.48	7.35	71.74	-2,591.35	-9,188.54	9,718.49	9,688.58	29.90	324.986		
4,600.00	4,416.20	1,234.00	1,241.31	25.05	7.62	71.84	-2,586.99	-9,200.56	9,742.74	9,712.16	30.58	318.604		
4,700.00	4,511.37	1,234.00	1,241.31	25.62	7.62	71.84	-2,586.99	-9,200.56	9,767.72	9,736.66	31.06	314.470		
4,800.00	4,606.54	1,234.00	1,241.31	26.20	7.62	71.84	-2,586.99	-9,200.56	9,793.65	9,762.11	31.54	310.539		
4,900.00	4,701.71	1,283.88	1,287.46	26.77	8.04	71.99	-2,580.47	-9,218.32	9,820.01	9,787.71	32.30	304.061		
5,000.00	4,796.88	1,329.00	1,328.91	27.34	8.42	72.12	-2,574.36	-9,235.05	9,847.45	9,814.42	33.03	298.152		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 121-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	1,329.00	1,328.91	27.92	8.42	72.12	-2,574.36	-9,235.05	9,875.40	9,841.90	33.49	294.863		
5,200.00	4,987.22	1,329.00	1,328.91	28.49	8.42	72.12	-2,574.36	-9,235.05	9,904.28	9,870.33	33.95	291.734		
5,300.00	5,082.39	1,366.11	1,362.79	29.07	8.76	72.23	-2,569.15	-9,249.26	9,933.80	9,899.17	34.63	286.835		
5,400.00	5,177.56	1,386.78	1,381.58	29.64	8.95	72.29	-2,566.16	-9,257.35	9,964.12	9,928.91	35.21	282.989		
5,500.00	5,272.72	1,423.00	1,414.34	30.21	9.29	72.40	-2,560.77	-9,271.82	9,995.23	9,959.34	35.88	278.553		
7,900.00	7,074.54	3,414.00	3,220.47	42.34	30.15	-2.84	-2,323.46	-10,074.49	9,934.04	9,876.29	57.75	172.017		
8,000.00	7,074.21	3,414.00	3,220.47	43.27	30.15	-2.84	-2,323.46	-10,074.49	9,841.85	9,784.06	57.78	170.326		
8,100.00	7,073.89	3,446.67	3,250.29	44.47	30.49	-2.81	-2,319.72	-10,087.30	9,749.73	9,691.68	58.05	167.949		
8,200.00	7,073.57	3,477.07	3,278.04	45.91	30.81	-2.78	-2,316.33	-10,099.24	9,657.65	9,599.34	58.31	165.628		
8,300.00	7,073.24	3,509.00	3,307.19	47.53	31.15	-2.74	-2,312.88	-10,111.81	9,565.61	9,507.03	58.58	163.284		
8,400.00	7,072.92	3,550.74	3,345.28	49.31	31.59	-2.70	-2,308.29	-10,128.25	9,473.58	9,414.65	58.93	160.757		
8,500.00	7,072.59	3,594.32	3,385.02	51.20	32.04	-2.65	-2,303.17	-10,145.39	9,381.53	9,322.23	59.30	158.215		
8,600.00	7,072.27	3,626.47	3,414.32	53.19	32.38	-2.61	-2,299.26	-10,158.03	9,289.47	9,229.89	59.59	155.900		
8,700.00	7,071.94	3,835.96	3,606.08	55.27	34.55	-2.34	-2,275.00	-10,238.79	9,197.14	9,136.03	61.11	150.503		
8,800.00	7,071.62	3,852.71	3,621.46	57.43	34.72	-2.32	-2,273.03	-10,245.12	9,104.44	9,043.15	61.30	148.534		
8,900.00	7,071.29	3,887.00	3,652.90	59.64	35.07	-2.27	-2,268.91	-10,258.17	9,011.87	8,950.27	61.61	146.283		
9,000.00	7,070.97	3,887.00	3,652.90	61.92	35.07	-2.27	-2,268.91	-10,258.17	8,919.31	8,857.63	61.69	144.588		
9,100.00	7,070.64	3,887.00	3,652.90	64.24	35.07	-2.27	-2,268.91	-10,258.17	8,826.92	8,765.14	61.78	142.885		
9,200.00	7,070.32	3,915.44	3,678.91	66.61	35.37	-2.22	-2,265.45	-10,269.13	8,734.57	8,672.50	62.06	140.733		
9,300.00	7,069.99	3,930.04	3,692.24	69.01	35.53	-2.20	-2,263.70	-10,274.81	8,642.35	8,580.09	62.26	138.800		
9,400.00	7,069.67	3,944.83	3,705.74	71.45	35.68	-2.18	-2,261.93	-10,280.61	8,550.25	8,487.78	62.47	136.867		
9,500.00	7,069.34	3,982.00	3,739.58	73.92	36.07	-2.12	-2,257.54	-10,295.34	8,458.33	8,395.49	62.83	134.614		
9,600.00	7,069.02	3,982.00	3,739.58	76.42	36.07	-2.12	-2,257.54	-10,295.34	8,366.38	8,303.43	62.95	132.898		
9,700.00	7,068.69	3,982.00	3,739.58	78.95	36.07	-2.12	-2,257.54	-10,295.34	8,274.62	8,211.54	63.08	131.177		
9,800.00	7,068.37	4,018.49	3,772.74	81.49	36.47	-2.07	-2,253.24	-10,309.96	8,182.91	8,119.45	63.46	128.953		
9,900.00	7,068.04	7,266.18	6,885.98	84.06	57.54	24.77	-2,067.75	-11,003.44	8,083.58	8,006.24	77.34	104.523		
10,000.00	7,067.72	7,267.21	6,887.00	86.65	57.54	24.91	-2,067.77	-11,003.47	7,983.60	7,906.23	77.38	103.180		
10,100.00	7,067.39	7,268.25	6,888.05	89.25	57.54	25.05	-2,067.79	-11,003.49	7,883.63	7,806.21	77.41	101.837		
10,200.00	7,067.07	7,269.31	6,889.10	91.87	57.54	25.20	-2,067.82	-11,003.52	7,783.65	7,706.19	77.45	100.493		
10,300.00	7,066.74	7,270.37	6,890.16	94.50	57.55	25.34	-2,067.84	-11,003.54	7,683.67	7,606.18	77.50	99.150		
10,400.00	7,066.42	7,271.45	6,891.24	97.14	57.55	25.49	-2,067.87	-11,003.56	7,583.70	7,506.16	77.54	97.807		
10,500.00	7,066.09	7,272.55	6,892.34	99.80	57.55	25.65	-2,067.89	-11,003.59	7,483.72	7,406.14	77.58	96.464		
10,600.00	7,065.77	7,273.65	6,893.44	102.47	57.55	25.81	-2,067.92	-11,003.62	7,383.75	7,306.12	77.62	95.121		
10,700.00	7,065.44	7,274.77	6,894.56	105.15	57.56	25.97	-2,067.94	-11,003.64	7,283.77	7,206.10	77.67	93.779		
10,800.00	7,065.12	7,275.91	6,895.69	107.83	57.56	26.14	-2,067.97	-11,003.67	7,183.80	7,106.08	77.72	92.436		
10,900.00	7,064.79	7,277.05	6,896.84	110.53	57.56	26.31	-2,068.00	-11,003.70	7,083.82	7,006.06	77.76	91.094		
11,000.00	7,064.47	7,278.22	6,898.00	113.23	57.56	26.48	-2,068.03	-11,003.72	6,983.85	6,906.04	77.81	89.752		
11,100.00	7,064.14	7,279.39	6,899.18	115.95	57.57	26.66	-2,068.05	-11,003.75	6,883.87	6,806.01	77.86	88.410		
11,200.00	7,063.82	7,280.59	6,900.37	118.66	57.57	26.85	-2,068.08	-11,003.78	6,783.90	6,705.99	77.91	87.069		
11,300.00	7,063.49	7,281.80	6,901.58	121.39	57.57	27.03	-2,068.11	-11,003.81	6,683.93	6,605.96	77.97	85.729		
11,400.00	7,063.17	7,283.02	6,902.80	124.12	57.58	27.23	-2,068.14	-11,003.84	6,583.96	6,505.94	78.02	84.389		
11,500.00	7,062.84	7,284.26	6,904.04	126.86	57.58	27.43	-2,068.17	-11,003.87	6,483.99	6,405.91	78.07	83.049		
11,600.00	7,062.52	7,285.52	6,905.30	129.60	57.58	27.63	-2,068.20	-11,003.90	6,384.01	6,305.88	78.13	81.710		
11,700.00	7,062.19	7,286.79	6,906.57	132.35	57.59	27.84	-2,068.23	-11,003.93	6,284.04	6,205.86	78.19	80.372		
11,800.00	7,061.87	7,288.08	6,907.86	135.10	57.59	28.06	-2,068.27	-11,003.97	6,184.07	6,105.83	78.25	79.034		
11,900.00	7,061.54	7,289.39	6,909.17	137.85	57.59	28.28	-2,068.30	-11,004.00	6,084.10	6,005.80	78.31	77.697		
12,000.00	7,061.22	7,290.71	6,910.49	140.61	57.59	28.51	-2,068.33	-11,004.03	5,984.13	5,905.77	78.37	76.361		
12,100.00	7,060.89	7,292.05	6,911.83	143.38	57.60	28.75	-2,068.37	-11,004.07	5,884.17	5,805.74	78.43	75.026		
12,200.00	7,060.57	7,293.41	6,913.19	146.15	57.60	28.99	-2,068.40	-11,004.10	5,784.20	5,705.71	78.49	73.692		
12,300.00	7,060.24	7,294.79	6,914.57	148.92	57.60	29.24	-2,068.44	-11,004.14	5,684.23	5,605.67	78.56	72.358		
12,400.00	7,059.92	7,296.19	6,915.97	151.69	57.61	29.50	-2,068.47	-11,004.17	5,584.26	5,505.64	78.62	71.026		
12,500.00	7,059.59	7,297.61	6,917.39	154.47	57.61	29.77	-2,068.51	-11,004.21	5,484.30	5,405.61	78.69	69.694		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

<b>Offset Design</b> HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH												<b>Offset Site Error:</b>	0.00 ft
Survey Program: 121-MWD												<b>Offset Well Error:</b>	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
12,600.00	7,059.27	7,299.05	6,918.83	157.25	57.61	30.04	-2,068.55	-11,004.25	5,384.33	5,305.57	78.76	68.364	
12,700.00	7,058.94	7,300.51	6,920.28	160.03	57.62	30.33	-2,068.58	-11,004.28	5,284.37	5,205.54	78.83	67.034	
12,800.00	7,058.62	7,301.99	6,921.76	162.82	57.62	30.62	-2,068.62	-11,004.32	5,184.40	5,105.50	78.90	65.706	
12,900.00	7,058.29	7,303.49	6,923.26	165.61	57.63	30.92	-2,068.66	-11,004.36	5,084.44	5,005.46	78.98	64.379	
13,000.00	7,057.97	7,305.01	6,924.78	168.40	57.63	31.24	-2,068.70	-11,004.40	4,984.48	4,905.43	79.05	63.053	
13,100.00	7,057.64	7,306.56	6,926.33	171.19	57.63	31.56	-2,068.75	-11,004.45	4,884.52	4,805.39	79.13	61.729	
13,200.00	7,057.32	7,308.13	6,927.90	173.99	57.64	31.89	-2,068.79	-11,004.49	4,784.55	4,705.35	79.21	60.405	
13,300.00	7,057.00	7,309.72	6,929.49	176.78	57.64	32.24	-2,068.83	-11,004.53	4,684.59	4,605.31	79.29	59.083	
13,400.00	7,056.67	7,311.33	6,931.10	179.58	57.64	32.60	-2,068.88	-11,004.58	4,584.63	4,505.26	79.37	57.763	
13,500.00	7,056.35	7,312.97	6,932.74	182.38	57.65	32.97	-2,068.92	-11,004.62	4,484.68	4,405.22	79.45	56.443	
13,600.00	7,056.02	7,314.64	6,934.40	185.19	57.65	33.36	-2,068.97	-11,004.67	4,384.72	4,305.18	79.54	55.126	
13,700.00	7,055.70	7,316.33	6,936.09	187.99	57.66	33.76	-2,069.01	-11,004.72	4,284.76	4,205.13	79.63	53.809	
13,800.00	7,055.37	7,318.04	6,937.80	190.80	57.66	34.18	-2,069.06	-11,004.76	4,184.81	4,105.09	79.72	52.495	
13,900.00	7,055.05	7,319.79	6,939.54	193.60	57.66	34.61	-2,069.11	-11,004.81	4,084.85	4,005.04	79.81	51.181	
14,000.00	7,054.72	7,321.55	6,941.31	196.41	57.67	35.06	-2,069.16	-11,004.87	3,984.90	3,904.99	79.91	49.870	
14,100.00	7,054.40	7,323.35	6,943.11	199.22	57.67	35.53	-2,069.21	-11,004.92	3,884.95	3,804.94	80.00	48.560	
14,200.00	7,054.07	7,325.18	6,944.93	202.03	57.68	36.01	-2,069.27	-11,004.97	3,785.00	3,704.89	80.10	47.251	
14,300.00	7,053.75	7,327.03	6,946.79	204.85	57.68	36.52	-2,069.32	-11,005.02	3,685.05	3,604.84	80.21	45.944	
14,400.00	7,053.42	7,328.92	6,948.67	207.66	57.69	37.05	-2,069.37	-11,005.08	3,585.10	3,504.79	80.31	44.639	
14,500.00	7,053.10	7,330.83	6,950.58	210.48	57.69	37.60	-2,069.43	-11,005.14	3,485.15	3,404.73	80.42	43.336	
14,600.00	7,052.77	7,332.78	6,952.53	213.29	57.70	38.18	-2,069.49	-11,005.20	3,385.21	3,304.67	80.53	42.034	
14,700.00	7,052.45	7,334.76	6,954.51	216.11	57.70	38.78	-2,069.55	-11,005.25	3,285.27	3,204.61	80.65	40.734	
14,800.00	7,052.12	7,336.77	6,956.52	218.93	57.71	39.41	-2,069.61	-11,005.32	3,185.33	3,104.55	80.77	39.436	
14,900.00	7,051.80	7,338.82	6,958.56	221.75	57.71	40.07	-2,069.67	-11,005.38	3,085.39	3,004.49	80.90	38.139	
15,000.00	7,051.47	7,340.90	6,960.64	224.57	57.72	40.76	-2,069.73	-11,005.44	2,985.45	2,904.42	81.03	36.845	
15,100.00	7,051.15	7,343.01	6,962.75	227.39	57.72	41.48	-2,069.80	-11,005.51	2,885.51	2,804.35	81.16	35.552	
15,145.13	7,051.00	7,343.98	6,963.72	228.67	57.72	41.82	-2,069.83	-11,005.54	2,840.42	2,759.19	81.23	34.969 CC, ES, SF	





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-106.36	-2,631.22	-8,960.99	9,339.37					
100.00	100.00	0.00	35.00	3.28	3.28	-106.36	-2,631.22	-8,960.99	9,339.53	9,332.96	6.56	1,422.646		
200.00	200.00	58.40	93.40	3.34	3.28	-106.37	-2,631.60	-8,961.22	9,340.24	9,333.62	6.62	1,410.961		
300.00	299.98	577.00	611.23	3.44	3.96	69.41	-2,617.01	-8,960.08	9,339.01	9,331.60	7.41	1,260.269		
400.00	399.84	577.00	611.23	3.59	3.96	69.50	-2,617.01	-8,960.08	9,334.37	9,326.82	7.55	1,235.858		
500.00	499.45	625.05	658.91	3.79	4.09	69.66	-2,611.04	-8,960.70	9,329.21	9,321.33	7.88	1,184.282		
600.00	598.70	667.00	700.45	4.03	4.21	69.83	-2,605.36	-8,961.80	9,323.62	9,315.38	8.24	1,131.903		
700.00	697.47	750.21	782.67	4.31	4.47	70.10	-2,592.92	-8,964.64	9,317.31	9,308.53	8.79	1,060.412		
800.00	795.62	927.66	957.31	4.64	5.15	70.63	-2,562.10	-8,970.71	9,309.26	9,299.47	9.78	951.419		
900.00	893.06	1,010.64	1,038.49	5.00	5.51	71.02	-2,545.18	-8,973.98	9,299.99	9,289.48	10.51	885.047		
1,000.00	989.64	1,096.63	1,122.08	5.40	5.93	71.46	-2,525.44	-8,978.06	9,289.89	9,278.57	11.32	820.934		
1,100.00	1,085.27	1,165.71	1,188.81	5.83	6.30	71.88	-2,508.00	-8,981.80	9,278.97	9,266.86	12.10	766.550		
1,200.00	1,180.44	1,228.00	1,248.64	6.29	6.64	72.09	-2,491.12	-8,985.68	9,268.11	9,255.21	12.90	718.368		
1,300.00	1,275.61	1,287.60	1,305.53	6.76	7.00	72.30	-2,473.86	-8,989.83	9,257.78	9,244.05	13.73	674.170		
1,400.00	1,370.78	1,353.47	1,367.95	7.26	7.42	72.53	-2,453.42	-8,994.84	9,247.92	9,233.29	14.64	631.849		
1,500.00	1,465.95	1,417.00	1,427.69	7.76	7.85	72.77	-2,432.46	-9,000.11	9,238.59	9,223.03	15.56	593.758		
1,600.00	1,561.12	1,444.19	1,453.14	8.27	8.04	72.88	-2,423.18	-9,002.55	9,229.93	9,213.67	16.26	567.569		
1,700.00	1,656.29	1,472.36	1,479.44	8.80	8.24	72.98	-2,413.46	-9,005.25	9,222.11	9,205.13	16.98	543.068		
1,800.00	1,751.46	1,512.00	1,516.35	9.32	8.53	73.14	-2,399.62	-9,009.35	9,215.15	9,197.36	17.79	517.942		
1,900.00	1,846.63	1,543.16	1,545.30	9.86	8.76	73.26	-2,388.59	-9,012.76	9,208.96	9,190.40	18.56	496.240		
2,000.00	1,941.80	1,596.29	1,594.50	10.40	9.17	73.47	-2,369.47	-9,018.75	9,203.44	9,183.94	19.50	472.036		
2,100.00	2,036.96	1,638.17	1,633.16	10.94	9.50	73.63	-2,354.12	-9,023.65	9,198.59	9,178.23	20.37	451.643		
2,200.00	2,132.13	1,676.82	1,668.70	11.49	9.81	73.79	-2,339.69	-9,028.39	9,194.51	9,173.29	21.22	433.320		
2,300.00	2,227.30	1,701.00	1,690.87	12.04	10.01	73.89	-2,330.53	-9,031.46	9,191.21	9,169.25	21.96	418.610		
2,400.00	2,322.47	1,752.21	1,737.63	12.59	10.44	74.10	-2,310.79	-9,038.24	9,188.65	9,165.71	22.94	400.630		
2,500.00	2,417.64	1,796.00	1,777.41	13.15	10.81	74.28	-2,293.54	-9,044.34	9,186.89	9,163.04	23.85	385.123		
2,600.00	2,512.81	1,915.06	1,884.93	13.70	11.88	74.78	-2,245.18	-9,060.94	9,185.53	9,160.06	25.47	360.635		
2,700.00	2,607.98	1,978.20	1,941.66	14.26	12.47	75.05	-2,218.89	-9,069.73	9,184.54	9,157.93	26.60	345.280		
2,793.37	2,696.84	2,018.09	1,977.43	14.78	12.84	75.22	-2,202.14	-9,075.37	9,184.20	9,156.71	27.48	334.158		
2,800.00	2,703.15	2,020.63	1,979.70	14.82	12.86	75.23	-2,201.07	-9,075.73	9,184.20	9,156.65	27.54	333.429		
2,900.00	2,798.32	2,058.83	2,013.93	15.38	13.23	75.39	-2,185.05	-9,081.29	9,184.64	9,156.19	28.45	322.820		
3,000.00	2,893.49	2,133.13	2,080.46	15.95	13.94	75.71	-2,153.88	-9,092.32	9,185.83	9,156.12	29.71	309.223		
3,100.00	2,988.66	2,214.70	2,153.41	16.51	14.73	76.06	-2,119.36	-9,104.22	9,187.30	9,156.26	31.04	295.991		
3,200.00	3,083.83	2,264.74	2,198.11	17.07	15.21	76.28	-2,098.11	-9,111.62	9,189.43	9,157.36	32.07	286.543		
3,300.00	3,179.00	2,311.09	2,239.49	17.64	15.67	76.48	-2,078.44	-9,118.60	9,192.27	9,159.20	33.07	278.003		
3,400.00	3,274.17	2,356.80	2,280.33	18.21	16.12	76.67	-2,059.15	-9,125.60	9,195.83	9,161.78	34.05	270.040		
3,500.00	3,369.34	2,393.28	2,312.95	18.77	16.48	76.83	-2,043.84	-9,131.29	9,200.14	9,165.20	34.95	263.246		
3,600.00	3,464.51	2,426.44	2,342.61	19.34	16.81	76.97	-2,030.00	-9,136.60	9,205.28	9,169.47	35.81	257.067		
3,700.00	3,559.68	2,464.00	2,376.22	19.91	17.18	77.13	-2,014.42	-9,142.79	9,211.23	9,174.52	36.71	250.918		
3,800.00	3,654.84	2,536.42	2,441.05	20.48	17.90	77.44	-1,984.48	-9,154.85	9,217.85	9,179.90	37.95	242.866		
3,900.00	3,750.01	2,599.38	2,497.49	21.05	18.52	77.71	-1,958.59	-9,165.31	9,224.96	9,185.86	39.10	235.928		
4,000.00	3,845.18	2,671.24	2,562.06	21.62	19.23	78.01	-1,929.46	-9,177.35	9,232.69	9,192.36	40.33	228.915		
4,100.00	3,940.35	2,860.94	2,731.35	22.19	21.15	78.82	-1,849.48	-9,207.78	9,240.25	9,197.48	42.76	216.074		
4,200.00	4,035.52	2,893.10	2,759.81	22.76	21.49	78.96	-1,835.40	-9,212.89	9,248.23	9,204.61	43.62	212.013		
4,300.00	4,130.69	2,939.56	2,800.87	23.33	21.98	79.16	-1,815.01	-9,220.37	9,256.93	9,212.31	44.62	207.468		
4,400.00	4,225.86	3,159.74	2,997.81	23.91	24.22	80.10	-1,722.62	-9,254.33	9,265.69	9,218.33	47.36	195.644		
4,500.00	4,321.03	3,209.18	3,041.89	24.48	24.73	80.31	-1,701.43	-9,261.62	9,274.43	9,226.05	48.37	191.722		
4,600.00	4,416.20	3,255.81	3,083.38	25.05	25.21	80.51	-1,681.35	-9,268.61	9,283.86	9,234.51	49.36	188.103		
4,700.00	4,511.37	3,302.49	3,125.11	25.62	25.68	80.71	-1,661.68	-9,275.74	9,294.01	9,243.67	50.33	184.652		
4,800.00	4,606.54	3,434.34	3,243.58	26.20	27.01	81.26	-1,607.32	-9,295.58	9,304.40	9,252.25	52.15	178.408		
4,900.00	4,701.71	3,478.65	3,283.49	26.77	27.46	81.45	-1,589.26	-9,302.23	9,315.27	9,262.19	53.09	175.470		
5,000.00	4,796.88	3,527.00	3,327.09	27.34	27.94	81.65	-1,569.68	-9,309.63	9,326.85	9,272.79	54.06	172.531		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	3,579.75	3,374.57	27.92	28.47	81.86	-1,548.22	-9,317.82	9,339.07	9,284.00	55.07	169.585		
5,200.00	4,987.22	3,692.24	3,475.71	28.49	29.61	82.33	-1,502.18	-9,335.24	9,351.78	9,295.10	56.68	164.999		
5,300.00	5,082.39	3,775.27	3,550.57	29.07	30.43	82.67	-1,468.54	-9,347.85	9,364.69	9,306.71	57.98	161.516		
5,400.00	5,177.56	3,857.52	3,624.77	29.64	31.26	83.01	-1,435.29	-9,360.27	9,378.00	9,318.73	59.27	158.217		
5,500.00	5,272.72	3,881.00	3,645.87	30.21	31.49	83.11	-1,425.62	-9,363.78	9,391.88	9,331.90	59.98	156.594		
5,600.00	5,367.89	3,926.80	3,686.85	30.79	31.97	83.30	-1,406.40	-9,370.80	9,406.46	9,345.55	60.91	154.425		
5,700.00	5,463.06	3,976.00	3,730.52	31.36	32.49	83.51	-1,385.16	-9,378.70	9,422.02	9,360.14	61.88	152.266		
5,800.00	5,558.23	3,976.00	3,730.52	31.94	32.49	83.51	-1,385.16	-9,378.70	9,438.25	9,375.92	62.33	151.425		
5,900.00	5,653.40	4,006.01	3,756.98	32.51	32.81	83.64	-1,371.91	-9,383.70	9,455.40	9,392.30	63.10	149.851		
6,000.00	5,748.57	4,032.62	3,780.33	33.09	33.11	83.75	-1,360.00	-9,388.24	9,473.36	9,409.54	63.82	148.428		
6,100.00	5,843.74	4,071.00	3,813.84	33.67	33.53	83.92	-1,342.54	-9,394.97	9,492.18	9,427.51	64.67	146.775		
6,200.00	5,938.91	4,071.00	3,813.84	34.24	33.53	83.92	-1,342.54	-9,394.97	9,511.80	9,446.71	65.10	146.121		
6,300.00	6,034.08	4,122.83	3,858.79	34.82	34.12	84.15	-1,318.48	-9,404.29	9,532.14	9,466.05	66.10	144.216		
6,400.00	6,129.25	4,174.72	3,902.59	35.39	35.38	84.36	-1,294.32	-9,414.29	9,552.20	9,485.58	67.10	142.261		
6,500.00	6,224.42	4,226.61	3,950.39	35.97	35.61	84.57	-1,270.16	-9,424.29	9,572.26	9,505.11	68.10	140.306		
6,600.00	6,319.59	4,278.50	3,998.19	36.54	35.82	84.78	-1,246.00	-9,434.29	9,592.32	9,524.64	69.10	138.351		
6,700.00	6,414.76	4,330.39	4,046.00	37.12	36.04	84.99	-1,221.84	-9,444.29	9,612.38	9,544.17	70.10	136.396		
6,800.00	6,509.91	4,382.28	4,093.81	37.70	36.25	85.20	-1,197.68	-9,454.29	9,632.44	9,563.70	71.10	134.441		
6,900.00	6,605.08	4,434.17	4,141.62	38.28	36.46	85.41	-1,173.52	-9,464.29	9,652.50	9,583.23	72.10	132.486		
7,000.00	6,694.76	4,486.06	4,189.43	38.86	36.67	85.62	-1,149.36	-9,474.29	9,672.56	9,602.76	73.10	130.531		
7,100.00	6,779.96	4,537.95	4,237.24	39.44	36.88	85.83	-1,125.20	-9,484.29	9,692.62	9,622.29	74.10	128.576		
7,200.00	6,857.50	4,589.84	4,285.05	39.99	37.09	86.04	-1,101.04	-9,494.29	9,712.68	9,641.82	75.10	126.621		
7,300.00	6,925.48	4,641.73	4,332.86	40.57	37.30	86.25	-1,076.88	-9,504.29	9,732.74	9,661.35	76.10	124.666		
7,400.00	6,982.21	4,693.62	4,380.67	41.15	37.51	86.46	-1,052.72	-9,514.29	9,752.80	9,680.88	77.10	122.711		
7,500.00	7,026.31	4,745.51	4,428.48	41.73	37.72	86.67	-1,028.56	-9,524.29	9,772.86	9,700.41	78.10	120.756		
7,600.00	7,056.68	4,797.40	4,476.29	42.31	37.93	86.88	-1,004.40	-9,534.29	9,792.92	9,719.94	79.10	118.801		
7,700.00	7,072.58	4,849.29	4,524.10	42.89	38.14	87.09	-980.24	-9,544.29	9,813.00	9,739.47	80.10	116.846		
7,800.00	7,074.86	4,896.18	4,565.91	43.47	38.35	87.30	-956.08	-9,554.29	9,833.06	9,758.99	81.10	114.891		
7,900.00	7,074.54	4,943.07	4,613.72	44.05	38.56	87.51	-931.92	-9,564.29	9,853.12	9,778.52	82.10	112.936		
8,000.00	7,074.21	4,989.96	4,661.53	44.63	38.77	87.72	-907.76	-9,574.29	9,873.18	9,798.05	83.10	110.981		
8,100.00	7,073.89	5,036.85	4,709.34	45.21	38.98	87.93	-883.60	-9,584.29	9,893.24	9,817.58	84.10	109.026		
8,200.00	7,073.57	5,083.74	4,757.15	45.79	39.19	88.14	-859.44	-9,594.29	9,913.30	9,837.11	85.10	107.071		
8,300.00	7,073.24	5,130.63	4,804.96	46.37	39.40	88.35	-835.28	-9,604.29	9,933.36	9,856.64	86.10	105.116		
8,400.00	7,072.92	5,177.52	4,852.77	46.95	39.61	88.56	-811.12	-9,614.29	9,953.42	9,876.17	87.10	103.161		
8,500.00	7,072.59	5,224.41	4,900.58	47.53	39.82	88.77	-786.96	-9,624.29	9,973.48	9,895.70	88.10	101.206		
8,600.00	7,072.27	5,271.30	4,948.39	48.11	40.03	88.98	-762.80	-9,634.29	9,993.54	9,915.23	89.10	99.251		
8,700.00	7,071.94	5,318.19	4,996.20	48.69	40.24	89.19	-738.64	-9,644.29	10,013.60	9,934.76	90.10	97.296		
8,800.00	7,071.62	5,365.08	5,044.01	49.27	40.45	89.40	-714.48	-9,654.29	10,033.66	9,954.29	91.10	95.341		
8,900.00	7,071.29	5,411.97	5,091.82	49.85	40.66	89.61	-690.32	-9,664.29	10,053.72	9,973.82	92.10	93.386		
9,000.00	7,070.97	5,458.86	5,139.63	50.43	40.87	89.82	-666.16	-9,674.29	10,073.78	9,993.35	93.10	91.431		
9,100.00	7,070.64	5,505.75	5,187.44	51.01	41.08	90.03	-642.00	-9,684.29	10,093.84	10,012.88	94.10	89.476		
9,200.00	7,070.32	5,552.64	5,235.25	51.59	41.29	90.24	-617.84	-9,694.29	10,113.90	10,032.41	95.10	87.521		
9,300.00	7,069.99	5,599.53	5,283.06	52.17	41.50	90.45	-593.68	-9,704.29	10,133.96	10,051.94	96.10	85.566		
9,400.00	7,069.67	5,646.42	5,330.87	52.75	41.71	90.66	-569.52	-9,714.29	10,154.02	10,071.47	97.10	83.611		
9,500.00	7,069.34	5,693.31	5,378.68	53.33	41.92	90.87	-545.36	-9,724.29	10,174.08	10,090.99	98.10	81.656		
9,600.00	7,069.02	5,740.20	5,426.49	53.91	42.13	91.08	-521.20	-9,734.29	10,194.14	10,110.52	99.10	79.701		
9,700.00	7,068.69	5,787.09	5,474.30	54.49	42.34	91.29	-497.04	-9,744.29	10,214.20	10,130.05	100.10	77.746		
9,800.00	7,068.37	5,833.98	5,522.11	55.07	42.55	91.50	-472.88	-9,754.29	10,234.26	10,149.58	101.10	75.791		
9,900.00	7,068.04	5,880.87	5,569.92	55.65	42.76	91.71	-448.72	-9,764.29	10,254.32	10,169.11	102.10	73.836		
10,000.00	7,067.72	5,927.76	5,617.73	56.23	42.97	91.92	-424.56	-9,774.29	10,274.38	10,188.64	103.10	71.881		
10,100.00	7,067.39	5,974.65	5,665.54	56.81	43.18	92.13	-400.40	-9,784.29	10,294.44	10,208.17	104.10	69.926		
10,200.00	7,067.07	6,021.54	5,713.35	57.39	43.39	92.34	-376.24	-9,794.29	10,314.50	10,227.70	105.10	67.971		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,361.70	6,977.39	94.50	52.80	87.21	-714.95	-9,632.33	6,458.76	6,362.43	96.33	67.050		
10,400.00	7,066.42	7,362.69	6,978.37	97.14	52.81	87.25	-714.95	-9,632.35	6,361.23	6,264.43	96.81	65.711		
10,500.00	7,066.09	7,363.67	6,979.35	99.80	52.81	87.29	-714.94	-9,632.36	6,263.79	6,166.47	97.31	64.368		
10,600.00	7,065.77	7,364.66	6,980.34	102.47	52.81	87.33	-714.94	-9,632.37	6,166.42	6,068.58	97.85	63.022		
10,700.00	7,065.44	7,365.64	6,981.32	105.15	52.81	87.37	-714.93	-9,632.39	6,069.14	5,970.73	98.41	61.674		
10,800.00	7,065.12	7,366.62	6,982.30	107.83	52.82	87.41	-714.93	-9,632.40	5,971.95	5,872.95	99.00	60.323		
10,900.00	7,064.79	7,367.61	6,983.29	110.53	52.82	87.45	-714.92	-9,632.41	5,874.85	5,775.23	99.62	58.970		
11,000.00	7,064.47	7,368.59	6,984.27	113.23	52.82	87.49	-714.92	-9,632.43	5,777.86	5,677.57	100.28	57.615		
11,100.00	7,064.14	7,369.57	6,985.25	115.95	52.82	87.53	-714.91	-9,632.44	5,680.96	5,579.99	100.98	56.260		
11,200.00	7,063.82	7,370.56	6,986.24	118.66	52.83	87.57	-714.91	-9,632.45	5,584.18	5,482.47	101.71	54.904		
11,300.00	7,063.49	7,371.54	6,987.22	121.39	52.83	87.61	-714.90	-9,632.46	5,487.51	5,385.03	102.48	53.548		
11,400.00	7,063.17	7,372.53	6,988.21	124.12	52.83	87.65	-714.90	-9,632.48	5,390.96	5,287.67	103.29	52.192		
11,500.00	7,062.84	7,373.51	6,989.19	126.86	52.83	87.69	-714.89	-9,632.49	5,294.54	5,190.40	104.15	50.837		
11,600.00	7,062.52	7,374.49	6,990.17	129.60	52.84	87.73	-714.89	-9,632.50	5,198.26	5,093.21	105.05	49.485		
11,700.00	7,062.19	7,375.48	6,991.16	132.35	52.84	87.77	-714.89	-9,632.52	5,102.12	4,996.12	106.00	48.134		
11,800.00	7,061.87	7,376.46	6,992.14	135.10	52.84	87.81	-714.88	-9,632.53	5,006.12	4,899.13	107.00	46.787		
11,900.00	7,061.54	7,377.44	6,993.12	137.85	52.84	87.85	-714.88	-9,632.54	4,910.29	4,802.24	108.05	45.444		
12,000.00	7,061.22	7,378.43	6,994.11	140.61	52.85	87.89	-714.87	-9,632.55	4,814.63	4,705.47	109.16	44.105		
12,100.00	7,060.89	7,379.41	6,995.09	143.38	52.85	87.93	-714.87	-9,632.57	4,719.15	4,608.81	110.33	42.771		
12,200.00	7,060.57	7,380.40	6,996.07	146.15	52.85	87.97	-714.86	-9,632.58	4,623.86	4,512.29	111.57	41.444		
12,300.00	7,060.24	7,381.38	6,997.06	148.92	52.85	88.01	-714.86	-9,632.59	4,528.77	4,415.90	112.87	40.124		
12,400.00	7,059.92	7,382.36	6,998.04	151.69	52.86	88.05	-714.85	-9,632.61	4,433.90	4,319.66	114.24	38.812		
12,500.00	7,059.59	7,383.35	6,999.03	154.47	52.86	88.09	-714.85	-9,632.62	4,339.25	4,223.57	115.69	37.508		
12,600.00	7,059.27	7,384.33	7,000.01	157.25	52.86	88.13	-714.84	-9,632.63	4,244.86	4,127.64	117.21	36.215		
12,700.00	7,058.94	7,385.31	7,000.99	160.03	52.86	88.17	-714.84	-9,632.64	4,150.72	4,031.90	118.82	34.932		
12,800.00	7,058.62	7,386.30	7,001.98	162.82	52.87	88.21	-714.83	-9,632.66	4,056.87	3,936.34	120.52	33.661		
12,900.00	7,058.29	7,387.28	7,002.96	165.61	52.87	88.25	-714.83	-9,632.67	3,963.31	3,841.00	122.32	32.402		
13,000.00	7,057.97	7,388.27	7,003.94	168.40	52.87	88.29	-714.82	-9,632.68	3,870.08	3,745.87	124.21	31.158		
13,100.00	7,057.64	7,389.26	7,004.92	171.19	52.87	88.33	-714.82	-9,632.70	3,777.20	3,650.98	126.21	29.928		
13,200.00	7,057.32	7,390.25	7,005.90	173.99	52.88	88.37	-714.81	-9,632.71	3,684.68	3,556.36	128.32	28.714		
13,300.00	7,057.00	7,391.24	7,006.88	176.78	52.88	88.42	-714.81	-9,632.73	3,592.57	3,462.01	130.56	27.517		
13,400.00	7,056.67	7,392.23	7,007.86	179.58	52.88	88.46	-714.80	-9,632.74	3,500.89	3,367.96	132.92	26.338		
13,500.00	7,056.35	7,393.22	7,008.84	182.38	52.88	88.50	-714.80	-9,632.75	3,409.67	3,274.25	135.42	25.178		
13,600.00	7,056.02	7,394.21	7,009.82	185.19	52.89	88.55	-714.79	-9,632.77	3,318.97	3,180.90	138.07	24.039		
13,700.00	7,055.70	7,395.20	7,009.80	187.99	52.89	88.59	-714.79	-9,632.78	3,228.81	3,087.94	140.87	22.921		
13,800.00	7,055.37	7,396.19	7,009.78	190.80	52.89	88.63	-714.78	-9,632.79	3,139.25	2,995.41	143.83	21.826		
13,900.00	7,055.05	7,397.18	7,009.76	193.60	52.89	88.68	-714.78	-9,632.81	3,050.33	2,903.36	146.98	20.754		
14,000.00	7,054.72	7,398.17	7,009.74	196.41	52.90	88.72	-714.77	-9,632.82	2,962.12	2,811.82	150.30	19.708		
14,100.00	7,054.40	7,399.16	7,009.72	199.22	52.90	88.76	-714.77	-9,632.83	2,874.69	2,720.86	153.83	18.687		
14,200.00	7,054.07	7,400.15	7,009.70	202.03	52.90	88.80	-714.76	-9,632.85	2,788.10	2,630.52	157.57	17.694		
14,300.00	7,053.75	7,401.14	7,009.68	204.85	52.91	88.84	-714.76	-9,632.86	2,702.43	2,540.89	161.54	16.729		
14,400.00	7,053.42	7,402.13	7,009.66	207.66	52.91	88.88	-714.75	-9,632.87	2,617.78	2,452.04	165.74	15.794		
14,500.00	7,053.10	7,403.12	7,009.64	210.48	52.91	88.92	-714.75	-9,632.89	2,534.25	2,364.05	170.20	14.890		
14,600.00	7,052.77	7,404.11	7,009.62	213.29	52.91	88.96	-714.74	-9,632.90	2,451.95	2,277.03	174.93	14.017		
14,700.00	7,052.45	7,405.10	7,009.60	216.11	52.92	89.00	-714.74	-9,632.91	2,371.02	2,191.08	179.93	13.177		
14,800.00	7,052.12	7,406.09	7,009.58	218.93	52.92	89.04	-714.73	-9,632.92	2,291.58	2,106.35	185.23	12.371		
14,900.00	7,051.80	7,407.08	7,009.56	221.75	52.92	89.08	-714.73	-9,632.94	2,213.82	2,022.98	190.84	11.601		
15,000.00	7,051.47	7,408.07	7,009.54	224.57	52.92	89.12	-714.73	-9,632.95	2,137.90	1,941.15	196.75	10.866		
15,100.00	7,051.15	7,409.06	7,009.52	227.39	52.93	89.16	-714.72	-9,632.96	2,064.04	1,861.06	202.99	10.168		
15,145.13	7,051.00	7,410.36	7,009.50	228.67	52.93	89.18	-714.72	-9,632.97	2,031.44	1,825.54	205.91	9.866 CC, ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	2,178.28	2,113.66	3.28	15.14	-103.42	-2,088.44	-8,752.38	9,243.02					
100.00	100.00	2,207.00	2,139.89	3.28	15.40	-103.36	-2,077.34	-8,748.72	9,220.44	9,202.69	17.75	519.420		
200.00	200.00	2,263.76	2,191.81	3.34	15.90	-103.23	-2,055.50	-8,741.74	9,198.39	9,180.15	18.24	504.282		
300.00	299.98	2,302.00	2,226.88	3.44	16.24	72.90	-2,040.90	-8,737.31	9,176.57	9,157.94	18.63	492.558		
400.00	399.84	400.00	2,373.78	3.59	3.54	73.75	-1,979.99	-8,718.65	9,153.96	9,146.94	7.02	1,304.893		
500.00	499.45	2,551.78	2,455.64	3.79	18.48	74.47	-1,945.11	-8,707.74	9,129.80	9,108.82	20.98	435.093		
600.00	598.70	2,595.54	2,495.45	4.03	18.88	75.09	-1,927.63	-8,702.79	9,105.41	9,083.83	21.58	421.998		
700.00	697.47	2,672.58	2,565.53	4.31	19.59	75.84	-1,896.77	-8,694.28	9,080.60	9,058.10	22.50	403.551		
800.00	795.62	2,885.22	2,758.23	4.64	21.58	77.12	-1,810.34	-8,669.54	9,054.55	9,029.91	24.64	367.459		
900.00	893.06	2,932.84	2,801.35	5.00	22.03	77.84	-1,791.00	-8,663.75	9,027.76	9,002.35	25.41	355.326		
1,000.00	989.64	2,987.63	2,851.20	5.40	22.54	78.60	-1,769.24	-8,657.15	9,000.87	8,974.60	26.27	342.654		
1,100.00	1,085.27	3,057.65	2,915.35	5.83	23.17	79.41	-1,742.54	-8,648.49	8,973.79	8,946.51	27.29	328.880		
1,200.00	1,180.44	3,129.00	2,980.87	6.29	23.82	79.70	-1,715.74	-8,639.60	8,946.87	8,918.53	28.34	315.727		
1,300.00	1,275.61	3,209.03	3,054.16	6.76	24.55	80.03	-1,685.14	-8,629.78	8,920.36	8,890.87	29.49	302.490		
1,400.00	1,370.78	3,269.52	3,109.58	7.26	25.09	80.29	-1,662.07	-8,622.31	8,894.25	8,863.75	30.50	291.624		
1,500.00	1,465.95	3,310.01	3,146.87	7.76	25.45	80.45	-1,647.09	-8,617.35	8,868.80	8,837.44	31.36	282.842		
1,600.00	1,561.12	3,346.00	3,180.19	8.27	25.77	80.60	-1,634.20	-8,612.98	8,844.06	8,811.87	32.19	274.738		
1,700.00	1,656.29	3,381.74	3,213.39	8.80	26.08	80.74	-1,621.66	-8,608.74	8,820.07	8,787.04	33.02	267.075		
1,800.00	1,751.46	3,413.64	3,243.09	9.32	26.35	80.87	-1,610.60	-8,605.11	8,796.87	8,763.03	33.84	259.962		
1,900.00	1,846.63	3,477.86	3,303.05	9.86	26.89	81.13	-1,588.70	-8,598.07	8,774.44	8,739.53	34.91	251.369		
2,000.00	1,941.80	3,565.07	3,384.70	10.40	27.61	81.47	-1,559.73	-8,588.06	8,752.15	8,716.00	36.15	242.118		
2,100.00	2,036.96	3,825.23	3,628.35	10.94	29.77	82.50	-1,474.70	-8,555.29	8,729.23	8,690.56	38.67	225.741		
2,200.00	2,132.13	2,200.00	3,718.78	11.49	15.96	82.90	-1,441.56	-8,542.18	8,705.98	8,679.47	26.51	328.425		
2,300.00	2,227.30	3,964.50	3,757.68	12.04	30.97	83.07	-1,426.52	-8,536.67	8,683.26	8,642.30	40.96	211.989		
2,400.00	2,322.47	4,015.00	3,804.31	12.59	31.42	83.28	-1,408.17	-8,530.43	8,661.37	8,619.39	41.98	206.322		
2,500.00	2,417.64	4,050.39	3,836.95	13.15	31.73	83.43	-1,395.15	-8,526.23	8,640.18	8,597.29	42.89	201.454		
2,600.00	2,512.81	4,110.00	3,891.86	13.70	32.27	83.69	-1,373.02	-8,519.24	8,619.58	8,575.58	44.00	195.895		
2,700.00	2,607.98	4,169.35	3,946.53	14.26	32.80	83.94	-1,350.96	-8,512.39	8,599.58	8,554.46	45.12	190.609		
2,800.00	2,703.15	4,529.52	4,276.58	14.82	36.10	85.51	-1,214.31	-8,467.09	8,580.15	8,531.39	48.76	175.982		
2,900.00	2,798.32	4,626.86	4,363.05	15.38	37.08	85.97	-1,171.72	-8,453.56	8,558.55	8,508.25	50.30	170.147		
3,000.00	2,893.49	4,679.00	4,409.34	15.95	37.61	86.22	-1,148.87	-8,446.21	8,537.38	8,485.94	51.44	165.960		
3,100.00	2,988.66	4,722.76	4,448.31	16.51	38.05	86.42	-1,129.93	-8,440.13	8,516.94	8,464.44	52.50	162.225		
3,200.00	3,083.83	4,774.00	4,494.17	17.07	38.57	86.66	-1,108.10	-8,433.33	8,497.45	8,443.82	53.63	158.443		
3,300.00	3,179.00	4,774.00	4,494.17	17.64	38.57	86.66	-1,108.10	-8,433.33	8,478.74	8,424.45	54.29	156.177		
3,400.00	3,274.17	4,819.90	4,535.54	18.21	39.01	86.88	-1,089.07	-8,427.51	8,460.90	8,405.54	55.36	152.848		
3,500.00	3,369.34	4,869.00	4,580.16	18.77	39.48	87.10	-1,069.49	-8,421.51	8,443.95	8,387.50	56.45	149.582		
3,600.00	3,464.51	4,918.51	4,625.46	19.34	39.93	87.32	-1,050.41	-8,415.56	8,427.72	8,370.19	57.53	146.495		
3,700.00	3,559.68	5,004.52	4,704.49	19.91	40.72	87.70	-1,018.13	-8,405.08	8,411.95	8,353.03	58.92	142.770		
3,800.00	3,654.84	5,057.00	4,752.54	20.48	41.20	87.94	-998.02	-8,398.66	8,396.62	8,336.60	60.03	139.882		
3,900.00	3,750.01	5,110.78	4,801.80	21.05	41.69	88.18	-977.45	-8,392.21	8,381.99	8,320.84	61.14	137.085		
4,000.00	3,845.18	5,152.00	4,839.75	21.62	42.06	88.36	-962.07	-8,387.47	8,368.20	8,306.04	62.16	134.633		
4,100.00	3,940.35	5,190.41	4,875.26	22.19	42.40	88.53	-948.07	-8,383.21	8,355.21	8,292.08	63.13	132.354		
4,200.00	4,035.52	5,247.00	4,927.86	22.76	42.89	88.77	-928.08	-8,377.19	8,343.06	8,278.81	64.25	129.856		
4,300.00	4,130.69	5,272.65	4,951.82	23.33	43.10	88.88	-919.28	-8,374.57	8,331.66	8,266.55	65.10	127.979		
4,400.00	4,225.86	5,314.89	4,991.42	23.91	43.45	89.06	-905.19	-8,370.40	8,321.07	8,254.99	66.08	125.917		
4,500.00	4,321.03	5,342.00	5,016.93	24.48	43.68	89.17	-896.40	-8,367.82	8,311.30	8,244.35	66.94	124.154		
4,600.00	4,416.20	5,385.56	5,058.16	25.05	44.01	89.35	-882.89	-8,363.92	8,302.35	8,234.44	67.90	122.267		
4,700.00	4,511.37	5,437.00	5,107.25	25.62	44.40	89.56	-868.10	-8,359.76	8,294.35	8,225.43	68.92	120.349		
4,800.00	4,606.54	5,437.00	5,107.25	26.20	44.40	89.56	-868.10	-8,359.76	8,287.15	8,217.60	69.55	119.151		
4,900.00	4,701.71	5,496.65	5,164.63	26.77	44.80	89.78	-852.40	-8,355.47	8,280.72	8,210.15	70.58	117.327		
5,000.00	4,796.88	5,562.45	5,228.38	27.34	45.23	90.02	-836.69	-8,351.21	8,275.09	8,203.46	71.63	115.531		
5,100.00	4,892.05	5,668.67	5,331.93	27.92	45.87	90.40	-814.11	-8,344.19	8,269.56	8,196.68	72.88	113.473		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error:	0.00 ft
Survey Program: 57-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,799.85	5,460.88	28.49	46.59	90.83	-791.56	-8,335.69	8,264.33	8,190.15	74.19	111.397		
5,300.00	5,082.39	5,846.79	5,507.15	29.07	46.82	90.97	-784.36	-8,332.56	8,259.06	8,184.03	75.04	110.068		
5,400.00	5,177.56	5,881.74	5,541.70	29.64	46.99	91.08	-779.54	-8,330.51	8,254.62	8,178.80	75.82	108.873		
5,500.00	5,272.72	5,927.76	5,587.32	30.21	47.20	91.22	-773.84	-8,328.19	8,250.99	8,174.35	76.64	107.658		
5,600.00	5,367.89	6,003.00	5,661.98	30.79	47.53	91.43	-765.28	-8,324.63	8,247.83	8,170.25	77.57	106.322		
5,700.00	5,463.06	6,070.38	5,728.93	31.36	47.81	91.63	-758.33	-8,321.66	8,245.09	8,166.64	78.46	105.093		
5,800.00	5,558.23	6,123.44	5,781.72	31.94	48.02	91.77	-753.37	-8,319.57	8,242.91	8,163.64	79.27	103.984		
5,900.00	5,653.40	6,169.60	5,827.67	32.51	48.20	91.90	-749.28	-8,318.04	8,241.40	8,161.35	80.05	102.952		
6,000.00	5,748.57	6,221.59	5,879.46	33.09	48.40	92.04	-744.84	-8,316.61	8,240.58	8,159.73	80.85	101.924		
6,100.00	5,843.74	6,286.00	5,943.60	33.67	48.64	92.21	-739.16	-8,315.12	8,240.35	8,158.66	81.69	100.867		
6,102.21	5,845.84	6,286.00	5,943.60	33.68	48.64	92.21	-739.16	-8,315.12	8,240.35	8,158.65	81.71	100.851		
6,200.00	5,938.91	6,361.57	6,018.88	34.24	48.92	92.42	-732.78	-8,313.61	8,240.57	8,157.99	82.58	99.793		
6,300.00	6,034.08	6,447.71	6,104.77	34.82	49.23	92.64	-726.43	-8,312.05	8,241.03	8,157.54	83.49	98.712		
6,400.00	6,129.25	6,536.70	6,193.57	35.39	49.54	92.87	-720.72	-8,310.61	8,241.73	8,157.34	84.39	97.663		
6,500.00	6,224.42	6,603.91	6,260.66	35.97	49.76	93.04	-716.98	-8,309.66	8,242.70	8,157.50	85.20	96.741		
6,600.00	6,319.59	6,665.00	6,321.68	36.54	49.95	93.19	-714.02	-8,309.17	8,244.26	8,158.27	85.99	95.875		
6,700.00	6,414.76	6,743.77	6,400.38	37.12	50.19	93.38	-710.81	-8,308.85	8,246.24	8,159.42	86.82	94.981		
6,800.00	6,509.91	6,872.16	6,528.72	37.70	50.56	93.60	-706.95	-8,308.30	8,247.69	8,159.89	87.79	93.943		
6,900.00	6,603.99	6,963.15	6,619.68	38.26	50.81	93.90	-704.72	-8,307.82	8,237.75	8,149.12	88.63	92.944		
7,000.00	6,694.76	7,056.26	6,712.77	38.78	51.07	94.03	-702.61	-8,307.31	8,212.68	8,123.24	89.44	91.828		
7,100.00	6,779.96	7,145.55	6,802.03	39.24	51.32	94.23	-700.84	-8,306.81	8,173.08	8,082.91	90.17	90.639		
7,200.00	6,857.50	7,226.88	6,883.35	39.65	51.54	94.41	-699.51	-8,306.36	8,119.93	8,029.10	90.83	89.393		
7,300.00	6,925.48	7,295.65	6,952.11	40.02	51.73	94.59	-698.56	-8,305.98	8,054.56	7,963.16	91.41	88.119		
7,400.00	6,982.21	7,352.86	7,009.32	40.33	51.88	94.74	-697.87	-8,305.67	7,978.59	7,886.69	91.90	86.821		
7,500.00	7,026.31	7,397.24	7,053.69	40.63	52.00	94.88	-697.41	-8,305.43	7,893.85	7,801.54	92.31	85.519		
7,600.00	7,056.68	7,429.15	7,085.60	40.91	52.08	94.91	-697.11	-8,305.26	7,802.41	7,709.78	92.63	84.229		
7,700.00	7,072.58	7,448.83	7,105.28	41.25	52.14	94.96	-696.93	-8,305.15	7,706.49	7,613.60	92.88	82.969		
7,800.00	7,074.86	7,450.97	7,107.42	41.69	52.14	94.98	-696.91	-8,305.14	7,608.45	7,515.40	93.05	81.768		
7,900.00	7,074.54	7,449.78	7,106.23	42.34	52.14	94.98	-696.92	-8,305.15	7,510.25	7,417.04	93.21	80.576		
8,000.00	7,074.21	7,448.59	7,105.05	43.27	52.14	94.99	-696.93	-8,305.15	7,412.09	7,318.72	93.38	79.379		
8,100.00	7,073.89	7,447.42	7,103.87	44.47	52.13	94.99	-696.94	-8,305.16	7,313.98	7,220.43	93.56	78.175		
8,200.00	7,073.57	7,446.25	7,102.70	45.91	52.13	94.99	-696.95	-8,305.17	7,215.93	7,122.17	93.75	76.966		
8,300.00	7,073.24	7,445.10	7,101.55	47.53	52.13	94.99	-696.96	-8,305.17	7,117.93	7,023.96	93.97	75.750		
8,400.00	7,072.92	7,443.95	7,100.40	49.31	52.12	94.99	-696.97	-8,305.18	7,019.98	6,925.79	94.19	74.528		
8,500.00	7,072.59	7,442.81	7,099.26	51.20	52.12	94.99	-696.98	-8,305.19	6,922.09	6,827.66	94.43	73.300		
8,600.00	7,072.27	7,441.68	7,098.13	53.19	52.12	94.99	-696.99	-8,305.19	6,824.27	6,729.58	94.69	72.066		
8,700.00	7,071.94	7,440.55	7,097.00	55.27	52.12	94.99	-697.00	-8,305.20	6,726.51	6,631.54	94.97	70.827		
8,800.00	7,071.62	7,439.44	7,095.89	57.43	52.11	94.99	-697.01	-8,305.21	6,628.81	6,533.54	95.27	69.581		
8,900.00	7,071.29	7,438.33	7,094.78	59.64	52.11	94.99	-697.02	-8,305.21	6,531.19	6,435.60	95.58	68.329		
9,000.00	7,070.97	7,437.23	7,093.68	61.92	52.11	94.99	-697.03	-8,305.22	6,433.63	6,337.71	95.92	67.072		
9,100.00	7,070.64	7,436.14	7,092.59	64.24	52.10	94.99	-697.04	-8,305.23	6,336.16	6,239.88	96.28	65.809		
9,200.00	7,070.32	7,435.06	7,091.51	66.61	52.10	94.99	-697.05	-8,305.23	6,238.76	6,142.10	96.66	64.541		
9,300.00	7,069.99	7,433.99	7,090.44	69.01	52.10	94.99	-697.06	-8,305.24	6,141.45	6,044.38	97.07	63.268		
9,400.00	7,069.67	7,432.92	7,089.37	71.45	52.10	94.99	-697.07	-8,305.24	6,044.22	5,946.72	97.50	61.989		
9,500.00	7,069.34	7,431.86	7,088.31	73.92	52.09	94.99	-697.08	-8,305.25	5,947.09	5,849.12	97.97	60.706		
9,600.00	7,069.02	7,430.81	7,087.26	76.42	52.09	94.99	-697.09	-8,305.26	5,850.05	5,751.59	98.45	59.419		
9,700.00	7,068.69	7,429.76	7,086.22	78.95	52.09	94.99	-697.10	-8,305.26	5,753.11	5,654.14	98.98	58.127		
9,800.00	7,068.37	7,428.73	7,085.18	81.49	52.08	94.99	-697.11	-8,305.27	5,656.28	5,556.75	99.53	56.831		
9,900.00	7,068.04	7,427.70	7,084.15	84.06	52.08	94.99	-697.12	-8,305.27	5,559.56	5,459.45	100.11	55.532		
10,000.00	7,067.72	7,426.68	7,083.13	86.65	52.08	94.99	-697.13	-8,305.28	5,462.96	5,362.23	100.74	54.230		
10,100.00	7,067.39	7,425.66	7,082.12	89.25	52.08	94.99	-697.14	-8,305.28	5,366.49	5,265.09	101.40	52.925		
10,200.00	7,067.07	7,424.66	7,081.11	91.87	52.07	94.99	-697.15	-8,305.29	5,270.14	5,168.05	102.10	51.619		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error:	0.00 ft
Survey Program: 57-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	7,423.66	7,080.11	94.50	52.07	91.19	-697.16	-8,305.29	5,173.94	5,071.10	102.84	50.310		
10,400.00	7,066.42	7,422.66	7,079.12	97.14	52.07	91.15	-697.17	-8,305.30	5,077.88	4,974.25	103.63	49.001		
10,500.00	7,066.09	7,421.71	7,078.17	99.80	52.06	91.11	-697.18	-8,305.30	4,981.98	4,877.51	104.46	47.691		
10,600.00	7,065.77	7,420.84	7,077.29	102.47	52.06	91.07	-697.18	-8,305.31	4,886.24	4,780.89	105.35	46.381		
10,700.00	7,065.44	7,419.96	7,076.42	105.15	52.06	91.04	-697.19	-8,305.31	4,790.67	4,684.38	106.29	45.073		
10,800.00	7,065.12	7,419.09	7,075.54	107.83	52.06	91.00	-697.20	-8,305.32	4,695.29	4,588.01	107.28	43.766		
10,900.00	7,064.79	7,418.21	7,074.67	110.53	52.06	90.97	-697.21	-8,305.32	4,600.10	4,491.77	108.33	42.462		
11,000.00	7,064.47	7,417.34	7,073.79	113.23	52.05	90.93	-697.22	-8,305.33	4,505.12	4,395.67	109.45	41.161		
11,100.00	7,064.14	7,416.46	7,072.91	115.95	52.05	90.90	-697.23	-8,305.33	4,410.37	4,299.74	110.63	39.865		
11,200.00	7,063.82	7,415.58	7,072.04	118.66	52.05	90.86	-697.23	-8,305.34	4,315.85	4,203.96	111.89	38.574		
11,300.00	7,063.49	7,414.70	7,071.16	121.39	52.05	90.83	-697.24	-8,305.34	4,221.58	4,108.37	113.21	37.289		
11,400.00	7,063.17	7,413.83	7,070.28	124.12	52.04	90.79	-697.25	-8,305.34	4,127.59	4,012.97	114.62	36.011		
11,500.00	7,062.84	7,412.95	7,069.40	126.86	52.04	90.76	-697.26	-8,305.35	4,033.88	3,917.77	116.11	34.742		
11,600.00	7,062.52	7,412.07	7,068.52	129.60	52.04	90.72	-697.27	-8,305.35	3,940.48	3,822.79	117.69	33.482		
11,700.00	7,062.19	7,411.19	7,067.64	132.35	52.04	90.69	-697.27	-8,305.36	3,847.41	3,728.05	119.36	32.233		
11,800.00	7,061.87	7,410.31	7,066.76	135.10	52.03	90.65	-697.28	-8,305.36	3,754.70	3,633.56	121.13	30.996		
11,900.00	7,061.54	7,409.43	7,065.88	137.85	52.03	90.62	-697.29	-8,305.37	3,662.37	3,539.36	123.01	29.772		
12,000.00	7,061.22	7,408.55	7,065.00	140.61	52.03	90.58	-697.30	-8,305.37	3,570.46	3,445.45	125.01	28.562		
12,100.00	7,060.89	7,407.67	7,064.12	143.38	52.03	90.54	-697.31	-8,305.38	3,478.99	3,351.87	127.12	27.368		
12,200.00	7,060.57	7,406.78	7,063.24	146.15	52.02	90.51	-697.32	-8,305.38	3,388.00	3,258.64	129.36	26.190		
12,300.00	7,060.24	7,405.90	7,062.36	148.92	52.02	90.47	-697.32	-8,305.39	3,297.53	3,165.80	131.74	25.031		
12,400.00	7,059.92	7,405.02	7,061.47	151.69	52.02	90.44	-697.33	-8,305.39	3,207.63	3,073.38	134.26	23.891		
12,500.00	7,059.59	7,404.14	7,060.59	154.47	52.02	90.40	-697.34	-8,305.39	3,118.35	2,981.42	136.93	22.773		
12,600.00	7,059.27	7,403.25	7,059.71	157.25	52.02	90.37	-697.35	-8,305.40	3,029.73	2,889.96	139.77	21.677		
12,700.00	7,058.94	7,402.37	7,058.82	160.03	52.01	90.33	-697.36	-8,305.40	2,941.85	2,799.07	142.78	20.604		
12,800.00	7,058.62	7,401.48	7,057.94	162.82	52.01	90.30	-697.37	-8,305.41	2,854.76	2,708.79	145.97	19.557		
12,900.00	7,058.29	7,400.60	7,057.05	165.61	52.01	90.26	-697.38	-8,305.41	2,768.54	2,619.18	149.36	18.536		
13,000.00	7,057.97	7,399.71	7,056.17	168.40	52.01	90.22	-697.38	-8,305.42	2,683.28	2,530.33	152.95	17.543		
13,100.00	7,057.64	7,398.83	7,055.28	171.19	52.00	90.19	-697.39	-8,305.42	2,599.08	2,442.31	156.76	16.580		
13,200.00	7,057.32	7,397.94	7,054.39	173.99	52.00	90.15	-697.40	-8,305.43	2,516.02	2,355.23	160.80	15.647		
13,300.00	7,057.00	7,397.05	7,053.51	176.78	52.00	90.12	-697.41	-8,305.43	2,434.24	2,269.18	165.07	14.747		
13,400.00	7,056.67	7,396.16	7,052.62	179.58	52.00	90.08	-697.42	-8,305.44	2,353.87	2,184.29	169.59	13.880		
13,500.00	7,056.35	7,395.28	7,051.73	182.38	51.99	90.05	-697.43	-8,305.44	2,275.06	2,100.70	174.36	13.048		
13,600.00	7,056.02	7,394.39	7,050.84	185.19	51.99	90.01	-697.44	-8,305.45	2,197.97	2,018.58	179.39	12.253		
13,700.00	7,055.70	7,393.50	7,049.95	187.99	51.99	89.97	-697.45	-8,305.45	2,122.79	1,938.11	184.68	11.495		
13,800.00	7,055.37	7,392.61	7,049.06	190.80	51.99	89.94	-697.45	-8,305.46	2,049.73	1,859.51	190.22	10.775		
13,900.00	7,055.05	7,391.72	7,048.17	193.60	51.98	89.90	-697.46	-8,305.46	1,979.03	1,783.01	196.02	10.096		
14,000.00	7,054.72	7,390.83	7,047.28	196.41	51.98	89.87	-697.47	-8,305.46	1,910.95	1,708.91	202.04	9.458		
14,100.00	7,054.40	7,389.94	7,046.39	199.22	51.98	89.83	-697.48	-8,305.47	1,845.78	1,637.51	208.27	8.863		
14,200.00	7,054.07	7,389.05	7,045.50	202.03	51.98	89.80	-697.49	-8,305.47	1,783.83	1,569.18	214.65	8.310		
14,300.00	7,053.75	7,388.15	7,044.61	204.85	51.97	89.76	-697.50	-8,305.48	1,725.46	1,504.31	221.15	7.802		
14,400.00	7,053.42	7,387.26	7,043.72	207.66	51.97	89.72	-697.51	-8,305.48	1,671.04	1,443.36	227.68	7.340		
14,500.00	7,053.10	7,386.37	7,042.82	210.48	51.97	89.69	-697.52	-8,305.49	1,620.97	1,386.82	234.15	6.923		
14,600.00	7,052.77	7,385.47	7,041.93	213.29	51.97	89.65	-697.53	-8,305.49	1,575.65	1,335.20	240.45	6.553		
14,700.00	7,052.45	7,384.58	7,041.04	216.11	51.96	89.62	-697.54	-8,305.50	1,535.53	1,289.05	246.47	6.230		
14,800.00	7,052.12	7,383.69	7,040.14	218.93	51.96	89.58	-697.54	-8,305.50	1,501.00	1,248.93	252.07	5.955		
14,900.00	7,051.80	7,382.79	7,039.25	221.75	51.96	89.54	-697.55	-8,305.51	1,472.46	1,215.36	257.10	5.727		
15,000.00	7,051.47	7,381.90	7,038.35	224.57	51.96	89.51	-697.56	-8,305.51	1,450.27	1,188.83	261.44	5.547		
15,100.00	7,051.15	7,381.00	7,037.46	227.39	51.96	89.47	-697.57	-8,305.52	1,434.73	1,169.76	264.97	5.415		
15,145.13	7,051.00	7,380.60	7,037.05	228.67	51.95	89.46	-697.58	-8,305.52	1,429.95	1,163.68	266.27	5.370 CC, ES, SF		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-106.68	-2,697.14	-9,002.18	9,397.61					
100.00	100.00	36.99	71.99	3.28	3.28	-106.68	-2,697.06	-9,002.26	9,397.64	9,391.07	6.57	1,431.340		
200.00	200.00	93.89	128.88	3.34	3.29	-106.67	-2,696.62	-9,002.70	9,398.16	9,391.54	6.62	1,419.059		
300.00	299.98	168.00	202.98	3.44	3.30	68.95	-2,695.50	-9,003.86	9,398.55	9,391.81	6.74	1,395.017		
400.00	399.84	168.00	202.98	3.59	3.30	68.95	-2,695.50	-9,003.86	9,398.24	9,391.35	6.89	1,364.578		
500.00	499.45	211.55	246.51	3.79	3.33	69.00	-2,694.65	-9,005.03	9,397.34	9,390.23	7.11	1,321.380		
600.00	598.70	259.00	293.90	4.03	3.37	69.06	-2,693.75	-9,006.99	9,396.15	9,388.75	7.39	1,270.636		
700.00	697.47	259.00	293.90	4.31	3.37	69.10	-2,693.75	-9,006.99	9,394.31	9,386.63	7.68	1,222.934		
800.00	795.62	290.63	325.49	4.64	3.40	69.18	-2,693.24	-9,008.65	9,392.11	9,384.07	8.04	1,168.184		
900.00	893.06	318.27	353.08	5.00	3.44	69.27	-2,692.93	-9,010.28	9,389.44	9,381.01	8.43	1,113.219		
1,000.00	989.64	350.00	384.74	5.40	3.48	69.38	-2,692.74	-9,012.38	9,386.32	9,377.45	8.87	1,057.839		
1,100.00	1,085.27	400.98	435.59	5.83	3.56	69.54	-2,692.59	-9,016.01	9,382.64	9,373.26	9.38	1,000.158		
1,200.00	1,180.44	469.97	504.38	6.29	3.70	69.67	-2,692.45	-9,021.14	9,378.86	9,368.90	9.96	941.510		
1,300.00	1,275.61	532.00	566.24	6.76	3.84	69.79	-2,692.26	-9,025.86	9,375.36	9,364.79	10.56	887.408		
1,400.00	1,370.78	577.61	611.70	7.26	3.96	69.87	-2,692.20	-9,029.51	9,372.40	9,361.24	11.16	839.931		
1,500.00	1,465.95	644.00	677.83	7.76	4.14	70.00	-2,692.54	-9,035.39	9,370.30	9,358.48	11.82	792.461		
1,600.00	1,561.12	653.11	686.90	8.27	4.16	70.01	-2,692.63	-9,036.25	9,368.63	9,356.27	12.36	758.103		
1,700.00	1,656.29	720.00	753.48	8.80	4.37	70.14	-2,693.35	-9,042.63	9,367.62	9,354.56	13.06	717.367		
1,800.00	1,751.46	837.48	870.42	9.32	4.76	70.35	-2,694.86	-9,053.76	9,366.68	9,352.75	13.93	672.271		
1,900.00	1,846.63	926.05	958.57	9.86	5.07	70.52	-2,695.52	-9,062.27	9,365.84	9,351.10	14.75	635.102		
2,000.00	1,941.80	1,096.00	1,127.81	10.40	5.72	70.84	-2,695.68	-9,077.79	9,364.36	9,348.50	15.87	590.173		
2,100.00	2,036.96	1,139.18	1,170.82	10.94	5.89	70.93	-2,695.58	-9,081.64	9,363.06	9,346.50	16.56	565.379		
2,200.00	2,132.13	1,190.00	1,221.36	11.49	6.09	71.03	-2,695.31	-9,086.96	9,362.79	9,345.51	17.29	541.580		
2,225.09	2,156.01	1,190.00	1,221.36	11.63	6.09	71.03	-2,695.31	-9,086.96	9,362.76	9,345.34	17.42	537.354		
2,300.00	2,227.30	1,190.00	1,221.36	12.04	6.09	71.03	-2,695.31	-9,086.96	9,363.06	9,345.23	17.83	525.134		
2,400.00	2,322.47	1,218.78	1,249.95	12.59	6.21	71.08	-2,695.10	-9,090.30	9,364.26	9,345.78	18.48	506.669		
2,500.00	2,417.64	1,249.86	1,280.79	13.15	6.35	71.15	-2,694.90	-9,094.11	9,366.21	9,347.07	19.15	489.224		
2,600.00	2,512.81	1,285.00	1,315.63	13.70	6.50	71.22	-2,694.68	-9,098.68	9,368.92	9,349.10	19.83	472.567		
2,700.00	2,607.98	1,314.73	1,345.09	14.26	6.63	71.28	-2,694.59	-9,102.72	9,372.37	9,351.88	20.49	457.478		
2,800.00	2,703.15	1,349.10	1,379.12	14.82	6.79	71.34	-2,694.74	-9,107.55	9,376.54	9,355.37	21.17	442.958		
2,900.00	2,798.32	1,379.00	1,408.70	15.38	6.92	71.40	-2,695.08	-9,111.88	9,381.43	9,359.59	21.83	429.712		
3,000.00	2,893.49	1,418.11	1,447.35	15.95	7.11	71.48	-2,695.52	-9,117.81	9,387.02	9,364.49	22.53	416.559		
3,100.00	2,988.66	1,475.00	1,503.49	16.51	7.38	71.59	-2,695.73	-9,127.03	9,393.41	9,370.10	23.31	402.935		
3,200.00	3,083.83	1,475.00	1,503.49	17.07	7.38	71.59	-2,695.73	-9,127.03	9,400.38	9,376.53	23.85	394.091		
3,300.00	3,179.00	1,524.96	1,552.70	17.64	7.63	71.69	-2,695.81	-9,135.63	9,408.08	9,383.48	24.60	382.369		
3,400.00	3,274.17	1,570.00	1,597.02	18.21	7.85	71.78	-2,696.09	-9,143.68	9,416.49	9,391.15	25.34	371.662		
3,500.00	3,369.34	1,604.97	1,631.39	18.77	8.03	71.85	-2,696.37	-9,150.13	9,425.54	9,399.51	26.02	362.174		
3,600.00	3,464.51	1,665.00	1,690.32	19.34	8.34	71.97	-2,696.75	-9,161.55	9,435.24	9,408.42	26.82	351.744		
3,700.00	3,559.68	1,665.00	1,690.32	19.91	8.34	71.97	-2,696.75	-9,161.55	9,445.59	9,418.23	27.36	345.281		
3,800.00	3,654.84	1,712.88	1,737.23	20.48	8.60	72.06	-2,696.98	-9,171.12	9,456.59	9,428.48	28.10	336.506		
3,900.00	3,750.01	1,759.00	1,782.31	21.05	8.85	72.16	-2,697.14	-9,180.85	9,468.45	9,439.61	28.84	328.304		
4,000.00	3,845.18	1,759.00	1,782.31	21.62	8.85	72.16	-2,697.14	-9,180.85	9,480.99	9,451.62	29.36	322.870		
4,100.00	3,940.35	1,808.60	1,830.70	22.19	9.13	72.26	-2,697.65	-9,191.74	9,494.22	9,464.10	30.12	315.238		
4,200.00	4,035.52	1,853.00	1,873.94	22.76	9.39	72.34	-2,698.72	-9,201.74	9,508.18	9,477.34	30.85	308.250		
4,300.00	4,130.69	1,893.81	1,913.65	23.33	9.63	72.42	-2,699.97	-9,211.11	9,522.75	9,491.19	31.56	301.769		
4,400.00	4,225.86	1,947.00	1,965.35	23.91	9.94	72.52	-2,701.58	-9,223.50	9,537.81	9,505.49	32.33	295.051		
4,500.00	4,321.03	2,011.05	2,027.55	24.48	10.33	72.64	-2,703.49	-9,238.66	9,553.32	9,520.17	33.15	288.186		
4,600.00	4,416.20	2,042.00	2,057.58	25.05	10.52	72.70	-2,704.40	-9,246.06	9,569.32	9,535.51	33.81	283.028		
4,700.00	4,511.37	2,042.00	2,057.58	25.62	10.52	72.70	-2,704.40	-9,246.06	9,586.26	9,551.95	34.31	279.365		
4,800.00	4,606.54	2,042.00	2,057.58	26.20	10.52	72.70	-2,704.40	-9,246.06	9,604.22	9,569.40	34.81	275.874		
4,900.00	4,701.71	2,087.09	2,101.17	26.77	10.81	72.78	-2,705.64	-9,257.55	9,622.41	9,586.87	35.54	270.750		
5,000.00	4,796.88	2,137.00	2,148.98	27.34	11.14	72.88	-2,706.82	-9,271.80	9,642.39	9,606.10	36.29	265.708		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	2,464.26	2,464.28	27.92	13.32	73.53	-2,711.38	-9,359.03	9,661.84	9,623.34	38.50	250.969		
5,200.00	4,987.22	2,513.00	2,511.26	28.49	13.64	73.63	-2,710.64	-9,371.99	9,679.90	9,640.65	39.25	246.606		
5,300.00	5,082.39	2,513.00	2,511.26	29.07	13.64	73.63	-2,710.64	-9,371.99	9,698.34	9,658.59	39.75	244.009		
5,400.00	5,177.56	2,513.00	2,511.26	29.64	13.64	73.63	-2,710.64	-9,371.99	9,717.76	9,677.53	40.23	241.533		
5,500.00	5,272.72	2,565.38	2,561.54	30.21	14.01	73.75	-2,709.74	-9,386.63	9,737.86	9,696.86	41.00	237.489		
5,600.00	5,367.89	2,609.00	2,603.36	30.79	14.31	73.84	-2,709.20	-9,399.05	9,758.58	9,716.85	41.72	233.887		
5,700.00	5,463.06	2,609.00	2,603.36	31.36	14.31	73.84	-2,709.20	-9,399.05	9,780.05	9,737.86	42.20	231.761		
5,800.00	5,558.23	2,609.00	2,603.36	31.94	14.31	73.84	-2,709.20	-9,399.05	9,802.50	9,759.84	42.67	229.737		
5,900.00	5,653.40	2,663.12	2,655.03	32.51	14.71	73.95	-2,708.90	-9,415.14	9,825.18	9,781.74	43.44	226.171		
6,000.00	5,748.57	2,704.00	2,693.83	33.09	15.02	74.04	-2,709.01	-9,428.00	9,849.10	9,804.96	44.14	223.149		
6,100.00	5,843.74	2,704.00	2,693.83	33.67	15.02	74.04	-2,709.01	-9,428.00	9,873.55	9,828.96	44.59	221.414		
6,200.00	5,938.91	3,296.06	3,258.33	34.24	19.46	75.27	-2,703.74	-9,605.26	9,897.53	9,849.05	48.48	204.161		
6,300.00	6,034.08	3,353.67	3,313.76	34.82	19.88	75.37	-2,705.88	-9,620.82	9,918.17	9,868.89	49.28	201.262		
6,400.00	6,129.25	3,411.62	3,369.44	35.39	20.29	75.47	-2,708.75	-9,636.60	9,939.23	9,889.15	50.08	198.461		
6,500.00	6,224.42	3,521.34	3,474.77	35.97	21.09	75.65	-2,715.35	-9,666.63	9,960.63	9,909.45	51.18	194.624		
6,600.00	6,319.59	6,600.00	3,686.07	36.54	43.10	76.04	-2,722.52	-9,725.39	9,981.21	9,914.43	66.78	149.462		
7,200.00	6,857.50	4,324.52	4,248.88	39.65	26.84	17.45	-2,731.37	-9,879.64	9,964.28	9,905.45	58.83	169.387		
7,300.00	6,925.48	6,882.42	6,766.19	40.02	40.24	17.33	-2,733.27	-10,244.88	9,911.25	9,840.35	70.89	139.807		
7,400.00	6,982.21	6,929.45	6,813.21	40.33	40.40	13.75	-2,733.92	-10,245.62	9,831.03	9,759.69	71.34	137.803		
7,500.00	7,026.31	6,966.50	6,850.24	40.63	40.52	9.85	-2,734.51	-10,246.23	9,742.60	9,670.92	71.68	135.925		
7,600.00	7,056.68	6,997.57	6,881.31	40.91	40.63	3.43	-2,735.09	-10,246.76	9,648.07	9,576.17	71.91	134.171		
7,700.00	7,072.58	7,015.75	6,899.48	41.25	40.69	-18.55	-2,735.48	-10,247.06	9,549.76	9,477.74	72.02	132.595		
7,800.00	7,074.86	7,019.83	6,903.56	41.69	40.70	-76.83	-2,735.57	-10,247.13	9,450.04	9,378.02	72.03	131.203		
7,900.00	7,074.54	7,021.21	6,904.94	42.34	40.70	-76.95	-2,735.61	-10,247.15	9,350.26	9,278.25	72.01	129.845		
8,000.00	7,074.21	7,022.59	6,906.32	43.27	40.71	-77.08	-2,735.64	-10,247.18	9,250.48	9,178.48	72.00	128.484		
8,100.00	7,073.89	7,023.97	6,907.69	44.47	40.71	-77.20	-2,735.67	-10,247.20	9,150.70	9,078.72	71.98	127.120		
8,200.00	7,073.57	7,025.34	6,909.06	45.91	40.72	-77.33	-2,735.70	-10,247.22	9,050.93	8,978.96	71.97	125.754		
8,300.00	7,073.24	7,026.70	6,910.43	47.53	40.72	-77.45	-2,735.74	-10,247.24	8,951.17	8,879.20	71.96	124.386		
8,400.00	7,072.92	7,028.07	6,911.79	49.31	40.73	-77.58	-2,735.77	-10,247.27	8,851.41	8,779.45	71.95	123.014		
8,500.00	7,072.59	7,029.43	6,913.15	51.20	40.73	-77.70	-2,735.80	-10,247.29	8,751.65	8,679.70	71.95	121.640		
8,600.00	7,072.27	7,030.79	6,914.51	53.19	40.74	-77.82	-2,735.84	-10,247.31	8,651.90	8,579.96	71.94	120.263		
8,700.00	7,071.94	7,032.15	6,915.87	55.27	40.74	-77.95	-2,735.87	-10,247.33	8,552.16	8,480.22	71.94	118.883		
8,800.00	7,071.62	7,033.50	6,917.22	57.43	40.75	-78.07	-2,735.90	-10,247.36	8,452.42	8,380.48	71.94	117.500		
8,900.00	7,071.29	7,034.85	6,918.57	59.64	40.75	-78.20	-2,735.94	-10,247.38	8,352.69	8,280.75	71.93	116.115		
9,000.00	7,070.97	7,036.20	6,919.92	61.92	40.75	-78.32	-2,735.97	-10,247.40	8,252.96	8,181.02	71.94	114.726		
9,100.00	7,070.64	7,037.54	6,921.26	64.24	40.76	-78.44	-2,736.00	-10,247.42	8,153.24	8,081.30	71.94	113.335		
9,200.00	7,070.32	7,038.88	6,922.60	66.61	40.76	-78.57	-2,736.04	-10,247.44	8,053.53	7,981.58	71.94	111.941		
9,300.00	7,069.99	7,040.22	6,923.94	69.01	40.77	-78.69	-2,736.07	-10,247.46	7,953.82	7,881.87	71.95	110.544		
9,400.00	7,069.67	7,041.56	6,925.27	71.45	40.77	-78.81	-2,736.11	-10,247.49	7,854.12	7,782.16	71.96	109.143		
9,500.00	7,069.34	7,042.89	6,926.61	73.92	40.78	-78.94	-2,736.14	-10,247.51	7,754.43	7,682.46	71.97	107.740		
9,600.00	7,069.02	7,044.22	6,927.93	76.42	40.78	-79.06	-2,736.18	-10,247.53	7,654.75	7,582.76	71.99	106.333		
9,700.00	7,068.69	7,045.54	6,929.26	78.95	40.78	-79.18	-2,736.21	-10,247.55	7,555.07	7,483.07	72.01	104.924		
9,800.00	7,068.37	7,046.87	6,930.58	81.49	40.79	-79.30	-2,736.25	-10,247.57	7,455.41	7,383.38	72.03	103.511		
9,900.00	7,068.04	7,048.19	6,931.90	84.06	40.79	-79.43	-2,736.28	-10,247.59	7,355.75	7,283.70	72.05	102.094		
10,000.00	7,067.72	7,049.51	6,933.22	86.65	40.80	-79.55	-2,736.32	-10,247.62	7,256.10	7,184.03	72.07	100.674		
10,100.00	7,067.39	7,050.82	6,934.54	89.25	40.80	-79.67	-2,736.35	-10,247.64	7,156.46	7,084.36	72.10	99.251		
10,200.00	7,067.07	7,052.13	6,935.85	91.87	40.81	-79.79	-2,736.39	-10,247.66	7,056.83	6,984.70	72.14	97.824		
10,300.00	7,066.74	7,053.44	6,937.16	94.50	40.81	-79.91	-2,736.42	-10,247.68	6,957.21	6,885.04	72.18	96.393		
10,400.00	7,066.42	7,054.75	6,938.46	97.14	40.82	-80.03	-2,736.46	-10,247.70	6,857.61	6,785.39	72.22	94.959		
10,500.00	7,066.09	7,056.05	6,939.77	99.80	40.82	-80.15	-2,736.49	-10,247.72	6,758.01	6,685.75	72.26	93.521		
10,600.00	7,065.77	7,057.36	6,941.07	102.47	40.82	-80.27	-2,736.53	-10,247.74	6,658.43	6,586.11	72.31	92.079		
10,700.00	7,065.44	7,058.65	6,942.36	105.15	40.83	-80.40	-2,736.57	-10,247.76	6,558.85	6,486.49	72.37	90.632		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,800.00	7,065.12	7,059.95	6,943.66	107.83	40.83	-80.52	-2,736.60	-10,247.78	6,459.29	6,386.87	72.43	89.182		
10,900.00	7,064.79	7,061.24	6,944.95	110.53	40.84	-80.64	-2,736.64	-10,247.80	6,359.75	6,287.25	72.49	87.727		
11,000.00	7,064.47	7,062.53	6,946.24	113.23	40.84	-80.76	-2,736.68	-10,247.83	6,260.22	6,187.65	72.57	86.267		
11,100.00	7,064.14	7,063.82	6,947.53	115.95	40.85	-80.88	-2,736.71	-10,247.85	6,160.70	6,088.05	72.65	84.803		
11,200.00	7,063.82	7,065.10	6,948.81	118.66	40.85	-81.00	-2,736.75	-10,247.87	6,061.20	5,988.47	72.73	83.335		
11,300.00	7,063.49	7,066.39	6,950.09	121.39	40.85	-81.12	-2,736.79	-10,247.89	5,961.72	5,888.89	72.83	81.861		
11,400.00	7,063.17	7,067.66	6,951.37	124.12	40.86	-81.23	-2,736.82	-10,247.91	5,862.25	5,789.32	72.93	80.382		
11,500.00	7,062.84	7,068.94	6,952.64	126.86	40.86	-81.35	-2,736.86	-10,247.93	5,762.80	5,689.76	73.04	78.898		
11,600.00	7,062.52	7,070.21	6,953.92	129.60	40.87	-81.47	-2,736.90	-10,247.95	5,663.37	5,590.21	73.16	77.409		
11,700.00	7,062.19	7,071.48	6,955.19	132.35	40.87	-81.59	-2,736.93	-10,247.97	5,563.96	5,490.67	73.29	75.914		
11,800.00	7,061.87	7,072.75	6,956.45	135.10	40.88	-81.71	-2,736.97	-10,247.99	5,464.57	5,391.13	73.44	74.414		
11,900.00	7,061.54	7,074.02	6,957.72	137.85	40.88	-81.83	-2,737.01	-10,248.01	5,365.20	5,291.61	73.59	72.907		
12,000.00	7,061.22	7,075.28	6,958.98	140.61	40.88	-81.95	-2,737.05	-10,248.03	5,265.86	5,192.10	73.76	71.395		
12,100.00	7,060.89	7,076.54	6,960.24	143.38	40.89	-82.06	-2,737.09	-10,248.05	5,166.54	5,092.60	73.94	69.876		
12,200.00	7,060.57	7,077.80	6,961.50	146.15	40.89	-82.18	-2,737.12	-10,248.07	5,067.25	4,993.12	74.14	68.351		
12,300.00	7,060.24	7,079.05	6,962.75	148.92	40.90	-82.30	-2,737.16	-10,248.09	4,967.99	4,893.64	74.35	66.819		
12,400.00	7,059.92	7,080.30	6,964.00	151.69	40.90	-82.42	-2,737.20	-10,248.11	4,868.76	4,794.17	74.58	65.280		
12,500.00	7,059.59	7,081.55	6,965.25	154.47	40.90	-82.53	-2,737.24	-10,248.13	4,769.56	4,694.72	74.83	63.735		
12,600.00	7,059.27	7,082.80	6,966.50	157.25	40.91	-82.65	-2,737.28	-10,248.15	4,670.39	4,595.28	75.11	62.182		
12,700.00	7,058.94	7,084.04	6,967.74	160.03	40.91	-82.77	-2,737.32	-10,248.17	4,571.26	4,495.85	75.41	60.622		
12,800.00	7,058.62	7,085.29	6,968.98	162.82	40.92	-82.88	-2,737.35	-10,248.19	4,472.16	4,396.43	75.73	59.055		
12,900.00	7,058.29	7,086.52	6,970.22	165.61	40.92	-83.00	-2,737.39	-10,248.21	4,373.11	4,297.03	76.08	57.481		
13,000.00	7,057.97	7,087.76	6,971.45	168.40	40.92	-83.12	-2,737.43	-10,248.23	4,274.10	4,197.64	76.46	55.900		
13,100.00	7,057.64	7,088.99	6,972.69	171.19	40.93	-83.23	-2,737.47	-10,248.25	4,175.14	4,098.26	76.88	54.311		
13,200.00	7,057.32	7,090.23	6,973.92	173.99	40.93	-83.35	-2,737.51	-10,248.27	4,076.23	3,998.90	77.33	52.714		
13,300.00	7,057.00	7,091.45	6,975.15	176.78	40.94	-83.46	-2,737.55	-10,248.28	3,977.37	3,899.55	77.82	51.111		
13,400.00	7,056.67	7,092.68	6,976.37	179.58	40.94	-83.58	-2,737.59	-10,248.30	3,878.57	3,800.22	78.35	49.500		
13,500.00	7,056.35	7,093.90	6,977.59	182.38	40.95	-83.69	-2,737.63	-10,248.32	3,779.84	3,700.90	78.94	47.883		
13,600.00	7,056.02	7,095.12	6,978.81	185.19	40.95	-83.81	-2,737.67	-10,248.34	3,681.17	3,601.59	79.58	46.260		
13,700.00	7,055.70	7,096.34	6,980.03	187.99	40.95	-83.92	-2,737.71	-10,248.36	3,582.57	3,502.30	80.27	44.630		
13,800.00	7,055.37	7,097.56	6,981.25	190.80	40.96	-84.04	-2,737.75	-10,248.38	3,484.06	3,403.02	81.03	42.995		
13,900.00	7,055.05	7,098.77	6,982.46	193.60	40.96	-84.15	-2,737.79	-10,248.40	3,385.63	3,303.76	81.87	41.356		
14,000.00	7,054.72	7,099.98	6,983.67	196.41	40.97	-84.27	-2,737.83	-10,248.42	3,287.29	3,204.51	82.78	39.713		
14,100.00	7,054.40	7,101.19	6,984.87	199.22	40.97	-84.38	-2,737.87	-10,248.44	3,189.06	3,105.28	83.77	38.067		
14,200.00	7,054.07	7,102.40	6,986.08	202.03	40.97	-84.49	-2,737.91	-10,248.46	3,090.94	3,006.07	84.87	36.420		
14,300.00	7,053.75	7,103.60	6,987.28	204.85	40.98	-84.61	-2,737.95	-10,248.47	2,992.95	2,906.87	86.07	34.773		
14,400.00	7,053.42	7,104.80	6,988.48	207.66	40.98	-84.72	-2,737.99	-10,248.49	2,895.09	2,807.69	87.39	33.127		
14,500.00	7,053.10	7,106.00	6,989.68	210.48	40.99	-84.83	-2,738.03	-10,248.51	2,797.38	2,708.53	88.85	31.485		
14,600.00	7,052.77	7,107.19	6,990.87	213.29	40.99	-84.95	-2,738.07	-10,248.53	2,699.84	2,609.39	90.45	29.849		
14,700.00	7,052.45	7,108.39	6,992.07	216.11	40.99	-85.06	-2,738.11	-10,248.55	2,602.49	2,510.27	92.22	28.221		
14,800.00	7,052.12	7,109.58	6,993.26	218.93	41.00	-85.17	-2,738.15	-10,248.57	2,505.34	2,411.17	94.17	26.604		
14,900.00	7,051.80	7,110.77	6,994.44	221.75	41.00	-85.29	-2,738.19	-10,248.59	2,408.43	2,312.09	96.33	25.001		
15,000.00	7,051.47	7,111.95	6,995.63	224.57	41.00	-85.40	-2,738.23	-10,248.60	2,311.78	2,213.05	98.73	23.415		
15,100.00	7,051.15	7,113.13	6,996.81	227.39	41.01	-85.51	-2,738.27	-10,248.62	2,215.42	2,114.03	101.39	21.850		
15,145.13	7,051.00	7,113.67	6,997.34	228.67	41.01	-85.56	-2,738.29	-10,248.63	2,172.05	2,069.36	102.69	21.152 CC, ES, SF		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-106.38	-2,629.40	-8,946.24	9,324.71					
100.00	100.00	37.01	72.01	3.28	3.28	-106.38	-2,629.32	-8,946.32	9,324.74	9,318.18	6.57	1,420.254		
200.00	200.00	93.94	128.94	3.34	3.29	-106.37	-2,628.90	-8,946.76	9,325.27	9,318.65	6.62	1,408.159		
300.00	299.98	462.73	497.57	3.44	3.71	69.35	-2,619.42	-8,945.78	9,322.87	9,315.71	7.16	1,302.485		
400.00	399.84	716.76	751.42	3.59	4.35	69.56	-2,611.42	-8,940.74	9,318.49	9,310.54	7.95	1,172.239		
500.00	499.45	788.55	823.12	3.79	4.57	69.73	-2,608.54	-8,938.75	9,311.69	9,303.33	8.36	1,113.964		
600.00	598.70	850.00	884.47	4.03	4.76	69.94	-2,605.19	-8,937.77	9,304.32	9,295.52	8.79	1,058.222		
700.00	697.47	876.39	910.81	4.31	4.85	70.12	-2,603.47	-8,937.60	9,296.27	9,287.11	9.16	1,014.940		
800.00	795.62	922.95	957.24	4.64	5.01	70.36	-2,600.07	-8,937.59	9,287.67	9,278.03	9.64	963.904		
900.00	893.06	982.70	1,016.76	5.00	5.21	70.64	-2,594.88	-8,938.14	9,278.45	9,268.25	10.20	909.567		
1,000.00	989.64	1,086.00	1,119.36	5.40	5.60	71.06	-2,583.03	-8,940.12	9,268.42	9,257.44	10.98	844.465		
1,100.00	1,085.27	1,184.66	1,217.05	5.83	5.99	71.51	-2,569.47	-8,942.28	9,257.07	9,245.28	11.79	785.027		
1,200.00	1,180.44	1,560.18	1,585.68	6.29	7.72	72.61	-2,498.79	-8,949.56	9,243.72	9,229.75	13.97	661.789		
1,300.00	1,275.61	1,857.44	1,873.10	6.76	9.39	73.58	-2,423.20	-8,952.55	9,228.61	9,212.54	16.08	574.096		
1,400.00	1,370.78	2,020.62	2,029.77	7.26	10.39	74.14	-2,377.54	-8,952.39	9,212.30	9,194.76	17.54	525.167		
1,500.00	1,465.95	2,054.72	2,062.44	7.76	10.61	74.26	-2,367.77	-8,952.42	9,196.46	9,178.21	18.25	503.822		
1,600.00	1,561.12	2,081.00	2,087.61	8.27	10.77	74.35	-2,360.23	-8,952.57	9,181.38	9,162.45	18.93	485.050		
1,700.00	1,656.29	2,127.27	2,131.88	8.80	11.07	74.51	-2,346.79	-8,953.11	9,167.03	9,147.28	19.75	464.250		
1,800.00	1,751.46	2,175.00	2,177.46	9.32	11.38	74.68	-2,332.64	-8,954.05	9,153.42	9,132.84	20.58	444.742		
1,900.00	1,846.63	1,900.00	2,340.04	9.86	9.52	75.30	-2,280.40	-8,956.89	9,139.75	9,120.47	19.29	473.833		
2,000.00	1,941.80	2,445.20	2,434.57	10.40	13.23	75.66	-2,249.68	-8,957.98	9,125.97	9,102.49	23.47	388.786		
2,100.00	2,036.96	2,566.73	2,550.28	10.94	14.08	76.10	-2,212.54	-8,958.96	9,112.37	9,087.52	24.85	366.686		
2,200.00	2,132.13	2,636.33	2,616.58	11.49	14.56	76.35	-2,191.38	-8,959.38	9,099.00	9,073.12	25.88	351.556		
2,300.00	2,227.30	2,763.32	2,736.88	12.04	15.48	76.83	-2,150.71	-8,960.28	9,085.79	9,058.45	27.34	332.316		
2,400.00	2,322.47	2,823.56	2,793.77	12.59	15.93	77.05	-2,130.92	-8,960.74	9,072.88	9,044.54	28.34	320.131		
2,500.00	2,417.64	2,882.06	2,849.21	13.15	16.35	77.27	-2,112.25	-8,961.22	9,060.54	9,031.22	29.32	309.018		
2,600.00	2,512.81	2,933.00	2,897.91	13.70	16.71	77.45	-2,097.32	-8,961.50	9,048.76	9,018.51	30.25	299.174		
2,700.00	2,607.98	2,993.26	2,955.67	14.26	17.13	77.67	-2,080.15	-8,961.92	9,037.55	9,006.32	31.23	289.408		
2,800.00	2,703.15	3,165.86	3,121.01	14.82	18.33	78.28	-2,030.64	-8,962.68	9,026.44	8,993.47	32.98	273.733		
2,900.00	2,798.32	3,297.05	3,247.05	15.38	19.24	78.75	-1,994.22	-8,962.23	9,015.22	8,980.79	34.43	261.826		
3,000.00	2,893.49	3,345.97	3,293.99	15.95	19.58	78.92	-1,980.46	-8,961.91	9,004.01	8,968.66	35.34	254.752		
3,100.00	2,988.66	3,382.56	3,329.07	16.51	19.83	79.05	-1,970.06	-8,961.90	8,993.55	8,957.38	36.18	248.611		
3,200.00	3,083.83	3,438.31	3,382.49	17.07	20.22	79.25	-1,954.10	-8,962.19	8,983.84	8,946.70	37.14	241.904		
3,300.00	3,179.00	3,527.57	3,468.14	17.64	20.84	79.57	-1,928.98	-8,962.54	8,974.44	8,936.11	38.33	234.120		
3,400.00	3,274.17	3,588.12	3,526.18	18.21	21.27	79.79	-1,911.75	-8,962.89	8,965.52	8,926.18	39.33	227.940		
3,500.00	3,369.34	3,650.66	3,586.04	18.77	21.71	80.01	-1,893.63	-8,963.44	8,957.13	8,916.78	40.35	221.968		
3,600.00	3,464.51	3,716.39	3,648.88	19.34	22.19	80.25	-1,874.40	-8,964.18	8,949.28	8,907.87	41.40	216.152		
3,700.00	3,559.68	3,786.84	3,715.94	19.91	22.70	80.52	-1,852.81	-8,965.18	8,941.90	8,899.40	42.50	210.420		
3,800.00	3,654.84	3,865.12	3,790.16	20.48	23.29	80.81	-1,827.98	-8,966.45	8,934.96	8,891.30	43.66	204.640		
3,900.00	3,750.01	3,956.80	3,877.01	21.05	23.98	81.16	-1,798.63	-8,967.92	8,928.39	8,883.46	44.93	198.704		
4,000.00	3,845.18	4,026.09	3,942.68	21.62	24.51	81.42	-1,776.54	-8,969.00	8,922.17	8,876.13	46.03	193.813		
4,100.00	3,940.35	4,071.00	3,985.31	22.19	24.84	81.59	-1,762.45	-8,969.75	8,916.52	8,869.56	46.95	189.902		
4,200.00	4,035.52	4,128.49	4,040.00	22.76	25.27	81.81	-1,744.76	-8,970.88	8,911.50	8,863.54	47.96	185.822		
4,300.00	4,130.69	4,187.09	4,095.87	23.33	25.70	82.03	-1,727.15	-8,972.28	8,907.20	8,858.23	48.97	181.893		
4,400.00	4,225.86	4,545.00	4,435.01	23.91	28.42	83.39	-1,612.91	-8,975.15	8,901.41	8,849.16	52.25	170.362		
4,500.00	4,321.03	4,603.03	4,489.62	24.48	28.88	83.62	-1,593.30	-8,974.86	8,895.43	8,842.15	53.29	166.929		
4,600.00	4,416.20	4,639.00	4,523.56	25.05	29.16	83.76	-1,581.39	-8,974.83	8,890.24	8,836.09	54.16	164.162		
4,700.00	4,511.37	4,702.41	4,583.66	25.62	29.64	84.00	-1,561.18	-8,974.97	8,885.71	8,830.49	55.21	160.932		
4,800.00	4,606.54	4,756.01	4,634.79	26.20	30.04	84.20	-1,545.09	-8,975.21	8,881.79	8,825.60	56.19	158.060		
4,900.00	4,701.71	4,805.07	4,681.71	26.77	30.39	84.38	-1,530.78	-8,975.59	8,878.54	8,821.41	57.13	155.420		
5,000.00	4,796.88	4,898.14	4,771.17	27.34	31.04	84.72	-1,505.15	-8,976.50	8,875.85	8,817.50	58.35	152.114		
5,100.00	4,892.05	4,978.42	4,849.01	27.92	31.57	84.99	-1,485.51	-8,977.07	8,873.32	8,813.86	59.45	149.244		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	5,047.68	4,916.37	28.49	32.01	85.23	-1,469.42	-8,977.69	8,871.25	8,810.78	60.47	146.702		
5,300.00	5,082.39	5,125.97	4,992.76	29.07	32.49	85.48	-1,452.25	-8,978.50	8,869.60	8,808.07	61.53	144.154		
5,400.00	5,177.56	5,236.24	5,100.95	29.64	33.13	85.83	-1,431.00	-8,979.52	8,868.15	8,805.41	62.74	141.355		
5,500.00	5,272.72	5,335.68	5,199.13	30.21	33.65	86.12	-1,415.27	-8,980.23	8,866.73	8,802.90	63.83	138.901		
5,600.00	5,367.89	5,424.50	5,287.10	30.79	34.09	86.37	-1,403.06	-8,980.90	8,865.57	8,800.73	64.84	136.722		
5,700.00	5,463.06	5,525.76	5,387.79	31.36	34.54	86.63	-1,392.47	-8,981.57	8,864.47	8,798.60	65.87	134.573		
5,800.00	5,558.23	5,600.00	5,602.00	31.94	35.64	87.16	-1,376.33	-8,982.04	8,863.33	8,795.80	67.53	131.246		
5,900.00	5,653.40	5,633.71	5,694.98	32.51	35.75	87.37	-1,371.39	-8,981.31	8,861.12	8,792.90	68.22	129.886		
6,000.00	5,748.57	5,684.65	5,745.88	33.09	35.94	87.48	-1,369.28	-8,981.14	8,859.45	8,790.47	68.98	128.435		
6,100.00	5,843.74	5,942.18	5,803.38	33.67	36.13	87.61	-1,367.39	-8,981.22	8,858.32	8,788.57	69.75	126.998		
6,200.00	5,938.91	6,013.39	5,874.56	34.24	36.37	87.76	-1,365.67	-8,981.61	8,857.67	8,787.11	70.56	125.528		
6,300.00	6,034.08	6,106.46	5,967.61	34.82	36.68	87.96	-1,363.66	-8,982.26	8,857.28	8,785.84	71.44	123.977		
6,400.00	6,129.25	6,217.52	6,078.65	35.39	37.04	88.19	-1,361.48	-8,982.90	8,856.89	8,784.51	72.38	122.365		
6,500.00	6,224.42	6,290.52	6,151.63	35.97	37.29	88.35	-1,360.07	-8,983.33	8,856.64	8,783.45	73.20	120.999		
6,518.39	6,241.92	6,303.64	6,164.75	36.07	37.33	88.37	-1,359.80	-8,983.43	8,856.64	8,783.29	73.34	120.753		
6,600.00	6,319.59	6,361.84	6,222.94	36.54	37.52	88.50	-1,358.58	-8,983.94	8,856.76	8,782.75	74.01	119.677		
6,700.00	6,414.76	6,438.63	6,299.70	37.12	37.78	88.66	-1,356.91	-8,984.77	8,857.22	8,782.39	74.83	118.358		
6,800.00	6,509.91	6,517.21	6,378.27	37.70	38.05	81.55	-1,355.28	-8,985.78	8,857.42	8,781.75	75.67	117.055		
6,900.00	6,603.99	6,615.25	6,476.27	38.26	38.38	58.97	-1,353.34	-8,987.12	8,846.41	8,769.85	76.56	115.555		
7,000.00	6,694.76	6,716.65	6,577.65	38.78	38.72	44.89	-1,351.39	-8,988.40	8,820.05	8,742.64	77.41	113.939		
7,100.00	6,779.96	6,779.46	6,640.44	39.24	38.93	36.63	-1,350.21	-8,989.28	8,779.18	8,701.10	78.08	112.438		
7,200.00	6,857.50	6,842.50	6,703.46	39.65	39.15	31.88	-1,349.07	-8,990.25	8,724.84	8,646.15	78.70	110.869		
7,300.00	6,925.48	6,903.48	6,764.42	40.02	39.36	29.38	-1,347.91	-8,991.28	8,658.30	8,579.05	79.25	109.250		
7,400.00	6,982.21	6,955.59	6,816.52	40.33	39.54	28.63	-1,346.77	-8,992.18	8,581.10	8,501.38	79.72	107.636		
7,500.00	7,026.31	6,996.50	6,857.40	40.63	39.68	29.79	-1,345.79	-8,992.90	8,495.10	8,415.00	80.10	106.059		
7,600.00	7,056.68	7,030.47	6,891.36	40.91	39.80	34.34	-1,344.92	-8,993.50	8,402.36	8,321.97	80.39	104.516		
7,700.00	7,072.58	7,051.67	6,912.55	41.25	39.87	49.75	-1,344.38	-8,993.87	8,305.12	8,224.53	80.59	103.054		
7,800.00	7,074.86	7,056.46	6,917.34	41.69	39.89	80.49	-1,344.26	-8,993.95	8,205.79	8,125.10	80.68	101.704		
7,900.00	7,074.54	7,058.10	6,918.98	42.34	39.90	80.61	-1,344.22	-8,993.98	8,106.26	8,025.50	80.76	100.377		
8,000.00	7,074.21	7,059.74	6,920.61	43.27	39.90	80.72	-1,344.18	-8,994.01	8,006.74	7,925.91	80.84	99.047		
8,100.00	7,073.89	7,061.37	6,922.24	44.47	39.91	80.84	-1,344.14	-8,994.04	7,907.24	7,826.32	80.92	97.714		
8,200.00	7,073.57	7,062.99	6,923.86	45.91	39.91	80.96	-1,344.10	-8,994.06	7,807.75	7,726.74	81.01	96.379		
8,300.00	7,073.24	7,064.60	6,925.47	47.53	39.92	81.07	-1,344.06	-8,994.09	7,708.27	7,627.17	81.10	95.041		
8,400.00	7,072.92	7,066.21	6,927.08	49.31	39.92	81.19	-1,344.02	-8,994.12	7,608.81	7,527.60	81.20	93.700		
8,500.00	7,072.59	7,067.80	6,928.67	51.20	39.93	81.30	-1,343.98	-8,994.15	7,509.36	7,428.05	81.31	92.356		
8,600.00	7,072.27	7,069.39	6,930.26	53.19	39.94	81.42	-1,343.94	-8,994.17	7,409.92	7,328.50	81.42	91.010		
8,700.00	7,071.94	7,070.97	6,931.84	55.27	39.94	81.53	-1,343.90	-8,994.20	7,310.50	7,228.97	81.54	89.660		
8,800.00	7,071.62	7,072.55	6,933.42	57.43	39.95	81.64	-1,343.86	-8,994.22	7,211.10	7,129.44	81.66	88.308		
8,900.00	7,071.29	7,074.12	6,934.98	59.64	39.95	81.76	-1,343.82	-8,994.25	7,111.71	7,029.92	81.79	86.953		
9,000.00	7,070.97	7,075.68	6,936.54	61.92	39.96	81.87	-1,343.78	-8,994.28	7,012.34	6,930.41	81.92	85.596		
9,100.00	7,070.64	7,077.23	6,938.09	64.24	39.96	81.98	-1,343.74	-8,994.30	6,912.98	6,830.91	82.07	84.235		
9,200.00	7,070.32	7,078.77	6,939.64	66.61	39.97	82.09	-1,343.71	-8,994.33	6,813.65	6,731.43	82.22	82.872		
9,300.00	7,069.99	7,080.31	6,941.18	69.01	39.97	82.20	-1,343.67	-8,994.35	6,714.33	6,631.95	82.38	81.506		
9,400.00	7,069.67	7,081.84	6,942.71	71.45	39.98	82.31	-1,343.63	-8,994.38	6,615.04	6,532.49	82.55	80.137		
9,500.00	7,069.34	7,083.37	6,944.23	73.92	39.99	82.42	-1,343.59	-8,994.40	6,515.76	6,433.04	82.72	78.765		
9,600.00	7,069.02	7,084.88	6,945.74	76.42	39.99	82.53	-1,343.55	-8,994.43	6,416.51	6,333.60	82.91	77.391		
9,700.00	7,068.69	7,086.39	6,947.25	78.95	40.00	82.64	-1,343.52	-8,994.45	6,317.28	6,234.17	83.11	76.013		
9,800.00	7,068.37	7,087.89	6,948.75	81.49	40.00	82.75	-1,343.48	-8,994.48	6,218.08	6,134.76	83.32	74.633		
9,900.00	7,068.04	7,089.39	6,950.25	84.06	40.01	82.86	-1,343.44	-8,994.50	6,118.90	6,035.36	83.53	73.250		
10,000.00	7,067.72	7,090.88	6,951.74	86.65	40.01	82.97	-1,343.41	-8,994.53	6,019.75	5,935.98	83.77	71.865		
10,100.00	7,067.39	7,092.36	6,953.22	89.25	40.02	83.07	-1,343.37	-8,994.55	5,920.62	5,836.61	84.01	70.476		
10,200.00	7,067.07	7,093.84	6,954.69	91.87	40.02	83.18	-1,343.33	-8,994.58	5,821.53	5,737.26	84.27	69.085		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	7,095.30	6,956.16	94.50	40.03	83.29	-1,343.30	-8,994.60	5,722.47	5,637.93	84.54	67.691		
10,400.00	7,066.42	7,096.77	6,957.62	97.14	40.03	83.39	-1,343.26	-8,994.62	5,623.44	5,538.61	84.82	66.295		
10,500.00	7,066.09	7,098.22	6,959.08	99.80	40.04	83.50	-1,343.22	-8,994.65	5,524.44	5,439.31	85.13	64.896		
10,600.00	7,065.77	7,099.67	6,960.52	102.47	40.04	83.60	-1,343.19	-8,994.67	5,425.48	5,340.03	85.45	63.494		
10,700.00	7,065.44	7,101.11	6,961.97	105.15	40.05	83.71	-1,343.15	-8,994.69	5,326.56	5,240.78	85.79	62.090		
10,800.00	7,065.12	7,102.55	6,963.40	107.83	40.05	83.81	-1,343.12	-8,994.72	5,227.68	5,141.54	86.15	60.683		
10,900.00	7,064.79	7,103.98	6,964.83	110.53	40.06	83.91	-1,343.08	-8,994.74	5,128.85	5,042.32	86.53	59.275		
11,000.00	7,064.47	7,105.40	6,966.25	113.23	40.06	84.02	-1,343.05	-8,994.76	5,030.06	4,943.13	86.93	57.864		
11,100.00	7,064.14	7,106.81	6,967.67	115.95	40.07	84.12	-1,343.01	-8,994.79	4,931.31	4,843.96	87.36	56.451		
11,200.00	7,063.82	7,108.22	6,969.08	118.66	40.07	84.22	-1,342.98	-8,994.81	4,832.62	4,744.82	87.81	55.036		
11,300.00	7,063.49	7,109.63	6,970.48	121.39	40.08	84.32	-1,342.94	-8,994.83	4,733.99	4,645.70	88.29	53.620		
11,400.00	7,063.17	7,111.02	6,971.88	124.12	40.08	84.43	-1,342.91	-8,994.85	4,635.41	4,546.61	88.80	52.202		
11,500.00	7,062.84	7,112.42	6,973.27	126.86	40.09	84.53	-1,342.88	-8,994.87	4,536.89	4,447.55	89.34	50.783		
11,600.00	7,062.52	7,113.80	6,974.65	129.60	40.09	84.63	-1,342.84	-8,994.90	4,438.44	4,348.53	89.92	49.362		
11,700.00	7,062.19	7,115.18	6,976.03	132.35	40.10	84.73	-1,342.81	-8,994.92	4,340.06	4,249.53	90.53	47.942		
11,800.00	7,061.87	7,116.55	6,977.40	135.10	40.10	84.83	-1,342.78	-8,994.94	4,241.76	4,150.58	91.18	46.520		
11,900.00	7,061.54	7,117.92	6,978.77	137.85	40.11	84.93	-1,342.74	-8,994.96	4,143.53	4,051.66	91.88	45.099		
12,000.00	7,061.22	7,119.28	6,980.13	140.61	40.11	85.03	-1,342.71	-8,994.98	4,045.40	3,952.78	92.62	43.678		
12,100.00	7,060.89	7,120.63	6,981.48	143.38	40.12	85.12	-1,342.68	-8,995.00	3,947.35	3,853.94	93.41	42.259		
12,200.00	7,060.57	7,121.98	6,982.83	146.15	40.12	85.22	-1,342.64	-8,995.03	3,849.41	3,755.15	94.26	40.840		
12,300.00	7,060.24	7,123.33	6,984.17	148.92	40.13	85.32	-1,342.61	-8,995.05	3,751.57	3,656.41	95.16	39.424		
12,400.00	7,059.92	7,124.66	6,985.51	151.69	40.13	85.42	-1,342.58	-8,995.07	3,653.85	3,557.72	96.13	38.010		
12,500.00	7,059.59	7,125.99	6,986.84	154.47	40.14	85.51	-1,342.55	-8,995.09	3,556.26	3,459.09	97.17	36.600		
12,600.00	7,059.27	7,127.32	6,988.16	157.25	40.14	85.61	-1,342.51	-8,995.11	3,458.80	3,360.52	98.28	35.194		
12,700.00	7,058.94	7,128.64	6,989.48	160.03	40.15	85.71	-1,342.48	-8,995.13	3,361.50	3,262.02	99.47	33.793		
12,800.00	7,058.62	7,129.95	6,990.80	162.82	40.15	85.80	-1,342.45	-8,995.15	3,264.35	3,163.59	100.76	32.398		
12,900.00	7,058.29	7,131.26	6,992.10	165.61	40.16	85.90	-1,342.42	-8,995.17	3,167.38	3,065.24	102.14	31.010		
13,000.00	7,057.97	7,132.56	6,993.41	168.40	40.16	85.99	-1,342.39	-8,995.19	3,070.61	2,966.98	103.63	29.630		
13,100.00	7,057.64	7,133.86	6,994.70	171.19	40.16	86.09	-1,342.36	-8,995.21	2,974.05	2,868.81	105.24	28.260		
13,200.00	7,057.32	7,135.15	6,995.99	173.99	40.17	86.18	-1,342.32	-8,995.23	2,877.72	2,770.75	106.97	26.901		
13,300.00	7,057.00	7,136.44	6,997.28	176.78	40.17	86.27	-1,342.29	-8,995.25	2,781.66	2,672.80	108.85	25.555		
13,400.00	7,056.67	7,137.72	6,998.56	179.58	40.18	86.37	-1,342.26	-8,995.27	2,685.88	2,574.99	110.89	24.222		
13,500.00	7,056.35	7,138.99	6,999.83	182.38	40.18	86.46	-1,342.23	-8,995.29	2,590.41	2,477.32	113.09	22.905		
13,600.00	7,056.02	7,140.26	7,001.10	185.19	40.19	86.55	-1,342.20	-8,995.31	2,495.31	2,379.81	115.49	21.606		
13,700.00	7,055.70	7,141.53	7,002.37	187.99	40.19	86.65	-1,342.17	-8,995.33	2,400.59	2,282.49	118.10	20.326		
13,800.00	7,055.37	7,142.79	7,003.62	190.80	40.20	86.74	-1,342.14	-8,995.35	2,306.33	2,185.38	120.95	19.068		
13,900.00	7,055.05	7,144.04	7,004.88	193.60	40.20	86.83	-1,342.11	-8,995.37	2,212.57	2,088.51	124.06	17.835		
14,000.00	7,054.72	7,145.29	7,006.12	196.41	40.20	86.92	-1,342.08	-8,995.39	2,119.38	1,991.91	127.46	16.627		
14,100.00	7,054.40	7,146.53	7,007.37	199.22	40.21	87.01	-1,342.05	-8,995.41	2,026.83	1,895.64	131.19	15.449		
14,200.00	7,054.07	7,147.77	7,008.60	202.03	40.21	87.10	-1,342.02	-8,995.42	1,935.03	1,799.74	135.29	14.303		
14,300.00	7,053.75	7,149.00	7,009.84	204.85	40.22	87.19	-1,341.99	-8,995.44	1,844.08	1,704.29	139.79	13.192		
14,400.00	7,053.42	7,150.23	7,011.06	207.66	40.22	87.28	-1,341.96	-8,995.46	1,754.11	1,609.36	144.76	12.118		
14,500.00	7,053.10	7,151.45	7,012.29	210.48	40.23	87.37	-1,341.93	-8,995.48	1,665.29	1,515.06	150.23	11.085		
14,600.00	7,052.77	7,152.67	7,013.50	213.29	40.23	87.46	-1,341.90	-8,995.50	1,577.81	1,421.52	156.28	10.096		
14,700.00	7,052.45	7,153.88	7,014.71	216.11	40.24	87.55	-1,341.88	-8,995.52	1,491.90	1,328.92	162.97	9.154		
14,800.00	7,052.12	7,155.09	7,015.92	218.93	40.24	87.63	-1,341.85	-8,995.54	1,407.84	1,237.48	170.36	8.264		
14,900.00	7,051.80	7,156.29	7,017.12	221.75	40.24	87.72	-1,341.82	-8,995.55	1,326.01	1,147.48	178.53	7.427		
15,000.00	7,051.47	7,157.49	7,018.32	224.57	40.25	87.81	-1,341.79	-8,995.57	1,246.82	1,059.31	187.52	6.649		
15,100.00	7,051.15	7,158.68	7,019.51	227.39	40.25	87.90	-1,341.76	-8,995.59	1,170.83	973.46	197.36	5.932		
15,145.13	7,051.00	7,159.22	7,020.05	228.67	40.25	87.94	-1,341.75	-8,995.60	1,137.75	935.66	202.09	5.630 CC, ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-106.36	-2,635.21	-8,977.12	9,355.98					
100.00	100.00	171.10	206.07	3.28	3.32	-106.34	-2,632.61	-8,976.85	9,355.52	9,348.91	6.61	1,415.926		
200.00	200.00	304.25	339.19	3.34	3.47	-106.33	-2,629.48	-8,975.85	9,354.11	9,347.31	6.80	1,375.286		
300.00	299.98	406.42	441.30	3.44	3.63	69.35	-2,626.42	-8,975.19	9,352.04	9,344.96	7.07	1,322.073		
400.00	399.84	492.48	527.31	3.59	3.81	69.46	-2,623.28	-8,974.75	9,348.68	9,341.28	7.40	1,262.958		
500.00	499.45	542.00	576.78	3.79	3.93	69.57	-2,621.16	-8,974.73	9,344.46	9,336.75	7.72	1,211.075		
600.00	598.70	587.84	622.58	4.03	4.04	69.71	-2,619.09	-8,975.01	9,339.59	9,331.52	8.07	1,156.805		
700.00	697.47	648.00	682.67	4.31	4.21	69.88	-2,616.42	-8,975.96	9,334.28	9,325.76	8.52	1,095.714		
800.00	795.62	661.88	696.53	4.64	4.25	70.01	-2,615.82	-8,976.27	9,328.30	9,319.41	8.88	1,050.461		
900.00	893.06	705.83	740.43	5.00	4.37	70.20	-2,614.08	-8,977.40	9,321.87	9,312.51	9.36	995.451		
1,000.00	989.64	791.08	825.59	5.40	4.63	70.49	-2,610.95	-8,979.79	9,314.64	9,304.63	10.01	930.174		
1,100.00	1,085.27	829.26	863.72	5.83	4.75	70.71	-2,609.45	-8,981.02	9,306.69	9,296.13	10.56	881.153		
1,200.00	1,180.44	884.00	918.35	6.29	4.93	70.82	-2,606.83	-8,983.33	9,298.94	9,287.75	11.19	830.814		
1,300.00	1,275.61	884.00	918.35	6.76	4.93	70.82	-2,606.83	-8,983.33	9,291.87	9,280.21	11.66	796.577		
1,400.00	1,370.78	924.44	958.67	7.26	5.06	70.91	-2,604.68	-8,985.52	9,285.56	9,273.27	12.29	755.696		
1,500.00	1,465.95	979.00	1,013.03	7.76	5.25	71.03	-2,601.80	-8,989.21	9,280.26	9,267.28	12.97	715.308		
1,600.00	1,561.12	979.00	1,013.03	8.27	5.25	71.03	-2,601.80	-8,989.21	9,275.45	9,261.97	13.48	687.944		
1,700.00	1,656.29	1,018.73	1,052.57	8.80	5.40	71.12	-2,599.52	-8,992.36	9,271.55	9,257.40	14.14	655.651		
1,800.00	1,751.46	1,074.00	1,107.50	9.32	5.60	71.25	-2,595.76	-8,997.19	9,268.28	9,253.42	14.86	623.505		
1,900.00	1,846.63	1,130.66	1,163.72	9.86	5.82	71.38	-2,591.14	-9,002.56	9,265.54	9,249.93	15.61	593.587		
2,000.00	1,941.80	1,168.00	1,200.70	10.40	5.97	71.48	-2,587.64	-9,006.26	9,263.25	9,246.96	16.29	568.753		
2,100.00	2,036.96	1,216.34	1,248.50	10.94	6.17	71.60	-2,582.62	-9,011.41	9,261.59	9,244.58	17.02	544.184		
2,200.00	2,132.13	1,263.00	1,294.53	11.49	6.37	71.72	-2,577.31	-9,016.94	9,260.77	9,243.02	17.75	521.714		
2,256.95	2,186.34	1,263.00	1,294.53	11.80	6.37	71.72	-2,577.31	-9,016.94	9,260.60	9,242.54	18.06	512.815		
2,300.00	2,227.30	1,263.00	1,294.53	12.04	6.37	71.72	-2,577.31	-9,016.94	9,260.70	9,242.40	18.29	506.296		
2,400.00	2,322.47	1,306.91	1,337.71	12.59	6.57	71.84	-2,571.83	-9,022.68	9,261.37	9,242.35	19.02	486.823		
2,500.00	2,417.64	1,358.00	1,387.78	13.15	6.80	71.98	-2,564.82	-9,030.08	9,262.98	9,243.19	19.79	467.996		
2,600.00	2,512.81	1,374.07	1,403.49	13.70	6.88	72.03	-2,562.50	-9,032.52	9,265.21	9,244.80	20.41	453.964		
2,700.00	2,607.98	1,471.12	1,498.41	14.26	7.35	72.30	-2,548.66	-9,047.24	9,267.93	9,246.52	21.41	432.956		
2,800.00	2,703.15	1,547.00	1,572.77	14.82	7.73	72.51	-2,538.51	-9,058.49	9,270.74	9,248.43	22.31	415.518		
2,900.00	2,798.32	1,602.97	1,627.63	15.38	8.01	72.66	-2,531.29	-9,066.88	9,274.03	9,250.90	23.13	401.033		
3,000.00	2,893.49	1,646.62	1,670.36	15.95	8.24	72.78	-2,525.59	-9,073.72	9,278.02	9,254.14	23.88	388.504		
3,100.00	2,988.66	3,100.00	1,819.14	16.51	16.23	73.19	-2,506.48	-9,097.20	9,282.14	9,250.36	31.78	292.036		
3,200.00	3,083.83	1,872.96	1,892.15	17.07	9.43	73.40	-2,496.75	-9,108.47	9,286.11	9,260.01	26.10	355.789		
3,300.00	3,179.00	1,926.00	1,944.04	17.64	9.72	73.54	-2,489.69	-9,116.86	9,290.77	9,263.86	26.92	345.182		
3,400.00	3,274.17	2,056.58	2,072.03	18.21	10.44	73.89	-2,473.30	-9,136.91	9,295.37	9,267.24	28.13	330.430		
3,500.00	3,369.34	2,117.00	2,131.24	18.77	10.77	74.06	-2,465.82	-9,146.32	9,300.39	9,271.40	28.99	320.860		
3,600.00	3,464.51	2,349.46	2,358.54	19.34	12.09	74.71	-2,432.23	-9,181.38	9,304.96	9,274.19	30.78	302.328		
3,700.00	3,559.68	2,401.00	2,409.05	19.91	12.38	74.85	-2,425.21	-9,188.89	9,309.33	9,277.73	31.60	294.590		
3,800.00	3,654.84	2,445.34	2,452.54	20.48	12.64	74.97	-2,419.64	-9,195.47	9,314.29	9,281.91	32.38	287.665		
3,900.00	3,750.01	2,495.00	2,501.21	21.05	12.92	75.10	-2,413.20	-9,202.96	9,319.73	9,286.54	33.18	280.846		
4,000.00	3,845.18	2,548.81	2,553.88	21.62	13.23	75.25	-2,406.01	-9,211.32	9,325.74	9,291.72	34.02	274.155		
4,100.00	3,940.35	2,594.44	2,598.47	22.19	13.49	75.38	-2,399.74	-9,218.69	9,332.42	9,297.62	34.80	268.155		
4,200.00	4,035.52	2,708.25	2,709.68	22.76	14.17	75.69	-2,384.02	-9,237.09	9,339.31	9,303.34	35.97	259.649		
4,300.00	4,130.69	2,779.00	2,778.81	23.33	14.58	75.89	-2,374.33	-9,248.58	9,346.49	9,309.60	36.90	253.318		
4,400.00	4,225.86	2,905.34	2,902.58	23.91	15.32	76.22	-2,358.50	-9,268.33	9,353.35	9,315.24	38.12	245.369		
4,500.00	4,321.03	2,936.88	2,933.53	24.48	15.50	76.31	-2,354.97	-9,273.35	9,360.94	9,322.12	38.82	241.138		
4,600.00	4,416.20	2,969.00	2,965.02	25.05	15.68	76.39	-2,351.54	-9,278.66	9,369.28	9,329.76	39.52	237.072		
4,700.00	4,511.37	3,206.74	3,198.19	25.62	17.05	77.00	-2,325.70	-9,317.09	9,377.66	9,336.33	41.33	226.887		
4,800.00	4,606.54	3,285.77	3,275.95	26.20	17.49	77.20	-2,318.59	-9,329.20	9,385.44	9,343.16	42.27	222.020		
4,900.00	4,701.71	3,675.79	3,660.83	26.77	19.60	78.15	-2,284.30	-9,381.99	9,391.57	9,346.77	44.80	209.635		
5,000.00	4,796.88	3,729.00	3,713.36	27.34	19.88	78.28	-2,278.83	-9,388.47	9,396.77	9,351.16	45.61	206.009		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	3,767.24	3,751.07	27.92	20.10	78.38	-2,274.71	-9,393.33	9,402.62	9,356.27	46.35	202.847		
5,200.00	4,987.22	3,824.00	3,806.87	28.49	20.41	78.53	-2,267.99	-9,401.23	9,409.43	9,362.24	47.19	199.396		
5,300.00	5,082.39	3,824.00	3,806.87	29.07	20.41	78.53	-2,267.99	-9,401.23	9,416.73	9,369.02	47.72	197.338		
5,400.00	5,177.56	3,857.20	3,839.44	29.64	20.61	78.61	-2,263.81	-9,406.19	9,424.95	9,376.52	48.43	194.616		
5,500.00	5,272.72	3,916.00	3,897.01	30.21	20.96	78.77	-2,256.25	-9,415.43	9,433.95	9,384.68	49.28	191.439		
5,600.00	5,367.89	3,938.63	3,919.15	30.79	21.09	78.83	-2,253.31	-9,419.10	9,443.51	9,393.59	49.92	189.156		
5,700.00	5,463.06	4,151.88	4,128.14	31.36	22.36	79.39	-2,227.15	-9,452.42	9,453.03	9,401.40	51.64	183.063		
5,800.00	5,558.23	4,208.58	4,183.76	31.94	22.69	79.54	-2,220.28	-9,460.98	9,462.22	9,409.75	52.47	180.332		
5,900.00	5,653.40	4,289.50	4,263.01	32.51	23.17	79.75	-2,209.66	-9,473.41	9,471.79	9,418.34	53.45	177.223		
6,000.00	5,748.57	4,382.44	4,353.82	33.09	23.73	80.00	-2,196.04	-9,487.77	9,481.59	9,427.09	54.50	173.973		
6,100.00	5,843.74	4,440.30	4,410.22	33.67	24.10	80.17	-2,186.77	-9,496.80	9,491.71	9,436.36	55.36	171.463		
6,200.00	5,938.91	4,485.00	4,453.69	34.24	24.38	80.29	-2,179.19	-9,503.94	9,502.38	9,446.25	56.13	169.282		
6,300.00	6,034.08	4,538.39	4,505.52	34.82	24.72	80.45	-2,169.88	-9,512.68	9,513.63	9,456.66	56.97	167.007		
6,400.00	6,129.25	4,605.82	4,572.58	35.39	25.00	80.45	-2,160.96	-9,521.42	9,518.78	9,463.81	57.46	164.528		
6,500.00	6,224.42	4,650.00	4,617.60	35.97	25.30	80.46	-2,151.83	-9,529.25	9,515.16	9,468.16	57.99	162.031		
6,600.00	6,319.59	4,698.94	4,666.68	36.54	25.55	80.47	-2,142.46	-9,537.47	9,511.31	9,473.03	58.48	159.534		
6,700.00	6,414.76	4,747.48	4,715.22	37.12	25.71	80.47	-2,132.80	-9,545.34	9,507.96	9,478.93	58.93	157.037		
6,800.00	6,509.91	4,795.99	4,763.71	37.70	25.86	77.55	-2,123.10	-9,553.43	9,504.69	9,484.91	59.34	154.540		
6,900.00	6,603.99	4,844.00	4,811.71	38.26	26.06	54.79	-2,113.41	-9,561.41	9,501.65	9,491.11	59.71	152.043		
7,000.00	6,694.76	4,892.41	4,860.11	38.78	26.20	40.36	-2,103.45	-9,569.41	9,498.85	9,498.61	60.00	149.546		
7,100.00	6,779.96	4,940.41	4,908.10	39.24	26.39	31.72	-2,093.62	-9,577.27	9,496.87	9,496.01	60.21	147.049		
7,200.00	6,857.50	4,988.30	4,956.97	39.65	26.58	26.36	-2,083.97	-9,585.22	9,494.66	9,493.22	60.39	144.552		
7,300.00	6,925.48	5,036.00	5,004.65	40.02	26.79	22.96	-2,074.33	-9,593.53	9,492.52	9,490.53	60.54	142.055		
7,400.00	6,982.21	5,083.09	5,051.73	40.33	26.90	20.70	-2,064.05	-9,601.28	9,490.65	9,488.61	60.66	139.558		
7,500.00	7,026.31	5,129.48	5,097.11	40.63	27.03	19.31	-2,053.70	-9,609.45	9,488.82	9,486.78	60.75	137.061		
7,600.00	7,056.68	5,174.70	5,142.32	40.91	27.13	18.60	-2,043.47	-9,617.97	9,487.15	9,485.19	60.81	134.564		
7,700.00	7,072.58	5,219.05	5,186.66	41.25	27.19	18.71	-2,033.34	-9,626.38	9,485.23	9,483.14	60.84	132.067		
7,800.00	7,074.86	5,263.07	5,231.67	41.69	27.20	21.66	-2,023.30	-9,635.50	9,483.43	9,481.30	60.84	129.570		
7,900.00	7,074.54	5,306.09	5,274.70	42.34	27.21	21.84	-2,013.29	-9,644.56	9,481.47	9,479.31	60.81	127.073		
8,000.00	7,074.21	5,349.12	5,317.73	43.27	27.22	22.02	-2,003.27	-9,653.62	9,479.51	9,477.33	60.75	124.576		
8,100.00	7,073.89	5,392.17	5,360.78	44.47	27.23	22.20	-1,993.25	-9,662.68	9,477.55	9,475.34	60.66	122.079		
8,200.00	7,073.57	5,435.23	5,403.81	45.91	27.24	22.39	-1,983.23	-9,671.74	9,475.60	9,473.36	60.54	119.582		
8,300.00	7,073.24	5,478.29	5,446.90	47.53	27.24	22.58	-1,973.22	-9,680.81	9,473.64	9,471.37	60.39	117.085		
8,400.00	7,072.92	5,521.37	5,490.98	49.31	27.25	22.78	-1,963.20	-9,689.87	9,471.68	9,469.38	60.21	114.588		
8,500.00	7,072.59	5,564.46	5,533.06	51.20	27.26	22.98	-1,953.18	-9,698.93	9,469.72	9,467.39	60.00	112.091		
8,600.00	7,072.27	5,607.56	5,576.16	53.19	27.27	23.18	-1,943.16	-9,708.99	9,467.76	9,465.41	59.75	109.594		
8,700.00	7,071.94	5,650.68	5,619.27	55.27	27.28	23.39	-1,933.14	-9,719.06	9,465.81	9,463.42	59.46	107.097		
8,800.00	7,071.62	5,693.80	5,662.40	57.43	27.29	23.60	-1,923.13	-9,729.12	9,463.85	9,461.43	59.13	104.600		
8,900.00	7,071.29	5,736.93	5,705.53	59.64	27.30	23.82	-1,913.11	-9,739.19	9,461.89	9,459.43	58.75	102.103		
9,000.00	7,070.97	5,780.08	5,748.68	61.92	27.30	24.04	-1,903.09	-9,749.25	9,459.94	9,457.44	58.33	99.606		
9,100.00	7,070.64	5,823.24	5,791.83	64.24	27.31	24.27	-1,893.07	-9,759.32	9,457.98	9,455.45	57.89	97.109		
9,200.00	7,070.32	5,866.41	5,835.00	66.61	27.32	24.51	-1,883.05	-9,769.38	9,455.93	9,453.46	57.41	94.612		
9,300.00	7,069.99	5,909.59	5,878.18	69.01	27.33	24.74	-1,873.03	-9,779.45	9,453.87	9,451.47	56.89	92.115		
9,400.00	7,069.67	5,952.78	5,921.37	71.45	27.34	24.99	-1,863.02	-9,789.52	9,451.82	9,449.47	56.33	89.618		
9,500.00	7,069.34	5,995.99	5,964.58	73.92	27.35	25.24	-1,853.00	-9,799.58	9,449.76	9,447.47	55.75	87.121		
9,600.00	7,069.02	6,039.20	6,007.79	76.42	27.35	25.49	-1,843.98	-9,809.65	9,447.61	9,445.47	55.14	84.624		
9,700.00	7,068.69	6,082.43	6,051.02	78.95	27.36	25.76	-1,834.96	-9,819.72	9,445.46	9,443.48	54.50	82.127		
9,800.00	7,068.37	6,125.68	6,094.26	81.49	27.37	26.02	-1,825.94	-9,829.79	9,443.30	9,441.48	53.83	79.630		
9,900.00	7,068.04	6,168.93	6,137.51	84.06	27.38	26.30	-1,816.93	-9,839.86	9,441.13	9,439.64	53.14	77.133		
10,000.00	7,067.72	6,212.20	6,180.78	86.65	27.39	26.58	-1,807.91	-9,849.93	9,438.96	9,437.81	52.43	74.636		
10,100.00	7,067.39	6,255.47	6,224.06	89.25	27.40	26.87	-1,798.89	-9,859.99	9,436.79	9,435.64	51.70	72.139		
10,200.00	7,067.07	6,298.77	6,267.35	91.87	27.41	27.17	-1,789.87	-9,869.97	9,434.61	9,433.46	50.95	69.642		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	6,916.07	6,867.65	94.50	35.42	27.47	-2,037.85	-9,657.15	6,338.55	6,264.47	74.08	85.567		
10,400.00	7,066.42	6,918.39	6,869.97	97.14	35.42	27.78	-2,037.83	-9,657.22	6,238.60	6,164.47	74.13	84.156		
10,500.00	7,066.09	6,920.72	6,872.30	99.80	35.43	28.10	-2,037.82	-9,657.29	6,138.65	6,064.47	74.19	82.746		
10,600.00	7,065.77	6,923.06	6,874.64	102.47	35.44	28.43	-2,037.80	-9,657.37	6,038.70	5,964.46	74.24	81.337		
10,700.00	7,065.44	6,925.42	6,877.00	105.15	35.45	28.77	-2,037.78	-9,657.44	5,938.76	5,864.46	74.30	79.928		
10,800.00	7,065.12	6,927.79	6,879.37	107.83	35.46	29.12	-2,037.76	-9,657.51	5,838.81	5,764.45	74.36	78.520		
10,900.00	7,064.79	6,930.17	6,881.75	110.53	35.47	29.48	-2,037.74	-9,657.59	5,738.86	5,664.44	74.42	77.112		
11,000.00	7,064.47	6,932.57	6,884.14	113.23	35.48	29.84	-2,037.72	-9,657.67	5,638.92	5,564.43	74.48	75.706		
11,100.00	7,064.14	6,934.98	6,886.55	115.95	35.49	30.22	-2,037.70	-9,657.74	5,538.97	5,464.42	74.55	74.300		
11,200.00	7,063.82	6,937.41	6,888.98	118.66	35.50	30.61	-2,037.69	-9,657.82	5,439.03	5,364.41	74.61	72.895		
11,300.00	7,063.49	6,939.85	6,891.42	121.39	35.51	31.01	-2,037.67	-9,657.90	5,339.09	5,264.40	74.68	71.491		
11,400.00	7,063.17	6,942.30	6,893.87	124.12	35.52	31.42	-2,037.65	-9,657.98	5,239.14	5,164.39	74.75	70.087		
11,500.00	7,062.84	6,944.77	6,896.33	126.86	35.53	31.84	-2,037.63	-9,658.06	5,139.20	5,064.38	74.82	68.685		
11,600.00	7,062.52	6,944.00	6,895.57	129.60	35.52	31.71	-2,037.64	-9,658.03	5,039.26	4,964.38	74.89	67.292		
11,700.00	7,062.19	6,944.00	6,895.57	132.35	35.52	31.71	-2,037.64	-9,658.03	4,939.33	4,864.37	74.96	65.897		
11,800.00	7,061.87	6,944.00	6,895.57	135.10	35.52	31.71	-2,037.64	-9,658.03	4,839.39	4,764.36	75.03	64.503		
11,900.00	7,061.54	6,944.00	6,895.57	137.85	35.52	31.71	-2,037.64	-9,658.03	4,739.46	4,664.36	75.10	63.110		
12,000.00	7,061.22	6,944.00	6,895.57	140.61	35.52	31.71	-2,037.64	-9,658.03	4,639.53	4,564.36	75.17	61.717		
12,100.00	7,060.89	6,944.00	6,895.57	143.38	35.52	31.71	-2,037.64	-9,658.03	4,539.60	4,464.35	75.25	60.325		
12,200.00	7,060.57	6,958.94	6,910.49	146.15	35.59	34.48	-2,037.52	-9,658.53	4,439.65	4,364.28	75.37	58.906		
12,300.00	7,060.24	6,961.09	6,912.65	148.92	35.59	34.91	-2,037.50	-9,658.60	4,339.72	4,264.26	75.46	57.514		
12,400.00	7,059.92	6,963.28	6,914.83	151.69	35.60	35.36	-2,037.48	-9,658.67	4,239.79	4,164.24	75.55	56.122		
12,500.00	7,059.59	6,965.49	6,917.04	154.47	35.61	35.83	-2,037.46	-9,658.75	4,139.86	4,064.22	75.64	54.732		
12,600.00	7,059.27	6,967.73	6,919.29	157.25	35.62	36.31	-2,037.45	-9,658.83	4,039.94	3,964.20	75.73	53.344		
12,700.00	7,058.94	6,970.01	6,921.56	160.03	35.63	36.81	-2,037.43	-9,658.91	3,940.01	3,864.18	75.83	51.956		
12,800.00	7,058.62	6,972.31	6,923.86	162.82	35.64	37.33	-2,037.41	-9,658.99	3,840.09	3,764.16	75.94	50.570		
12,900.00	7,058.29	6,974.65	6,926.20	165.61	35.65	37.87	-2,037.39	-9,659.07	3,740.17	3,664.13	76.04	49.186		
13,000.00	7,057.97	6,977.02	6,928.57	168.40	35.66	38.44	-2,037.36	-9,659.15	3,640.26	3,564.11	76.15	47.803		
13,100.00	7,057.64	6,979.43	6,930.97	171.19	35.67	39.02	-2,037.34	-9,659.24	3,540.34	3,464.08	76.27	46.421		
13,200.00	7,057.32	6,981.86	6,933.41	173.99	35.68	39.63	-2,037.32	-9,659.32	3,440.43	3,364.05	76.38	45.041		
13,300.00	7,057.00	6,984.33	6,935.87	176.78	35.69	40.26	-2,037.30	-9,659.41	3,340.52	3,264.02	76.51	43.662		
13,400.00	7,056.67	6,986.84	6,938.38	179.58	35.70	40.92	-2,037.27	-9,659.50	3,240.62	3,163.98	76.64	42.285		
13,500.00	7,056.35	6,989.38	6,940.92	182.38	35.71	41.60	-2,037.25	-9,659.60	3,140.72	3,063.95	76.77	40.909		
13,600.00	7,056.02	6,991.96	6,943.50	185.19	35.72	42.32	-2,037.23	-9,659.69	3,040.82	2,963.91	76.91	39.535		
13,700.00	7,055.70	6,994.58	6,946.11	187.99	35.73	43.06	-2,037.20	-9,659.79	2,940.93	2,863.86	77.06	38.162		
13,800.00	7,055.37	6,997.24	6,948.77	190.80	35.74	43.84	-2,037.18	-9,659.89	2,841.04	2,763.82	77.22	36.791		
13,900.00	7,055.05	6,999.93	6,951.46	193.60	35.75	44.65	-2,037.15	-9,659.99	2,741.15	2,663.77	77.39	35.422		
14,000.00	7,054.72	7,002.67	6,954.20	196.41	35.76	45.50	-2,037.12	-9,660.09	2,641.27	2,563.71	77.56	34.054		
14,100.00	7,054.40	7,005.44	6,956.97	199.22	35.77	46.38	-2,037.09	-9,660.19	2,541.40	2,463.65	77.75	32.687		
14,200.00	7,054.07	7,008.26	6,959.79	202.03	35.78	47.31	-2,037.07	-9,660.30	2,441.53	2,363.58	77.95	31.322		
14,300.00	7,053.75	7,011.13	6,962.65	204.85	35.80	48.28	-2,037.04	-9,660.41	2,341.67	2,263.51	78.17	29.958		
14,400.00	7,053.42	7,014.03	6,965.55	207.66	35.81	49.29	-2,037.01	-9,660.52	2,241.82	2,163.42	78.40	28.596		
14,500.00	7,053.10	7,016.98	6,968.50	210.48	35.82	50.36	-2,036.97	-9,660.64	2,141.98	2,063.33	78.65	27.234		
14,600.00	7,052.77	7,019.98	6,971.49	213.29	35.83	51.47	-2,036.94	-9,660.76	2,042.14	1,963.22	78.93	25.874		
14,700.00	7,052.45	7,023.02	6,974.54	216.11	35.84	52.63	-2,036.91	-9,660.88	1,942.32	1,863.09	79.23	24.515		
14,800.00	7,052.12	7,026.12	6,977.63	218.93	35.86	53.86	-2,036.88	-9,661.00	1,842.51	1,762.95	79.57	23.157		
14,900.00	7,051.80	7,029.26	6,980.77	221.75	35.87	55.14	-2,036.84	-9,661.13	1,742.72	1,662.78	79.95	21.799		
15,000.00	7,051.47	7,032.45	6,983.96	224.57	35.88	56.48	-2,036.81	-9,661.26	1,642.95	1,562.57	80.37	20.442		
15,100.00	7,051.15	7,035.70	6,987.20	227.39	35.90	57.89	-2,036.77	-9,661.39	1,543.19	1,462.33	80.86	19.085		
15,145.13	7,051.00	7,037.18	6,988.68	228.67	35.90	58.54	-2,036.75	-9,661.45	1,498.19	1,417.08	81.10	18.473	CC, ES, SF	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	35.00	3.28	3.28	-106.69	-2,693.50	-8,985.49	9,380.57					
100.00	100.00	42.92	77.92	3.28	3.28	-106.69	-2,693.39	-8,985.57	9,380.58	9,374.02	6.57	1,428.735		
200.00	200.00	111.82	146.82	3.34	3.29	-106.68	-2,692.77	-8,986.06	9,380.99	9,374.36	6.63	1,415.082		
300.00	299.98	171.00	205.98	3.44	3.33	68.94	-2,691.80	-8,986.77	9,381.09	9,374.33	6.76	1,386.910		
400.00	399.84	208.72	243.69	3.59	3.36	68.97	-2,691.12	-8,987.46	9,380.51	9,373.56	6.95	1,350.657		
500.00	499.45	263.00	297.94	3.79	3.41	69.02	-2,690.42	-8,988.96	9,379.49	9,372.29	7.20	1,302.366		
600.00	598.70	263.00	297.94	4.03	3.41	69.06	-2,690.42	-8,988.96	9,377.80	9,370.35	7.45	1,259.170		
700.00	697.47	263.00	297.94	4.31	3.41	69.09	-2,690.42	-8,988.96	9,375.92	9,368.19	7.74	1,212.027		
800.00	795.62	304.86	339.77	4.64	3.47	69.18	-2,690.30	-8,990.69	9,373.37	9,365.25	8.11	1,155.101		
900.00	893.06	354.00	388.82	5.00	3.55	69.30	-2,690.98	-8,993.57	9,370.88	9,362.33	8.55	1,096.026		
1,000.00	989.64	354.00	388.82	5.40	3.55	69.36	-2,690.98	-8,993.57	9,367.53	9,358.59	8.95	1,046.931		
1,100.00	1,085.27	354.00	388.82	5.83	3.55	69.43	-2,690.98	-8,993.57	9,364.03	9,354.65	9.38	998.377		
1,200.00	1,180.44	385.80	420.52	6.29	3.61	69.48	-2,691.92	-8,995.82	9,360.84	9,350.95	9.89	946.633		
1,300.00	1,275.61	410.64	445.26	6.76	3.65	69.52	-2,692.97	-8,997.72	9,358.47	9,348.06	10.41	899.176		
1,400.00	1,370.78	445.00	479.46	7.26	3.73	69.58	-2,694.88	-9,000.54	9,356.93	9,345.97	10.96	853.550		
1,500.00	1,465.95	554.13	587.94	7.76	3.99	69.73	-2,703.12	-9,009.11	9,355.78	9,344.07	11.70	799.500		
1,600.00	1,561.12	625.67	658.98	8.27	4.19	69.83	-2,709.67	-9,014.37	9,354.62	9,342.23	12.39	754.733		
1,700.00	1,656.29	744.71	777.07	8.80	4.58	69.99	-2,722.09	-9,022.73	9,353.54	9,340.28	13.26	705.549		
1,800.00	1,751.46	819.00	850.81	9.32	4.84	70.08	-2,729.42	-9,028.09	9,352.53	9,338.51	14.02	667.165		
1,900.00	1,846.63	1,383.00	1,412.90	9.86	7.01	70.96	-2,760.15	-9,059.14	9,346.92	9,330.34	16.58	563.584		
2,000.00	1,941.80	1,383.00	1,412.90	10.40	7.01	70.96	-2,760.15	-9,059.14	9,341.82	9,324.70	17.12	545.589		
2,100.00	2,036.96	1,383.00	1,412.90	10.94	7.01	70.96	-2,760.15	-9,059.14	9,337.79	9,320.13	17.66	528.651		
2,200.00	2,132.13	1,383.00	1,412.90	11.49	7.01	70.96	-2,760.15	-9,059.14	9,334.83	9,316.62	18.21	512.707		
2,300.00	2,227.30	1,383.00	1,412.90	12.04	7.01	70.96	-2,760.15	-9,059.14	9,332.94	9,314.18	18.75	497.696		
2,400.00	2,322.47	1,414.96	1,444.76	12.59	7.14	71.01	-2,760.87	-9,061.52	9,331.53	9,312.11	19.42	480.454		
2,428.13	2,349.24	1,417.48	1,447.27	12.75	7.15	71.02	-2,760.94	-9,061.75	9,331.40	9,311.81	19.59	476.431		
2,500.00	2,417.64	1,445.00	1,474.62	13.15	7.27	71.07	-2,761.87	-9,064.66	9,331.66	9,311.57	20.09	464.569		
2,600.00	2,512.81	1,445.00	1,474.62	13.70	7.27	71.07	-2,761.87	-9,064.66	9,332.35	9,311.71	20.63	452.271		
2,700.00	2,607.98	1,445.00	1,474.62	14.26	7.27	71.07	-2,761.87	-9,064.66	9,334.11	9,312.92	21.18	440.665		
2,800.00	2,703.15	1,489.43	1,518.69	14.82	7.47	71.14	-2,763.74	-9,069.97	9,336.78	9,314.87	21.91	426.150		
2,900.00	2,798.32	1,557.82	1,586.50	15.38	7.78	71.26	-2,767.31	-9,078.15	9,339.87	9,317.14	22.74	410.761		
3,000.00	2,893.49	1,569.00	1,597.58	15.95	7.83	71.27	-2,767.97	-9,079.49	9,343.57	9,320.24	23.33	400.480		
3,100.00	2,988.66	1,627.24	1,655.22	16.51	8.11	71.36	-2,772.23	-9,086.66	9,347.78	9,323.65	24.13	387.430		
3,200.00	3,083.83	1,665.00	1,692.49	17.07	8.29	71.42	-2,775.81	-9,091.53	9,352.85	9,328.01	24.84	376.571		
3,300.00	3,179.00	1,665.00	1,692.49	17.64	8.29	71.42	-2,775.81	-9,091.53	9,358.74	9,333.36	25.38	368.743		
3,400.00	3,274.17	1,702.24	1,729.16	18.21	8.48	71.47	-2,779.87	-9,096.64	9,365.35	9,339.26	26.09	358.947		
3,500.00	3,369.34	3,500.00	1,785.07	18.77	18.40	71.54	-2,786.84	-9,105.18	9,373.03	9,338.07	34.95	268.165		
3,600.00	3,464.51	1,902.36	1,925.63	19.34	9.53	71.72	-2,804.34	-9,125.64	9,380.27	9,352.16	28.11	333.728		
3,700.00	3,559.68	3,700.00	2,059.08	19.91	19.55	71.89	-2,822.17	-9,144.33	9,387.28	9,350.10	37.18	252.485		
3,800.00	3,654.84	2,092.84	2,112.71	20.48	10.55	71.96	-2,829.04	-9,151.59	9,394.02	9,363.91	30.11	312.008		
3,900.00	3,750.01	2,136.00	2,155.05	21.05	10.79	72.01	-2,834.50	-9,157.95	9,401.76	9,370.90	30.86	304.667		
4,000.00	3,845.18	2,163.99	2,182.48	21.62	10.95	72.05	-2,838.08	-9,162.26	9,410.13	9,378.60	31.54	298.395		
4,100.00	3,940.35	2,368.16	2,382.56	22.19	12.10	72.29	-2,865.18	-9,192.44	9,418.41	9,385.31	33.10	284.551		
4,200.00	4,035.52	2,419.00	2,432.42	22.76	12.38	72.35	-2,872.18	-9,199.58	9,426.15	9,392.25	33.90	278.083		
4,300.00	4,130.69	2,479.27	2,491.42	23.33	12.73	72.42	-2,880.92	-9,208.23	9,434.34	9,399.59	34.75	271.511		
4,400.00	4,225.86	2,524.08	2,535.18	23.91	12.99	72.47	-2,887.86	-9,214.90	9,443.20	9,407.68	35.52	265.872		
4,500.00	4,321.03	2,600.22	2,609.47	24.48	13.45	72.55	-2,899.87	-9,226.46	9,452.46	9,416.01	36.46	259.273		
4,600.00	4,416.20	2,635.84	2,644.19	25.05	13.66	72.59	-2,905.56	-9,232.00	9,462.18	9,425.00	37.18	254.476		
4,700.00	4,511.37	3,482.98	3,476.44	25.62	18.46	73.55	-3,021.69	-9,335.18	9,466.48	9,424.36	42.12	224.738		
4,800.00	4,606.54	3,522.13	3,515.09	26.20	18.67	73.60	-3,026.95	-9,338.62	9,469.16	9,426.27	42.89	220.801		
4,900.00	4,701.71	3,550.00	3,542.56	26.77	18.83	73.63	-3,030.84	-9,341.19	9,472.51	9,428.92	43.59	217.311		
5,000.00	4,796.88	3,594.38	3,586.28	27.34	19.07	73.68	-3,037.07	-9,345.57	9,476.51	9,432.13	44.38	213.538		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	3,644.00	3,635.14	27.92	19.35	73.73	-3,043.89	-9,350.96	9,481.25	9,436.06	45.19	209.791		
5,200.00	4,987.22	3,644.00	3,635.14	28.49	19.35	73.73	-3,043.89	-9,350.96	9,486.68	9,440.93	45.75	207.374		
5,300.00	5,082.39	3,680.74	3,671.25	29.07	19.57	73.77	-3,049.02	-9,355.35	9,492.86	9,446.37	46.49	204.179		
5,400.00	5,177.56	3,704.39	3,694.45	29.64	19.70	73.80	-3,052.49	-9,358.37	9,499.89	9,452.72	47.17	201.415		
5,500.00	5,272.72	3,739.00	3,728.32	30.21	19.91	73.83	-3,057.79	-9,363.09	9,507.74	9,459.85	47.90	198.511		
5,600.00	5,367.89	3,739.00	3,728.32	30.79	19.91	73.83	-3,057.79	-9,363.09	9,516.38	9,467.95	48.43	196.494		
5,700.00	5,463.06	3,800.73	3,788.57	31.36	20.29	73.90	-3,067.77	-9,372.06	9,525.57	9,476.26	49.32	193.157		
5,800.00	5,558.23	4,305.00	4,282.41	31.94	23.29	74.41	-3,146.37	-9,435.62	9,531.26	9,478.60	52.66	180.981		
5,900.00	5,653.40	4,350.14	4,326.85	32.51	23.55	74.46	-3,152.38	-9,440.72	9,536.87	9,483.41	53.46	178.396		
6,000.00	5,748.57	4,399.00	4,374.88	33.09	23.83	74.52	-3,159.09	-9,446.71	9,543.26	9,488.99	54.27	175.841		
6,100.00	5,843.74	4,422.36	4,397.82	33.67	23.97	74.54	-3,162.31	-9,449.73	9,550.26	9,495.31	54.94	173.816		
6,200.00	5,938.91	4,472.08	4,446.65	34.24	24.26	74.60	-3,168.88	-9,456.38	9,557.85	9,502.10	55.76	171.416		
6,300.00	6,034.08	4,519.62	4,493.33	34.82	24.54	74.66	-3,174.90	-9,463.03	9,565.99	9,509.43	56.56	169.134		
6,400.00	6,129.25	4,565.47	4,538.30	35.39	24.82	74.71	-3,180.99	-9,469.64	9,574.70	9,517.35	57.35	166.957		
6,500.00	6,224.42	4,643.59	4,614.78	35.97	25.29	74.80	-3,191.98	-9,481.17	9,583.88	9,525.56	58.32	164.330		
6,600.00	6,319.59	6,270.28	6,228.13	36.54	33.08	77.24	-3,294.13	-9,611.36	9,585.35	9,519.10	66.25	144.689		
6,700.00	6,414.76	6,360.74	6,318.58	37.12	33.42	77.40	-3,294.11	-9,612.26	9,579.31	9,512.11	67.20	142.555		
6,800.00	6,509.91	6,457.05	6,414.89	37.70	33.76	70.27	-3,293.93	-9,613.26	9,572.84	9,504.68	68.16	140.447		
6,900.00	6,603.99	6,553.74	6,511.57	38.26	34.11	47.37	-3,293.49	-9,614.29	9,555.17	9,486.07	69.10	138.283		
7,000.00	6,694.76	6,647.02	6,604.85	38.78	34.45	32.61	-3,292.82	-9,615.28	9,522.53	9,452.56	69.97	136.095		
7,100.00	6,779.96	6,807.23	6,765.04	39.24	35.00	23.46	-3,290.88	-9,616.50	9,475.43	9,404.46	70.97	133.510		
7,200.00	6,857.50	6,963.48	6,921.26	39.65	35.53	17.23	-3,287.82	-9,616.52	9,414.63	9,342.75	71.88	130.976		
7,300.00	6,925.48	7,003.18	6,960.95	40.02	35.66	12.10	-3,286.99	-9,616.47	9,342.22	9,269.87	72.35	129.122		
7,400.00	6,982.21	7,045.65	7,003.41	40.33	35.81	7.07	-3,286.15	-9,616.45	9,260.20	9,187.45	72.75	127.290		
7,500.00	7,026.31	7,078.82	7,036.57	40.63	35.92	0.45	-3,285.54	-9,616.48	9,170.53	9,097.50	73.03	125.569		
7,600.00	7,056.68	7,101.81	7,059.56	40.91	36.00	-12.26	-3,285.13	-9,616.51	9,075.37	9,002.17	73.20	123.984		
7,700.00	7,072.58	7,113.97	7,071.72	41.25	36.04	-49.86	-3,284.93	-9,616.54	8,977.03	8,903.78	73.25	122.549		
7,800.00	7,074.86	7,115.88	7,073.62	41.69	36.04	-91.36	-3,284.90	-9,616.54	8,877.84	8,804.62	73.21	121.258		
7,900.00	7,074.54	7,115.80	7,073.55	42.34	36.04	-91.35	-3,284.90	-9,616.54	8,778.70	8,705.54	73.16	119.989		
8,000.00	7,074.21	7,115.73	7,073.48	43.27	36.04	-91.35	-3,284.90	-9,616.54	8,679.58	8,606.46	73.11	118.713		
8,100.00	7,073.89	7,115.66	7,073.41	44.47	36.04	-91.35	-3,284.90	-9,616.54	8,580.48	8,507.41	73.07	117.429		
8,200.00	7,073.57	7,115.59	7,073.34	45.91	36.04	-91.34	-3,284.90	-9,616.54	8,481.40	8,408.37	73.03	116.137		
8,300.00	7,073.24	7,115.52	7,073.27	47.53	36.04	-91.34	-3,284.90	-9,616.54	8,382.34	8,309.35	72.99	114.837		
8,400.00	7,072.92	7,115.44	7,073.19	49.31	36.04	-91.34	-3,284.90	-9,616.54	8,283.30	8,210.34	72.96	113.529		
8,500.00	7,072.59	7,115.37	7,073.12	51.20	36.04	-91.33	-3,284.91	-9,616.54	8,184.29	8,111.36	72.94	112.212		
8,600.00	7,072.27	7,115.30	7,073.05	53.19	36.04	-91.33	-3,284.91	-9,616.54	8,085.30	8,012.39	72.92	110.886		
8,700.00	7,071.94	7,115.22	7,072.97	55.27	36.04	-91.33	-3,284.91	-9,616.54	7,986.34	7,913.44	72.90	109.552		
8,800.00	7,071.62	7,115.15	7,072.90	57.43	36.04	-91.32	-3,284.91	-9,616.54	7,887.41	7,814.52	72.89	108.207		
8,900.00	7,071.29	7,115.08	7,072.83	59.64	36.04	-91.32	-3,284.91	-9,616.54	7,788.50	7,715.61	72.89	106.853		
9,000.00	7,070.97	7,115.00	7,072.75	61.92	36.04	-91.31	-3,284.91	-9,616.54	7,689.62	7,616.72	72.89	105.490		
9,100.00	7,070.64	7,114.93	7,072.68	64.24	36.04	-91.31	-3,284.91	-9,616.54	7,590.77	7,517.86	72.91	104.116		
9,200.00	7,070.32	7,114.85	7,072.60	66.61	36.04	-91.31	-3,284.91	-9,616.54	7,491.95	7,419.02	72.93	102.731		
9,300.00	7,069.99	7,114.77	7,072.52	69.01	36.04	-91.30	-3,284.91	-9,616.54	7,393.16	7,320.20	72.96	101.335		
9,400.00	7,069.67	7,114.70	7,072.45	71.45	36.04	-91.30	-3,284.92	-9,616.54	7,294.40	7,221.41	73.00	99.928		
9,500.00	7,069.34	7,114.62	7,072.37	73.92	36.04	-91.30	-3,284.92	-9,616.54	7,195.68	7,122.63	73.04	98.510		
9,600.00	7,069.02	7,114.54	7,072.29	76.42	36.04	-91.29	-3,284.92	-9,616.54	7,096.99	7,023.89	73.10	97.080		
9,700.00	7,068.69	7,114.47	7,072.22	78.95	36.04	-91.29	-3,284.92	-9,616.54	6,998.35	6,925.17	73.18	95.638		
9,800.00	7,068.37	7,114.39	7,072.14	81.49	36.04	-91.28	-3,284.92	-9,616.54	6,899.74	6,826.48	73.26	94.184		
9,900.00	7,068.04	7,114.31	7,072.06	84.06	36.04	-91.28	-3,284.92	-9,616.54	6,801.17	6,727.81	73.35	92.716		
10,000.00	7,067.72	7,114.23	7,071.98	86.65	36.04	-91.28	-3,284.92	-9,616.54	6,702.64	6,629.18	73.46	91.236		
10,100.00	7,067.39	7,114.15	7,071.90	89.25	36.04	-91.27	-3,284.93	-9,616.54	6,604.16	6,530.57	73.59	89.743		
10,200.00	7,067.07	7,114.07	7,071.82	91.87	36.04	-91.27	-3,284.93	-9,616.54	6,505.72	6,431.99	73.73	88.236		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
10,300.00	7,066.74	7,113.99	7,071.74	94.50	36.04	-91.26	-3,284.93	-9,616.54	6,407.34	6,333.45	73.89	86.715		
10,400.00	7,066.42	7,113.91	7,071.66	97.14	36.04	-91.26	-3,284.93	-9,616.54	6,309.00	6,234.93	74.07	85.181		
10,500.00	7,066.09	7,113.83	7,071.58	99.80	36.04	-91.26	-3,284.93	-9,616.54	6,210.72	6,136.45	74.26	83.632		
10,600.00	7,065.77	7,113.75	7,071.50	102.47	36.04	-91.25	-3,284.93	-9,616.54	6,112.49	6,038.01	74.48	82.070		
10,700.00	7,065.44	7,113.67	7,071.42	105.15	36.04	-91.25	-3,284.93	-9,616.54	6,014.32	5,939.60	74.72	80.493		
10,800.00	7,065.12	7,113.59	7,071.34	107.83	36.04	-91.24	-3,284.93	-9,616.54	5,916.21	5,841.23	74.98	78.901		
10,900.00	7,064.79	7,113.51	7,071.26	110.53	36.04	-91.24	-3,284.94	-9,616.54	5,818.17	5,742.89	75.27	77.296		
11,000.00	7,064.47	7,113.42	7,071.17	113.23	36.04	-91.24	-3,284.94	-9,616.54	5,720.19	5,644.60	75.59	75.676		
11,100.00	7,064.14	7,113.34	7,071.09	115.95	36.04	-91.23	-3,284.94	-9,616.54	5,622.28	5,546.35	75.93	74.042		
11,200.00	7,063.82	7,113.26	7,071.01	118.66	36.04	-91.23	-3,284.94	-9,616.54	5,524.45	5,448.14	76.31	72.394		
11,300.00	7,063.49	7,113.17	7,070.92	121.39	36.04	-91.22	-3,284.94	-9,616.54	5,426.70	5,349.98	76.72	70.733		
11,400.00	7,063.17	7,113.09	7,070.84	124.12	36.04	-91.22	-3,284.94	-9,616.54	5,329.04	5,251.87	77.17	69.058		
11,500.00	7,062.84	7,113.01	7,070.76	126.86	36.03	-91.22	-3,284.94	-9,616.54	5,231.46	5,153.81	77.65	67.371		
11,600.00	7,062.52	7,112.92	7,070.67	129.60	36.03	-91.21	-3,284.95	-9,616.54	5,133.97	5,055.80	78.18	65.672		
11,700.00	7,062.19	7,112.83	7,070.58	132.35	36.03	-91.21	-3,284.95	-9,616.54	5,036.58	4,957.84	78.74	63.961		
11,800.00	7,061.87	7,112.75	7,070.50	135.10	36.03	-91.20	-3,284.95	-9,616.54	4,939.30	4,859.94	79.36	62.240		
11,900.00	7,061.54	7,112.66	7,070.41	137.85	36.03	-91.20	-3,284.95	-9,616.54	4,842.13	4,762.11	80.02	60.509		
12,000.00	7,061.22	7,112.58	7,070.33	140.61	36.03	-91.19	-3,284.95	-9,616.54	4,745.08	4,664.34	80.74	58.770		
12,100.00	7,060.89	7,112.49	7,070.24	143.38	36.03	-91.19	-3,284.95	-9,616.54	4,648.15	4,566.63	81.51	57.023		
12,200.00	7,060.57	7,112.40	7,070.15	146.15	36.03	-91.19	-3,284.95	-9,616.54	4,551.35	4,469.00	82.35	55.270		
12,300.00	7,060.24	7,112.31	7,070.06	148.92	36.03	-91.18	-3,284.96	-9,616.54	4,454.69	4,371.45	83.25	53.513		
12,400.00	7,059.92	7,112.22	7,069.97	151.69	36.03	-91.18	-3,284.96	-9,616.54	4,358.19	4,273.98	84.21	51.753		
12,500.00	7,059.59	7,112.13	7,069.88	154.47	36.03	-91.17	-3,284.96	-9,616.54	4,261.85	4,176.59	85.25	49.991		
12,600.00	7,059.27	7,112.04	7,069.79	157.25	36.03	-91.17	-3,284.96	-9,616.54	4,165.67	4,079.30	86.37	48.230		
12,700.00	7,058.94	7,111.95	7,069.70	160.03	36.03	-91.16	-3,284.96	-9,616.54	4,069.69	3,982.11	87.58	46.471		
12,800.00	7,058.62	7,111.86	7,069.61	162.82	36.03	-91.16	-3,284.96	-9,616.54	3,973.90	3,885.03	88.87	44.717		
12,900.00	7,058.29	7,111.77	7,069.52	165.61	36.03	-91.15	-3,284.97	-9,616.54	3,878.32	3,788.07	90.26	42.969		
13,000.00	7,057.97	7,111.68	7,069.43	168.40	36.03	-91.15	-3,284.97	-9,616.54	3,782.98	3,691.23	91.75	41.231		
13,100.00	7,057.64	7,111.59	7,069.34	171.19	36.03	-91.14	-3,284.97	-9,616.53	3,687.88	3,594.52	93.35	39.505		
13,200.00	7,057.32	7,111.50	7,069.25	173.99	36.03	-91.14	-3,284.97	-9,616.53	3,593.04	3,497.97	95.07	37.792		
13,300.00	7,057.00	7,111.40	7,069.15	176.78	36.03	-91.14	-3,284.97	-9,616.53	3,498.49	3,401.57	96.92	36.095		
13,400.00	7,056.67	7,111.31	7,069.06	179.58	36.03	-91.13	-3,284.97	-9,616.53	3,404.26	3,305.35	98.91	34.418		
13,500.00	7,056.35	7,111.21	7,068.96	182.38	36.03	-91.13	-3,284.97	-9,616.53	3,310.36	3,209.32	101.04	32.762		
13,600.00	7,056.02	7,111.12	7,068.87	185.19	36.03	-91.12	-3,284.98	-9,616.53	3,216.83	3,113.50	103.33	31.131		
13,700.00	7,055.70	7,111.02	7,068.77	187.99	36.03	-91.12	-3,284.98	-9,616.53	3,123.70	3,017.91	105.79	29.527		
13,800.00	7,055.37	7,110.93	7,068.68	190.80	36.03	-91.11	-3,284.98	-9,616.53	3,031.01	2,922.58	108.44	27.952		
13,900.00	7,055.05	7,110.83	7,068.58	193.60	36.03	-91.11	-3,284.98	-9,616.53	2,938.80	2,827.52	111.28	26.409		
14,000.00	7,054.72	7,110.74	7,068.49	196.41	36.03	-91.10	-3,284.98	-9,616.53	2,847.12	2,732.78	114.34	24.901		
14,100.00	7,054.40	7,110.64	7,068.39	199.22	36.03	-91.10	-3,284.98	-9,616.53	2,756.01	2,638.38	117.63	23.430		
14,200.00	7,054.07	7,110.54	7,068.29	202.03	36.03	-91.09	-3,284.99	-9,616.53	2,665.54	2,544.37	121.17	21.999		
14,300.00	7,053.75	7,110.44	7,068.19	204.85	36.03	-91.09	-3,284.99	-9,616.53	2,575.78	2,450.80	124.98	20.610		
14,400.00	7,053.42	7,110.34	7,068.09	207.66	36.03	-91.08	-3,284.99	-9,616.53	2,486.79	2,357.71	129.08	19.265		
14,500.00	7,053.10	7,110.24	7,067.99	210.48	36.03	-91.08	-3,284.99	-9,616.53	2,398.68	2,265.17	133.50	17.967		
14,600.00	7,052.77	7,110.14	7,067.89	213.29	36.03	-91.07	-3,284.99	-9,616.53	2,311.53	2,173.26	138.27	16.717		
14,700.00	7,052.45	7,110.04	7,067.79	216.11	36.02	-91.07	-3,284.99	-9,616.53	2,225.46	2,082.05	143.41	15.518		
14,800.00	7,052.12	7,109.94	7,067.69	218.93	36.02	-91.06	-3,285.00	-9,616.53	2,140.61	1,991.66	148.95	14.371		
14,900.00	7,051.80	7,109.84	7,067.59	221.75	36.02	-91.06	-3,285.00	-9,616.53	2,057.12	1,902.19	154.92	13.278		
15,000.00	7,051.47	7,109.74	7,067.49	224.57	36.02	-91.05	-3,285.00	-9,616.53	1,975.16	1,813.80	161.36	12.241		
15,100.00	7,051.15	7,109.63	7,067.38	227.39	36.02	-91.05	-3,285.00	-9,616.53	1,894.93	1,726.64	168.29	11.260		
15,145.13	7,051.00	7,109.59	7,067.34	228.67	36.02	-91.05	-3,285.00	-9,616.53	1,859.35	1,687.77	171.58	10.836 CC, ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	949.75	975.04	3.28	5.64	-107.43	-2,774.46	-8,839.52	9,315.88					
100.00	100.00	1,003.00	1,026.88	3.28	5.92	-107.49	-2,783.23	-8,831.08	9,305.56	9,296.40	9.16	1,016.386		
200.00	200.00	1,065.31	1,087.57	3.34	6.25	-107.57	-2,793.57	-8,821.45	9,295.69	9,286.17	9.52	976.792		
300.00	299.98	1,098.00	1,119.48	3.44	6.43	68.19	-2,798.78	-8,816.66	9,285.80	9,276.02	9.78	949.689		
400.00	399.84	1,142.62	1,163.14	3.59	6.67	68.34	-2,805.62	-8,810.50	9,275.27	9,265.12	10.14	914.387		
500.00	499.45	1,193.00	1,212.58	3.79	6.93	68.52	-2,812.90	-8,804.16	9,264.20	9,253.61	10.59	874.703		
600.00	598.70	1,234.95	1,253.78	4.03	7.16	68.73	-2,819.02	-8,799.12	9,252.41	9,241.37	11.04	837.921		
700.00	697.47	1,309.73	1,327.02	4.31	7.56	68.95	-2,831.00	-8,789.97	9,239.70	9,227.99	11.71	788.885		
800.00	795.62	1,379.00	1,394.91	4.64	7.94	69.20	-2,842.00	-8,781.71	9,226.02	9,213.62	12.40	744.064		
900.00	893.06	1,703.82	1,714.63	5.00	9.68	69.61	-2,884.20	-8,743.13	9,210.85	9,196.42	14.44	637.944		
1,000.00	989.64	1,757.00	1,766.95	5.40	9.97	69.99	-2,890.91	-8,736.41	9,192.97	9,177.86	15.10	608.795		
1,100.00	1,085.27	1,774.04	1,783.72	5.83	10.07	70.33	-2,893.11	-8,734.36	9,174.44	9,158.84	15.61	587.851		
1,200.00	1,180.44	1,836.32	1,844.98	6.29	10.41	70.38	-2,901.48	-8,726.94	9,155.97	9,139.59	16.38	559.024		
1,300.00	1,275.61	2,247.11	2,248.00	6.76	12.77	70.71	-2,956.64	-8,670.25	9,134.82	9,115.75	19.08	478.847		
1,400.00	1,370.78	2,307.65	2,307.50	7.26	13.12	70.77	-2,963.57	-8,661.49	9,113.43	9,093.56	19.87	458.613		
1,500.00	1,465.95	2,321.00	2,320.65	7.76	13.19	70.78	-2,964.96	-8,659.63	9,092.65	9,072.22	20.43	445.034		
1,600.00	1,561.12	2,382.64	2,381.38	8.27	13.53	70.84	-2,971.57	-8,651.41	9,072.31	9,051.06	21.25	426.947		
1,700.00	1,656.29	2,487.60	2,484.67	8.80	14.13	70.93	-2,984.40	-8,637.94	9,052.76	9,030.45	22.32	405.667		
1,800.00	1,751.46	2,573.84	2,569.31	9.32	14.62	71.00	-2,995.95	-8,626.16	9,032.77	9,009.47	23.30	387.689		
1,900.00	1,846.63	2,749.12	2,741.21	9.86	15.66	71.15	-3,019.86	-8,601.76	9,012.64	8,987.84	24.79	363.514		
2,000.00	1,941.80	2,840.50	2,830.39	10.40	16.23	71.20	-3,034.33	-8,588.00	8,992.00	8,966.15	25.85	347.855		
2,100.00	2,036.96	2,890.00	2,878.83	10.94	16.53	71.24	-3,041.52	-8,580.80	8,971.61	8,944.94	26.67	336.386		
2,200.00	2,132.13	2,939.40	2,927.30	11.49	16.82	71.28	-3,048.21	-8,574.03	8,951.76	8,924.28	27.48	325.754		
2,300.00	2,227.30	2,984.00	2,971.18	12.04	17.08	71.32	-3,053.93	-8,568.42	8,932.62	8,904.35	28.27	316.002		
2,400.00	2,322.47	3,054.31	3,040.30	12.59	17.49	71.38	-3,063.41	-8,559.76	8,913.97	8,884.77	29.20	305.279		
2,500.00	2,417.64	3,107.73	3,092.73	13.15	17.79	71.42	-3,071.19	-8,553.12	8,895.58	8,865.54	30.04	296.143		
2,600.00	2,512.81	3,169.00	3,153.18	13.70	18.14	71.48	-3,078.66	-8,546.44	8,877.89	8,846.97	30.92	287.154		
2,700.00	2,607.98	3,189.84	3,173.81	14.26	18.24	71.51	-3,080.87	-8,544.40	8,860.71	8,829.14	31.58	280.617		
2,800.00	2,703.15	3,234.63	3,218.16	14.82	18.47	71.56	-3,085.50	-8,540.25	8,844.22	8,811.87	32.35	273.366		
2,900.00	2,798.32	3,289.14	3,272.19	15.38	18.76	71.62	-3,091.01	-8,535.57	8,828.31	8,795.13	33.18	266.072		
3,000.00	2,893.49	3,357.00	3,339.37	15.95	19.10	71.69	-3,098.58	-8,529.78	8,812.79	8,778.71	34.08	258.625		
3,100.00	2,988.66	3,100.00	3,473.67	16.51	17.79	71.84	-3,113.41	-8,518.56	8,797.56	8,764.24	33.32	264.014		
3,200.00	3,083.83	3,590.65	3,570.78	17.07	20.31	71.95	-3,123.94	-8,509.84	8,781.65	8,745.30	36.35	241.571		
3,300.00	3,179.00	4,076.77	4,048.99	17.64	23.08	72.39	-3,188.89	-8,453.93	8,764.58	8,725.10	39.48	222.020		
3,400.00	3,274.17	4,112.00	4,083.51	18.21	23.30	72.42	-3,193.99	-8,449.01	8,744.92	8,704.66	40.26	217.236		
3,500.00	3,369.34	4,165.77	4,136.32	18.77	23.61	72.47	-3,201.22	-8,441.99	8,725.85	8,684.73	41.12	212.211		
3,600.00	3,464.51	4,217.51	4,187.26	19.34	23.91	72.52	-3,207.70	-8,435.68	8,707.34	8,665.37	41.97	207.451		
3,700.00	3,559.68	4,290.10	4,258.58	19.91	24.34	72.58	-3,217.90	-8,426.82	8,689.24	8,646.30	42.94	202.343		
3,800.00	3,654.84	4,337.00	4,304.55	20.48	24.62	72.61	-3,225.25	-8,421.09	8,671.56	8,627.78	43.78	198.069		
3,900.00	3,750.01	4,396.00	4,362.53	21.05	24.96	72.66	-3,233.95	-8,414.50	8,654.55	8,609.87	44.68	193.680		
4,000.00	3,845.18	4,434.70	4,400.63	21.62	25.18	72.70	-3,239.39	-8,410.47	8,638.07	8,592.60	45.47	189.971		
4,100.00	3,940.35	4,491.00	4,456.11	22.19	25.50	72.75	-3,247.11	-8,404.82	8,622.05	8,575.70	46.35	186.026		
4,200.00	4,035.52	4,537.53	4,502.04	22.76	25.75	72.80	-3,253.22	-8,400.48	8,606.59	8,559.42	47.17	182.472		
4,300.00	4,130.69	4,585.00	4,548.97	23.33	26.01	72.85	-3,259.12	-8,396.49	8,591.80	8,543.81	47.99	179.037		
4,400.00	4,225.86	4,614.74	4,578.42	23.91	26.16	72.88	-3,262.61	-8,394.26	8,577.70	8,528.99	48.71	176.096		
4,500.00	4,321.03	4,649.35	4,612.74	24.48	26.33	72.92	-3,266.43	-8,391.96	8,564.35	8,514.89	49.45	173.178		
4,600.00	4,416.20	4,680.00	4,643.17	25.05	26.49	72.96	-3,269.60	-8,390.20	8,551.75	8,501.57	50.18	170.433		
4,700.00	4,511.37	4,722.72	4,686.64	25.62	26.69	73.01	-3,273.78	-8,388.11	8,539.88	8,488.94	50.95	167.629		
4,800.00	4,606.54	4,800.00	4,782.09	26.20	27.04	73.15	-3,282.17	-8,384.27	8,528.64	8,476.77	51.87	164.437		
4,900.00	4,701.71	4,941.09	4,903.15	26.77	27.66	73.33	-3,290.65	-8,379.20	8,516.81	8,463.76	53.05	160.538		
5,000.00	4,796.88	4,992.49	4,954.43	27.34	27.88	73.41	-3,293.77	-8,377.34	8,505.41	8,451.57	53.84	157.977		
5,100.00	4,892.05	5,059.00	5,020.81	27.92	28.16	73.51	-3,297.47	-8,375.46	8,494.65	8,439.96	54.69	155.332		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,103.15	5,064.91	28.49	28.33	73.59	-3,299.24	-8,374.59	8,484.38	8,428.96	55.42	153.090		
5,300.00	5,082.39	5,171.07	5,132.82	29.07	28.57	73.72	-3,299.93	-8,373.91	8,474.54	8,418.31	56.24	150.696		
5,400.00	5,177.56	5,235.39	5,197.14	29.64	28.79	73.85	-3,299.87	-8,373.65	8,465.14	8,408.12	57.02	148.466		
5,500.00	5,272.72	5,299.59	5,261.34	30.21	29.00	73.98	-3,299.87	-8,373.61	8,456.18	8,398.38	57.80	146.310		
5,600.00	5,367.89	5,371.71	5,333.46	30.79	29.24	74.12	-3,300.13	-8,373.79	8,447.66	8,389.06	58.60	144.148		
5,700.00	5,463.06	5,460.14	5,421.89	31.36	29.53	74.30	-3,300.58	-8,374.10	8,439.38	8,379.91	59.47	141.906		
5,800.00	5,558.23	5,548.62	5,510.37	31.94	29.82	74.47	-3,301.11	-8,374.46	8,431.28	8,370.94	60.34	139.728		
5,900.00	5,653.40	5,639.96	5,601.70	32.51	30.12	74.65	-3,301.73	-8,374.90	8,423.35	8,362.13	61.22	137.594		
6,000.00	5,748.57	5,744.79	5,706.53	33.09	30.46	74.86	-3,302.28	-8,375.38	8,415.48	8,353.34	62.14	135.430		
6,100.00	5,843.74	5,849.42	5,811.16	33.67	30.80	75.07	-3,302.53	-8,375.81	8,407.60	8,344.54	63.06	133.329		
6,200.00	5,938.91	5,954.56	5,916.30	34.24	31.16	75.29	-3,302.58	-8,376.15	8,399.72	8,335.73	63.99	131.265		
6,300.00	6,034.08	6,060.64	6,022.38	34.82	31.52	75.50	-3,303.01	-8,376.29	8,391.83	8,326.89	64.93	129.235		
6,400.00	6,129.25	6,167.03	6,128.76	35.39	31.89	75.71	-3,303.94	-8,376.19	8,383.91	8,318.03	65.88	127.258		
6,500.00	6,224.42	6,305.26	6,266.98	35.97	32.41	75.98	-3,305.61	-8,375.56	8,375.81	8,308.84	66.98	125.052		
6,600.00	6,319.59	6,450.77	6,412.47	36.54	32.96	76.26	-3,307.42	-8,374.04	8,367.25	8,299.14	68.11	122.851		
6,700.00	6,414.76	6,537.05	6,498.73	37.12	33.30	76.43	-3,308.66	-8,372.85	8,358.51	8,289.49	69.02	121.099		
6,800.00	6,509.91	6,614.51	6,576.17	37.70	33.61	76.66	-3,310.14	-8,371.88	8,349.52	8,279.62	69.90	119.444		
6,900.00	6,603.99	6,691.23	6,652.87	38.26	33.91	76.86	-3,311.97	-8,371.03	8,329.62	8,258.86	70.76	117.719		
7,000.00	6,694.76	6,767.99	6,729.60	38.78	34.21	77.03	-3,314.15	-8,370.28	8,295.09	8,223.53	71.56	115.918		
7,100.00	6,779.96	6,853.61	6,815.18	39.24	34.55	77.19	-3,316.47	-8,369.53	8,246.61	8,174.27	72.34	114.003		
7,200.00	6,857.50	6,931.26	6,892.80	39.65	34.86	77.33	-3,318.26	-8,368.90	8,185.28	8,112.27	73.02	112.102		
7,300.00	6,925.48	6,999.10	6,960.63	40.02	35.13	77.47	-3,319.58	-8,368.38	8,112.60	8,039.01	73.59	110.245		
7,400.00	6,982.21	7,066.25	7,027.76	40.33	35.40	77.59	-3,320.68	-8,367.89	8,030.32	7,956.25	74.08	108.403		
7,500.00	7,026.31	7,130.19	7,091.70	40.63	35.65	77.69	-3,321.70	-8,367.27	7,940.38	7,865.91	74.48	106.615		
7,600.00	7,056.68	7,173.22	7,134.72	40.91	35.82	77.76	-3,322.38	-8,366.77	7,845.06	7,770.34	74.72	104.996		
7,700.00	7,072.58	7,194.60	7,156.10	41.25	35.91	77.80	-3,322.72	-8,366.49	7,746.79	7,671.99	74.81	103.558		
7,800.00	7,074.86	7,195.98	7,157.48	41.69	35.91	77.80	-3,322.74	-8,366.47	7,647.94	7,573.18	74.77	102.288		
7,900.00	7,074.54	7,193.59	7,155.08	42.34	35.90	77.79	-3,322.71	-8,366.50	7,549.21	7,474.50	74.71	101.042		
8,000.00	7,074.21	7,191.22	7,152.72	43.27	35.89	77.75	-3,322.67	-8,366.53	7,450.51	7,375.85	74.66	99.787		
8,100.00	7,073.89	7,188.88	7,150.38	44.47	35.88	77.68	-3,322.63	-8,366.56	7,351.84	7,277.22	74.62	98.522		
8,200.00	7,073.57	7,186.57	7,148.06	45.91	35.88	77.50	-3,322.60	-8,366.59	7,253.21	7,178.63	74.58	97.248		
8,300.00	7,073.24	7,184.28	7,145.77	47.53	35.87	77.21	-3,322.56	-8,366.62	7,154.62	7,080.07	74.56	95.963		
8,400.00	7,072.92	7,182.01	7,143.51	49.31	35.86	76.81	-3,322.52	-8,366.65	7,056.07	6,981.53	74.53	94.668		
8,500.00	7,072.59	7,179.78	7,141.28	51.20	35.85	76.31	-3,322.49	-8,366.68	6,957.56	6,883.03	74.52	93.362		
8,600.00	7,072.27	7,177.57	7,139.06	53.19	35.84	75.71	-3,322.45	-8,366.71	6,859.09	6,784.57	74.52	92.045		
8,700.00	7,071.94	7,175.38	7,136.88	55.27	35.83	75.01	-3,322.42	-8,366.74	6,760.66	6,686.13	74.53	90.717		
8,800.00	7,071.62	7,173.21	7,134.71	57.43	35.82	74.21	-3,322.38	-8,366.77	6,662.28	6,587.74	74.54	89.376		
8,900.00	7,071.29	7,171.08	7,132.57	59.64	35.81	73.41	-3,322.35	-8,366.79	6,563.95	6,489.38	74.57	88.023		
9,000.00	7,070.97	7,168.96	7,130.46	61.92	35.81	72.61	-3,322.32	-8,366.82	6,465.67	6,391.06	74.61	86.657		
9,100.00	7,070.64	7,166.87	7,128.37	64.24	35.80	71.81	-3,322.28	-8,366.85	6,367.44	6,292.77	74.67	85.278		
9,200.00	7,070.32	7,164.79	7,126.29	66.61	35.79	71.01	-3,322.25	-8,366.87	6,269.27	6,194.53	74.74	83.885		
9,300.00	7,069.99	7,162.75	7,124.25	69.01	35.78	70.21	-3,322.22	-8,366.90	6,171.16	6,096.33	74.82	82.478		
9,400.00	7,069.67	7,160.72	7,122.22	71.45	35.77	69.41	-3,322.19	-8,366.92	6,073.10	5,998.18	74.92	81.057		
9,500.00	7,069.34	7,158.71	7,120.22	73.92	35.76	68.61	-3,322.15	-8,366.95	5,975.12	5,900.07	75.04	79.621		
9,600.00	7,069.02	7,156.73	7,118.23	76.42	35.76	67.81	-3,322.12	-8,366.97	5,877.19	5,802.01	75.18	78.170		
9,700.00	7,068.69	7,154.77	7,116.27	78.95	35.75	67.01	-3,322.09	-8,366.99	5,779.34	5,704.00	75.35	76.704		
9,800.00	7,068.37	7,152.82	7,114.33	81.49	35.74	66.21	-3,322.06	-8,367.02	5,681.57	5,606.04	75.53	75.221		
9,900.00	7,068.04	7,150.90	7,112.40	84.06	35.73	65.41	-3,322.03	-8,367.04	5,583.87	5,508.13	75.74	73.723		
10,000.00	7,067.72	7,149.00	7,110.50	86.65	35.73	64.61	-3,322.00	-8,367.06	5,486.25	5,410.28	75.98	72.209		
10,100.00	7,067.39	7,147.11	7,108.62	89.25	35.72	63.81	-3,321.97	-8,367.08	5,388.73	5,312.48	76.24	70.679		
10,200.00	7,067.07	7,145.25	7,106.75	91.87	35.71	63.01	-3,321.94	-8,367.10	5,291.29	5,214.75	76.54	69.132		
10,300.00	7,066.74	7,143.41	7,104.91	94.50	35.70	62.21	-3,321.91	-8,367.13	5,193.95	5,117.08	76.87	67.569		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,141.58	7,103.08	97.14	35.70	-92.52	-3,321.88	-8,367.15	5,096.71	5,019.48	77.23	65.990		
10,500.00	7,066.09	7,139.77	7,101.28	99.80	35.69	-92.43	-3,321.85	-8,367.17	4,999.58	4,921.94	77.64	64.395		
10,600.00	7,065.77	7,137.98	7,099.49	102.47	35.68	-92.35	-3,321.83	-8,367.19	4,902.57	4,824.48	78.09	62.784		
10,700.00	7,065.44	7,136.21	7,097.72	105.15	35.67	-92.26	-3,321.80	-8,367.21	4,805.68	4,727.10	78.58	61.158		
10,800.00	7,065.12	7,134.45	7,095.96	107.83	35.67	-92.18	-3,321.77	-8,367.23	4,708.91	4,629.80	79.12	59.518		
10,900.00	7,064.79	7,132.72	7,094.22	110.53	35.66	-92.10	-3,321.74	-8,367.25	4,612.29	4,532.58	79.71	57.864		
11,000.00	7,064.47	7,131.00	7,092.50	113.23	35.65	-92.01	-3,321.71	-8,367.26	4,515.81	4,435.45	80.36	56.197		
11,100.00	7,064.14	7,129.29	7,090.80	115.95	35.65	-91.93	-3,321.69	-8,367.28	4,419.49	4,338.42	81.06	54.518		
11,200.00	7,063.82	7,127.61	7,089.12	118.66	35.64	-91.85	-3,321.66	-8,367.30	4,323.33	4,241.49	81.84	52.829		
11,300.00	7,063.49	7,125.94	7,087.45	121.39	35.63	-91.77	-3,321.63	-8,367.32	4,227.35	4,144.67	82.68	51.130		
11,400.00	7,063.17	7,124.28	7,085.79	124.12	35.63	-91.69	-3,321.61	-8,367.34	4,131.56	4,047.97	83.59	49.424		
11,500.00	7,062.84	7,122.64	7,084.15	126.86	35.62	-91.62	-3,321.58	-8,367.35	4,035.98	3,951.39	84.59	47.713		
11,600.00	7,062.52	7,121.02	7,082.53	129.60	35.61	-91.54	-3,321.56	-8,367.37	3,940.61	3,854.94	85.67	45.998		
11,700.00	7,062.19	7,119.42	7,080.92	132.35	35.61	-91.46	-3,321.53	-8,367.39	3,845.48	3,758.64	86.84	44.281		
11,800.00	7,061.87	7,117.82	7,079.33	135.10	35.60	-91.39	-3,321.51	-8,367.40	3,750.60	3,662.49	88.11	42.566		
11,900.00	7,061.54	7,116.25	7,077.76	137.85	35.60	-91.31	-3,321.48	-8,367.42	3,656.00	3,566.51	89.49	40.854		
12,000.00	7,061.22	7,114.68	7,076.19	140.61	35.59	-91.24	-3,321.46	-8,367.44	3,561.69	3,470.71	90.98	39.148		
12,100.00	7,060.89	7,113.14	7,074.65	143.38	35.58	-91.16	-3,321.43	-8,367.45	3,467.69	3,375.10	92.59	37.451		
12,200.00	7,060.57	7,111.60	7,073.11	146.15	35.58	-91.09	-3,321.41	-8,367.47	3,374.04	3,279.71	94.34	35.766		
12,300.00	7,060.24	7,110.08	7,071.59	148.92	35.57	-91.02	-3,321.38	-8,367.48	3,280.77	3,184.55	96.22	34.097		
12,400.00	7,059.92	7,108.58	7,070.09	151.69	35.56	-90.94	-3,321.36	-8,367.50	3,187.90	3,089.65	98.25	32.445		
12,500.00	7,059.59	7,107.09	7,068.60	154.47	35.56	-90.87	-3,321.33	-8,367.51	3,095.48	2,995.03	100.45	30.815		
12,600.00	7,059.27	7,105.61	7,067.12	157.25	35.55	-90.80	-3,321.31	-8,367.53	3,003.54	2,900.71	102.83	29.210		
12,700.00	7,058.94	7,104.14	7,065.66	160.03	35.55	-90.73	-3,321.29	-8,367.54	2,912.13	2,806.74	105.39	27.632		
12,800.00	7,058.62	7,102.69	7,064.21	162.82	35.54	-90.66	-3,321.26	-8,367.56	2,821.31	2,713.15	108.15	26.086		
12,900.00	7,058.29	7,101.25	7,062.77	165.61	35.54	-90.59	-3,321.24	-8,367.57	2,731.12	2,619.98	111.14	24.574		
13,000.00	7,057.97	7,099.83	7,061.34	168.40	35.53	-90.53	-3,321.22	-8,367.59	2,641.64	2,527.28	114.36	23.100		
13,100.00	7,057.64	7,098.42	7,059.93	171.19	35.52	-90.46	-3,321.20	-8,367.60	2,552.94	2,435.11	117.83	21.666		
13,200.00	7,057.32	7,097.02	7,058.53	173.99	35.52	-90.39	-3,321.17	-8,367.61	2,465.11	2,343.53	121.58	20.276		
13,300.00	7,057.00	7,095.63	7,057.14	176.78	35.51	-90.33	-3,321.15	-8,367.63	2,378.23	2,252.61	125.62	18.932		
13,400.00	7,056.67	7,094.25	7,055.77	179.58	35.51	-90.26	-3,321.13	-8,367.64	2,292.43	2,162.45	129.98	17.637		
13,500.00	7,056.35	7,092.89	7,054.40	182.38	35.50	-90.20	-3,321.11	-8,367.65	2,207.82	2,073.14	134.68	16.393		
13,600.00	7,056.02	7,091.54	7,053.05	185.19	35.50	-90.13	-3,321.09	-8,367.66	2,124.54	1,984.80	139.74	15.203		
13,700.00	7,055.70	7,090.20	7,051.71	187.99	35.49	-90.07	-3,321.07	-8,367.68	2,042.77	1,897.58	145.19	14.070		
13,800.00	7,055.37	7,088.87	7,050.38	190.80	35.49	-90.00	-3,321.04	-8,367.69	1,962.68	1,811.64	151.05	12.994		
13,900.00	7,055.05	7,087.55	7,049.07	193.60	35.48	-89.94	-3,321.02	-8,367.70	1,884.50	1,727.17	157.33	11.978		
14,000.00	7,054.72	7,086.25	7,047.76	196.41	35.48	-89.88	-3,321.00	-8,367.71	1,808.47	1,644.41	164.05	11.024		
14,100.00	7,054.40	7,084.95	7,046.47	199.22	35.47	-89.82	-3,320.98	-8,367.73	1,734.87	1,563.64	171.23	10.132		
14,200.00	7,054.07	7,083.67	7,045.18	202.03	35.47	-89.75	-3,320.96	-8,367.74	1,664.02	1,485.17	178.85	9.304		
14,300.00	7,053.75	7,082.40	7,043.91	204.85	35.46	-89.69	-3,320.94	-8,367.75	1,596.30	1,409.40	186.90	8.541		
14,400.00	7,053.42	7,081.13	7,042.65	207.66	35.46	-89.63	-3,320.92	-8,367.76	1,532.12	1,336.77	195.34	7.843		
14,500.00	7,053.10	7,079.88	7,041.40	210.48	35.45	-89.57	-3,320.90	-8,367.77	1,471.93	1,267.83	204.10	7.212		
14,600.00	7,052.77	7,078.64	7,040.16	213.29	35.45	-89.51	-3,320.88	-8,367.78	1,416.25	1,203.17	213.08	6.646		
14,700.00	7,052.45	7,077.41	7,038.93	216.11	35.44	-89.46	-3,320.86	-8,367.79	1,365.64	1,143.50	222.14	6.148		
14,800.00	7,052.12	7,076.19	7,037.71	218.93	35.44	-89.40	-3,320.84	-8,367.80	1,320.66	1,089.57	231.09	5.715		
14,900.00	7,051.80	7,074.98	7,036.50	221.75	35.43	-89.34	-3,320.82	-8,367.81	1,281.93	1,042.22	239.70	5.348		
15,000.00	7,051.47	7,073.78	7,035.30	224.57	35.43	-89.28	-3,320.80	-8,367.82	1,250.01	1,002.29	247.72	5.046		
15,100.00	7,051.15	7,072.59	7,034.11	227.39	35.42	-89.23	-3,320.78	-8,367.83	1,225.44	970.57	254.87	4.808		
15,145.13	7,051.00	7,072.06	7,033.57	228.67	35.42	-89.20	-3,320.78	-8,367.84	1,216.88	959.15	257.74	4.721 CC, ES, SF		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	64.00	3.28	3.28	-131.93	-3,026.43	-3,369.26	4,529.38					
100.00	100.00	36.00	100.00	3.28	3.34	-131.93	-3,026.43	-3,369.26	4,528.92	4,522.30	6.62	683.676		
200.00	200.00	136.00	200.00	3.34	4.45	-131.93	-3,026.43	-3,369.26	4,528.92	4,521.14	7.78	581.855		
300.00	299.98	235.98	299.98	3.44	7.27	43.71	-3,026.43	-3,369.26	4,527.66	4,516.95	10.71	422.603		
400.00	399.84	335.84	399.84	3.59	10.50	43.81	-3,026.43	-3,369.26	4,523.88	4,509.78	14.09	320.975		
500.00	499.45	435.45	499.45	3.79	13.85	43.98	-3,026.43	-3,369.26	4,517.59	4,499.95	17.64	256.107		
600.00	598.70	534.70	598.70	4.03	17.24	44.21	-3,026.43	-3,369.26	4,508.80	4,487.53	21.27	212.003		
700.00	697.47	633.47	697.47	4.31	20.63	44.50	-3,026.43	-3,369.26	4,497.55	4,472.60	24.94	180.307		
800.00	795.62	731.62	795.62	4.64	24.02	44.87	-3,026.43	-3,369.26	4,483.86	4,455.21	28.65	156.511		
900.00	893.06	829.06	893.06	5.00	27.39	45.30	-3,026.43	-3,369.26	4,467.77	4,435.40	32.37	138.023		
1,000.00	989.64	925.64	989.64	5.40	30.74	45.80	-3,026.43	-3,369.26	4,449.32	4,413.23	36.10	123.261		
1,100.00	1,085.27	1,021.27	1,085.27	5.83	34.07	46.35	-3,026.43	-3,369.26	4,428.58	4,388.76	39.83	111.200		
1,200.00	1,180.44	1,116.44	1,180.44	6.29	37.37	46.63	-3,026.43	-3,369.26	4,406.90	4,363.35	43.55	101.182		
1,300.00	1,275.61	1,211.61	1,275.61	6.76	40.68	46.92	-3,026.43	-3,369.26	4,385.32	4,338.02	47.30	92.707		
1,400.00	1,370.78	1,306.78	1,370.78	7.26	44.00	47.20	-3,026.43	-3,369.26	4,363.86	4,312.79	51.07	85.452		
1,500.00	1,465.95	1,401.95	1,465.95	7.76	47.31	47.49	-3,026.43	-3,369.26	4,342.50	4,287.66	54.85	79.175		
1,600.00	1,561.12	1,502.88	1,561.12	8.27	50.83	47.79	-3,026.43	-3,369.26	4,321.26	4,262.42	58.84	73.444		
1,700.00	1,656.29	1,607.71	1,656.29	8.80	54.48	48.08	-3,026.43	-3,369.26	4,300.13	4,237.16	62.97	68.284		
1,800.00	1,751.46	1,687.46	1,751.46	9.32	57.26	48.38	-3,026.43	-3,369.26	4,279.12	4,212.88	66.24	64.596		
1,900.00	1,846.63	1,782.63	1,846.63	9.86	60.57	48.68	-3,026.43	-3,369.26	4,258.23	4,188.17	70.06	60.780		
2,000.00	1,941.80	1,877.80	1,941.80	10.40	63.89	48.98	-3,026.43	-3,369.26	4,237.45	4,163.57	73.88	57.355		
2,100.00	2,036.96	1,972.96	2,036.96	10.94	67.21	49.29	-3,026.43	-3,369.26	4,216.80	4,139.09	77.71	54.265		
2,200.00	2,132.13	2,068.13	2,132.13	11.49	70.53	49.60	-3,026.43	-3,369.26	4,196.27	4,114.73	81.54	51.463		
2,300.00	2,227.30	2,163.30	2,227.30	12.04	73.85	49.91	-3,026.43	-3,369.26	4,175.86	4,090.48	85.38	48.912		
2,400.00	2,322.47	2,258.47	2,322.47	12.59	77.17	50.22	-3,026.43	-3,369.26	4,155.58	4,066.37	89.22	46.579		
2,500.00	2,417.64	2,353.64	2,417.64	13.15	80.49	50.54	-3,026.43	-3,369.26	4,135.43	4,042.37	93.06	44.439		
2,600.00	2,512.81	2,448.81	2,512.81	13.70	83.81	50.86	-3,026.43	-3,369.26	4,115.41	4,018.50	96.91	42.468		
2,700.00	2,607.98	2,543.98	2,607.98	14.26	87.13	51.19	-3,026.43	-3,369.26	4,095.52	3,994.77	100.76	40.648		
2,800.00	2,703.15	2,639.15	2,703.15	14.82	90.45	51.51	-3,026.43	-3,369.26	4,075.77	3,971.16	104.61	38.962		
2,900.00	2,798.32	2,734.32	2,798.32	15.38	93.77	51.84	-3,026.43	-3,369.26	4,056.15	3,947.69	108.46	37.396		
3,000.00	2,893.49	2,829.49	2,893.49	15.95	97.09	52.17	-3,026.43	-3,369.26	4,036.67	3,924.35	112.32	35.938		
3,100.00	2,988.66	2,924.66	2,988.66	16.51	100.41	52.51	-3,026.43	-3,369.26	4,017.33	3,901.15	116.18	34.578		
3,200.00	3,083.83	3,019.83	3,083.83	17.07	103.73	52.85	-3,026.43	-3,369.26	3,998.13	3,878.09	120.05	33.305		
3,300.00	3,179.00	3,115.00	3,179.00	17.64	107.05	53.19	-3,026.43	-3,369.26	3,979.08	3,855.17	123.91	32.113		
3,400.00	3,274.17	3,210.17	3,274.17	18.21	110.37	53.53	-3,026.43	-3,369.26	3,960.18	3,832.40	127.78	30.993		
3,500.00	3,369.34	3,305.34	3,369.34	18.77	113.69	53.88	-3,026.43	-3,369.26	3,941.42	3,809.77	131.65	29.940		
3,600.00	3,464.51	3,400.51	3,464.51	19.34	117.01	54.23	-3,026.43	-3,369.26	3,922.81	3,787.29	135.52	28.947		
3,700.00	3,559.68	3,504.32	3,559.68	19.91	120.64	54.59	-3,026.43	-3,369.26	3,904.36	3,764.67	139.69	27.950		
3,800.00	3,654.84	3,609.16	3,654.84	20.48	124.29	54.94	-3,026.43	-3,369.26	3,886.06	3,742.15	143.90	27.005		
3,900.00	3,750.01	3,686.01	3,750.01	21.05	126.98	55.30	-3,026.43	-3,369.26	3,867.92	3,720.78	147.14	26.287		
4,000.00	3,845.18	3,781.18	3,845.18	21.62	130.30	55.67	-3,026.43	-3,369.26	3,849.93	3,698.91	151.02	25.493		
4,100.00	3,940.35	3,876.35	3,940.35	22.19	133.62	56.03	-3,026.43	-3,369.26	3,832.11	3,677.21	154.90	24.740		
4,200.00	4,035.52	3,971.52	4,035.52	22.76	136.94	56.40	-3,026.43	-3,369.26	3,814.45	3,655.68	158.78	24.024		
4,300.00	4,130.69	4,066.69	4,130.69	23.33	140.26	56.78	-3,026.43	-3,369.26	3,796.96	3,634.30	162.66	23.343		
4,400.00	4,225.86	4,161.86	4,225.86	23.91	143.58	57.15	-3,026.43	-3,369.26	3,779.64	3,613.09	166.55	22.694		
4,500.00	4,321.03	4,257.03	4,321.03	24.48	146.90	57.53	-3,026.43	-3,369.26	3,762.49	3,592.06	170.43	22.076		
4,600.00	4,416.20	4,352.20	4,416.20	25.05	150.23	57.92	-3,026.43	-3,369.26	3,745.51	3,571.19	174.32	21.486		
4,700.00	4,511.37	4,447.37	4,511.37	25.62	153.55	58.30	-3,026.43	-3,369.26	3,728.71	3,550.50	178.21	20.923		
4,800.00	4,606.54	4,542.54	4,606.54	26.20	156.87	58.69	-3,026.43	-3,369.26	3,712.08	3,529.98	182.10	20.385		
4,900.00	4,701.71	4,637.71	4,701.71	26.77	160.19	59.08	-3,026.43	-3,369.26	3,695.64	3,509.65	185.99	19.870		
5,000.00	4,796.88	4,732.88	4,796.88	27.34	163.51	59.48	-3,026.43	-3,369.26	3,679.38	3,489.49	189.88	19.377		
5,100.00	4,892.05	4,828.05	4,892.05	27.92	166.83	59.88	-3,026.43	-3,369.26	3,663.30	3,469.52	193.78	18.904		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,923.22	4,987.22	28.49	170.16	60.28	-3,026.43	-3,369.26	3,647.41	3,449.74	197.68	18.452		
5,300.00	5,082.39	5,018.39	5,082.39	29.07	173.48	60.68	-3,026.43	-3,369.26	3,631.71	3,430.14	201.57	18.017		
5,400.00	5,177.56	5,113.56	5,177.56	29.64	176.80	61.09	-3,026.43	-3,369.26	3,616.21	3,410.73	205.47	17.600		
5,500.00	5,272.72	5,208.72	5,272.72	30.21	180.12	61.51	-3,026.43	-3,369.26	3,600.89	3,391.52	209.37	17.199		
5,600.00	5,367.89	5,303.89	5,367.89	30.79	183.44	61.92	-3,026.43	-3,369.26	3,585.78	3,372.51	213.27	16.813		
5,700.00	5,463.06	5,400.94	5,463.06	31.36	186.83	62.34	-3,026.43	-3,369.26	3,570.87	3,353.63	217.24	16.437		
5,800.00	5,558.23	5,505.77	5,558.23	31.94	190.49	62.76	-3,026.43	-3,369.26	3,556.16	3,334.67	221.48	16.056		
5,900.00	5,653.40	5,589.40	5,653.40	32.51	193.41	63.18	-3,026.43	-3,369.26	3,541.65	3,316.67	224.98	15.742		
6,000.00	5,748.57	5,684.57	5,748.57	33.09	196.73	63.61	-3,026.43	-3,369.26	3,527.35	3,298.46	228.89	15.411		
6,100.00	5,843.74	5,779.74	5,843.74	33.67	200.05	64.04	-3,026.43	-3,369.26	3,513.26	3,280.46	232.80	15.091		
6,200.00	5,938.91	5,874.91	5,938.91	34.24	203.37	64.48	-3,026.43	-3,369.26	3,499.39	3,262.68	236.71	14.784		
6,300.00	6,034.08	5,970.08	6,034.08	34.82	206.70	64.92	-3,026.43	-3,369.26	3,485.73	3,245.11	240.62	14.487		
6,400.00	6,129.25	6,065.25	6,129.25	35.39	210.02	65.36	-3,026.43	-3,369.26	3,472.28	3,227.76	244.53	14.200		
6,500.00	6,224.42	6,160.42	6,224.42	35.97	213.34	65.80	-3,026.43	-3,369.26	3,459.06	3,210.62	248.44	13.923		
6,600.00	6,319.59	6,255.59	6,319.59	36.54	216.66	66.25	-3,026.43	-3,369.26	3,446.06	3,193.71	252.35	13.656		
6,700.00	6,414.76	6,350.76	6,414.76	37.12	219.98	66.70	-3,026.43	-3,369.26	3,433.29	3,177.02	256.26	13.397		
6,800.00	6,509.91	6,445.91	6,509.91	37.70	223.31	59.76	-3,026.43	-3,369.26	3,420.22	3,160.04	260.18	13.146		
6,900.00	6,603.99	6,539.99	6,603.99	38.26	226.59	36.61	-3,026.43	-3,369.26	3,396.67	3,132.65	264.02	12.865		
7,000.00	6,694.76	6,630.76	6,694.76	38.78	229.76	21.26	-3,026.43	-3,369.26	3,359.12	3,091.43	267.69	12.549		
7,100.00	6,779.96	6,715.96	6,779.96	39.24	232.73	10.93	-3,026.43	-3,369.26	3,308.40	3,037.31	271.09	12.204		
7,200.00	6,857.50	6,806.50	6,857.50	39.65	235.89	2.85	-3,026.43	-3,369.26	3,245.68	2,971.08	274.60	11.820		
7,300.00	6,925.48	6,861.48	6,925.48	40.02	237.81	-4.93	-3,026.43	-3,369.26	3,172.48	2,895.69	276.79	11.462		
7,400.00	6,982.21	6,918.21	6,982.21	40.33	239.79	-14.23	-3,026.43	-3,369.26	3,090.61	2,811.66	278.95	11.079		
7,500.00	7,026.31	6,962.31	7,026.31	40.63	241.33	-27.50	-3,026.43	-3,369.26	3,002.13	2,721.54	280.59	10.700		
7,600.00	7,056.68	7,007.32	7,056.68	40.91	242.90	-48.00	-3,026.43	-3,369.26	2,909.32	2,627.14	282.17	10.310		
7,700.00	7,072.58	7,008.58	7,072.58	41.25	242.95	-75.21	-3,026.43	-3,369.26	2,814.60	2,532.43	282.17	9.975		
7,800.00	7,074.86	7,010.86	7,074.86	41.69	243.03	-90.51	-3,026.43	-3,369.26	2,720.31	2,438.15	282.16	9.641		
7,900.00	7,074.54	7,010.54	7,074.54	42.34	243.02	-90.49	-3,026.43	-3,369.26	2,626.66	2,344.58	282.09	9.312		
8,000.00	7,074.21	7,010.21	7,074.21	43.27	243.00	-90.47	-3,026.43	-3,369.26	2,533.50	2,251.45	282.05	8.982		
8,100.00	7,073.89	7,009.89	7,073.89	44.47	242.99	-90.45	-3,026.43	-3,369.26	2,440.89	2,158.82	282.06	8.654		
8,200.00	7,073.57	7,009.57	7,073.57	45.91	242.98	-90.43	-3,026.43	-3,369.26	2,348.87	2,066.74	282.13	8.325		
8,300.00	7,073.24	7,009.24	7,073.24	47.53	242.97	-90.41	-3,026.43	-3,369.26	2,257.54	1,975.26	282.28	7.997		
8,400.00	7,072.92	7,008.92	7,072.92	49.31	242.96	-90.39	-3,026.43	-3,369.26	2,166.98	1,884.46	282.52	7.670		
8,500.00	7,072.59	7,008.59	7,072.59	51.20	242.95	-90.37	-3,026.43	-3,369.26	2,077.27	1,794.41	282.87	7.344		
8,600.00	7,072.27	7,008.27	7,072.27	53.19	242.94	-90.35	-3,026.43	-3,369.26	1,988.56	1,705.21	283.35	7.018		
8,700.00	7,071.94	7,007.94	7,071.94	55.27	242.92	-90.33	-3,026.43	-3,369.26	1,900.96	1,616.96	283.99	6.694		
8,800.00	7,071.62	7,007.62	7,071.62	57.43	242.91	-90.31	-3,026.43	-3,369.26	1,814.64	1,529.81	284.83	6.371		
8,900.00	7,071.29	7,007.29	7,071.29	59.64	242.90	-90.29	-3,026.43	-3,369.26	1,729.80	1,443.90	285.90	6.050		
9,000.00	7,070.97	7,006.97	7,070.97	61.92	242.89	-90.27	-3,026.43	-3,369.26	1,646.66	1,359.42	287.24	5.733		
9,100.00	7,070.64	7,006.64	7,070.64	64.24	242.88	-90.25	-3,026.43	-3,369.26	1,565.50	1,276.60	288.89	5.419		
9,200.00	7,070.32	7,006.32	7,070.32	66.61	242.87	-90.23	-3,026.43	-3,369.26	1,486.63	1,195.73	290.90	5.110		
9,300.00	7,069.99	7,005.99	7,069.99	69.01	242.86	-90.21	-3,026.43	-3,369.26	1,410.44	1,117.13	293.31	4.809		
9,400.00	7,069.67	7,005.67	7,069.67	71.45	242.84	-90.19	-3,026.43	-3,369.26	1,337.40	1,041.24	296.15	4.516		
9,500.00	7,069.34	7,005.34	7,069.34	73.92	242.83	-90.17	-3,026.43	-3,369.26	1,268.03	968.57	299.47	4.234		
9,600.00	7,069.02	7,005.02	7,069.02	76.42	242.82	-90.15	-3,026.43	-3,369.26	1,202.99	899.73	303.26	3.967		
9,700.00	7,068.69	7,004.69	7,068.69	78.95	242.81	-90.13	-3,026.43	-3,369.26	1,143.01	835.49	307.52	3.717		
9,800.00	7,068.37	7,004.37	7,068.37	81.49	242.80	-90.11	-3,026.43	-3,369.26	1,088.93	776.73	312.19	3.488		
9,900.00	7,068.04	7,004.04	7,068.04	84.06	242.79	-90.09	-3,026.43	-3,369.26	1,041.65	724.48	317.18	3.284		
10,000.00	7,067.72	7,003.72	7,067.72	86.65	242.78	-90.07	-3,026.43	-3,369.26	1,002.16	679.84	322.32	3.109		
10,100.00	7,067.39	7,003.39	7,067.39	89.25	242.77	-90.05	-3,026.43	-3,369.26	971.40	644.00	327.40	2.967		
10,200.00	7,067.07	7,003.07	7,067.07	91.87	242.75	-90.03	-3,026.43	-3,369.26	950.21	618.03	332.17	2.861		
10,300.00	7,066.74	7,002.74	7,066.74	94.50	242.74	-90.01	-3,026.43	-3,369.26	939.24	602.86	336.38	2.792		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
10,353.59	7,066.57	7,002.57	7,066.57	95.91	242.74	-90.00	-3,026.43	-3,369.26	937.71	599.38	338.33	2.772 CC		
10,400.00	7,066.42	7,002.42	7,066.42	97.14	242.73	-89.99	-3,026.43	-3,369.26	938.86	599.05	339.81	2.763 ES, SF		
10,500.00	7,066.09	7,002.09	7,066.09	99.80	242.72	-89.97	-3,026.43	-3,369.26	949.07	606.75	342.32	2.772		
10,600.00	7,065.77	7,001.77	7,065.77	102.47	242.71	-89.95	-3,026.43	-3,369.26	969.54	625.68	343.87	2.820		
10,700.00	7,065.44	7,001.44	7,065.44	105.15	242.70	-89.93	-3,026.43	-3,369.26	999.65	655.14	344.51	2.902		
10,800.00	7,065.12	7,001.12	7,065.12	107.83	242.69	-89.91	-3,026.43	-3,369.26	1,038.55	694.16	344.39	3.016		
10,900.00	7,064.79	7,000.79	7,064.79	110.53	242.67	-89.89	-3,026.43	-3,369.26	1,085.29	741.65	343.65	3.158		
11,000.00	7,064.47	7,000.47	7,064.47	113.23	242.66	-89.87	-3,026.43	-3,369.26	1,138.92	796.46	342.46	3.326		
11,100.00	7,064.14	7,000.14	7,064.14	115.95	242.65	-89.85	-3,026.43	-3,369.26	1,198.51	857.54	340.97	3.515		
11,200.00	7,063.82	7,000.18	7,063.82	118.66	242.65	-89.83	-3,026.43	-3,369.26	1,263.21	923.90	339.31	3.723		
11,300.00	7,063.49	7,000.51	7,063.49	121.39	242.66	-89.81	-3,026.43	-3,369.26	1,332.28	994.71	337.58	3.947		
11,400.00	7,063.17	7,000.83	7,063.17	124.12	242.68	-89.79	-3,026.43	-3,369.26	1,405.08	1,069.26	335.82	4.184		
11,500.00	7,062.84	7,001.16	7,062.84	126.86	242.69	-89.77	-3,026.43	-3,369.26	1,481.06	1,146.97	334.09	4.433		
11,600.00	7,062.52	7,001.48	7,062.52	129.60	242.70	-89.75	-3,026.43	-3,369.26	1,559.75	1,227.34	332.41	4.692		
11,700.00	7,062.19	7,001.81	7,062.19	132.35	242.71	-89.73	-3,026.43	-3,369.26	1,640.76	1,309.96	330.80	4.960		
11,800.00	7,061.87	7,002.13	7,061.87	135.10	242.72	-89.71	-3,026.43	-3,369.26	1,723.77	1,394.49	329.28	5.235		
11,900.00	7,061.54	7,002.46	7,061.54	137.85	242.73	-89.69	-3,026.43	-3,369.26	1,808.49	1,480.65	327.85	5.516		
12,000.00	7,061.22	7,002.78	7,061.22	140.61	242.74	-89.67	-3,026.43	-3,369.26	1,894.71	1,568.21	326.50	5.803		
12,100.00	7,060.89	7,003.11	7,060.89	143.38	242.76	-89.65	-3,026.43	-3,369.26	1,982.22	1,656.99	325.24	6.095		
12,200.00	7,060.57	7,003.43	7,060.57	146.15	242.77	-89.63	-3,026.43	-3,369.26	2,070.87	1,746.81	324.06	6.390		
12,300.00	7,060.24	7,003.76	7,060.24	148.92	242.78	-89.61	-3,026.43	-3,369.26	2,160.50	1,837.54	322.96	6.690		
12,400.00	7,059.92	7,004.08	7,059.92	151.69	242.79	-89.59	-3,026.43	-3,369.26	2,251.01	1,929.08	321.93	6.992		
12,500.00	7,059.59	7,004.41	7,059.59	154.47	242.80	-89.57	-3,026.43	-3,369.26	2,342.29	2,021.32	320.97	7.297		
12,600.00	7,059.27	7,004.73	7,059.27	157.25	242.81	-89.55	-3,026.43	-3,369.26	2,434.25	2,114.18	320.08	7.605		
12,700.00	7,058.94	7,005.06	7,058.94	160.03	242.82	-89.53	-3,026.43	-3,369.26	2,526.83	2,207.59	319.24	7.915		
12,800.00	7,058.62	7,005.38	7,058.62	162.82	242.83	-89.51	-3,026.43	-3,369.26	2,619.95	2,301.49	318.46	8.227		
12,900.00	7,058.29	7,005.71	7,058.29	165.61	242.85	-89.49	-3,026.43	-3,369.26	2,713.56	2,395.83	317.73	8.540		
13,000.00	7,057.97	7,006.03	7,057.97	168.40	242.86	-89.47	-3,026.43	-3,369.26	2,807.62	2,490.56	317.05	8.855		
13,100.00	7,057.64	7,006.36	7,057.64	171.19	242.87	-89.45	-3,026.43	-3,369.26	2,902.06	2,585.65	316.41	9.172		
13,200.00	7,057.32	7,006.68	7,057.32	173.99	242.88	-89.43	-3,026.43	-3,369.26	2,996.87	2,681.06	315.81	9.489		
13,300.00	7,057.00	7,007.01	7,057.00	176.78	242.89	-89.42	-3,026.43	-3,369.26	3,092.01	2,776.76	315.25	9.808		
13,400.00	7,056.67	7,007.33	7,056.67	179.58	242.90	-89.40	-3,026.43	-3,369.26	3,187.44	2,872.72	314.73	10.128		
13,500.00	7,056.35	7,007.66	7,056.35	182.38	242.91	-89.38	-3,026.43	-3,369.26	3,283.15	2,968.92	314.23	10.448		
13,600.00	7,056.02	7,007.98	7,056.02	185.19	242.93	-89.36	-3,026.43	-3,369.26	3,379.11	3,065.34	313.77	10.769		
13,700.00	7,055.70	7,008.30	7,055.70	187.99	242.94	-89.34	-3,026.43	-3,369.26	3,475.29	3,161.96	313.33	11.091		
13,800.00	7,055.37	7,008.63	7,055.37	190.80	242.95	-89.32	-3,026.43	-3,369.26	3,571.68	3,258.76	312.92	11.414		
13,900.00	7,055.05	7,008.95	7,055.05	193.60	242.96	-89.30	-3,026.43	-3,369.26	3,668.27	3,355.73	312.53	11.737		
14,000.00	7,054.72	7,009.28	7,054.72	196.41	242.97	-89.28	-3,026.43	-3,369.26	3,765.03	3,452.86	312.17	12.061		
14,100.00	7,054.40	7,009.60	7,054.40	199.22	242.98	-89.26	-3,026.43	-3,369.26	3,861.96	3,550.14	311.82	12.385		
14,200.00	7,054.07	7,009.93	7,054.07	202.03	242.99	-89.24	-3,026.43	-3,369.26	3,959.04	3,647.54	311.50	12.710		
14,300.00	7,053.75	6,989.75	7,053.75	204.85	242.29	-89.22	-3,026.43	-3,369.26	4,056.26	3,745.79	310.48	13.065		
14,400.00	7,053.42	6,989.42	7,053.42	207.66	242.28	-89.20	-3,026.43	-3,369.26	4,153.62	3,843.45	310.17	13.392		
14,500.00	7,053.10	6,989.10	7,053.10	210.48	242.27	-89.18	-3,026.43	-3,369.26	4,251.10	3,941.23	309.87	13.719		
14,600.00	7,052.77	6,988.77	7,052.77	213.29	242.26	-89.16	-3,026.43	-3,369.26	4,348.69	4,039.10	309.59	14.047		
14,700.00	7,052.45	6,988.45	7,052.45	216.11	242.24	-89.14	-3,026.43	-3,369.26	4,446.39	4,137.06	309.32	14.375		
14,800.00	7,052.12	6,988.12	7,052.12	218.93	242.23	-89.12	-3,026.43	-3,369.26	4,544.19	4,235.12	309.07	14.703		
14,900.00	7,051.80	6,987.80	7,051.80	221.75	242.22	-89.10	-3,026.43	-3,369.26	4,642.08	4,333.25	308.83	15.031		
15,000.00	7,051.47	6,987.47	7,051.47	224.57	242.21	-89.08	-3,026.43	-3,369.26	4,740.06	4,431.46	308.60	15.360		
15,100.00	7,051.15	6,987.15	7,051.15	227.39	242.20	-89.06	-3,026.43	-3,369.26	4,838.12	4,529.74	308.39	15.688		
15,145.13	7,051.00	6,987.00	7,051.00	228.67	242.19	-89.05	-3,026.43	-3,369.26	4,882.40	4,574.11	308.29	15.837		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	10.00	3.28	3.28	21.99	1,217.50	491.73	1,313.09					
100.00	100.00	87.10	97.10	3.28	3.29	21.99	1,217.58	491.79	1,313.15	1,306.58	6.57	199.870		
200.00	200.00	187.40	197.40	3.34	3.33	22.00	1,217.74	491.99	1,313.38	1,306.71	6.67	196.922		
300.00	299.98	290.69	300.69	3.44	3.44	-162.39	1,217.76	492.19	1,315.13	1,308.25	6.88	191.211		
400.00	399.84	383.27	393.27	3.59	3.58	-162.41	1,217.76	492.63	1,320.30	1,313.13	7.17	184.171		
500.00	499.45	486.20	496.19	3.79	3.78	-162.43	1,217.85	493.64	1,329.06	1,321.50	7.57	175.656		
600.00	598.70	580.49	590.48	4.03	3.99	-162.47	1,217.86	494.57	1,341.06	1,333.04	8.02	167.123		
700.00	697.47	684.09	694.07	4.31	4.26	-162.53	1,217.83	496.10	1,356.51	1,347.94	8.57	158.262		
800.00	795.62	783.92	793.89	4.64	4.55	-162.60	1,217.49	497.39	1,374.90	1,365.73	9.17	150.006		
900.00	893.06	878.19	888.15	5.00	4.83	-162.69	1,217.27	498.51	1,396.63	1,386.84	9.79	142.653		
1,000.00	989.64	977.52	987.47	5.40	5.16	-162.80	1,217.02	499.99	1,421.72	1,411.25	10.47	135.775		
1,100.00	1,085.27	1,067.73	1,077.67	5.83	5.46	-162.91	1,216.88	501.01	1,450.00	1,438.84	11.16	129.930		
1,200.00	1,180.44	1,162.80	1,172.73	6.29	5.79	-163.21	1,217.02	502.35	1,480.10	1,468.22	11.87	124.642		
1,300.00	1,275.61	1,267.03	1,276.96	6.76	6.16	-163.52	1,216.74	503.88	1,509.88	1,497.23	12.65	119.353		
1,400.00	1,370.78	1,364.61	1,374.52	7.26	6.52	-163.81	1,216.13	504.83	1,539.21	1,525.79	13.42	114.688		
1,500.00	1,465.95	1,461.07	1,470.98	7.76	6.88	-164.09	1,215.63	505.51	1,568.59	1,554.39	14.20	110.438		
1,600.00	1,561.12	1,556.72	1,566.62	8.27	7.25	-164.35	1,214.88	506.58	1,597.89	1,582.89	15.00	106.549		
1,700.00	1,656.29	1,649.20	1,659.10	8.80	7.60	-164.59	1,214.25	507.61	1,627.31	1,611.52	15.79	103.077		
1,800.00	1,751.46	1,744.05	1,753.94	9.32	7.97	-164.84	1,213.89	508.36	1,656.93	1,640.33	16.60	99.826		
1,900.00	1,846.63	1,846.93	1,856.82	9.86	8.38	-165.10	1,213.30	509.06	1,686.37	1,668.91	17.46	96.605		
2,000.00	1,941.80	1,943.73	1,953.62	10.40	8.76	-165.36	1,212.49	509.05	1,715.38	1,697.09	18.29	93.773		
2,100.00	2,036.96	2,035.70	2,045.58	10.94	9.12	-165.61	1,212.14	508.72	1,744.73	1,725.62	19.11	91.293		
2,200.00	2,132.13	2,131.26	2,141.14	11.49	9.50	-165.86	1,211.58	508.48	1,773.97	1,754.02	19.95	88.905		
2,300.00	2,227.30	2,216.24	2,226.12	12.04	9.84	-166.08	1,211.51	508.22	1,803.67	1,782.93	20.74	86.947		
2,400.00	2,322.47	2,310.89	2,320.77	12.59	10.22	-166.31	1,211.57	508.25	1,833.64	1,812.05	21.59	84.930		
2,500.00	2,417.64	2,403.80	2,413.68	13.15	10.60	-166.52	1,211.67	508.46	1,863.72	1,841.29	22.43	83.092		
2,600.00	2,512.81	2,507.13	2,517.01	13.70	11.02	-166.76	1,211.73	508.26	1,893.67	1,870.34	23.33	81.168		
2,700.00	2,607.98	2,592.74	2,602.61	14.26	11.37	-166.96	1,211.90	507.87	1,923.70	1,899.56	24.14	79.706		
2,800.00	2,703.15	2,686.88	2,696.75	14.82	11.75	-167.18	1,212.33	507.48	1,954.00	1,929.01	24.99	78.192		
2,900.00	2,798.32	2,786.49	2,796.36	15.38	12.16	-167.40	1,212.74	506.89	1,984.24	1,958.36	25.88	76.675		
3,000.00	2,893.49	2,886.57	2,906.44	15.95	12.61	-167.65	1,212.76	505.87	2,014.06	1,987.23	26.83	75.066		
3,100.00	2,988.66	2,983.77	2,993.63	16.51	12.97	-167.85	1,212.63	504.88	2,043.69	2,016.03	27.65	73.906		
3,200.00	3,083.83	3,085.23	3,095.08	17.07	13.38	-168.08	1,212.74	503.28	2,073.47	2,044.91	28.56	72.601		
3,300.00	3,179.00	3,175.23	3,185.06	17.64	13.76	-168.29	1,212.78	501.57	2,103.14	2,073.74	29.40	71.534		
3,400.00	3,274.17	3,278.88	3,288.71	18.21	14.19	-168.51	1,212.78	500.05	2,132.91	2,102.59	30.32	70.336		
3,500.00	3,369.34	3,377.44	3,387.25	18.77	14.60	-168.71	1,212.33	498.69	2,162.29	2,131.08	31.22	69.261		
3,600.00	3,464.51	3,470.86	3,480.66	19.34	14.99	-168.90	1,211.95	497.26	2,191.71	2,159.62	32.08	68.310		
3,700.00	3,559.68	3,560.28	3,570.07	19.91	15.36	-169.07	1,211.66	496.17	2,221.30	2,188.38	32.93	67.462		
3,800.00	3,654.84	3,643.47	3,653.26	20.48	15.71	-169.21	1,211.56	495.70	2,251.27	2,217.54	33.73	66.745		
3,900.00	3,750.01	3,728.27	3,738.06	21.05	16.06	-169.35	1,211.94	495.61	2,281.86	2,247.32	34.54	66.061		
4,000.00	3,845.18	3,827.63	3,837.42	21.62	16.48	-169.50	1,212.43	495.42	2,312.51	2,277.06	35.45	65.239		
4,100.00	3,940.35	3,925.56	3,935.34	22.19	16.89	-169.66	1,212.81	494.91	2,342.98	2,306.64	36.34	64.467		
4,200.00	4,035.52	4,019.44	4,029.22	22.76	17.28	-169.81	1,213.23	494.26	2,373.50	2,336.28	37.22	63.776		
4,300.00	4,130.69	4,119.31	4,129.09	23.33	17.70	-169.96	1,213.51	493.76	2,403.91	2,365.79	38.13	63.049		
4,400.00	4,225.86	4,215.60	4,225.38	23.91	18.11	-170.10	1,213.68	493.18	2,434.22	2,395.21	39.02	62.389		
4,500.00	4,321.03	4,307.34	4,317.12	24.48	18.49	-170.23	1,213.90	492.67	2,464.61	2,424.73	39.88	61.805		
4,600.00	4,416.20	4,402.43	4,412.21	25.05	18.89	-170.36	1,214.16	492.22	2,495.07	2,454.31	40.76	61.214		
4,700.00	4,511.37	4,494.02	4,503.79	25.62	19.28	-170.48	1,214.46	491.88	2,525.60	2,483.98	41.62	60.682		
4,800.00	4,606.54	4,582.16	4,591.94	26.20	19.65	-170.59	1,214.87	491.81	2,556.34	2,513.88	42.46	60.210		
4,900.00	4,701.71	4,679.27	4,689.04	26.77	20.06	-170.71	1,215.41	491.89	2,587.22	2,543.86	43.36	59.675		
5,000.00	4,796.88	4,766.57	4,776.34	27.34	20.42	-170.81	1,215.92	491.98	2,618.12	2,573.93	44.19	59.251		
5,100.00	4,892.05	4,848.14	4,857.91	27.92	20.77	-170.89	1,216.65	492.49	2,649.44	2,604.46	44.98	58.904		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,935.08	4,944.83	28.49	21.14	-170.97	1,217.83	493.30	2,681.25	2,635.44	45.81	58.533		
5,300.00	5,082.39	5,043.42	5,053.17	29.07	21.59	-171.09	1,219.29	493.76	2,712.97	2,666.18	46.79	57.987		
5,400.00	5,177.56	5,162.71	5,172.45	29.64	22.10	-171.21	1,220.01	493.83	2,743.91	2,696.07	47.84	57.356		
5,500.00	5,272.72	5,260.49	5,270.23	30.21	22.51	-171.33	1,220.16	493.32	2,774.32	2,725.57	48.74	56.915		
5,600.00	5,367.89	5,368.97	5,378.70	30.79	22.97	-171.45	1,220.37	492.32	2,804.71	2,754.99	49.72	56.406		
5,700.00	5,463.06	5,473.11	5,482.84	31.36	23.41	-171.58	1,219.99	491.04	2,834.51	2,783.84	50.67	55.938		
5,800.00	5,558.23	5,565.30	5,575.01	31.94	23.80	-171.70	1,219.70	489.50	2,864.28	2,812.74	51.54	55.573		
5,900.00	5,653.40	5,659.33	5,669.04	32.51	24.20	-171.81	1,219.44	488.32	2,894.19	2,841.77	52.42	55.209		
6,000.00	5,748.57	5,754.50	5,764.19	33.09	24.60	-171.92	1,219.20	486.95	2,924.09	2,870.78	53.31	54.849		
6,100.00	5,843.74	5,846.21	5,855.88	33.67	24.99	-172.03	1,219.13	485.12	2,954.05	2,899.88	54.18	54.525		
6,200.00	5,938.91	5,936.80	5,946.45	34.24	25.37	-172.15	1,219.18	483.47	2,984.19	2,929.15	55.04	54.222		
6,300.00	6,034.08	6,030.54	6,040.18	34.82	25.77	-172.26	1,219.34	481.72	3,014.43	2,958.52	55.92	53.910		
6,400.00	6,129.25	6,132.49	6,142.11	35.39	26.20	-172.39	1,219.54	479.48	3,044.65	2,987.80	56.85	53.552		
6,500.00	6,224.42	6,234.12	6,243.72	35.97	26.64	-172.51	1,219.32	477.30	3,074.48	3,016.69	57.79	53.201		
6,600.00	6,319.59	6,321.59	6,331.16	36.54	27.01	-172.61	1,219.36	475.22	3,104.55	3,045.92	58.63	52.954		
6,700.00	6,414.76	6,423.11	6,432.64	37.12	27.44	-172.75	1,219.37	472.24	3,134.47	3,074.91	59.56	52.624		
6,800.00	6,509.91	6,501.48	6,510.96	37.70	27.77	179.12	1,219.61	469.84	3,164.78	3,104.44	60.34	52.452		
6,900.00	6,603.99	6,593.31	6,602.75	38.26	28.16	153.30	1,220.24	466.67	3,197.35	3,136.15	61.20	52.244		
7,000.00	6,694.76	6,693.28	6,702.62	38.78	28.59	135.91	1,220.97	462.63	3,231.98	3,169.87	62.11	52.037		
7,100.00	6,779.96	6,787.83	6,797.10	39.24	28.99	124.38	1,221.39	458.87	3,267.91	3,204.95	62.97	51.899		
7,200.00	6,857.50	6,864.33	6,873.54	39.65	29.32	116.09	1,221.66	455.84	3,304.88	3,241.19	63.69	51.886		
7,300.00	6,925.48	6,931.41	6,940.55	40.02	29.60	109.70	1,222.08	452.76	3,342.69	3,278.31	64.38	51.922		
7,400.00	6,982.21	6,988.94	6,998.01	40.33	29.85	104.46	1,222.55	449.93	3,380.95	3,315.90	65.05	51.972		
7,500.00	7,026.31	7,043.41	7,052.40	40.63	30.08	100.09	1,223.02	447.12	3,419.25	3,353.44	65.80	51.960		
7,600.00	7,056.68	7,084.94	7,093.87	40.91	30.26	96.24	1,223.30	444.95	3,457.11	3,390.53	66.59	51.917		
7,700.00	7,072.58	7,109.81	7,118.71	41.25	30.37	92.73	1,223.43	443.64	3,494.13	3,426.74	67.39	51.848		
7,800.00	7,074.86	7,118.78	7,127.67	41.69	30.41	90.85	1,223.47	443.16	3,530.08	3,461.88	68.21	51.755		
7,900.00	7,074.54	7,122.61	7,131.49	42.34	30.42	90.91	1,223.51	442.91	3,567.77	3,498.66	69.11	51.628		
8,000.00	7,074.21	7,128.63	7,137.50	43.27	30.45	91.02	1,223.55	442.56	3,607.82	3,537.70	70.11	51.457		
8,100.00	7,073.89	7,134.94	7,143.80	44.47	30.48	91.13	1,223.60	442.19	3,650.16	3,578.96	71.20	51.268		
8,200.00	7,073.57	7,141.55	7,150.39	45.91	30.50	91.24	1,223.65	441.79	3,694.71	3,622.37	72.34	51.071		
8,300.00	7,073.24	7,148.49	7,157.32	47.53	30.53	91.36	1,223.70	441.36	3,741.40	3,667.86	73.54	50.878		
8,400.00	7,072.92	7,155.77	7,164.59	49.31	30.57	91.49	1,223.76	440.89	3,790.13	3,715.37	74.76	50.696		
8,500.00	7,072.59	7,163.43	7,172.23	51.20	30.60	91.62	1,223.83	440.39	3,840.85	3,764.84	76.01	50.531		
8,600.00	7,072.27	7,171.50	7,180.29	53.19	30.63	91.76	1,223.90	439.86	3,893.45	3,816.18	77.27	50.388		
8,700.00	7,071.94	7,180.01	7,188.78	55.27	30.67	91.91	1,223.99	439.27	3,947.88	3,869.35	78.53	50.269		
8,800.00	7,071.62	7,189.00	7,197.74	57.43	30.71	92.07	1,224.08	438.64	4,004.05	3,924.25	79.80	50.178		
8,900.00	7,071.29	7,198.51	7,207.22	59.64	30.75	92.23	1,224.18	437.96	4,061.89	3,980.84	81.05	50.115		
9,000.00	7,070.97	7,208.58	7,217.26	61.92	30.79	92.41	1,224.30	437.21	4,121.33	4,039.04	82.29	50.081		
9,100.00	7,070.64	7,219.27	7,227.92	64.24	30.84	92.59	1,224.43	436.39	4,182.30	4,098.78	83.52	50.075 SF		
9,200.00	7,070.32	7,221.76	7,230.41	66.61	30.85	92.64	1,224.43	436.27	4,244.75	4,160.08	84.67	50.134		
9,300.00	7,069.99	7,229.18	7,237.81	69.01	30.88	92.77	1,224.50	435.73	4,308.59	4,222.77	85.83	50.202		
9,400.00	7,069.67	7,236.49	7,245.10	71.45	30.91	92.89	1,224.56	435.21	4,373.78	4,286.83	86.95	50.300		
9,500.00	7,069.34	7,243.70	7,252.29	73.92	30.94	93.02	1,224.62	434.71	4,440.25	4,352.20	88.06	50.425		
9,600.00	7,069.02	7,250.80	7,259.37	76.42	30.97	93.14	1,224.67	434.21	4,507.95	4,418.83	89.13	50.579		
9,700.00	7,068.69	7,257.80	7,266.35	78.95	31.00	93.26	1,224.72	433.72	4,576.83	4,486.66	90.17	50.758		
9,800.00	7,068.37	7,264.69	7,273.24	81.49	31.03	93.38	1,224.76	433.24	4,646.82	4,555.64	91.18	50.963		
9,900.00	7,068.04	7,271.10	7,279.63	84.06	31.06	93.49	1,224.80	432.80	4,717.89	4,625.73	92.16	51.192		
10,000.00	7,067.72	7,277.70	7,286.21	86.65	31.09	93.61	1,224.85	432.34	4,789.98	4,696.87	93.11	51.443		
10,100.00	7,067.39	7,284.30	7,292.79	89.25	31.12	93.72	1,224.89	431.88	4,863.05	4,769.02	94.04	51.715		
10,200.00	7,067.07	7,290.90	7,299.38	91.87	31.15	93.83	1,224.93	431.43	4,937.06	4,842.13	94.93	52.007		
10,300.00	7,066.74	7,297.50	7,305.96	94.50	31.18	93.95	1,224.98	430.97	5,011.96	4,916.16	95.80	52.318		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	7,304.10	7,312.54	97.14	31.20	94.06	1,225.02	430.51	5,087.71	4,991.08	96.64	52.647		
10,500.00	7,066.09	7,310.70	7,319.13	99.80	31.23	94.18	1,225.06	430.05	5,164.29	5,066.83	97.45	52.993		
10,600.00	7,065.77	7,317.30	7,325.71	102.47	31.26	94.29	1,225.10	429.60	5,241.64	5,143.40	98.24	53.356		
10,700.00	7,065.44	7,323.90	7,332.30	105.15	31.29	94.40	1,225.15	429.14	5,319.74	5,220.73	99.00	53.733		
10,800.00	7,065.12	7,330.50	7,338.88	107.83	31.32	94.52	1,225.19	428.68	5,398.55	5,298.81	99.74	54.125		
10,900.00	7,064.79	7,337.10	7,345.46	110.53	31.35	94.63	1,225.23	428.22	5,478.05	5,377.59	100.46	54.531		
11,000.00	7,064.47	7,343.70	7,352.05	113.23	31.38	94.75	1,225.27	427.77	5,558.20	5,457.05	101.15	54.949		
11,100.00	7,064.14	7,350.30	7,358.63	115.95	31.41	94.86	1,225.32	427.31	5,638.98	5,537.15	101.82	55.380		
11,200.00	7,063.82	7,356.90	7,365.21	118.66	31.43	94.97	1,225.36	426.85	5,720.35	5,617.88	102.47	55.822		
11,300.00	7,063.49	7,363.50	7,371.80	121.39	31.46	95.09	1,225.40	426.40	5,802.31	5,699.20	103.10	56.276		
11,400.00	7,063.17	7,370.10	7,378.38	124.12	31.49	95.20	1,225.44	425.94	5,884.81	5,781.09	103.72	56.739		
11,500.00	7,062.84	7,376.69	7,384.97	126.86	31.52	95.32	1,225.49	425.48	5,967.84	5,863.53	104.31	57.213		
11,600.00	7,062.52	7,383.29	7,391.55	129.60	31.55	95.43	1,225.53	425.02	6,051.38	5,946.49	104.88	57.696		
11,700.00	7,062.19	7,389.89	7,398.13	132.35	31.58	95.54	1,225.57	424.57	6,135.40	6,029.96	105.44	58.187		
11,800.00	7,061.87	7,396.49	7,404.72	135.10	31.61	95.66	1,225.61	424.11	6,219.89	6,113.90	105.98	58.687		
11,900.00	7,061.54	7,403.09	7,411.30	137.85	31.64	95.77	1,225.66	423.65	6,304.82	6,198.31	106.51	59.195		
12,000.00	7,061.22	7,409.69	7,417.88	140.61	31.66	95.88	1,225.70	423.20	6,390.19	6,283.17	107.02	59.710		
12,100.00	7,060.89	7,416.29	7,424.47	143.38	31.69	96.00	1,225.74	422.74	6,475.96	6,368.45	107.52	60.233		
12,200.00	7,060.57	7,422.89	7,431.05	146.15	31.72	96.11	1,225.78	422.28	6,562.14	6,454.14	108.00	60.762		
12,300.00	7,060.24	7,429.49	7,437.63	148.92	31.75	96.22	1,225.83	421.82	6,648.69	6,540.22	108.47	61.297		
12,400.00	7,059.92	7,436.09	7,444.22	151.69	31.78	96.34	1,225.87	421.37	6,735.61	6,626.69	108.92	61.839		
12,500.00	7,059.59	7,442.69	7,450.80	154.47	31.81	96.45	1,225.91	420.91	6,822.88	6,713.51	109.37	62.386		
12,600.00	7,059.27	7,449.29	7,457.39	157.25	31.84	96.56	1,225.95	420.45	6,910.49	6,800.69	109.80	62.939		
12,700.00	7,058.94	7,455.89	7,463.97	160.03	31.87	96.68	1,226.00	419.99	6,998.42	6,888.21	110.22	63.497		
12,800.00	7,058.62	7,443.00	7,451.11	162.82	31.81	96.45	1,225.91	420.89	7,086.70	6,976.19	110.51	64.127		
12,900.00	7,058.29	7,443.00	7,451.11	165.61	31.81	96.45	1,225.91	420.89	7,175.27	7,064.40	110.87	64.718		
13,000.00	7,057.97	7,443.00	7,451.11	168.40	31.81	96.45	1,225.91	420.89	7,264.14	7,152.92	111.22	65.314		
13,100.00	7,057.64	7,443.00	7,451.11	171.19	31.81	96.45	1,225.91	420.89	7,353.30	7,241.74	111.56	65.914		
13,200.00	7,057.32	7,443.00	7,451.11	173.99	31.81	96.45	1,225.91	420.89	7,442.73	7,330.84	111.89	66.518		
13,300.00	7,057.00	7,443.00	7,451.11	176.78	31.81	96.45	1,225.91	420.89	7,532.42	7,420.21	112.21	67.127		
13,400.00	7,056.67	7,443.00	7,451.11	179.58	31.81	96.45	1,225.91	420.89	7,622.38	7,509.85	112.53	67.739		
13,500.00	7,056.35	7,443.00	7,451.11	182.38	31.81	96.45	1,225.91	420.89	7,712.58	7,599.75	112.83	68.356		
13,600.00	7,056.02	7,443.00	7,451.11	185.19	31.81	96.45	1,225.91	420.89	7,803.02	7,689.89	113.13	68.975		
13,700.00	7,055.70	7,443.00	7,451.11	187.99	31.81	96.45	1,225.91	420.89	7,893.69	7,780.27	113.42	69.598		
13,800.00	7,055.37	7,443.00	7,451.11	190.80	31.81	96.45	1,225.91	420.89	7,984.58	7,870.88	113.70	70.225		
13,900.00	7,055.05	7,443.00	7,451.11	193.60	31.81	96.45	1,225.91	420.89	8,075.69	7,961.71	113.98	70.854		
14,000.00	7,054.72	7,443.00	7,451.11	196.41	31.81	96.45	1,225.91	420.89	8,167.00	8,052.76	114.24	71.487		
14,100.00	7,054.40	7,443.00	7,451.11	199.22	31.81	96.45	1,225.91	420.89	8,258.52	8,144.01	114.51	72.122		
14,200.00	7,054.07	7,443.00	7,451.11	202.03	31.81	96.45	1,225.91	420.89	8,350.23	8,235.47	114.76	72.760		
14,300.00	7,053.75	7,443.00	7,451.11	204.85	31.81	96.45	1,225.91	420.89	8,442.13	8,327.12	115.01	73.401		
14,400.00	7,053.42	7,443.00	7,451.11	207.66	31.81	96.45	1,225.91	420.89	8,534.21	8,418.95	115.26	74.044		
14,500.00	7,053.10	7,443.00	7,451.11	210.48	31.81	96.45	1,225.91	420.89	8,626.47	8,510.97	115.50	74.689		
14,600.00	7,052.77	7,443.00	7,451.11	213.29	31.81	96.45	1,225.91	420.89	8,718.90	8,603.17	115.73	75.337		
14,700.00	7,052.45	7,443.00	7,451.11	216.11	31.81	96.45	1,225.91	420.89	8,811.49	8,695.53	115.96	75.987		
14,800.00	7,052.12	7,443.00	7,451.11	218.93	31.81	96.45	1,225.91	420.89	8,904.25	8,788.06	116.18	76.639		
14,900.00	7,051.80	7,443.00	7,451.11	221.75	31.81	96.45	1,225.91	420.89	8,997.16	8,880.75	116.40	77.292		
15,000.00	7,051.47	7,443.00	7,451.11	224.57	31.81	96.45	1,225.91	420.89	9,090.22	8,973.60	116.62	77.948		
15,100.00	7,051.15	7,443.00	7,451.11	227.39	31.81	96.45	1,225.91	420.89	9,183.42	9,066.60	116.83	78.605		
15,145.13	7,051.00	7,443.00	7,451.11	228.67	31.81	96.45	1,225.91	420.89	9,225.53	9,108.61	116.92	78.903		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	20.00	3.28	3.28	72.50	164.66	522.35	548.05					
100.00	100.00	77.26	97.26	3.28	3.28	72.45	165.18	522.38	547.88	541.31	6.57	83.399	CC, ES	
200.00	200.00	179.38	199.37	3.34	3.33	72.29	166.78	522.33	548.31	541.64	6.67	82.251		
300.00	299.98	280.65	300.63	3.44	3.43	-112.40	168.09	521.86	548.93	542.06	6.87	79.905		
400.00	399.84	378.10	398.07	3.59	3.57	-112.97	169.23	521.53	551.00	543.83	7.16	76.923		
500.00	499.45	475.55	495.51	3.79	3.76	-113.82	170.40	521.68	555.01	547.46	7.55	73.552		
600.00	598.70	573.08	593.03	4.03	3.98	-114.93	171.67	522.11	560.94	552.93	8.01	70.040		
700.00	697.47	671.45	691.39	4.31	4.23	-116.33	173.24	522.62	568.85	560.31	8.54	66.577		
800.00	795.62	768.22	788.14	4.64	4.50	-117.89	174.58	523.25	578.83	569.69	9.14	63.349		
900.00	893.06	864.26	884.17	5.00	4.80	-119.65	176.20	523.99	591.32	581.54	9.78	60.455		
1,000.00	989.64	960.87	980.76	5.40	5.11	-121.56	177.66	524.89	606.38	595.90	10.47	57.898		
1,100.00	1,085.27	1,056.22	1,076.10	5.83	5.43	-123.57	179.03	525.69	624.08	612.87	11.20	55.705		
1,200.00	1,180.44	1,151.82	1,171.69	6.29	5.76	-125.87	180.51	526.42	643.64	631.68	11.96	53.826		
1,300.00	1,275.61	1,247.65	1,267.51	6.76	6.10	-128.05	181.83	526.97	663.95	651.22	12.73	52.136		
1,400.00	1,370.78	1,341.96	1,361.81	7.26	6.44	-130.09	183.36	527.31	685.14	671.62	13.52	50.669		
1,500.00	1,465.95	1,438.17	1,458.00	7.76	6.80	-132.04	184.82	527.76	707.19	692.86	14.33	49.349		
1,600.00	1,561.12	1,535.79	1,555.61	8.27	7.17	-133.90	185.99	527.85	729.51	714.36	15.16	48.132		
1,700.00	1,656.29	1,631.61	1,651.42	8.80	7.54	-135.64	187.28	527.72	752.47	736.48	15.98	47.082		
1,800.00	1,751.46	1,729.89	1,749.70	9.32	7.92	-137.32	188.30	527.20	775.58	758.75	16.83	46.091		
1,900.00	1,846.63	1,823.14	1,842.95	9.86	8.29	-138.81	189.04	526.91	799.27	781.61	17.65	45.280		
2,000.00	1,941.80	1,917.65	1,937.45	10.40	8.66	-140.24	189.94	526.73	823.65	805.16	18.49	44.551		
2,100.00	2,036.96	2,018.17	2,037.97	10.94	9.06	-141.67	190.69	526.20	848.16	828.80	19.36	43.806		
2,200.00	2,132.13	2,117.46	2,137.25	11.49	9.46	-143.00	190.85	525.38	872.49	852.26	20.23	43.127		
2,300.00	2,227.30	2,210.90	2,230.69	12.04	9.83	-144.18	190.88	524.68	897.18	876.11	21.07	42.582		
2,400.00	2,322.47	2,309.94	2,329.73	12.59	10.23	-145.34	190.68	524.01	922.09	900.15	21.94	42.020		
2,500.00	2,417.64	2,407.00	2,426.78	13.15	10.62	-146.43	190.26	523.17	947.05	924.24	22.81	41.520		
2,600.00	2,512.81	2,503.96	2,523.74	13.70	11.01	-147.44	189.58	522.40	972.13	948.45	23.68	41.058		
2,700.00	2,607.98	2,600.35	2,620.12	14.26	11.41	-148.38	188.63	521.79	997.35	972.81	24.54	40.636		
2,800.00	2,703.15	2,692.11	2,711.87	14.82	11.78	-149.22	187.70	521.47	1,022.95	997.57	25.38	40.301		
2,900.00	2,798.32	2,791.65	2,811.41	15.38	12.19	-150.08	186.62	521.26	1,048.78	1,022.50	26.27	39.916		
3,000.00	2,893.49	2,883.90	2,903.65	15.95	12.57	-150.86	185.67	520.81	1,074.70	1,047.58	27.12	39.628		
3,100.00	2,988.66	2,977.66	2,997.41	16.51	12.95	-151.62	185.06	520.27	1,101.09	1,073.11	27.98	39.359		
3,200.00	3,083.83	3,070.63	3,090.37	17.07	13.34	-152.35	184.64	519.71	1,127.80	1,098.97	28.83	39.123		
3,300.00	3,179.00	3,165.88	3,185.63	17.64	13.73	-153.08	184.50	518.95	1,154.84	1,125.15	29.70	38.890		
3,400.00	3,274.17	3,261.39	3,281.13	18.21	14.13	-153.78	184.32	518.11	1,181.99	1,151.42	30.57	38.669		
3,500.00	3,369.34	3,354.53	3,374.26	18.77	14.52	-154.43	184.14	517.43	1,209.35	1,177.93	31.42	38.488		
3,600.00	3,464.51	3,449.10	3,468.84	19.34	14.91	-155.03	183.88	517.26	1,237.04	1,204.75	32.29	38.311		
3,700.00	3,559.68	3,546.32	3,566.05	19.91	15.32	-155.63	183.52	517.05	1,264.76	1,231.59	33.18	38.122		
3,800.00	3,654.84	3,643.60	3,663.33	20.48	15.72	-156.20	183.07	516.70	1,292.46	1,258.39	34.07	37.940		
3,900.00	3,750.01	3,740.94	3,760.67	21.05	16.13	-156.75	182.52	516.20	1,320.12	1,285.16	34.96	37.764		
4,000.00	3,845.18	3,838.36	3,858.08	21.62	16.54	-157.29	181.88	515.56	1,347.74	1,311.89	35.85	37.595		
4,100.00	3,940.35	3,935.83	3,955.55	22.19	16.95	-157.81	181.14	514.79	1,375.31	1,338.57	36.74	37.432		
4,200.00	4,035.52	4,033.38	4,053.09	22.76	17.36	-158.31	180.30	513.87	1,402.84	1,365.21	37.64	37.274		
4,300.00	4,130.69	4,130.98	4,150.68	23.33	17.77	-158.79	179.37	512.80	1,430.32	1,391.79	38.53	37.121		
4,400.00	4,225.86	4,228.65	4,248.34	23.91	18.18	-159.26	178.34	511.60	1,457.75	1,418.32	39.43	36.973		
4,500.00	4,321.03	4,320.23	4,339.91	24.48	18.57	-159.68	177.40	510.65	1,485.35	1,445.07	40.28	36.876		
4,600.00	4,416.20	4,410.58	4,430.25	25.05	18.95	-160.07	176.58	510.02	1,513.28	1,472.16	41.12	36.798		
4,700.00	4,511.37	4,498.91	4,518.58	25.62	19.32	-160.44	176.16	509.44	1,541.66	1,499.71	41.95	36.749		
4,800.00	4,606.54	4,595.04	4,614.71	26.20	19.72	-160.84	175.97	508.66	1,570.31	1,527.47	42.84	36.656		
4,900.00	4,701.71	4,687.42	4,707.09	26.77	20.11	-161.21	175.81	508.00	1,599.08	1,555.38	43.70	36.594		
5,000.00	4,796.88	4,784.28	4,803.95	27.34	20.52	-161.58	175.60	507.58	1,627.97	1,583.37	44.59	36.507		
5,100.00	4,892.05	4,873.09	4,892.75	27.92	20.90	-161.89	175.41	507.37	1,656.99	1,611.56	45.42	36.478		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,965.48	4,985.14	28.49	21.29	-162.21	175.58	507.18	1,686.42	1,640.13	46.28	36.436		
5,300.00	5,082.39	5,062.37	5,082.03	29.07	21.70	-162.55	175.84	506.76	1,715.90	1,668.72	47.18	36.369		
5,400.00	5,177.56	5,157.45	5,177.11	29.64	22.10	-162.86	176.00	506.32	1,745.33	1,697.27	48.06	36.313		
5,500.00	5,272.72	5,254.44	5,274.10	30.21	22.51	-163.18	176.22	505.80	1,774.84	1,725.88	48.96	36.250		
5,600.00	5,367.89	5,355.04	5,374.70	30.79	22.94	-163.51	176.33	504.85	1,804.15	1,754.26	49.89	36.163		
5,700.00	5,463.06	5,450.62	5,470.27	31.36	23.34	-163.81	176.24	503.84	1,833.30	1,782.52	50.78	36.105		
5,800.00	5,558.23	5,543.66	5,563.31	31.94	23.74	-164.09	176.21	503.07	1,862.62	1,810.97	51.64	36.066		
5,900.00	5,653.40	5,642.34	5,661.98	32.51	24.15	-164.37	176.09	502.50	1,891.97	1,839.41	52.56	35.998		
6,000.00	5,748.57	5,742.66	5,762.30	33.09	24.58	-164.64	175.61	501.93	1,921.05	1,867.57	53.49	35.917		
6,100.00	5,843.74	5,834.26	5,853.89	33.67	24.97	-164.88	175.13	501.42	1,950.12	1,895.77	54.34	35.885		
6,200.00	5,938.91	5,921.78	5,941.42	34.24	25.34	-165.10	174.99	501.10	1,979.61	1,924.44	55.17	35.883		
6,300.00	6,034.08	6,019.22	6,038.86	34.82	25.75	-165.34	174.99	500.58	2,009.23	1,953.16	56.07	35.832		
6,400.00	6,129.25	6,119.46	6,139.10	35.39	26.18	-165.59	174.82	499.82	2,038.66	1,981.66	57.00	35.765		
6,500.00	6,224.42	6,211.84	6,231.47	35.97	26.57	-165.81	174.63	499.18	2,068.10	2,010.23	57.87	35.739		
6,600.00	6,319.59	6,301.95	6,321.58	36.54	26.95	-166.01	174.55	498.79	2,097.76	2,039.05	58.71	35.729		
6,700.00	6,414.76	6,396.98	6,416.61	37.12	27.36	-166.22	174.54	498.54	2,127.56	2,067.96	59.60	35.697		
6,800.00	6,509.91	6,492.00	6,511.62	37.70	27.76	-174.41	174.53	498.30	2,157.56	2,097.07	60.49	35.669 SF		
6,900.00	6,603.99	6,585.97	6,605.60	38.26	28.16	159.81	174.52	498.09	2,190.74	2,129.37	61.37	35.698		
7,000.00	6,694.76	6,676.65	6,696.28	38.78	28.55	142.36	174.51	497.90	2,227.70	2,165.48	62.21	35.807		
7,100.00	6,779.96	6,761.80	6,781.43	39.24	28.91	130.60	174.51	497.74	2,267.89	2,204.88	63.01	35.991		
7,200.00	6,857.50	6,839.30	6,858.93	39.65	29.24	122.00	174.50	497.60	2,310.91	2,247.15	63.76	36.246		
7,300.00	6,925.48	6,907.26	6,926.88	40.02	29.53	115.09	174.50	497.50	2,356.40	2,291.95	64.45	36.561		
7,400.00	6,982.21	6,963.99	6,983.61	40.33	29.77	109.07	174.50	497.42	2,404.03	2,338.92	65.11	36.923		
7,500.00	7,026.31	7,008.10	7,027.73	40.63	29.96	103.49	174.49	497.36	2,453.34	2,387.59	65.75	37.314		
7,600.00	7,056.68	7,038.51	7,058.14	40.91	30.09	98.12	174.49	497.32	2,503.75	2,437.37	66.38	37.718		
7,700.00	7,072.58	7,054.48	7,074.11	41.25	30.16	92.91	174.49	497.30	2,554.50	2,487.49	67.01	38.123		
7,800.00	7,074.86	7,056.88	7,076.51	41.69	30.17	89.93	174.49	497.30	2,604.97	2,537.35	67.62	38.522		
7,900.00	7,074.54	7,056.67	7,076.30	42.34	30.17	89.93	174.49	497.30	2,657.58	2,589.28	68.30	38.910		
8,000.00	7,074.21	7,056.47	7,076.09	43.27	30.16	89.92	174.49	497.30	2,712.85	2,643.82	69.03	39.298		
8,100.00	7,073.89	7,056.26	7,075.89	44.47	30.16	89.92	174.49	497.30	2,770.64	2,700.83	69.80	39.691		
8,200.00	7,073.57	7,056.05	7,075.68	45.91	30.16	89.91	174.49	497.30	2,830.77	2,760.17	70.60	40.095		
8,300.00	7,073.24	7,055.84	7,075.47	47.53	30.16	89.90	174.49	497.30	2,893.12	2,821.70	71.41	40.513		
8,400.00	7,072.92	7,055.64	7,075.27	49.31	30.16	89.90	174.49	497.30	2,957.53	2,885.30	72.23	40.948		
8,500.00	7,072.59	7,055.43	7,075.06	51.20	30.16	89.89	174.49	497.30	3,023.88	2,950.84	73.04	41.402		
8,600.00	7,072.27	7,055.22	7,074.85	53.19	30.16	89.89	174.49	497.30	3,092.03	3,018.20	73.84	41.876		
8,700.00	7,071.94	7,055.02	7,074.65	55.27	30.16	89.88	174.49	497.30	3,161.89	3,087.26	74.63	42.370		
8,800.00	7,071.62	7,054.81	7,074.44	57.43	30.16	89.88	174.49	497.30	3,233.32	3,157.93	75.39	42.886		
8,900.00	7,071.29	7,054.61	7,074.23	59.64	30.16	89.87	174.49	497.30	3,306.24	3,230.10	76.14	43.421		
9,000.00	7,070.97	7,054.40	7,074.03	61.92	30.16	89.87	174.49	497.30	3,380.54	3,303.67	76.87	43.977		
9,100.00	7,070.64	7,054.19	7,073.82	64.24	30.15	89.86	174.49	497.30	3,456.14	3,378.57	77.57	44.553		
9,200.00	7,070.32	7,053.99	7,073.61	66.61	30.15	89.86	174.49	497.30	3,532.96	3,454.70	78.25	45.148		
9,300.00	7,069.99	7,053.78	7,073.41	69.01	30.15	89.85	174.49	497.30	3,610.90	3,531.99	78.91	45.761		
9,400.00	7,069.67	7,053.57	7,073.20	71.45	30.15	89.85	174.49	497.30	3,689.91	3,610.37	79.54	46.391		
9,500.00	7,069.34	7,053.37	7,073.00	73.92	30.15	89.84	174.49	497.30	3,769.92	3,689.78	80.15	47.037		
9,600.00	7,069.02	7,053.16	7,072.79	76.42	30.15	89.84	174.49	497.30	3,850.87	3,770.13	80.73	47.699		
9,700.00	7,068.69	7,052.96	7,072.58	78.95	30.15	89.83	174.49	497.30	3,932.69	3,851.39	81.29	48.376		
9,800.00	7,068.37	7,052.75	7,072.38	81.49	30.15	89.83	174.49	497.30	4,015.33	3,933.50	81.83	49.067		
9,900.00	7,068.04	7,052.55	7,072.17	84.06	30.15	89.82	174.49	497.30	4,098.75	4,016.39	82.35	49.771		
10,000.00	7,067.72	7,052.34	7,071.97	86.65	30.15	89.81	174.49	497.30	4,182.89	4,100.04	82.85	50.487		
10,100.00	7,067.39	7,052.14	7,071.76	89.25	30.15	89.81	174.49	497.30	4,267.72	4,184.39	83.33	51.215		
10,200.00	7,067.07	7,051.93	7,071.56	91.87	30.15	89.80	174.49	497.30	4,353.19	4,269.40	83.79	51.954		
10,300.00	7,066.74	7,051.72	7,071.35	94.50	30.14	89.80	174.49	497.30	4,439.27	4,355.04	84.23	52.704		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	7,051.52	7,071.15	97.14	30.14	89.79	174.49	497.30	4,525.92	4,441.27	84.66	53.463		
10,500.00	7,066.09	7,051.31	7,070.94	99.80	30.14	89.79	174.49	497.30	4,613.11	4,528.05	85.06	54.231		
10,600.00	7,065.77	7,051.11	7,070.74	102.47	30.14	89.78	174.49	497.30	4,700.81	4,615.36	85.46	55.008		
10,700.00	7,065.44	7,050.91	7,070.53	105.15	30.14	89.78	174.49	497.31	4,789.00	4,703.16	85.84	55.792		
10,800.00	7,065.12	7,050.70	7,070.33	107.83	30.14	89.77	174.49	497.31	4,877.64	4,791.44	86.20	56.585		
10,900.00	7,064.79	7,050.50	7,070.12	110.53	30.14	89.77	174.49	497.31	4,966.71	4,880.16	86.55	57.384		
11,000.00	7,064.47	7,050.29	7,069.92	113.23	30.14	89.76	174.49	497.31	5,056.19	4,969.30	86.89	58.190		
11,100.00	7,064.14	7,050.09	7,069.71	115.95	30.14	89.76	174.49	497.31	5,146.06	5,058.84	87.22	59.003		
11,200.00	7,063.82	7,049.88	7,069.51	118.66	30.14	89.75	174.49	497.31	5,236.29	5,148.76	87.53	59.821		
11,300.00	7,063.49	7,049.68	7,069.31	121.39	30.14	89.75	174.49	497.31	5,326.87	5,239.04	87.84	60.645		
11,400.00	7,063.17	7,049.47	7,069.10	124.12	30.13	89.74	174.49	497.31	5,417.79	5,329.66	88.13	61.474		
11,500.00	7,062.84	7,049.27	7,068.90	126.86	30.13	89.74	174.49	497.31	5,509.02	5,420.60	88.42	62.308		
11,600.00	7,062.52	7,049.07	7,068.69	129.60	30.13	89.73	174.49	497.31	5,600.55	5,511.86	88.69	63.147		
11,700.00	7,062.19	7,048.86	7,068.49	132.35	30.13	89.73	174.49	497.31	5,692.36	5,603.40	88.96	63.990		
11,800.00	7,061.87	7,048.66	7,068.29	135.10	30.13	89.72	174.49	497.31	5,784.45	5,695.23	89.22	64.837		
11,900.00	7,061.54	7,048.45	7,068.08	137.85	30.13	89.72	174.49	497.31	5,876.79	5,787.33	89.47	65.688		
12,000.00	7,061.22	7,048.25	7,067.88	140.61	30.13	89.71	174.49	497.31	5,969.38	5,879.67	89.71	66.542		
12,100.00	7,060.89	7,048.05	7,067.67	143.38	30.13	89.70	174.49	497.31	6,062.21	5,972.26	89.94	67.400		
12,200.00	7,060.57	7,047.84	7,067.47	146.15	30.13	89.70	174.49	497.31	6,155.26	6,065.09	90.17	68.260		
12,300.00	7,060.24	7,047.64	7,067.27	148.92	30.13	89.69	174.49	497.31	6,248.52	6,158.13	90.40	69.124		
12,400.00	7,059.92	7,047.44	7,067.06	151.69	30.13	89.69	174.49	497.31	6,342.00	6,251.38	90.61	69.991		
12,500.00	7,059.59	7,047.23	7,066.86	154.47	30.13	89.68	174.49	497.31	6,435.66	6,344.84	90.82	70.860		
12,600.00	7,059.27	7,047.03	7,066.66	157.25	30.12	89.68	174.49	497.31	6,529.52	6,438.49	91.03	71.732		
12,700.00	7,058.94	7,046.83	7,066.45	160.03	30.12	89.67	174.49	497.31	6,623.55	6,532.33	91.23	72.605		
12,800.00	7,058.62	7,046.62	7,066.25	162.82	30.12	89.67	174.49	497.31	6,717.76	6,626.34	91.42	73.481		
12,900.00	7,058.29	7,046.42	7,066.05	165.61	30.12	89.66	174.49	497.31	6,812.13	6,720.52	91.61	74.359		
13,000.00	7,057.97	7,046.22	7,065.85	168.40	30.12	89.66	174.49	497.31	6,906.66	6,814.87	91.80	75.239		
13,100.00	7,057.64	7,046.02	7,065.64	171.19	30.12	89.65	174.49	497.31	7,001.35	6,909.37	91.98	76.121		
13,200.00	7,057.32	7,045.81	7,065.44	173.99	30.12	89.65	174.49	497.31	7,096.17	7,004.02	92.15	77.004		
13,300.00	7,057.00	7,045.61	7,065.24	176.78	30.12	89.64	174.49	497.31	7,191.14	7,098.82	92.33	77.888		
13,400.00	7,056.67	7,045.41	7,065.04	179.58	30.12	89.64	174.49	497.31	7,286.25	7,193.75	92.50	78.774		
13,500.00	7,056.35	7,045.21	7,064.83	182.38	30.12	89.63	174.49	497.31	7,381.48	7,288.82	92.66	79.661		
13,600.00	7,056.02	7,045.00	7,064.63	185.19	30.12	89.63	174.49	497.31	7,476.84	7,384.01	92.82	80.549		
13,700.00	7,055.70	7,044.80	7,064.43	187.99	30.11	89.62	174.49	497.31	7,572.31	7,479.33	92.98	81.438		
13,800.00	7,055.37	7,044.60	7,064.23	190.80	30.11	89.62	174.49	497.31	7,667.90	7,574.77	93.14	82.329		
13,900.00	7,055.05	7,044.40	7,064.02	193.60	30.11	89.61	174.49	497.31	7,763.61	7,670.32	93.29	83.220		
14,000.00	7,054.72	7,044.19	7,063.82	196.41	30.11	89.61	174.49	497.31	7,859.42	7,765.98	93.44	84.111		
14,100.00	7,054.40	7,043.99	7,063.62	199.22	30.11	89.60	174.49	497.31	7,955.33	7,861.74	93.59	85.004		
14,200.00	7,054.07	7,043.79	7,063.42	202.03	30.11	89.60	174.49	497.31	8,051.34	7,957.61	93.73	85.897		
14,300.00	7,053.75	7,043.59	7,063.22	204.85	30.11	89.59	174.49	497.31	8,147.45	8,053.58	93.87	86.791		
14,400.00	7,053.42	7,043.39	7,063.02	207.66	30.11	89.59	174.49	497.31	8,243.65	8,149.64	94.01	87.685		
14,500.00	7,053.10	7,043.19	7,062.81	210.48	30.11	89.58	174.49	497.31	8,339.94	8,245.79	94.15	88.580		
14,600.00	7,052.77	7,042.98	7,062.61	213.29	30.11	89.58	174.49	497.31	8,436.32	8,342.03	94.29	89.475		
14,700.00	7,052.45	7,042.78	7,062.41	216.11	30.11	89.57	174.49	497.31	8,532.78	8,438.36	94.42	90.370		
14,800.00	7,052.12	7,042.58	7,062.21	218.93	30.11	89.56	174.49	497.32	8,629.32	8,534.77	94.55	91.265		
14,900.00	7,051.80	7,042.38	7,062.01	221.75	30.10	89.56	174.49	497.32	8,725.94	8,631.26	94.68	92.161		
15,000.00	7,051.47	7,042.18	7,061.81	224.57	30.10	89.55	174.49	497.32	8,822.64	8,727.83	94.81	93.056		
15,100.00	7,051.15	7,041.98	7,061.61	227.39	30.10	89.55	174.49	497.32	8,919.40	8,824.47	94.94	93.952		
15,145.13	7,051.00	7,041.89	7,061.52	228.67	30.10	89.55	174.49	497.32	8,963.09	8,868.10	94.99	94.356		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.46	419.67	3.34	419.68					
100.00	100.00	102.00	100.00	3.28	3.29	0.46	419.67	3.34	419.68	413.12	6.57	63.880		
200.00	200.00	202.00	200.00	3.34	3.34	0.46	419.67	3.34	419.68	413.01	6.68	62.868 CC, ES		
300.00	299.98	288.94	286.93	3.44	3.43	176.06	421.05	3.20	423.00	416.12	6.88	61.475		
400.00	399.84	375.59	373.48	3.59	3.56	176.03	425.02	2.80	432.80	425.61	7.19	60.193		
500.00	499.45	461.17	458.81	3.79	3.73	175.98	431.51	2.15	449.01	441.42	7.59	59.174		
600.00	598.70	545.18	542.35	4.03	3.93	175.92	440.34	1.26	471.53	463.47	8.05	58.549		
700.00	697.47	627.16	623.58	4.31	4.14	175.85	451.30	0.16	500.19	491.63	8.57	58.383		
800.00	795.62	706.68	702.05	4.64	4.37	175.76	464.14	-1.13	534.82	525.71	9.11	58.688		
900.00	893.06	783.39	777.37	5.00	4.61	175.67	478.57	-2.58	575.19	565.51	9.68	59.436		
1,000.00	989.64	856.98	849.23	5.40	4.86	175.57	494.30	-4.15	621.05	610.80	10.24	60.626		
1,100.00	1,085.27	927.19	917.40	5.83	5.10	175.47	511.01	-5.83	672.13	661.30	10.83	62.088		
1,200.00	1,180.44	994.69	982.54	6.29	5.35	175.45	528.64	-7.60	726.55	715.18	11.37	63.906		
1,300.00	1,275.61	1,063.97	1,048.94	6.76	5.63	175.41	548.27	-9.57	782.85	770.92	11.93	65.637		
1,400.00	1,370.78	1,146.22	1,127.63	7.26	5.97	175.37	572.09	-11.96	839.72	827.16	12.56	66.848		
1,500.00	1,465.95	1,228.46	1,206.32	7.76	6.33	175.34	595.91	-14.36	896.60	883.38	13.22	67.818		
1,600.00	1,561.12	1,310.71	1,285.01	8.27	6.70	175.31	619.73	-16.75	953.47	939.57	13.90	68.596		
1,700.00	1,656.29	1,407.04	1,363.70	8.80	7.14	175.28	643.55	-19.14	1,010.35	995.69	14.66	68.935		
1,800.00	1,751.46	1,475.21	1,442.38	9.32	7.46	175.26	667.38	-21.53	1,067.23	1,051.92	15.31	69.716		
1,900.00	1,846.63	1,557.46	1,521.07	9.86	7.85	175.24	691.20	-23.92	1,124.10	1,108.07	16.03	70.112		
2,000.00	1,941.80	1,639.71	1,599.76	10.40	8.24	175.22	715.02	-26.31	1,180.98	1,164.21	16.77	70.427		
2,100.00	2,036.96	1,721.96	1,678.45	10.94	8.64	175.20	738.84	-28.71	1,237.85	1,220.34	17.51	70.674		
2,200.00	2,132.13	1,804.21	1,757.13	11.49	9.04	175.19	762.66	-31.10	1,294.73	1,276.46	18.27	70.868		
2,300.00	2,227.30	1,886.46	1,835.82	12.04	9.45	175.17	786.49	-33.49	1,351.61	1,332.58	19.03	71.018		
2,400.00	2,322.47	1,968.71	1,914.51	12.59	9.86	175.16	810.31	-35.88	1,408.48	1,388.68	19.80	71.131		
2,500.00	2,417.64	2,050.96	1,993.20	13.15	10.27	175.15	834.13	-38.27	1,465.36	1,444.78	20.58	71.216		
2,600.00	2,512.81	2,133.21	2,071.89	13.70	10.69	175.14	857.95	-40.66	1,522.24	1,500.88	21.36	71.276		
2,700.00	2,607.98	2,215.46	2,150.57	14.26	11.11	175.12	881.78	-43.06	1,579.11	1,556.97	22.14	71.317		
2,800.00	2,703.15	2,302.29	2,229.26	14.82	11.55	175.11	905.60	-45.45	1,635.99	1,613.04	22.95	71.274		
2,900.00	2,798.32	2,379.96	2,307.95	15.38	11.95	175.11	929.42	-47.84	1,692.87	1,669.14	23.73	71.353		
3,000.00	2,893.49	2,462.21	2,386.64	15.95	12.37	175.10	953.24	-50.23	1,749.74	1,725.22	24.52	71.353		
3,100.00	2,988.66	2,544.46	2,465.32	16.51	12.79	175.09	977.06	-52.62	1,806.62	1,781.30	25.32	71.344		
3,200.00	3,083.83	2,626.71	2,544.01	17.07	13.22	175.08	1,000.89	-55.01	1,863.50	1,837.37	26.13	71.328		
3,300.00	3,179.00	2,708.96	2,622.70	17.64	13.64	175.07	1,024.71	-57.41	1,920.38	1,893.44	26.93	71.306		
3,400.00	3,274.17	2,808.80	2,701.39	18.21	14.16	175.07	1,048.53	-59.80	1,977.25	1,949.43	27.83	71.059		
3,500.00	3,369.34	2,873.45	2,780.08	18.77	14.50	175.06	1,072.35	-62.19	2,034.13	2,005.58	28.55	71.248		
3,600.00	3,464.51	2,955.70	2,858.76	19.34	14.93	175.05	1,096.17	-64.58	2,091.01	2,061.64	29.36	71.213		
3,700.00	3,559.68	3,037.95	2,937.45	19.91	15.36	175.05	1,120.00	-66.97	2,147.88	2,117.71	30.18	71.176		
3,800.00	3,654.84	3,120.20	3,016.14	20.48	15.79	175.04	1,143.82	-69.36	2,204.76	2,173.77	30.99	71.137		
3,900.00	3,750.01	3,202.45	3,094.83	21.05	16.22	175.04	1,167.64	-71.76	2,261.64	2,229.83	31.81	71.096		
4,000.00	3,845.18	3,284.70	3,173.51	21.62	16.65	175.03	1,191.46	-74.15	2,318.51	2,285.88	32.63	71.054		
4,100.00	3,940.35	3,366.95	3,252.20	22.19	17.08	175.03	1,215.28	-76.54	2,375.39	2,341.94	33.45	71.011		
4,200.00	4,035.52	3,449.20	3,330.89	22.76	17.51	175.02	1,239.11	-78.93	2,432.27	2,398.00	34.27	70.968		
4,300.00	4,130.69	3,531.45	3,409.58	23.33	17.95	175.02	1,262.93	-81.32	2,489.15	2,454.05	35.10	70.924		
4,400.00	4,225.86	3,613.70	3,488.27	23.91	18.38	175.02	1,286.75	-83.71	2,546.02	2,510.10	35.92	70.879		
4,500.00	4,321.03	3,704.05	3,566.95	24.48	18.86	175.01	1,310.57	-86.11	2,602.90	2,566.11	36.79	70.757		
4,600.00	4,416.20	3,778.20	3,645.64	25.05	19.25	175.01	1,334.40	-88.50	2,659.78	2,622.20	37.57	70.790		
4,700.00	4,511.37	3,860.45	3,724.33	25.62	19.69	175.01	1,358.22	-90.89	2,716.65	2,678.25	38.40	70.746		
4,800.00	4,606.54	3,942.70	3,803.02	26.20	20.12	175.00	1,382.04	-93.28	2,773.53	2,734.30	39.23	70.701		
4,900.00	4,701.71	4,024.95	3,881.70	26.77	20.56	175.00	1,405.86	-95.67	2,830.41	2,790.35	40.06	70.657		
5,000.00	4,796.88	4,107.20	3,960.39	27.34	20.99	175.00	1,429.68	-98.06	2,887.29	2,846.40	40.89	70.614		
5,100.00	4,892.05	4,189.45	4,039.08	27.92	21.43	174.99	1,453.51	-100.46	2,944.16	2,902.44	41.72	70.570		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,271.70	4,117.77	28.49	21.86	174.99	1,477.33	-102.85	3,001.04	2,958.49	42.55	70.527		
5,300.00	5,082.39	4,353.95	4,196.46	29.07	22.30	174.99	1,501.15	-105.24	3,057.92	3,014.53	43.38	70.485		
5,400.00	5,177.56	4,436.19	4,275.14	29.64	22.74	174.98	1,524.97	-107.63	3,114.79	3,070.58	44.22	70.442		
5,500.00	5,272.72	4,518.44	4,353.83	30.21	23.18	174.98	1,548.79	-110.02	3,171.67	3,126.62	45.05	70.401		
5,600.00	5,367.89	4,600.69	4,432.52	30.79	23.61	174.98	1,572.62	-112.41	3,228.55	3,182.66	45.89	70.360		
5,700.00	5,463.06	4,682.94	4,511.21	31.36	24.05	174.98	1,596.44	-114.81	3,285.43	3,238.70	46.72	70.319		
5,800.00	5,558.23	4,765.19	4,589.89	31.94	24.49	174.97	1,620.26	-117.20	3,342.30	3,294.74	47.56	70.278		
5,900.00	5,653.40	4,847.44	4,668.58	32.51	24.93	174.97	1,644.08	-119.59	3,399.18	3,350.78	48.39	70.239		
6,000.00	5,748.57	4,929.69	4,747.27	33.09	25.36	174.97	1,667.90	-121.98	3,456.06	3,406.82	49.23	70.199		
6,100.00	5,843.74	5,011.94	4,825.96	33.67	25.80	174.97	1,691.73	-124.37	3,512.93	3,462.86	50.07	70.161		
6,200.00	5,938.91	5,105.81	4,904.65	34.24	26.30	174.97	1,715.55	-126.76	3,569.81	3,518.84	50.97	70.042		
6,300.00	6,034.08	5,176.44	4,983.33	34.82	26.68	174.96	1,739.37	-129.16	3,626.69	3,574.94	51.75	70.084		
6,400.00	6,129.25	5,258.69	5,062.02	35.39	27.12	174.96	1,763.19	-131.55	3,683.57	3,630.98	52.59	70.047		
6,500.00	6,224.42	5,339.06	5,140.71	35.97	32.29	175.23	1,924.91	-147.78	3,717.92	3,656.82	61.10	60.848		
6,600.00	6,319.59	5,424.23	5,219.59	36.54	32.63	175.26	1,924.91	-147.78	3,748.53	3,686.57	61.95	60.505		
6,700.00	6,414.76	5,509.40	5,298.40	37.12	32.97	175.30	1,924.91	-147.78	3,779.14	3,716.33	62.81	60.169		
6,800.00	6,509.91	5,594.55	5,377.55	37.70	33.32	167.30	1,924.91	-147.78	3,809.75	3,746.08	63.67	59.840		
6,900.00	6,603.99	5,681.64	5,460.99	38.26	33.66	141.80	1,924.91	-147.78	3,840.13	3,775.61	64.52	59.523		
7,000.00	6,694.76	5,768.13	5,548.13	38.78	34.02	124.95	1,924.87	-152.94	3,869.65	3,804.29	65.36	59.204		
7,100.00	6,779.96	5,854.12	5,636.80	39.24	34.39	114.06	1,924.70	-175.08	3,897.56	3,831.35	66.22	58.860		
7,200.00	6,857.50	5,936.27	5,710.73	39.65	34.77	106.69	1,924.37	-216.83	3,923.15	3,856.05	67.10	58.469		
7,300.00	6,925.48	6,018.30	5,789.21	40.02	35.14	101.53	1,923.88	-280.32	3,945.73	3,877.68	68.05	57.980		
7,400.00	6,982.21	6,099.50	5,866.86	40.33	35.49	97.86	1,923.20	-366.76	3,964.69	3,895.51	69.18	57.312		
7,500.00	7,026.31	6,174.37	5,941.97	40.63	35.85	95.31	1,922.35	-475.38	3,979.46	3,908.85	70.61	56.360		
7,600.00	7,056.68	6,242.42	6,012.42	40.91	36.46	93.66	1,921.36	-602.36	3,989.60	3,917.12	72.48	55.045		
7,700.00	7,072.58	6,309.11	6,077.49	41.25	37.65	92.79	1,920.28	-740.51	3,994.79	3,919.94	74.85	53.374		
7,800.00	7,074.86	6,369.54	6,137.74	41.69	38.95	92.64	1,919.39	-853.90	3,995.44	3,918.16	77.28	51.699		
7,900.00	7,074.54	6,424.54	6,192.36	42.34	40.28	92.64	1,918.61	-953.90	3,995.33	3,915.42	79.90	50.002		
8,000.00	7,074.21	6,474.54	6,241.98	43.27	41.78	92.64	1,917.83	-1,053.90	3,995.21	3,912.37	82.84	48.231		
8,100.00	7,073.89	6,524.54	6,291.60	44.47	43.41	92.64	1,917.04	-1,153.89	3,995.09	3,909.05	86.05	46.429		
8,200.00	7,073.57	6,574.54	6,341.22	45.91	45.17	92.64	1,916.26	-1,253.89	3,994.98	3,905.48	89.50	44.636		
8,300.00	7,073.24	6,624.54	6,390.84	47.53	47.04	92.63	1,915.48	-1,353.88	3,994.86	3,901.67	93.19	42.868		
8,400.00	7,072.92	6,674.54	6,440.46	49.31	49.01	92.63	1,914.70	-1,453.88	3,994.74	3,897.67	97.07	41.154		
8,500.00	7,072.59	6,724.54	6,490.08	51.20	51.06	92.63	1,913.92	-1,553.88	3,994.62	3,893.50	101.12	39.503		
8,600.00	7,072.27	6,774.54	6,539.70	53.19	53.18	92.63	1,913.13	-1,653.87	3,994.51	3,889.18	105.33	37.925		
8,700.00	7,071.94	6,824.54	6,589.33	55.27	55.37	92.63	1,912.35	-1,753.87	3,994.39	3,884.72	109.67	36.422		
8,800.00	7,071.62	6,874.54	6,638.95	57.43	57.62	92.63	1,911.57	-1,853.86	3,994.27	3,880.14	114.13	34.998		
8,900.00	7,071.29	6,924.54	6,688.57	59.64	59.92	92.63	1,910.79	-1,953.86	3,994.16	3,875.45	118.70	33.648		
9,000.00	7,070.97	6,974.54	6,738.19	61.92	62.27	92.63	1,910.01	-2,053.86	3,994.04	3,870.68	123.36	32.376		
9,100.00	7,070.64	7,024.54	6,787.81	64.24	64.66	92.63	1,909.22	-2,153.85	3,993.92	3,865.81	128.12	31.174		
9,200.00	7,070.32	7,074.54	6,837.43	66.61	67.09	92.63	1,908.44	-2,253.85	3,993.81	3,860.86	132.94	30.042		
9,300.00	7,069.99	7,124.54	6,887.05	69.01	69.55	92.63	1,907.66	-2,353.85	3,993.69	3,855.85	137.84	28.974		
9,400.00	7,069.67	7,174.54	6,936.67	71.45	72.03	92.63	1,906.88	-2,453.84	3,993.57	3,850.78	142.79	27.968		
9,500.00	7,069.34	7,224.54	6,986.29	73.92	74.55	92.63	1,906.09	-2,553.84	3,993.46	3,845.66	147.80	27.020		
9,600.00	7,069.02	7,274.54	7,035.91	76.42	77.09	92.63	1,905.31	-2,653.83	3,993.34	3,840.48	152.86	26.125		
9,700.00	7,068.69	7,324.54	7,085.53	78.95	79.65	92.62	1,904.53	-2,753.83	3,993.22	3,835.26	157.96	25.280		
9,800.00	7,068.37	7,374.54	7,135.15	81.49	82.23	92.62	1,903.75	-2,853.83	3,993.10	3,830.00	163.10	24.483		
9,900.00	7,068.04	7,424.54	7,184.77	84.06	84.82	92.62	1,902.97	-2,953.82	3,992.99	3,824.71	168.28	23.728		
10,000.00	7,067.72	7,474.54	7,234.39	86.65	87.44	92.62	1,902.18	-3,053.82	3,992.87	3,819.38	173.49	23.015		
10,100.00	7,067.39	7,524.54	7,284.01	89.25	90.07	92.62	1,901.40	-3,153.81	3,992.75	3,814.02	178.74	22.339		
10,200.00	7,067.07	7,574.54	7,333.63	91.87	92.71	92.62	1,900.62	-3,253.81	3,992.64	3,808.63	184.01	21.698		
10,300.00	7,066.74	7,624.54	7,383.25	94.50	95.36	92.62	1,899.84	-3,353.81	3,992.52	3,803.22	189.30	21.091		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,506.54	7,248.87	97.14	98.03	92.62	1,899.06	-3,453.80	3,992.40	3,797.78	194.62	20.514		
10,500.00	7,066.09	10,606.54	7,248.49	99.80	100.71	92.62	1,898.27	-3,553.80	3,992.29	3,792.32	199.96	19.965		
10,600.00	7,065.77	10,706.54	7,248.11	102.47	103.39	92.62	1,897.49	-3,653.80	3,992.17	3,786.84	205.33	19.443		
10,700.00	7,065.44	10,806.54	7,247.73	105.15	106.09	92.62	1,896.71	-3,753.79	3,992.05	3,781.35	210.70	18.946		
10,800.00	7,065.12	10,906.54	7,247.36	107.83	108.79	92.62	1,895.93	-3,853.79	3,991.94	3,775.83	216.10	18.472		
10,900.00	7,064.79	11,006.54	7,246.98	110.53	111.50	92.62	1,895.15	-3,953.78	3,991.82	3,770.30	221.51	18.021		
11,000.00	7,064.47	11,106.54	7,246.60	113.23	114.22	92.62	1,894.36	-4,053.78	3,991.70	3,764.76	226.94	17.589		
11,100.00	7,064.14	11,206.54	7,246.22	115.95	116.95	92.61	1,893.58	-4,153.78	3,991.58	3,759.20	232.38	17.177		
11,200.00	7,063.82	11,306.54	7,245.84	118.66	119.68	92.61	1,892.80	-4,253.77	3,991.47	3,753.63	237.84	16.782		
11,300.00	7,063.49	11,406.54	7,245.46	121.39	122.42	92.61	1,892.02	-4,353.77	3,991.35	3,748.05	243.30	16.405		
11,400.00	7,063.17	11,506.54	7,245.08	124.12	125.16	92.61	1,891.24	-4,453.76	3,991.23	3,742.46	248.78	16.043		
11,500.00	7,062.84	11,606.54	7,244.70	126.86	127.91	92.61	1,890.45	-4,553.76	3,991.12	3,736.85	254.26	15.697		
11,600.00	7,062.52	11,706.54	7,244.32	129.60	130.66	92.61	1,889.67	-4,653.76	3,991.00	3,731.24	259.76	15.364		
11,700.00	7,062.19	11,806.54	7,243.94	132.35	133.42	92.61	1,888.89	-4,753.75	3,990.88	3,725.62	265.26	15.045		
11,800.00	7,061.87	11,906.54	7,243.56	135.10	136.18	92.61	1,888.11	-4,853.75	3,990.77	3,719.99	270.78	14.738		
11,900.00	7,061.54	12,006.54	7,243.18	137.85	138.94	92.61	1,887.33	-4,953.75	3,990.65	3,714.35	276.30	14.443		
12,000.00	7,061.22	12,106.54	7,242.80	140.61	141.71	92.61	1,886.54	-5,053.74	3,990.53	3,708.70	281.83	14.159		
12,100.00	7,060.89	12,206.54	7,242.42	143.38	144.48	92.61	1,885.76	-5,153.74	3,990.42	3,703.05	287.37	13.886		
12,200.00	7,060.57	12,306.54	7,242.04	146.15	147.26	92.61	1,884.98	-5,253.73	3,990.30	3,697.39	292.91	13.623		
12,300.00	7,060.24	12,406.54	7,241.66	148.92	150.04	92.61	1,884.20	-5,353.73	3,990.18	3,691.72	298.46	13.369		
12,400.00	7,059.92	12,506.54	7,241.28	151.69	152.82	92.61	1,883.42	-5,453.73	3,990.06	3,686.05	304.01	13.125		
12,500.00	7,059.59	12,606.54	7,240.90	154.47	155.60	92.60	1,882.63	-5,553.72	3,989.95	3,680.37	309.58	12.888		
12,600.00	7,059.27	12,706.54	7,240.52	157.25	158.39	92.60	1,881.85	-5,653.72	3,989.83	3,674.69	315.14	12.660		
12,700.00	7,058.94	12,806.54	7,240.14	160.03	161.18	92.60	1,881.07	-5,753.71	3,989.71	3,669.00	320.71	12.440		
12,800.00	7,058.62	12,906.54	7,239.76	162.82	163.97	92.60	1,880.29	-5,853.71	3,989.60	3,663.31	326.29	12.227		
12,900.00	7,058.29	13,006.54	7,239.39	165.61	166.77	92.60	1,879.51	-5,953.71	3,989.48	3,657.61	331.87	12.021		
13,000.00	7,057.97	13,106.54	7,239.01	168.40	169.56	92.60	1,878.72	-6,053.70	3,989.36	3,651.91	337.46	11.822		
13,100.00	7,057.64	13,206.54	7,238.63	171.19	172.36	92.60	1,877.94	-6,153.70	3,989.25	3,646.20	343.05	11.629		
13,200.00	7,057.32	13,306.54	7,238.25	173.99	175.16	92.60	1,877.16	-6,253.69	3,989.13	3,640.49	348.64	11.442		
13,300.00	7,057.00	13,406.54	7,237.87	176.78	177.96	92.60	1,876.38	-6,353.69	3,989.01	3,634.78	354.24	11.261		
13,400.00	7,056.67	13,506.54	7,237.49	179.58	180.77	92.60	1,875.60	-6,453.69	3,988.90	3,629.06	359.84	11.085		
13,500.00	7,056.35	13,606.54	7,237.11	182.38	183.57	92.60	1,874.81	-6,553.68	3,988.78	3,623.34	365.44	10.915		
13,600.00	7,056.02	13,706.54	7,236.73	185.19	186.38	92.60	1,874.03	-6,653.68	3,988.66	3,617.61	371.05	10.750		
13,700.00	7,055.70	13,806.54	7,236.35	187.99	189.19	92.60	1,873.25	-6,753.68	3,988.54	3,611.88	376.66	10.589		
13,800.00	7,055.37	13,906.54	7,235.97	190.80	192.00	92.60	1,872.47	-6,853.67	3,988.43	3,606.15	382.27	10.433		
13,900.00	7,055.05	14,006.54	7,235.59	193.60	194.81	92.59	1,871.69	-6,953.67	3,988.31	3,600.42	387.89	10.282		
14,000.00	7,054.72	14,106.54	7,235.21	196.41	197.62	92.59	1,870.90	-7,053.66	3,988.19	3,594.68	393.51	10.135		
14,100.00	7,054.40	14,206.54	7,234.83	199.22	200.44	92.59	1,870.12	-7,153.66	3,988.08	3,588.95	399.13	9.992		
14,200.00	7,054.07	14,306.54	7,234.45	202.03	203.25	92.59	1,869.34	-7,253.66	3,987.96	3,583.20	404.76	9.853		
14,300.00	7,053.75	14,406.54	7,234.07	204.85	206.07	92.59	1,868.56	-7,353.65	3,987.84	3,577.46	410.38	9.717		
14,400.00	7,053.42	14,506.54	7,233.69	207.66	208.89	92.59	1,867.78	-7,453.65	3,987.73	3,571.71	416.01	9.586		
14,500.00	7,053.10	14,606.54	7,233.31	210.48	211.70	92.59	1,866.99	-7,553.64	3,987.61	3,565.97	421.64	9.457		
14,600.00	7,052.77	14,706.54	7,232.93	213.29	214.52	92.59	1,866.21	-7,653.64	3,987.49	3,560.22	427.28	9.332		
14,700.00	7,052.45	14,806.54	7,232.55	216.11	217.35	92.59	1,865.43	-7,753.64	3,987.38	3,554.46	432.91	9.211		
14,800.00	7,052.12	14,906.54	7,232.17	218.93	220.17	92.59	1,864.65	-7,853.63	3,987.26	3,548.71	438.55	9.092		
14,900.00	7,051.80	15,006.54	7,231.80	221.75	222.99	92.59	1,863.87	-7,953.63	3,987.14	3,542.95	444.19	8.976		
15,000.00	7,051.47	15,106.54	7,231.42	224.57	225.81	92.59	1,863.08	-8,053.63	3,987.03	3,537.20	449.83	8.863		
15,100.00	7,051.15	15,206.54	7,231.04	227.39	228.64	92.59	1,862.30	-8,153.62	3,986.91	3,531.44	455.47	8.753		
15,114.14	7,051.10	15,216.01	7,231.00	227.79	228.91	92.59	1,862.23	-8,163.10	3,986.89	3,530.76	456.14	8.741		
15,145.13	7,051.00	15,216.01	7,231.00	228.67	228.91	92.59	1,862.23	-8,163.10	3,987.02	3,530.03	456.98	8.725 SF		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.48	400.00	3.34	400.02					
100.00	100.00	102.00	100.00	3.28	3.29	0.48	400.00	3.34	400.02	393.45	6.57	60.887		
200.00	200.00	202.00	200.00	3.34	3.34	0.48	400.00	3.34	400.02	393.34	6.68	59.922	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	176.10	400.00	3.34	401.76	394.87	6.89	58.330		
400.00	399.84	389.24	387.23	3.59	3.58	176.11	401.38	3.16	408.55	401.36	7.19	56.845		
500.00	499.45	475.92	473.81	3.79	3.76	176.09	405.36	2.65	421.80	414.22	7.58	55.643		
600.00	598.70	561.24	558.87	4.03	3.96	176.04	411.81	1.82	441.43	433.38	8.05	54.865		
700.00	697.47	644.72	641.89	4.31	4.18	175.97	420.55	0.70	467.28	458.72	8.56	54.569		
800.00	795.62	725.91	722.35	4.64	4.41	175.87	431.35	-0.68	499.19	490.08	9.12	54.764		
900.00	893.06	804.43	799.83	5.00	4.66	175.76	443.94	-2.29	536.96	527.27	9.69	55.429		
1,000.00	989.64	881.40	875.42	5.40	4.92	175.64	458.31	-4.13	580.33	570.06	10.27	56.498		
1,100.00	1,085.27	969.44	961.71	5.83	5.22	175.53	475.65	-6.36	627.74	616.83	10.91	57.564		
1,200.00	1,180.44	1,056.75	1,047.28	6.29	5.53	175.51	492.84	-8.56	676.50	664.96	11.55	58.585		
1,300.00	1,275.61	1,144.05	1,132.84	6.76	5.87	175.49	510.04	-10.76	725.27	713.05	12.21	59.385		
1,400.00	1,370.78	1,231.36	1,218.41	7.26	6.21	175.48	527.23	-12.97	774.03	761.13	12.90	59.992		
1,500.00	1,465.95	1,318.66	1,303.97	7.76	6.57	175.47	544.43	-15.17	822.80	809.18	13.61	60.449		
1,600.00	1,561.12	1,405.96	1,389.54	8.27	6.93	175.46	561.62	-17.37	871.56	857.22	14.34	60.787		
1,700.00	1,656.29	1,506.73	1,475.11	8.80	7.36	175.45	578.81	-19.58	920.32	905.19	15.13	60.809		
1,800.00	1,751.46	1,580.57	1,560.67	9.32	7.67	175.44	596.01	-21.78	969.09	953.26	15.83	61.208		
1,900.00	1,846.63	1,667.88	1,646.24	9.86	8.05	175.43	613.20	-23.98	1,017.85	1,001.26	16.60	61.326		
2,000.00	1,941.80	1,755.18	1,731.80	10.40	8.44	175.42	630.40	-26.19	1,066.62	1,049.25	17.37	61.401		
2,100.00	2,036.96	1,842.49	1,817.37	10.94	8.82	175.41	647.59	-28.39	1,115.38	1,097.23	18.15	61.441		
2,200.00	2,132.13	1,929.79	1,902.93	11.49	9.21	175.41	664.79	-30.59	1,164.15	1,145.20	18.94	61.454		
2,300.00	2,227.30	2,017.09	1,988.50	12.04	9.61	175.40	681.98	-32.80	1,212.91	1,193.17	19.74	61.447		
2,400.00	2,322.47	2,104.40	2,074.07	12.59	10.00	175.40	699.18	-35.00	1,261.67	1,241.13	20.54	61.423		
2,500.00	2,417.64	2,208.30	2,159.63	13.15	10.48	175.39	716.37	-37.20	1,310.44	1,289.02	21.42	61.177		
2,600.00	2,512.81	2,279.01	2,245.20	13.70	10.80	175.39	733.56	-39.41	1,359.20	1,337.05	22.16	61.342		
2,700.00	2,607.98	2,366.31	2,330.76	14.26	11.20	175.38	750.76	-41.61	1,407.97	1,385.00	22.97	61.289		
2,800.00	2,703.15	2,453.62	2,416.33	14.82	11.60	175.38	767.95	-43.81	1,456.73	1,432.94	23.79	61.230		
2,900.00	2,798.32	2,540.92	2,501.90	15.38	12.01	175.38	785.15	-46.02	1,505.50	1,480.88	24.61	61.167		
3,000.00	2,893.49	2,628.22	2,587.46	15.95	12.41	175.37	802.34	-48.22	1,554.26	1,528.82	25.44	61.102		
3,100.00	2,988.66	2,715.53	2,673.03	16.51	12.82	175.37	819.54	-50.42	1,603.03	1,576.76	26.26	61.034		
3,200.00	3,083.83	2,802.83	2,758.59	17.07	13.23	175.37	836.73	-52.63	1,651.79	1,624.70	27.09	60.966		
3,300.00	3,179.00	2,890.14	2,844.16	17.64	13.64	175.36	853.93	-54.83	1,700.55	1,672.63	27.93	60.896		
3,400.00	3,274.17	2,977.44	2,929.73	18.21	14.05	175.36	871.12	-57.03	1,749.32	1,720.56	28.76	60.826		
3,500.00	3,369.34	3,064.74	3,015.29	18.77	14.46	175.36	888.31	-59.24	1,798.08	1,768.49	29.59	60.757		
3,600.00	3,464.51	3,152.05	3,100.86	19.34	14.87	175.36	905.51	-61.44	1,846.85	1,816.42	30.43	60.688		
3,700.00	3,559.68	3,239.35	3,186.42	19.91	15.28	175.35	922.70	-63.64	1,895.61	1,864.34	31.27	60.620		
3,800.00	3,654.84	3,326.66	3,271.99	20.48	15.69	175.35	939.90	-65.85	1,944.38	1,912.27	32.11	60.552		
3,900.00	3,750.01	3,413.96	3,357.56	21.05	16.10	175.35	957.09	-68.05	1,993.14	1,960.19	32.95	60.485		
4,000.00	3,845.18	3,501.27	3,443.12	21.62	16.52	175.35	974.29	-70.25	2,041.90	2,008.11	33.80	60.420		
4,100.00	3,940.35	3,588.57	3,528.69	22.19	16.93	175.35	991.48	-72.46	2,090.67	2,056.03	34.64	60.356		
4,200.00	4,035.52	3,675.87	3,614.25	22.76	17.34	175.34	1,008.68	-74.66	2,139.43	2,103.95	35.48	60.293		
4,300.00	4,130.69	3,763.18	3,699.82	23.33	17.76	175.34	1,025.87	-76.86	2,188.20	2,151.87	36.33	60.231		
4,400.00	4,225.86	3,850.48	3,785.39	23.91	18.17	175.34	1,043.06	-79.07	2,236.96	2,199.79	37.18	60.170		
4,500.00	4,321.03	3,937.79	3,870.95	24.48	18.59	175.34	1,060.26	-81.27	2,285.73	2,247.70	38.03	60.111		
4,600.00	4,416.20	4,025.09	3,956.52	25.05	19.00	175.34	1,077.45	-83.47	2,334.49	2,295.62	38.87	60.053		
4,700.00	4,511.37	4,112.40	4,042.08	25.62	19.42	175.34	1,094.65	-85.68	2,383.26	2,343.53	39.72	59.996		
4,800.00	4,606.54	4,200.30	4,127.65	26.20	19.84	175.33	1,111.84	-87.88	2,432.02	2,391.44	40.58	59.936		
4,900.00	4,701.71	4,287.00	4,213.21	26.77	20.25	175.33	1,129.04	-90.08	2,480.78	2,439.36	41.43	59.886		
5,000.00	4,796.88	4,374.31	4,298.78	27.34	20.67	175.33	1,146.23	-92.29	2,529.55	2,487.27	42.28	59.833		
5,100.00	4,892.05	4,461.61	4,384.35	27.92	21.09	175.33	1,163.43	-94.49	2,578.31	2,535.18	43.13	59.781		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,548.92	4,469.91	28.49	21.50	175.33	1,180.62	-96.69	2,627.08	2,583.10	43.98	59.730		
5,300.00	5,082.39	4,636.22	4,555.48	29.07	21.92	175.33	1,197.81	-98.90	2,675.84	2,631.01	44.84	59.681		
5,400.00	5,177.56	4,723.53	4,641.04	29.64	22.34	175.33	1,215.01	-101.10	2,724.61	2,678.92	45.69	59.632		
5,500.00	5,272.72	4,810.83	4,726.61	30.21	22.76	175.33	1,232.20	-103.30	2,773.37	2,726.83	46.55	59.584		
5,600.00	5,367.89	4,901.87	4,812.18	30.79	23.19	175.33	1,249.40	-105.51	2,822.14	2,774.72	47.42	59.516		
5,700.00	5,463.06	4,985.44	4,897.74	31.36	23.59	175.32	1,266.59	-107.71	2,870.90	2,822.64	48.26	59.492		
5,800.00	5,558.23	5,072.74	4,983.31	31.94	24.01	175.32	1,283.79	-109.91	2,919.66	2,870.55	49.11	59.448		
5,900.00	5,653.40	5,160.05	5,068.87	32.51	24.43	175.32	1,300.98	-112.12	2,968.43	2,918.46	49.97	59.404		
6,000.00	5,748.57	5,247.35	5,154.44	33.09	24.85	175.32	1,318.18	-114.32	3,017.19	2,966.37	50.83	59.362		
6,100.00	5,843.74	5,334.66	5,240.01	33.67	25.27	175.32	1,335.37	-116.52	3,065.96	3,014.27	51.69	59.320		
6,200.00	5,938.91	5,421.96	5,325.57	34.24	25.68	175.32	1,352.56	-118.73	3,114.72	3,062.18	52.54	59.279		
6,300.00	6,034.08	5,509.26	5,411.14	34.82	26.10	175.32	1,369.76	-120.93	3,163.49	3,110.08	53.40	59.239		
6,400.00	6,129.25	5,603.43	5,496.70	35.39	26.56	175.32	1,386.95	-123.13	3,212.25	3,157.96	54.29	59.164		
6,500.00	6,224.42	5,683.87	5,582.27	35.97	26.94	175.32	1,404.15	-125.34	3,261.01	3,205.89	55.12	59.161		
6,600.00	6,319.59	5,771.18	5,667.84	36.54	27.36	175.32	1,421.34	-127.54	3,309.78	3,253.80	55.98	59.123		
6,700.00	6,414.76	5,858.48	5,753.40	37.12	27.78	175.32	1,438.54	-129.74	3,358.54	3,301.70	56.84	59.086		
6,800.00	6,509.91	5,945.78	5,838.96	37.70	28.20	166.71	1,455.73	-131.95	3,407.30	3,349.60	57.70	59.049		
6,900.00	6,603.99	6,032.38	5,923.83	38.26	28.62	139.12	1,472.78	-134.13	3,455.67	3,397.12	58.56	59.015		
7,000.00	6,694.76	6,116.29	6,006.08	38.78	29.02	120.37	1,489.31	-136.25	3,502.69	3,443.32	59.37	58.998		
7,100.00	6,779.96	6,204.55	6,083.66	39.24	29.44	107.90	1,504.90	-138.25	3,547.54	3,487.37	60.17	58.960		
7,200.00	6,857.50	6,267.90	6,154.67	39.65	29.75	99.22	1,519.17	-140.08	3,589.60	3,528.77	60.83	59.015		
7,300.00	6,925.48	6,331.87	6,217.37	40.02	30.06	92.90	1,531.77	-141.69	3,628.38	3,566.90	61.49	59.011		
7,400.00	6,982.21	6,385.79	6,270.21	40.33	30.32	88.17	1,542.39	-143.05	3,663.55	3,601.41	62.14	58.954		
7,500.00	7,026.31	6,428.31	6,311.88	40.63	30.52	84.56	1,550.76	-144.13	3,694.81	3,631.97	62.83	58.804		
7,600.00	7,056.68	6,458.39	6,341.37	40.91	30.66	81.80	1,556.69	-144.88	3,721.90	3,658.31	63.59	58.530		
7,700.00	7,072.58	6,475.30	6,357.94	41.25	30.75	79.75	1,560.02	-145.31	3,744.56	3,680.14	64.42	58.123		
7,800.00	7,074.86	6,479.77	6,362.32	41.69	30.77	78.85	1,560.90	-145.42	3,763.13	3,697.80	65.34	57.597		
7,900.00	7,074.54	7,730.15	7,069.54	42.34	39.48	89.92	1,697.54	-950.34	3,770.01	3,691.10	78.91	47.775		
8,000.00	7,074.21	7,830.15	7,069.25	43.27	41.00	89.92	1,696.79	-1,050.34	3,769.93	3,688.05	81.88	46.042		
8,100.00	7,073.89	7,930.15	7,068.97	44.47	42.67	89.93	1,696.04	-1,150.34	3,769.84	3,684.72	85.13	44.284		
8,200.00	7,073.57	8,030.15	7,068.68	45.91	44.45	89.93	1,695.29	-1,250.33	3,769.76	3,681.13	88.63	42.535		
8,300.00	7,073.24	8,130.15	7,068.40	47.53	46.35	89.93	1,694.53	-1,350.33	3,769.67	3,677.33	92.35	40.820		
8,400.00	7,072.92	8,230.15	7,068.11	49.31	48.34	89.93	1,693.78	-1,450.33	3,769.59	3,673.33	96.26	39.159		
8,500.00	7,072.59	8,330.15	7,067.83	51.20	50.42	89.93	1,693.03	-1,550.32	3,769.50	3,669.15	100.35	37.562		
8,600.00	7,072.27	8,430.15	7,067.54	53.19	52.57	89.93	1,692.28	-1,650.32	3,769.42	3,664.82	104.59	36.038		
8,700.00	7,071.94	8,530.15	7,067.26	55.27	54.78	89.93	1,691.52	-1,750.32	3,769.33	3,660.36	108.97	34.590		
8,800.00	7,071.62	8,630.15	7,066.98	57.43	57.05	89.93	1,690.77	-1,850.31	3,769.25	3,655.78	113.47	33.219		
8,900.00	7,071.29	8,730.15	7,066.69	59.64	59.37	89.93	1,690.02	-1,950.31	3,769.16	3,651.10	118.07	31.923		
9,000.00	7,070.97	8,830.15	7,066.41	61.92	61.74	89.93	1,689.27	-2,050.31	3,769.08	3,646.31	122.76	30.702		
9,100.00	7,070.64	8,930.15	7,066.12	64.24	64.15	89.93	1,688.51	-2,150.30	3,768.99	3,641.45	127.54	29.551		
9,200.00	7,070.32	9,030.15	7,065.84	66.61	66.59	89.93	1,687.76	-2,250.30	3,768.91	3,636.51	132.40	28.467		
9,300.00	7,069.99	9,130.15	7,065.55	69.01	69.07	89.93	1,687.01	-2,350.30	3,768.82	3,631.51	137.32	27.446		
9,400.00	7,069.67	9,230.15	7,065.27	71.45	71.57	89.93	1,686.26	-2,450.29	3,768.74	3,626.44	142.30	26.485		
9,500.00	7,069.34	9,330.15	7,064.98	73.92	74.10	89.93	1,685.50	-2,550.29	3,768.65	3,621.33	147.33	25.580		
9,600.00	7,069.02	9,430.15	7,064.70	76.42	76.66	89.93	1,684.75	-2,650.29	3,768.57	3,616.16	152.41	24.727		
9,700.00	7,068.69	9,530.15	7,064.41	78.95	79.23	89.94	1,684.00	-2,750.28	3,768.48	3,610.95	157.53	23.922		
9,800.00	7,068.37	9,630.15	7,064.13	81.49	81.82	89.94	1,683.25	-2,850.28	3,768.40	3,605.70	162.70	23.162		
9,900.00	7,068.04	9,730.15	7,063.84	84.06	84.43	89.94	1,682.49	-2,950.28	3,768.31	3,600.42	167.90	22.444		
10,000.00	7,067.72	9,830.15	7,063.56	86.65	87.06	89.94	1,681.74	-3,050.27	3,768.23	3,595.10	173.13	21.765		
10,100.00	7,067.39	9,930.15	7,063.27	89.25	89.70	89.94	1,680.99	-3,150.27	3,768.14	3,589.75	178.39	21.123		
10,200.00	7,067.07	10,030.15	7,062.99	91.87	92.35	89.94	1,680.24	-3,250.27	3,768.06	3,584.38	183.68	20.514		
10,300.00	7,066.74	10,130.15	7,062.70	94.50	95.02	89.94	1,679.49	-3,350.26	3,767.97	3,578.98	189.00	19.937		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,230.15	7,062.42	97.14	97.69	89.94	1,678.73	-3,450.26	3,767.89	3,573.55	194.33	19.389		
10,500.00	7,066.09	10,330.15	7,062.13	99.80	100.38	89.94	1,677.98	-3,550.26	3,767.80	3,568.11	199.69	18.868		
10,600.00	7,065.77	10,430.15	7,061.85	102.47	103.07	89.94	1,677.23	-3,650.25	3,767.72	3,562.65	205.07	18.373		
10,700.00	7,065.44	10,530.15	7,061.56	105.15	105.78	89.94	1,676.48	-3,750.25	3,767.63	3,557.17	210.47	17.901		
10,800.00	7,065.12	10,630.15	7,061.28	107.83	108.49	89.94	1,675.72	-3,850.25	3,767.55	3,551.67	215.88	17.452		
10,900.00	7,064.79	10,730.15	7,061.00	110.53	111.21	89.94	1,674.97	-3,950.25	3,767.46	3,546.16	221.31	17.024		
11,000.00	7,064.47	10,830.15	7,060.71	113.23	113.93	89.94	1,674.22	-4,050.24	3,767.38	3,540.63	226.75	16.615		
11,100.00	7,064.14	10,930.15	7,060.43	115.95	116.67	89.94	1,673.47	-4,150.24	3,767.29	3,535.09	232.20	16.224		
11,200.00	7,063.82	11,030.15	7,060.14	118.66	119.40	89.94	1,672.71	-4,250.24	3,767.21	3,529.54	237.67	15.851		
11,300.00	7,063.49	11,130.15	7,059.86	121.39	122.15	89.94	1,671.96	-4,350.23	3,767.12	3,523.98	243.15	15.493		
11,400.00	7,063.17	11,230.15	7,059.57	124.12	124.90	89.95	1,671.21	-4,450.23	3,767.04	3,518.40	248.64	15.151		
11,500.00	7,062.84	11,330.15	7,059.29	126.86	127.65	89.95	1,670.46	-4,550.23	3,766.95	3,512.82	254.14	14.823		
11,600.00	7,062.52	11,430.15	7,059.00	129.60	130.41	89.95	1,669.70	-4,650.22	3,766.87	3,507.22	259.65	14.508		
11,700.00	7,062.19	11,530.15	7,058.72	132.35	133.17	89.95	1,668.95	-4,750.22	3,766.78	3,501.62	265.16	14.206		
11,800.00	7,061.87	11,630.15	7,058.43	135.10	135.94	89.95	1,668.20	-4,850.22	3,766.70	3,496.01	270.69	13.915		
11,900.00	7,061.54	11,730.15	7,058.15	137.85	138.71	89.95	1,667.45	-4,950.21	3,766.61	3,490.39	276.22	13.636		
12,000.00	7,061.22	11,830.15	7,057.86	140.61	141.48	89.95	1,666.69	-5,050.21	3,766.53	3,484.76	281.76	13.368		
12,100.00	7,060.89	11,930.15	7,057.58	143.38	144.26	89.95	1,665.94	-5,150.21	3,766.44	3,479.13	287.31	13.109		
12,200.00	7,060.57	12,030.15	7,057.29	146.15	147.04	89.95	1,665.19	-5,250.20	3,766.36	3,473.49	292.87	12.860		
12,300.00	7,060.24	12,130.15	7,057.01	148.92	149.82	89.95	1,664.44	-5,350.20	3,766.27	3,467.85	298.43	12.620		
12,400.00	7,059.92	12,230.15	7,056.72	151.69	152.61	89.95	1,663.68	-5,450.20	3,766.19	3,462.20	303.99	12.389		
12,500.00	7,059.59	12,330.15	7,056.44	154.47	155.39	89.95	1,662.93	-5,550.19	3,766.10	3,456.54	309.57	12.166		
12,600.00	7,059.27	12,430.15	7,056.15	157.25	158.19	89.95	1,662.18	-5,650.19	3,766.02	3,450.88	315.14	11.950		
12,700.00	7,058.94	12,530.15	7,055.87	160.03	160.98	89.95	1,661.43	-5,750.19	3,765.93	3,445.21	320.72	11.742		
12,800.00	7,058.62	12,630.15	7,055.58	162.82	163.77	89.95	1,660.67	-5,850.18	3,765.85	3,439.54	326.31	11.541		
12,900.00	7,058.29	12,730.15	7,055.30	165.61	166.57	89.95	1,659.92	-5,950.18	3,765.76	3,433.86	331.90	11.346		
13,000.00	7,057.97	12,830.15	7,055.01	168.40	169.37	89.96	1,659.17	-6,050.18	3,765.68	3,428.18	337.50	11.158		
13,100.00	7,057.64	12,930.15	7,054.73	171.19	172.17	89.96	1,658.42	-6,150.17	3,765.59	3,422.50	343.10	10.975		
13,200.00	7,057.32	13,030.15	7,054.45	173.99	174.98	89.96	1,657.66	-6,250.17	3,765.51	3,416.81	348.70	10.799		
13,300.00	7,057.00	13,130.15	7,054.16	176.78	177.78	89.96	1,656.91	-6,350.17	3,765.42	3,411.12	354.31	10.628		
13,400.00	7,056.67	13,230.15	7,053.88	179.58	180.59	89.96	1,656.16	-6,450.16	3,765.34	3,405.42	359.92	10.462		
13,500.00	7,056.35	13,330.15	7,053.59	182.38	183.40	89.96	1,655.41	-6,550.16	3,765.25	3,399.72	365.53	10.301		
13,600.00	7,056.02	13,430.15	7,053.31	185.19	186.21	89.96	1,654.65	-6,650.16	3,765.17	3,394.02	371.15	10.145		
13,700.00	7,055.70	13,530.15	7,053.02	187.99	189.02	89.96	1,653.90	-6,750.15	3,765.08	3,388.32	376.77	9.993		
13,800.00	7,055.37	13,630.15	7,052.74	190.80	191.83	89.96	1,653.15	-6,850.15	3,765.00	3,382.61	382.39	9.846		
13,900.00	7,055.05	13,730.15	7,052.45	193.60	194.64	89.96	1,652.40	-6,950.15	3,764.91	3,376.90	388.02	9.703		
14,000.00	7,054.72	13,830.15	7,052.17	196.41	197.46	89.96	1,651.64	-7,050.14	3,764.83	3,371.19	393.64	9.564		
14,100.00	7,054.40	13,930.15	7,051.88	199.22	200.28	89.96	1,650.89	-7,150.14	3,764.74	3,365.47	399.27	9.429		
14,200.00	7,054.07	14,030.15	7,051.60	202.03	203.09	89.96	1,650.14	-7,250.14	3,764.66	3,359.75	404.91	9.298		
14,300.00	7,053.75	14,130.15	7,051.31	204.85	205.91	89.96	1,649.39	-7,350.13	3,764.57	3,354.03	410.54	9.170		
14,400.00	7,053.42	14,230.15	7,051.03	207.66	208.73	89.96	1,648.63	-7,450.13	3,764.49	3,348.31	416.18	9.045		
14,500.00	7,053.10	14,330.15	7,050.74	210.48	211.55	89.96	1,647.88	-7,550.13	3,764.40	3,342.58	421.82	8.924		
14,600.00	7,052.77	14,430.15	7,050.46	213.29	214.38	89.96	1,647.13	-7,650.12	3,764.32	3,336.86	427.46	8.806		
14,700.00	7,052.45	14,530.15	7,050.17	216.11	217.20	89.97	1,646.38	-7,750.12	3,764.23	3,331.13	433.10	8.691		
14,800.00	7,052.12	14,630.15	7,049.89	218.93	220.02	89.97	1,645.62	-7,850.12	3,764.15	3,325.40	438.75	8.579		
14,900.00	7,051.80	14,730.15	7,049.60	221.75	222.85	89.97	1,644.87	-7,950.11	3,764.06	3,319.67	444.40	8.470		
15,000.00	7,051.47	14,830.15	7,049.32	224.57	225.67	89.97	1,644.12	-8,050.11	3,763.98	3,313.93	450.05	8.364		
15,100.00	7,051.15	14,930.15	7,049.03	227.39	228.50	89.97	1,643.37	-8,150.11	3,763.89	3,308.20	455.70	8.260		
15,116.44	7,051.09	14,946.59	7,048.99	227.86	228.96	89.97	1,643.24	-8,166.55	3,763.88	3,307.25	456.63	8.243		
15,145.13	7,051.00	14,942.37	7,049.00	228.67	228.85	89.97	1,643.28	-8,162.33	3,764.00	3,306.71	457.29	8.231 SF		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.45	319.85	2.50	319.86					
100.00	100.00	101.00	100.00	3.28	3.28	0.45	319.85	2.50	319.86	313.29	6.57	48.688		
200.00	200.00	201.00	200.00	3.34	3.34	0.45	319.85	2.50	319.86	313.19	6.67	47.920	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	176.08	319.85	2.50	321.60	314.72	6.89	46.702		
400.00	399.84	400.84	399.84	3.59	3.60	176.14	319.85	2.50	326.82	319.63	7.20	45.411		
500.00	499.45	500.45	499.45	3.79	3.81	176.22	319.85	2.50	335.52	327.92	7.60	44.150		
600.00	598.70	599.70	598.70	4.03	4.05	176.34	319.85	2.50	347.68	339.60	8.08	43.030		
700.00	697.47	698.47	697.47	4.31	4.28	176.37	321.10	1.97	364.68	356.08	8.60	42.392		
800.00	795.62	796.62	795.62	4.64	4.54	176.26	324.78	0.42	387.84	378.67	9.17	42.285		
900.00	893.06	894.06	893.06	5.00	4.84	176.06	330.45	-1.97	416.07	406.28	9.80	42.474		
1,000.00	989.64	990.64	989.64	5.40	5.15	175.91	336.18	-4.39	447.66	437.20	10.46	42.803		
1,100.00	1,085.27	1,086.27	1,085.27	5.83	5.47	175.80	341.84	-6.78	482.53	471.37	11.16	43.252		
1,200.00	1,180.44	1,181.44	1,180.44	6.29	5.81	175.76	347.47	-9.16	518.83	506.98	11.86	43.756		
1,300.00	1,275.61	1,276.61	1,275.61	6.76	6.15	175.73	353.10	-11.54	555.14	542.56	12.58	44.119		
1,400.00	1,370.78	1,371.78	1,370.78	7.26	6.50	175.70	358.72	-13.92	591.45	578.12	13.33	44.373		
1,500.00	1,465.95	1,466.95	1,465.95	7.76	6.86	175.67	364.35	-16.29	627.76	613.67	14.09	44.545		
1,600.00	1,561.12	1,562.12	1,561.12	8.27	7.22	175.65	369.98	-18.67	664.07	649.20	14.87	44.656		
1,700.00	1,656.29	1,657.29	1,656.29	8.80	7.59	175.63	375.61	-21.05	700.38	684.72	15.66	44.720		
1,800.00	1,751.46	1,752.46	1,751.46	9.32	7.96	175.61	381.24	-23.43	736.69	720.23	16.46	44.749		
1,900.00	1,846.63	1,847.63	1,846.63	9.86	8.34	175.59	386.87	-25.80	773.00	755.72	17.27	44.751		
2,000.00	1,941.80	1,942.80	1,941.80	10.40	8.75	175.58	392.50	-28.18	809.31	791.19	18.12	44.663		
2,100.00	2,036.96	2,037.96	2,036.96	10.94	9.10	175.56	398.13	-30.56	845.62	826.70	18.92	44.702		
2,200.00	2,132.13	2,133.13	2,132.13	11.49	9.49	175.55	403.75	-32.94	881.93	862.18	19.75	44.659		
2,300.00	2,227.30	2,228.30	2,227.30	12.04	9.88	175.54	409.38	-35.31	918.24	897.65	20.58	44.608		
2,400.00	2,322.47	2,323.47	2,322.47	12.59	10.27	175.53	415.01	-37.69	954.54	933.12	21.43	44.551		
2,500.00	2,417.64	2,418.64	2,417.64	13.15	10.66	175.52	420.64	-40.07	990.85	968.58	22.27	44.491		
2,600.00	2,512.81	2,513.81	2,512.81	13.70	11.05	175.51	426.27	-42.45	1,027.16	1,004.04	23.12	44.428		
2,700.00	2,607.98	2,608.98	2,607.98	14.26	11.44	175.50	431.90	-44.82	1,063.47	1,039.50	23.97	44.363		
2,800.00	2,703.15	2,704.15	2,703.15	14.82	11.84	175.49	437.53	-47.20	1,099.78	1,074.96	24.83	44.297		
2,900.00	2,798.32	2,799.32	2,798.32	15.38	12.24	175.48	443.15	-49.58	1,136.09	1,110.41	25.69	44.231		
3,000.00	2,893.49	2,894.49	2,893.49	15.95	12.63	175.48	448.78	-51.96	1,172.40	1,145.86	26.55	44.166		
3,100.00	2,988.66	2,989.66	2,988.66	16.51	13.03	175.47	454.41	-54.33	1,208.71	1,181.30	27.41	44.101		
3,200.00	3,083.83	3,084.83	3,083.83	17.07	13.43	175.46	460.04	-56.71	1,245.02	1,216.75	28.27	44.037		
3,300.00	3,179.00	3,180.00	3,179.00	17.64	13.83	175.46	465.67	-59.09	1,281.33	1,252.19	29.14	43.974		
3,400.00	3,274.17	3,275.17	3,274.17	18.21	14.23	175.45	471.30	-61.47	1,317.64	1,287.63	30.01	43.912		
3,500.00	3,369.34	3,370.34	3,369.34	18.77	14.68	175.45	476.93	-63.84	1,353.95	1,323.02	30.93	43.780		
3,600.00	3,464.51	3,465.51	3,464.51	19.34	15.04	175.44	482.55	-66.22	1,390.26	1,358.51	31.75	43.793		
3,700.00	3,559.68	3,560.68	3,559.68	19.91	15.44	175.44	488.18	-68.60	1,426.57	1,393.95	32.62	43.735		
3,800.00	3,654.84	3,655.84	3,654.84	20.48	15.84	175.43	493.81	-70.98	1,462.88	1,429.39	33.49	43.679		
3,900.00	3,750.01	3,751.01	3,750.01	21.05	16.25	175.43	499.44	-73.35	1,499.19	1,464.82	34.37	43.625		
4,000.00	3,845.18	3,846.18	3,845.18	21.62	16.65	175.42	505.07	-75.73	1,535.50	1,500.26	35.24	43.571		
4,100.00	3,940.35	3,941.35	3,940.35	22.19	17.05	175.42	510.70	-78.11	1,571.81	1,535.69	36.12	43.520		
4,200.00	4,035.52	4,036.52	4,035.52	22.76	17.46	175.42	516.33	-80.49	1,608.12	1,571.12	36.99	43.469		
4,300.00	4,130.69	4,131.69	4,130.69	23.33	17.86	175.41	521.96	-82.86	1,644.43	1,606.56	37.87	43.420		
4,400.00	4,225.86	4,226.86	4,225.86	23.91	18.27	175.41	527.58	-85.24	1,680.74	1,641.99	38.75	43.373		
4,500.00	4,321.03	4,322.03	4,321.03	24.48	18.68	175.41	533.21	-87.62	1,717.05	1,677.42	39.63	43.326		
4,600.00	4,416.20	4,417.20	4,416.20	25.05	19.08	175.40	538.84	-90.00	1,753.36	1,712.85	40.51	43.281		
4,700.00	4,511.37	4,512.37	4,511.37	25.62	19.49	175.40	544.47	-92.37	1,789.67	1,748.27	41.39	43.237		
4,800.00	4,606.54	4,607.54	4,606.54	26.20	19.89	175.40	550.10	-94.75	1,825.98	1,783.70	42.27	43.195		
4,900.00	4,701.71	4,702.71	4,701.71	26.77	20.31	175.39	555.73	-97.13	1,862.29	1,819.12	43.17	43.141		
5,000.00	4,796.88	4,797.88	4,796.88	27.34	20.71	175.39	561.36	-99.51	1,898.60	1,854.56	44.04	43.113		
5,100.00	4,892.05	4,893.05	4,892.05	27.92	21.12	175.39	566.98	-101.88	1,934.91	1,889.98	44.92	43.074		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,878.11	4,868.17	28.49	21.52	175.39	572.61	-104.26	1,971.21	1,925.41	45.80	43.036		
5,300.00	5,082.39	4,971.28	4,961.14	29.07	21.93	175.38	578.24	-106.64	2,007.52	1,960.84	46.69	42.999		
5,400.00	5,177.56	5,064.46	5,054.12	29.64	22.34	175.38	583.87	-109.02	2,043.83	1,996.26	47.57	42.962		
5,500.00	5,272.72	5,157.63	5,147.09	30.21	22.75	175.38	589.50	-111.39	2,080.14	2,031.69	48.46	42.927		
5,600.00	5,367.89	5,250.81	5,240.07	30.79	23.16	175.38	595.13	-113.77	2,116.45	2,067.11	49.34	42.893		
5,700.00	5,463.06	5,343.98	5,333.04	31.36	23.56	175.37	600.76	-116.15	2,152.76	2,102.53	50.23	42.859		
5,800.00	5,558.23	5,437.16	5,426.02	31.94	23.97	175.37	606.38	-118.53	2,189.07	2,137.96	51.11	42.827		
5,900.00	5,653.40	5,530.33	5,518.99	32.51	24.38	175.37	612.01	-120.90	2,225.38	2,173.38	52.00	42.795		
6,000.00	5,748.57	5,623.51	5,611.97	33.09	24.79	175.37	617.64	-123.28	2,261.69	2,208.80	52.89	42.764		
6,100.00	5,843.74	5,716.68	5,704.94	33.67	25.20	175.37	623.27	-125.66	2,298.00	2,244.23	53.78	42.733		
6,200.00	5,938.91	5,809.86	5,797.91	34.24	25.61	175.36	628.90	-128.04	2,334.31	2,279.65	54.66	42.704		
6,300.00	6,034.08	5,903.03	5,890.89	34.82	26.02	175.36	634.53	-130.41	2,370.62	2,315.07	55.55	42.675		
6,400.00	6,129.25	6,003.79	5,983.86	35.39	26.46	175.36	640.16	-132.79	2,406.93	2,350.46	56.47	42.621		
6,500.00	6,224.42	6,089.38	6,076.84	35.97	26.84	175.36	645.79	-135.17	2,443.24	2,385.91	57.33	42.619		
6,600.00	6,319.59	6,182.56	6,169.81	36.54	27.25	175.36	651.41	-137.55	2,479.55	2,421.34	58.22	42.592		
6,700.00	6,414.76	6,275.73	6,262.79	37.12	27.65	175.36	657.04	-139.92	2,515.86	2,456.76	59.11	42.566		
6,800.00	6,509.91	6,368.90	6,355.75	37.70	28.06	167.16	662.67	-142.30	2,552.17	2,492.17	60.00	42.540		
6,900.00	6,603.99	6,461.32	6,447.97	38.26	28.47	141.11	668.25	-144.66	2,588.20	2,527.32	60.88	42.516		
7,000.00	6,694.76	6,550.87	6,537.33	38.78	28.86	123.87	673.66	-146.95	2,623.33	2,561.62	61.72	42.505		
7,100.00	6,779.96	6,635.34	6,621.62	39.24	29.24	112.80	678.77	-149.10	2,657.16	2,594.65	62.51	42.510		
7,200.00	6,857.50	6,728.17	6,713.89	39.65	29.65	105.47	684.38	-156.66	2,689.29	2,625.91	63.38	42.431		
7,300.00	6,925.48	6,833.28	6,815.78	40.02	30.11	100.46	690.68	-181.21	2,718.93	2,654.53	64.40	42.220		
7,400.00	6,982.21	6,953.70	6,925.68	40.33	30.65	97.08	697.60	-229.49	2,745.28	2,679.67	65.61	41.839		
7,500.00	7,026.31	7,095.00	7,040.32	40.63	31.32	94.97	705.01	-311.26	2,767.44	2,700.33	67.12	41.233		
7,600.00	7,056.68	7,262.77	7,149.04	40.91	32.31	93.89	712.32	-438.20	2,784.35	2,715.27	69.08	40.306		
7,700.00	7,072.58	7,458.67	7,229.06	41.25	33.93	93.56	718.20	-616.06	2,794.78	2,722.97	71.82	38.916		
7,800.00	7,074.86	7,651.50	7,251.93	41.69	36.10	93.63	720.70	-806.81	2,798.05	2,722.86	75.18	37.217		
7,900.00	7,074.54	7,751.49	7,251.56	42.34	37.46	93.62	721.27	-906.80	2,799.28	2,721.48	77.79	35.984		
8,000.00	7,074.21	7,851.48	7,251.20	43.27	38.98	93.62	721.84	-1,006.79	2,800.50	2,719.80	80.71	34.699		
8,100.00	7,073.89	7,951.48	7,250.83	44.47	40.63	93.62	722.40	-1,106.78	2,801.73	2,717.82	83.91	33.389		
8,200.00	7,073.57	8,051.47	7,250.46	45.91	42.42	93.62	722.97	-1,206.77	2,802.96	2,715.59	87.37	32.081		
8,300.00	7,073.24	8,151.46	7,250.10	47.53	44.31	93.61	723.54	-1,306.76	2,804.19	2,713.13	91.06	30.795		
8,400.00	7,072.92	8,251.45	7,249.73	49.31	46.31	93.61	724.10	-1,406.75	2,805.42	2,710.48	94.95	29.547		
8,500.00	7,072.59	8,351.45	7,249.36	51.20	48.39	93.61	724.67	-1,506.74	2,806.65	2,707.64	99.01	28.347		
8,600.00	7,072.27	8,451.44	7,249.00	53.19	50.55	93.61	725.24	-1,606.73	2,807.88	2,704.65	103.23	27.200		
8,700.00	7,071.94	8,551.43	7,248.63	55.27	52.78	93.60	725.81	-1,706.72	2,809.11	2,701.52	107.59	26.110		
8,800.00	7,071.62	8,651.42	7,248.27	57.43	55.07	93.60	726.37	-1,806.71	2,810.34	2,698.27	112.07	25.078		
8,900.00	7,071.29	8,751.42	7,247.90	59.64	57.40	93.60	726.94	-1,906.70	2,811.57	2,694.92	116.65	24.102		
9,000.00	7,070.97	8,851.41	7,247.53	61.92	59.79	93.60	727.51	-2,006.69	2,812.80	2,691.46	121.33	23.182		
9,100.00	7,070.64	8,951.40	7,247.17	64.24	62.21	93.59	728.07	-2,106.68	2,814.03	2,687.93	126.10	22.316		
9,200.00	7,070.32	9,051.39	7,246.80	66.61	64.67	93.59	728.64	-2,206.67	2,815.26	2,684.31	130.94	21.500		
9,300.00	7,069.99	9,151.38	7,246.44	69.01	67.16	93.59	729.21	-2,306.66	2,816.49	2,680.63	135.85	20.732		
9,400.00	7,069.67	9,251.38	7,246.07	71.45	69.68	93.59	729.77	-2,406.65	2,817.71	2,676.89	140.82	20.009		
9,500.00	7,069.34	9,351.37	7,245.70	73.92	72.23	93.58	730.34	-2,506.64	2,818.94	2,673.10	145.84	19.329		
9,600.00	7,069.02	9,451.36	7,245.34	76.42	74.80	93.58	730.91	-2,606.63	2,820.17	2,669.26	150.92	18.687		
9,700.00	7,068.69	9,551.35	7,244.97	78.95	77.39	93.58	731.47	-2,706.62	2,821.40	2,665.37	156.03	18.082		
9,800.00	7,068.37	9,651.35	7,244.60	81.49	79.99	93.58	732.04	-2,806.61	2,822.63	2,661.44	161.19	17.511		
9,900.00	7,068.04	9,751.34	7,244.24	84.06	82.62	93.58	732.61	-2,906.60	2,823.86	2,657.48	166.38	16.972		
10,000.00	7,067.72	9,851.33	7,243.87	86.65	85.26	93.57	733.17	-3,006.59	2,825.09	2,653.48	171.61	16.463		
10,100.00	7,067.39	9,951.32	7,243.51	89.25	87.91	93.57	733.74	-3,106.58	2,826.32	2,649.46	176.86	15.980		
10,200.00	7,067.07	10,051.32	7,243.14	91.87	90.58	93.57	734.31	-3,206.57	2,827.55	2,645.41	182.14	15.524		
10,300.00	7,066.74	10,151.31	7,242.77	94.50	93.26	93.57	734.87	-3,306.56	2,828.78	2,641.33	187.45	15.091		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,251.30	7,242.41	97.14	95.94	93.56	735.44	-3,406.55	2,830.01	2,637.23	192.78	14.680		
10,500.00	7,066.09	10,351.29	7,242.04	99.80	98.64	93.56	736.01	-3,506.54	2,831.24	2,633.10	198.13	14.290		
10,600.00	7,065.77	10,451.29	7,241.68	102.47	101.35	93.56	736.57	-3,606.53	2,832.47	2,628.96	203.51	13.918		
10,700.00	7,065.44	10,551.28	7,241.31	105.15	104.07	93.56	737.14	-3,706.52	2,833.70	2,624.80	208.89	13.565		
10,800.00	7,065.12	10,651.27	7,240.94	107.83	106.79	93.55	737.71	-3,806.51	2,834.93	2,620.62	214.30	13.229		
10,900.00	7,064.79	10,751.26	7,240.58	110.53	109.52	93.55	738.28	-3,906.50	2,836.15	2,616.43	219.72	12.908		
11,000.00	7,064.47	10,851.26	7,240.21	113.23	112.26	93.55	738.84	-4,006.50	2,837.38	2,612.23	225.16	12.602		
11,100.00	7,064.14	10,951.25	7,239.84	115.95	115.00	93.55	739.41	-4,106.49	2,838.61	2,608.01	230.61	12.309		
11,200.00	7,063.82	11,051.24	7,239.48	118.66	117.75	93.54	739.98	-4,206.48	2,839.84	2,603.78	236.07	12.030		
11,300.00	7,063.49	11,151.23	7,239.11	121.39	120.50	93.54	740.54	-4,306.47	2,841.07	2,599.53	241.54	11.762		
11,400.00	7,063.17	11,251.22	7,238.75	124.12	123.26	93.54	741.11	-4,406.46	2,842.30	2,595.28	247.02	11.506		
11,500.00	7,062.84	11,351.22	7,238.38	126.86	126.03	93.54	741.68	-4,506.45	2,843.53	2,591.01	252.52	11.261		
11,600.00	7,062.52	11,451.21	7,238.01	129.60	128.79	93.53	742.24	-4,606.44	2,844.76	2,586.74	258.02	11.025		
11,700.00	7,062.19	11,551.20	7,237.65	132.35	131.57	93.53	742.81	-4,706.43	2,845.99	2,582.46	263.53	10.799		
11,800.00	7,061.87	11,651.19	7,237.28	135.10	134.34	93.53	743.38	-4,806.42	2,847.22	2,578.17	269.05	10.582		
11,900.00	7,061.54	11,751.19	7,236.92	137.85	137.12	93.53	743.94	-4,906.41	2,848.45	2,573.87	274.58	10.374		
12,000.00	7,061.22	11,851.18	7,236.55	140.61	139.90	93.53	744.51	-5,006.40	2,849.68	2,569.56	280.12	10.173		
12,100.00	7,060.89	11,951.17	7,236.18	143.38	142.69	93.52	745.08	-5,106.39	2,850.91	2,565.25	285.66	9.980		
12,200.00	7,060.57	12,051.16	7,235.82	146.15	145.48	93.52	745.64	-5,206.38	2,852.14	2,560.93	291.21	9.794		
12,300.00	7,060.24	12,151.16	7,235.45	148.92	148.27	93.52	746.21	-5,306.37	2,853.37	2,556.60	296.76	9.615		
12,400.00	7,059.92	12,251.15	7,235.08	151.69	151.07	93.52	746.78	-5,406.36	2,854.60	2,552.27	302.32	9.442		
12,500.00	7,059.59	12,351.14	7,234.72	154.47	153.86	93.51	747.34	-5,506.35	2,855.83	2,547.94	307.89	9.275		
12,600.00	7,059.27	12,451.13	7,234.35	157.25	156.66	93.51	747.91	-5,606.34	2,857.06	2,543.59	313.46	9.115		
12,700.00	7,058.94	12,551.13	7,233.99	160.03	159.46	93.51	748.48	-5,706.33	2,858.28	2,539.25	319.04	8.959		
12,800.00	7,058.62	12,651.12	7,233.62	162.82	162.27	93.51	749.04	-5,806.32	2,859.51	2,534.90	324.62	8.809		
12,900.00	7,058.29	12,751.11	7,233.25	165.61	165.07	93.50	749.61	-5,906.31	2,860.74	2,530.54	330.20	8.664		
13,000.00	7,057.97	12,851.10	7,232.89	168.40	167.88	93.50	750.18	-6,006.30	2,861.97	2,526.18	335.79	8.523		
13,100.00	7,057.64	12,951.10	7,232.52	171.19	170.69	93.50	750.75	-6,106.29	2,863.20	2,521.81	341.39	8.387		
13,200.00	7,057.32	13,051.09	7,232.16	173.99	173.50	93.50	751.31	-6,206.28	2,864.43	2,517.45	346.99	8.255		
13,300.00	7,057.00	13,151.08	7,231.79	176.78	176.31	93.49	751.88	-6,306.27	2,865.66	2,513.07	352.59	8.128		
13,400.00	7,056.67	13,251.07	7,231.42	179.58	179.13	93.49	752.45	-6,406.26	2,866.89	2,508.70	358.19	8.004		
13,500.00	7,056.35	13,351.06	7,231.06	182.38	181.94	93.49	753.01	-6,506.25	2,868.12	2,504.32	363.80	7.884		
13,600.00	7,056.02	13,451.06	7,230.69	185.19	184.76	93.49	753.58	-6,606.24	2,869.35	2,499.94	369.41	7.767		
13,700.00	7,055.70	13,551.05	7,230.32	187.99	187.58	93.49	754.15	-6,706.23	2,870.58	2,495.55	375.03	7.654		
13,800.00	7,055.37	13,651.04	7,229.96	190.80	190.40	93.48	754.71	-6,806.22	2,871.81	2,491.17	380.64	7.545		
13,900.00	7,055.05	13,751.03	7,229.59	193.60	193.22	93.48	755.28	-6,906.21	2,873.04	2,486.78	386.26	7.438		
14,000.00	7,054.72	13,851.03	7,229.23	196.41	196.04	93.48	755.85	-7,006.20	2,874.27	2,482.38	391.89	7.334		
14,100.00	7,054.40	13,951.02	7,228.86	199.22	198.86	93.48	756.41	-7,106.19	2,875.50	2,477.99	397.51	7.234		
14,200.00	7,054.07	14,051.01	7,228.49	202.03	201.69	93.47	756.98	-7,206.18	2,876.73	2,473.59	403.14	7.136		
14,300.00	7,053.75	14,151.00	7,228.13	204.85	204.51	93.47	757.55	-7,306.17	2,877.96	2,469.19	408.77	7.041		
14,400.00	7,053.42	14,251.00	7,227.76	207.66	207.34	93.47	758.11	-7,406.16	2,879.19	2,464.79	414.40	6.948		
14,500.00	7,053.10	14,350.99	7,227.40	210.48	210.17	93.47	758.68	-7,506.15	2,880.42	2,460.38	420.03	6.858		
14,600.00	7,052.77	14,450.98	7,227.03	213.29	213.00	93.46	759.25	-7,606.14	2,881.65	2,455.97	425.67	6.770		
14,700.00	7,052.45	14,550.97	7,226.66	216.11	215.83	93.46	759.81	-7,706.13	2,882.88	2,451.57	431.31	6.684		
14,800.00	7,052.12	14,650.97	7,226.30	218.93	218.66	93.46	760.38	-7,806.12	2,884.10	2,447.16	436.95	6.601		
14,900.00	7,051.80	14,750.96	7,225.93	221.75	221.49	93.46	760.95	-7,906.11	2,885.33	2,442.74	442.59	6.519		
15,000.00	7,051.47	14,850.95	7,225.56	224.57	224.32	93.46	761.51	-8,006.10	2,886.56	2,438.33	448.24	6.440		
15,100.00	7,051.15	14,950.94	7,225.20	227.39	227.15	93.45	762.08	-8,106.09	2,887.79	2,433.91	453.88	6.362		
15,145.13	7,051.00	14,996.07	7,225.03	228.67	228.43	93.45	762.34	-8,151.21	2,888.35	2,431.92	456.43	6.328 SF		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.00	20.02	0.00	20.02					
100.00	100.00	100.00	100.00	3.28	3.28	0.00	20.02	0.00	20.02	13.46	6.57	3.048		
200.00	200.00	200.00	200.00	3.34	3.34	0.00	20.02	0.00	20.02	13.35	6.67	3.000		
300.00	299.98	300.70	300.68	3.44	3.44	175.58	18.26	-0.15	20.01	13.12	6.89	2.904		
400.00	399.84	401.40	401.24	3.59	3.59	175.47	12.97	-0.59	19.98	12.76	7.22	2.768		
500.00	499.45	502.10	501.54	3.79	3.80	175.30	4.17	-1.32	19.92	12.27	7.65	2.605		
600.00	598.70	602.80	601.47	4.03	4.04	175.05	-8.15	-2.34	19.84	11.68	8.17	2.430		
700.00	697.47	703.49	700.90	4.31	4.32	174.73	-23.95	-3.66	19.74	10.99	8.76	2.255		
800.00	795.62	804.18	799.71	4.64	4.65	174.33	-43.23	-5.26	19.62	10.22	9.40	2.087		
900.00	893.06	904.86	897.77	5.00	5.02	173.86	-65.95	-7.15	19.48	9.38	10.10	1.929		
989.94	979.97	995.41	985.23	5.36	5.38	173.37	-89.31	-9.09	19.34	8.57	10.76	1.796 CC		
1,000.00	989.64	1,005.44	994.88	5.40	5.42	173.32	-92.04	-9.32	19.35	8.52	10.84	1.786		
1,100.00	1,085.27	1,105.42	1,091.06	5.83	5.84	173.49	-119.23	-11.58	21.39	9.81	11.58	1.847		
1,200.00	1,180.44	1,205.36	1,187.21	6.29	6.29	174.02	-146.40	-13.84	24.96	12.59	12.37	2.018		
1,300.00	1,275.61	1,305.29	1,283.35	6.76	6.75	174.42	-173.58	-16.10	28.53	15.35	13.18	2.164		
1,400.00	1,370.78	1,405.23	1,379.50	7.26	7.23	174.73	-200.75	-18.36	32.10	18.08	14.02	2.289		
1,500.00	1,465.95	1,505.16	1,475.64	7.76	7.71	174.98	-227.93	-20.62	35.67	20.79	14.89	2.397		
1,600.00	1,561.12	1,605.10	1,571.78	8.27	8.21	175.18	-255.10	-22.88	39.25	23.48	15.76	2.489		
1,700.00	1,656.29	1,705.04	1,667.93	8.80	8.71	175.35	-282.28	-25.14	42.82	26.16	16.66	2.570		
1,800.00	1,751.46	1,804.97	1,764.07	9.32	9.21	175.49	-309.45	-27.40	46.39	28.83	17.57	2.641		
1,900.00	1,846.63	1,904.91	1,860.21	9.86	9.72	175.61	-336.63	-29.66	49.97	31.48	18.49	2.703		
2,000.00	1,941.80	2,004.84	1,956.36	10.40	10.24	175.72	-363.80	-31.92	53.54	34.13	19.41	2.758		
2,100.00	2,036.96	2,104.78	2,052.50	10.94	10.76	175.81	-390.98	-34.18	57.12	36.77	20.35	2.807		
2,200.00	2,132.13	2,204.72	2,148.64	11.49	11.28	175.89	-418.16	-36.44	60.69	39.40	21.29	2.850		
2,300.00	2,227.30	2,304.65	2,244.79	12.04	11.81	175.97	-445.33	-38.70	64.27	42.03	22.24	2.890		
2,400.00	2,322.47	2,404.59	2,340.93	12.59	12.34	176.03	-472.51	-40.96	67.84	44.65	23.19	2.925		
2,500.00	2,417.64	2,504.52	2,437.08	13.15	12.87	176.09	-499.68	-43.22	71.42	47.26	24.15	2.957		
2,600.00	2,512.81	2,604.46	2,533.22	13.70	13.40	176.14	-526.86	-45.48	74.99	49.88	25.12	2.986		
2,700.00	2,607.98	2,704.40	2,629.36	14.26	13.93	176.19	-554.03	-47.74	78.57	52.48	26.08	3.012		
2,800.00	2,703.15	2,804.33	2,725.51	14.82	14.47	176.24	-581.21	-50.00	82.14	55.09	27.05	3.036		
2,900.00	2,798.32	2,904.27	2,821.65	15.38	15.00	176.28	-608.38	-52.26	85.72	57.69	28.03	3.058		
3,000.00	2,893.49	3,004.20	2,917.79	15.95	15.54	176.31	-635.56	-54.52	89.29	60.29	29.00	3.079		
3,100.00	2,988.66	3,104.14	3,013.94	16.51	16.08	176.35	-662.73	-56.78	92.87	62.89	29.98	3.098		
3,200.00	3,083.83	3,204.08	3,110.08	17.07	16.62	176.38	-689.91	-59.04	96.44	65.48	30.96	3.115		
3,300.00	3,179.00	3,304.01	3,206.22	17.64	17.16	176.41	-717.09	-61.30	100.02	68.08	31.94	3.131		
3,400.00	3,274.17	3,403.95	3,302.37	18.21	17.70	176.44	-744.26	-63.56	103.59	70.67	32.93	3.146		
3,500.00	3,369.34	3,503.88	3,398.51	18.77	18.24	176.46	-771.44	-65.82	107.17	73.26	33.91	3.160		
3,600.00	3,464.51	3,603.82	3,494.66	19.34	18.78	176.49	-798.61	-68.08	110.75	75.85	34.90	3.173		
3,700.00	3,559.68	3,703.76	3,590.80	19.91	19.33	176.51	-825.79	-70.34	114.32	78.43	35.89	3.185		
3,800.00	3,654.84	3,803.69	3,686.94	20.48	19.87	176.53	-852.96	-72.60	117.90	81.02	36.88	3.197		
3,900.00	3,750.01	3,903.63	3,783.09	21.05	20.41	176.55	-880.14	-74.86	121.47	83.60	37.87	3.208		
4,000.00	3,845.18	4,003.56	3,879.23	21.62	20.96	176.57	-907.31	-77.12	125.05	86.19	38.86	3.218		
4,100.00	3,940.35	4,103.50	3,975.37	22.19	21.50	176.59	-934.49	-79.38	128.62	88.77	39.85	3.227		
4,200.00	4,035.52	4,203.44	4,071.52	22.76	22.05	176.60	-961.66	-81.64	132.20	91.35	40.85	3.236		
4,300.00	4,130.69	4,303.37	4,167.66	23.33	22.59	176.62	-988.84	-83.90	135.77	93.93	41.84	3.245		
4,400.00	4,225.86	4,403.31	4,263.81	23.91	23.14	176.63	-1,016.02	-86.16	139.35	96.51	42.84	3.253		
4,500.00	4,321.03	4,503.24	4,359.95	24.48	23.69	176.65	-1,043.19	-88.42	142.93	99.09	43.83	3.261		
4,600.00	4,416.20	4,603.18	4,456.09	25.05	24.23	176.66	-1,070.37	-90.68	146.50	101.67	44.83	3.268		
4,700.00	4,511.37	4,703.12	4,552.24	25.62	24.78	176.67	-1,097.54	-92.94	150.08	104.25	45.83	3.275		
4,800.00	4,606.54	4,803.05	4,648.38	26.20	25.33	176.69	-1,124.72	-95.20	153.65	106.82	46.83	3.281		
4,900.00	4,701.71	4,902.99	4,744.52	26.77	25.87	176.70	-1,151.89	-97.46	157.23	109.40	47.83	3.287		
5,000.00	4,796.88	5,002.92	4,840.67	27.34	26.42	176.71	-1,179.07	-99.72	160.80	111.98	48.83	3.293		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,102.86	4,936.81	27.92	26.97	176.72	-1,206.24	-101.98	164.38	114.55	49.83	3.299		
5,200.00	4,987.22	5,202.80	5,032.95	28.49	27.52	176.73	-1,233.42	-104.24	167.95	117.13	50.83	3.304		
5,300.00	5,082.39	5,302.73	5,129.10	29.07	28.06	176.74	-1,260.59	-106.50	171.53	119.70	51.83	3.310		
5,400.00	5,177.56	5,402.67	5,225.24	29.64	28.61	176.75	-1,287.77	-108.76	175.11	122.28	52.83	3.315		
5,500.00	5,272.72	5,502.61	5,321.39	30.21	29.16	176.76	-1,314.95	-111.02	178.68	124.85	53.83	3.319		
5,600.00	5,367.89	5,602.54	5,417.53	30.79	29.71	176.77	-1,342.12	-113.28	182.26	127.42	54.83	3.324		
5,700.00	5,463.06	5,702.48	5,513.67	31.36	30.26	176.78	-1,369.30	-115.54	185.83	130.00	55.84	3.328		
5,800.00	5,558.23	5,802.41	5,609.82	31.94	30.81	176.78	-1,396.47	-117.80	189.41	132.57	56.84	3.332		
5,900.00	5,653.40	5,902.35	5,705.96	32.51	31.36	176.79	-1,423.65	-120.06	192.98	135.14	57.84	3.336		
6,000.00	5,748.57	6,002.29	5,802.10	33.09	31.91	176.80	-1,450.82	-122.32	196.56	137.72	58.84	3.340		
6,100.00	5,843.74	6,102.22	5,898.25	33.67	32.46	176.81	-1,478.00	-124.58	200.14	140.29	59.85	3.344		
6,200.00	5,938.91	6,202.16	5,994.39	34.24	33.00	176.81	-1,505.17	-126.84	203.71	142.86	60.85	3.348		
6,300.00	6,034.08	6,302.09	6,090.53	34.82	33.55	176.82	-1,532.35	-129.10	207.29	145.43	61.86	3.351		
6,400.00	6,129.25	6,402.03	6,186.68	35.39	34.10	176.83	-1,559.52	-131.36	210.86	148.00	62.86	3.354		
6,500.00	6,224.42	6,501.97	6,282.82	35.97	34.65	176.83	-1,586.70	-133.62	214.44	150.57	63.87	3.358		
6,600.00	6,319.59	6,601.90	6,378.97	36.54	35.20	176.84	-1,613.88	-135.88	218.01	153.14	64.87	3.361		
6,700.00	6,414.76	6,701.84	6,475.11	37.12	35.75	176.85	-1,641.05	-138.14	221.59	155.71	65.88	3.364		
6,800.00	6,509.91	6,801.77	6,571.24	37.70	36.30	169.63	-1,668.22	-140.40	225.18	158.30	66.88	3.367		
6,900.00	6,603.99	6,901.33	6,667.02	38.26	36.85	149.34	-1,695.30	-142.66	229.36	161.51	67.85	3.380		
7,000.00	6,694.76	7,004.14	6,765.01	38.78	37.41	138.63	-1,723.08	-156.04	234.74	165.91	68.83	3.411		
7,100.00	6,779.96	7,110.01	6,862.39	39.24	37.93	133.36	-1,750.81	-186.55	240.94	171.25	69.69	3.457		
7,200.00	6,857.50	7,219.04	6,956.13	39.65	38.42	131.00	-1,777.66	-235.03	247.54	177.27	70.27	3.523		
7,300.00	6,925.48	7,331.18	7,042.76	40.02	38.86	130.10	-1,802.63	-301.48	254.06	183.58	70.48	3.605		
7,400.00	6,982.21	7,446.24	7,118.55	40.33	39.25	129.89	-1,824.66	-384.99	260.01	189.59	70.43	3.692		
7,500.00	7,026.31	7,563.84	7,179.76	40.63	39.60	129.96	-1,842.70	-483.57	264.93	194.53	70.40	3.763		
7,600.00	7,056.68	7,683.41	7,223.03	40.91	39.95	130.07	-1,855.75	-594.07	268.41	197.60	70.82	3.790		
7,700.00	7,072.58	7,804.18	7,245.79	41.25	40.39	130.10	-1,863.07	-712.28	270.18	198.07	72.11	3.747		
7,800.00	7,074.86	7,916.27	7,248.74	41.69	40.98	130.04	-1,864.75	-824.24	270.31	196.07	74.24	3.641		
7,900.00	7,074.54	8,016.27	7,248.15	42.34	41.78	129.98	-1,865.33	-924.23	270.20	193.71	76.48	3.533		
8,000.00	7,074.21	8,116.27	7,247.55	43.27	42.86	129.93	-1,865.91	-1,024.23	270.09	191.16	78.93	3.422		
8,100.00	7,073.89	8,216.27	7,246.96	44.47	44.20	129.87	-1,866.50	-1,124.23	269.98	188.42	81.56	3.310		
8,200.00	7,073.57	8,316.27	7,246.36	45.91	45.73	129.81	-1,867.08	-1,224.22	269.87	185.51	84.36	3.199		
8,300.00	7,073.24	8,416.27	7,245.76	47.53	47.42	129.76	-1,867.66	-1,324.22	269.76	182.45	87.31	3.090		
8,400.00	7,072.92	8,516.27	7,245.17	49.31	49.24	129.70	-1,868.25	-1,424.21	269.65	179.25	90.40	2.983		
8,500.00	7,072.59	8,616.27	7,244.57	51.20	51.16	129.65	-1,868.83	-1,524.21	269.54	175.92	93.62	2.879		
8,600.00	7,072.27	8,716.27	7,243.98	53.19	53.19	129.59	-1,869.42	-1,624.21	269.43	172.48	96.95	2.779		
8,700.00	7,071.94	8,816.27	7,243.38	55.27	55.29	129.54	-1,870.00	-1,724.20	269.33	168.94	100.39	2.683		
8,800.00	7,071.62	8,916.27	7,242.78	57.43	57.46	129.48	-1,870.58	-1,824.20	269.22	165.30	103.92	2.591		
8,900.00	7,071.29	9,016.27	7,242.19	59.64	59.69	129.42	-1,871.17	-1,924.19	269.11	161.58	107.53	2.503		
9,000.00	7,070.97	9,116.27	7,241.59	61.92	61.98	129.37	-1,871.75	-2,024.19	269.00	157.78	111.22	2.419		
9,100.00	7,070.64	9,216.27	7,241.00	64.24	64.31	129.31	-1,872.34	-2,124.19	268.90	153.91	114.99	2.338		
9,200.00	7,070.32	9,316.27	7,240.40	66.61	66.68	129.26	-1,872.92	-2,224.18	268.79	149.97	118.82	2.262		
9,300.00	7,069.99	9,416.27	7,239.81	69.01	69.10	129.20	-1,873.50	-2,324.18	268.68	145.97	122.71	2.190		
9,400.00	7,069.67	9,516.27	7,239.21	71.45	71.54	129.14	-1,874.09	-2,424.18	268.58	141.92	126.65	2.121		
9,500.00	7,069.34	9,616.26	7,238.61	73.92	74.02	129.09	-1,874.67	-2,524.17	268.47	137.82	130.65	2.055		
9,600.00	7,069.02	9,716.26	7,238.02	76.42	76.52	129.03	-1,875.25	-2,624.17	268.36	133.67	134.69	1.992		
9,700.00	7,068.69	9,816.26	7,237.42	78.95	79.05	128.98	-1,875.84	-2,724.16	268.26	129.48	138.78	1.933		
9,800.00	7,068.37	9,916.26	7,236.83	81.49	81.60	128.92	-1,876.42	-2,824.16	268.15	125.25	142.90	1.876		
9,900.00	7,068.04	10,016.26	7,236.23	84.06	84.17	128.86	-1,877.01	-2,924.16	268.05	120.98	147.07	1.823		
10,000.00	7,067.72	10,116.26	7,235.63	86.65	86.76	128.81	-1,877.59	-3,024.15	267.94	116.68	151.26	1.771		
10,100.00	7,067.39	10,216.26	7,235.04	89.25	89.37	128.75	-1,878.17	-3,124.15	267.84	112.35	155.49	1.723		
10,200.00	7,067.07	10,316.26	7,234.44	91.87	91.99	128.69	-1,878.76	-3,224.14	267.74	107.98	159.75	1.676		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,416.26	7,233.85	94.50	94.63	128.64	-1,879.34	-3,324.14	267.63	103.59	164.04	1.631		
10,400.00	7,066.42	10,516.26	7,233.25	97.14	97.27	128.58	-1,879.92	-3,424.14	267.53	99.17	168.36	1.589		
10,500.00	7,066.09	10,616.26	7,232.66	99.80	99.93	128.52	-1,880.51	-3,524.13	267.42	94.72	172.70	1.548		
10,600.00	7,065.77	10,716.26	7,232.06	102.47	102.60	128.47	-1,881.09	-3,624.13	267.32	90.25	177.07	1.510		
10,700.00	7,065.44	10,816.26	7,231.46	105.15	105.28	128.41	-1,881.68	-3,724.12	267.22	85.76	181.46	1.473	Level 3	
10,800.00	7,065.12	10,916.26	7,230.87	107.83	107.97	128.35	-1,882.26	-3,824.12	267.12	81.25	185.87	1.437	Level 3	
10,900.00	7,064.79	11,016.26	7,230.27	110.53	110.67	128.30	-1,882.84	-3,924.12	267.01	76.72	190.30	1.403	Level 3	
11,000.00	7,064.47	11,116.26	7,229.68	113.23	113.38	128.24	-1,883.43	-4,024.11	266.91	72.16	194.75	1.371	Level 3	
11,100.00	7,064.14	11,216.26	7,229.08	115.95	116.09	128.18	-1,884.01	-4,124.11	266.81	67.59	199.21	1.339	Level 3	
11,200.00	7,063.82	11,316.26	7,228.48	118.66	118.81	128.13	-1,884.59	-4,224.11	266.71	63.01	203.70	1.309	Level 3	
11,300.00	7,063.49	11,416.26	7,227.89	121.39	121.54	128.07	-1,885.18	-4,324.10	266.61	58.40	208.21	1.280	Level 3	
11,400.00	7,063.17	11,516.26	7,227.29	124.12	124.27	128.01	-1,885.76	-4,424.10	266.51	53.78	212.73	1.253	Level 3	
11,500.00	7,062.84	11,616.26	7,226.70	126.86	127.01	127.96	-1,886.35	-4,524.09	266.40	49.14	217.26	1.226	Level 2	
11,600.00	7,062.52	11,716.26	7,226.10	129.60	129.75	127.90	-1,886.93	-4,624.09	266.30	44.49	221.81	1.201	Level 2	
11,700.00	7,062.19	11,816.26	7,225.50	132.35	132.50	127.84	-1,887.51	-4,724.09	266.20	39.83	226.38	1.176	Level 2	
11,800.00	7,061.87	11,916.26	7,224.91	135.10	135.25	127.79	-1,888.10	-4,824.08	266.10	35.15	230.96	1.152	Level 2	
11,900.00	7,061.54	12,016.26	7,224.31	137.85	138.01	127.73	-1,888.68	-4,924.08	266.00	30.45	235.55	1.129	Level 2	
12,000.00	7,061.22	12,116.25	7,223.72	140.61	140.77	127.67	-1,889.26	-5,024.07	265.90	25.75	240.16	1.107	Level 2	
12,100.00	7,060.89	12,216.25	7,223.12	143.38	143.53	127.61	-1,889.85	-5,124.07	265.80	21.03	244.78	1.086	Level 2	
12,200.00	7,060.57	12,316.25	7,222.53	146.15	146.30	127.56	-1,890.43	-5,224.07	265.71	16.30	249.41	1.065	Level 2	
12,300.00	7,060.24	12,416.25	7,221.93	148.92	149.07	127.50	-1,891.02	-5,324.06	265.61	11.55	254.05	1.045	Level 2	
12,400.00	7,059.92	12,516.25	7,221.33	151.69	151.85	127.44	-1,891.60	-5,424.06	265.51	6.80	258.71	1.026	Level 2	
12,500.00	7,059.59	12,616.25	7,220.74	154.47	154.63	127.38	-1,892.18	-5,524.05	265.41	2.03	263.38	1.008	Level 2	
12,600.00	7,059.27	12,716.25	7,220.14	157.25	157.41	127.33	-1,892.77	-5,624.05	265.31	-2.74	268.06	0.990	Level 1	
12,700.00	7,058.94	12,816.25	7,219.55	160.03	160.19	127.27	-1,893.35	-5,724.05	265.22	-7.53	272.75	0.972	Level 1	
12,800.00	7,058.62	12,916.25	7,218.95	162.82	162.98	127.21	-1,893.94	-5,824.04	265.12	-12.33	277.45	0.956	Level 1	
12,900.00	7,058.29	13,016.25	7,218.35	165.61	165.77	127.15	-1,894.52	-5,924.04	265.02	-17.14	282.16	0.939	Level 1	
13,000.00	7,057.97	13,116.25	7,217.76	168.40	168.56	127.10	-1,895.10	-6,024.04	264.92	-21.95	286.88	0.923	Level 1	
13,100.00	7,057.64	13,216.25	7,217.16	171.19	171.35	127.04	-1,895.69	-6,124.03	264.83	-26.78	291.61	0.908	Level 1	
13,200.00	7,057.32	13,316.25	7,216.57	173.99	174.15	126.98	-1,896.27	-6,224.03	264.73	-31.62	296.35	0.893	Level 1	
13,300.00	7,057.00	13,416.25	7,215.97	176.78	176.95	126.92	-1,896.85	-6,324.02	264.64	-36.46	301.10	0.879	Level 1	
13,400.00	7,056.67	13,516.25	7,215.38	179.58	179.75	126.87	-1,897.44	-6,424.02	264.54	-41.32	305.86	0.865	Level 1	
13,500.00	7,056.35	13,616.25	7,214.78	182.38	182.55	126.81	-1,898.02	-6,524.02	264.44	-46.18	310.63	0.851	Level 1	
13,600.00	7,056.02	13,716.25	7,214.18	185.19	185.35	126.75	-1,898.61	-6,624.01	264.35	-51.06	315.41	0.838	Level 1	
13,700.00	7,055.70	13,816.25	7,213.59	187.99	188.16	126.69	-1,899.19	-6,724.01	264.25	-55.94	320.19	0.825	Level 1	
13,800.00	7,055.37	13,916.25	7,212.99	190.80	190.96	126.63	-1,899.77	-6,824.00	264.16	-60.83	324.99	0.813	Level 1	
13,900.00	7,055.05	14,016.25	7,212.40	193.60	193.77	126.58	-1,900.36	-6,924.00	264.06	-65.73	329.80	0.801	Level 1	
14,000.00	7,054.72	14,116.25	7,211.80	196.41	196.58	126.52	-1,900.94	-7,024.00	263.97	-70.64	334.61	0.789	Level 1	
14,100.00	7,054.40	14,216.25	7,211.20	199.22	199.39	126.46	-1,901.52	-7,123.99	263.88	-75.55	339.43	0.777	Level 1	
14,200.00	7,054.07	14,316.25	7,210.61	202.03	202.21	126.40	-1,902.11	-7,223.99	263.78	-80.48	344.26	0.766	Level 1	
14,300.00	7,053.75	14,416.25	7,210.01	204.85	205.02	126.34	-1,902.69	-7,323.99	263.69	-85.41	349.10	0.755	Level 1	
14,400.00	7,053.42	14,516.25	7,209.42	207.66	207.83	126.29	-1,903.28	-7,423.98	263.60	-90.35	353.95	0.745	Level 1	
14,500.00	7,053.10	14,616.24	7,208.82	210.48	210.65	126.23	-1,903.86	-7,523.98	263.50	-95.30	358.80	0.734	Level 1	
14,600.00	7,052.77	14,716.24	7,208.23	213.29	213.47	126.17	-1,904.44	-7,623.97	263.41	-100.25	363.66	0.724	Level 1	
14,700.00	7,052.45	14,816.24	7,207.63	216.11	216.29	126.11	-1,905.03	-7,723.97	263.32	-105.22	368.54	0.715	Level 1	
14,800.00	7,052.12	14,916.24	7,207.03	218.93	219.10	126.05	-1,905.61	-7,823.97	263.23	-110.19	373.41	0.705	Level 1	
14,900.00	7,051.80	15,016.24	7,206.44	221.75	221.93	125.99	-1,906.19	-7,923.96	263.14	-115.16	378.30	0.696	Level 1	
15,000.00	7,051.47	15,116.24	7,205.84	224.57	224.75	125.93	-1,906.78	-8,023.96	263.04	-120.15	383.19	0.686	Level 1	
15,100.00	7,051.15	15,216.24	7,205.25	227.39	227.57	125.88	-1,907.36	-8,123.95	262.95	-125.14	388.10	0.678	Level 1	
15,145.13	7,051.00	15,261.37	7,204.98	228.67	228.84	125.85	-1,907.63	-8,169.08	262.91	-127.40	390.31	0.674	Level 1, ES, SF	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	1.00	0.00	3.28	3.28	-179.52	-100.19	-0.83	100.19					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-100.19	-0.83	100.19	93.62	6.57	15.251		
200.00	200.00	199.00	200.00	3.34	3.34	-179.52	-100.19	-0.83	100.19	93.52	6.67	15.014		
300.00	299.98	295.66	296.64	3.44	3.43	-3.94	-101.78	-0.91	100.10	93.22	6.88	14.542		
400.00	399.84	392.29	393.14	3.59	3.58	-4.03	-106.63	-1.13	99.90	92.70	7.20	13.876		
500.00	499.45	488.92	489.43	3.79	3.77	-4.19	-114.73	-1.51	99.59	91.97	7.62	13.077		
600.00	598.70	585.57	585.41	4.03	4.00	-4.41	-126.07	-2.03	99.17	91.05	8.12	12.219		
700.00	697.47	682.24	680.96	4.31	4.26	-4.69	-140.64	-2.71	98.63	89.95	8.69	11.356		
800.00	795.62	778.92	775.99	4.64	4.57	-5.04	-158.42	-3.53	98.00	88.68	9.32	10.520		
900.00	893.06	875.62	870.38	5.00	4.91	-5.45	-179.40	-4.50	97.26	87.27	9.99	9.737		
1,000.00	989.64	972.36	964.03	5.40	5.28	-5.94	-203.56	-5.62	96.42	85.71	10.71	9.002		
1,100.00	1,085.27	1,069.12	1,056.84	5.83	5.69	-6.50	-230.88	-6.88	95.49	84.02	11.47	8.328		
1,122.99	1,107.15	1,091.36	1,078.05	5.93	5.79	-6.63	-237.60	-7.19	95.40	83.76	11.64	8.193 CC, ES		
1,200.00	1,180.44	1,165.88	1,148.69	6.29	6.13	-6.99	-261.31	-8.29	96.40	84.15	12.25	7.869		
1,300.00	1,275.61	1,262.49	1,239.30	6.76	6.60	-7.29	-294.76	-9.83	100.68	87.62	13.05	7.712		
1,400.00	1,370.78	1,358.71	1,328.38	7.26	7.11	-7.38	-331.09	-11.51	108.30	94.43	13.87	7.807		
1,500.00	1,465.95	1,454.34	1,415.64	7.76	7.63	-7.30	-370.14	-13.32	119.23	104.54	14.69	8.114		
1,600.00	1,561.12	1,549.16	1,500.84	8.27	8.19	-7.11	-411.72	-15.24	133.46	117.94	15.52	8.599		
1,700.00	1,656.29	1,642.99	1,583.74	8.80	8.77	-6.84	-455.61	-17.27	150.92	134.57	16.34	9.235		
1,800.00	1,751.46	1,735.64	1,664.15	9.32	9.37	-6.53	-501.58	-19.40	171.56	154.40	17.16	9.999		
1,900.00	1,846.63	1,833.39	1,741.72	9.86	10.03	-6.22	-549.29	-21.61	195.33	177.34	17.99	10.857		
2,000.00	1,941.80	1,923.45	1,823.19	10.40	10.66	-5.93	-601.34	-24.01	220.75	201.84	18.91	11.674		
2,100.00	2,036.96	2,020.16	1,904.66	10.94	11.35	-5.70	-653.39	-26.42	246.17	226.29	19.88	12.384		
2,200.00	2,132.13	2,116.87	1,986.13	11.49	12.05	-5.51	-705.44	-28.83	271.60	250.73	20.86	13.018		
2,300.00	2,227.30	2,213.58	2,067.61	12.04	12.76	-5.35	-757.49	-31.24	297.02	275.16	21.86	13.587		
2,400.00	2,322.47	2,310.29	2,149.08	12.59	13.47	-5.22	-809.54	-33.64	322.45	299.58	22.87	14.099		
2,500.00	2,417.64	2,407.00	2,230.55	13.15	14.19	-5.11	-861.60	-36.05	347.88	323.99	23.89	14.562		
2,600.00	2,512.81	2,503.71	2,312.02	13.70	14.92	-5.01	-913.65	-38.46	373.31	348.40	24.92	14.983		
2,700.00	2,607.98	2,600.42	2,393.50	14.26	15.65	-4.93	-965.70	-40.86	398.75	372.79	25.95	15.365		
2,800.00	2,703.15	2,697.13	2,474.97	14.82	16.38	-4.85	-1,017.75	-43.27	424.18	397.19	26.99	15.715		
2,900.00	2,798.32	2,806.16	2,556.44	15.38	17.22	-4.79	-1,069.80	-45.68	449.61	421.50	28.11	15.992		
3,000.00	2,893.49	2,909.45	2,637.92	15.95	18.01	-4.73	-1,121.85	-48.09	475.05	445.84	29.21	16.265		
3,100.00	2,988.66	2,987.26	2,719.39	16.51	18.60	-4.68	-1,173.90	-50.49	500.48	470.33	30.15	16.600		
3,200.00	3,083.83	3,083.97	2,800.86	17.07	19.35	-4.63	-1,225.95	-52.90	525.92	494.70	31.21	16.850		
3,300.00	3,179.00	3,180.68	2,882.33	17.64	20.10	-4.59	-1,278.00	-55.31	551.35	519.07	32.28	17.082		
3,400.00	3,274.17	3,277.39	2,963.81	18.21	20.85	-4.55	-1,330.05	-57.72	576.79	543.44	33.35	17.297		
3,500.00	3,369.34	3,374.10	3,045.28	18.77	21.60	-4.51	-1,382.10	-60.12	602.22	567.80	34.42	17.497		
3,600.00	3,464.51	3,470.81	3,126.75	19.34	22.35	-4.48	-1,434.16	-62.53	627.66	592.17	35.49	17.684		
3,700.00	3,559.68	3,567.52	3,208.22	19.91	23.10	-4.45	-1,486.21	-64.94	653.09	616.53	36.57	17.859		
3,800.00	3,654.84	3,664.23	3,289.70	20.48	23.86	-4.42	-1,538.26	-67.35	678.53	640.88	37.65	18.022		
3,900.00	3,750.01	3,760.94	3,371.17	21.05	24.61	-4.39	-1,590.31	-69.75	703.97	665.24	38.73	18.176		
4,000.00	3,845.18	3,857.65	3,452.64	21.62	25.37	-4.37	-1,642.36	-72.16	729.40	689.59	39.81	18.320		
4,100.00	3,940.35	3,954.36	3,534.12	22.19	26.12	-4.34	-1,694.41	-74.57	754.84	713.94	40.90	18.456		
4,200.00	4,035.52	4,051.08	3,615.59	22.76	26.88	-4.32	-1,746.46	-76.98	780.28	738.29	41.99	18.583		
4,300.00	4,130.69	4,147.79	3,697.06	23.33	27.64	-4.30	-1,798.51	-79.38	805.71	762.64	43.08	18.704		
4,400.00	4,225.86	4,244.50	3,778.53	23.91	28.40	-4.28	-1,850.56	-81.79	831.15	786.98	44.17	18.818		
4,500.00	4,321.03	4,341.21	3,860.01	24.48	29.16	-4.27	-1,902.61	-84.20	856.59	811.33	45.26	18.927		
4,600.00	4,416.20	4,437.92	3,941.48	25.05	29.92	-4.25	-1,954.66	-86.60	882.03	835.67	46.35	19.029		
4,700.00	4,511.37	4,534.63	4,022.95	25.62	30.68	-4.23	-2,006.71	-89.01	907.46	860.02	47.45	19.127		
4,800.00	4,606.54	4,631.34	4,104.42	26.20	31.44	-4.22	-2,058.77	-91.42	932.90	884.36	48.54	19.219		
4,900.00	4,701.71	4,728.05	4,185.90	26.77	32.21	-4.20	-2,110.82	-93.83	958.34	908.70	49.64	19.307		
5,000.00	4,796.88	4,824.76	4,267.37	27.34	32.97	-4.19	-2,162.87	-96.23	983.77	933.04	50.73	19.391		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	4,921.47	4,348.84	27.92	33.73	-4.18	-2,214.92	-98.64	1,009.21	957.38	51.83	19.471		
5,200.00	4,987.22	5,018.18	4,430.32	28.49	34.49	-4.17	-2,266.97	-101.05	1,034.65	981.72	52.93	19.547		
5,300.00	5,082.39	5,114.89	4,511.79	29.07	35.26	-4.15	-2,319.02	-103.46	1,060.09	1,006.06	54.03	19.620		
5,400.00	5,177.56	5,211.60	4,593.26	29.64	36.02	-4.14	-2,371.07	-105.86	1,085.52	1,030.39	55.13	19.690		
5,500.00	5,272.72	5,308.31	4,674.73	30.21	36.79	-4.13	-2,423.12	-108.27	1,110.96	1,054.73	56.23	19.757		
5,600.00	5,367.89	5,405.02	4,756.21	30.79	37.55	-4.12	-2,475.17	-110.68	1,136.40	1,079.07	57.33	19.821		
5,700.00	5,463.06	5,501.73	4,837.68	31.36	38.31	-4.11	-2,527.22	-113.09	1,161.84	1,103.40	58.44	19.882		
5,800.00	5,558.23	5,601.56	4,919.15	31.94	39.10	-4.10	-2,579.27	-115.49	1,187.28	1,127.72	59.56	19.935		
5,900.00	5,653.40	5,695.15	5,000.62	32.51	39.85	-4.10	-2,631.32	-117.90	1,212.71	1,152.07	60.64	19.998		
6,000.00	5,748.57	5,811.00	5,098.41	33.09	40.76	-4.09	-2,683.39	-120.77	1,237.96	1,175.93	62.02	19.959		
6,100.00	5,843.74	5,984.19	5,248.40	33.67	42.06	-4.09	-2,779.83	-124.77	1,258.96	1,194.90	64.06	19.652		
6,200.00	5,938.91	6,161.30	5,406.90	34.24	43.30	-4.11	-2,858.70	-128.42	1,273.96	1,208.10	65.85	19.345		
6,300.00	6,034.08	6,341.07	5,572.46	34.82	44.46	-4.15	-2,928.60	-131.65	1,282.78	1,215.41	67.36	19.043		
6,400.00	6,129.25	6,522.12	5,743.30	35.39	45.52	-4.22	-2,988.37	-134.41	1,285.31	1,216.75	68.56	18.748		
6,500.00	6,224.42	6,703.02	5,917.44	35.97	46.47	-4.31	-3,037.22	-136.67	1,281.53	1,212.11	69.42	18.461		
6,600.00	6,319.59	6,882.33	6,092.75	36.54	47.30	-4.42	-3,074.70	-138.41	1,271.49	1,201.55	69.94	18.181		
6,700.00	6,414.76	7,058.72	6,267.16	37.12	48.02	-4.56	-3,100.81	-139.61	1,255.30	1,185.18	70.12	17.902		
6,800.00	6,509.91	7,230.90	6,438.65	37.70	48.62	-12.66	-3,115.92	-140.31	1,233.15	1,163.15	70.00	17.617		
6,900.00	6,603.99	7,396.05	6,603.71	38.26	49.09	-39.29	-3,120.71	-140.53	1,205.66	1,136.05	69.61	17.320		
7,000.00	6,694.76	7,492.65	6,699.94	38.78	49.33	-57.65	-3,120.75	-147.75	1,176.89	1,106.58	70.31	16.738		
7,100.00	6,779.96	7,593.14	6,797.69	39.24	49.57	-70.13	-3,120.89	-170.59	1,150.40	1,079.57	70.83	16.242		
7,200.00	6,857.50	7,698.63	6,895.10	39.65	49.82	-79.11	-3,121.14	-210.79	1,126.91	1,055.78	71.13	15.844		
7,300.00	6,925.48	7,809.87	6,989.14	40.02	50.05	-85.85	-3,121.50	-269.95	1,106.95	1,035.74	71.21	15.544		
7,400.00	6,982.21	7,927.33	7,075.66	40.33	50.25	-90.98	-3,121.99	-349.14	1,090.89	1,019.72	71.17	15.329		
7,500.00	7,026.31	8,051.02	7,149.43	40.63	50.42	-94.77	-3,122.59	-448.18	1,078.87	1,007.69	71.19	15.155		
7,600.00	7,056.68	8,180.26	7,240.56	40.91	50.54	-97.35	-3,123.31	-564.83	1,070.88	999.28	71.60	14.956		
7,700.00	7,072.58	8,313.55	7,235.58	41.25	50.61	-98.72	-3,124.10	-694.20	1,066.81	994.07	72.74	14.666		
7,800.00	7,074.86	8,435.80	7,240.86	41.69	50.66	-98.96	-3,124.85	-816.22	1,066.17	991.43	74.74	14.266		
7,900.00	7,074.54	8,535.80	7,240.45	42.34	50.71	-98.95	-3,125.46	-916.21	1,066.10	988.97	77.13	13.822		
8,000.00	7,074.21	8,635.80	7,240.05	43.27	50.78	-98.95	-3,126.07	-1,016.21	1,066.04	986.18	79.86	13.349		
8,100.00	7,073.89	8,735.80	7,239.64	44.47	50.90	-98.95	-3,126.68	-1,116.21	1,065.97	983.09	82.88	12.862		
8,200.00	7,073.57	8,835.80	7,239.23	45.91	51.10	-98.94	-3,127.30	-1,216.20	1,065.90	979.74	86.17	12.370		
8,300.00	7,073.24	8,935.80	7,238.83	47.53	51.50	-98.94	-3,127.91	-1,316.20	1,065.84	976.14	89.69	11.883		
8,400.00	7,072.92	9,035.80	7,238.42	49.31	52.31	-98.93	-3,128.52	-1,416.20	1,065.77	972.34	93.43	11.408		
8,500.00	7,072.59	9,135.80	7,238.02	51.20	53.63	-98.93	-3,129.13	-1,516.20	1,065.70	968.35	97.35	10.947		
8,600.00	7,072.27	9,235.80	7,237.61	53.19	55.33	-98.93	-3,129.75	-1,616.19	1,065.64	964.20	101.43	10.506		
8,700.00	7,071.94	9,335.80	7,237.20	55.27	57.24	-98.92	-3,130.36	-1,716.19	1,065.57	959.90	105.66	10.085		
8,800.00	7,071.62	9,435.80	7,236.80	57.43	59.27	-98.92	-3,130.97	-1,816.19	1,065.50	955.48	110.02	9.684		
8,900.00	7,071.29	9,535.80	7,236.39	59.64	61.40	-98.91	-3,131.58	-1,916.19	1,065.43	950.94	114.50	9.305		
9,000.00	7,070.97	9,635.80	7,235.99	61.92	63.59	-98.91	-3,132.20	-2,016.18	1,065.37	946.30	119.07	8.947		
9,100.00	7,070.64	9,735.80	7,235.58	64.24	65.85	-98.91	-3,132.81	-2,116.18	1,065.30	941.57	123.74	8.609		
9,200.00	7,070.32	9,835.80	7,235.18	66.61	68.16	-98.90	-3,133.42	-2,216.18	1,065.23	936.75	128.48	8.291		
9,300.00	7,069.99	9,935.80	7,234.77	69.01	70.51	-98.90	-3,134.03	-2,316.17	1,065.17	931.87	133.30	7.991		
9,400.00	7,069.67	10,035.80	7,234.36	71.45	72.90	-98.90	-3,134.65	-2,416.17	1,065.10	926.92	138.18	7.708		
9,500.00	7,069.34	10,135.80	7,233.96	73.92	75.32	-98.89	-3,135.26	-2,516.17	1,065.03	921.92	143.11	7.442		
9,600.00	7,069.02	10,235.80	7,233.55	76.42	77.77	-98.89	-3,135.87	-2,616.17	1,064.97	916.86	148.10	7.191		
9,700.00	7,068.69	10,335.80	7,233.15	78.95	80.26	-98.88	-3,136.48	-2,716.16	1,064.90	911.76	153.14	6.954		
9,800.00	7,068.37	10,435.80	7,232.74	81.49	82.76	-98.88	-3,137.10	-2,816.16	1,064.83	906.61	158.22	6.730		
9,900.00	7,068.04	10,535.80	7,232.34	84.06	85.29	-98.88	-3,137.71	-2,916.16	1,064.77	901.43	163.34	6.519		
10,000.00	7,067.72	10,635.80	7,231.93	86.65	87.84	-98.87	-3,138.32	-3,016.16	1,064.70	896.21	168.49	6.319		
10,100.00	7,067.39	10,735.80	7,231.52	89.25	90.41	-98.87	-3,138.93	-3,116.15	1,064.63	890.96	173.67	6.130		
10,200.00	7,067.07	10,835.80	7,231.12	91.87	93.00	-98.86	-3,139.55	-3,216.15	1,064.57	885.68	178.89	5.951		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,935.80	7,230.71	94.50	95.60	-98.86	-3,140.16	-3,316.15	1,064.50	880.37	184.12	5.781		
10,400.00	7,066.42	11,035.80	7,230.31	97.14	98.22	-98.86	-3,140.77	-3,416.14	1,064.43	875.04	189.39	5.620		
10,500.00	7,066.09	11,135.80	7,229.90	99.80	100.85	-98.85	-3,141.38	-3,516.14	1,064.37	869.69	194.68	5.467		
10,600.00	7,065.77	11,235.80	7,229.50	102.47	103.49	-98.85	-3,142.00	-3,616.14	1,064.30	864.32	199.98	5.322		
10,700.00	7,065.44	11,335.80	7,229.09	105.15	106.14	-98.85	-3,142.61	-3,716.14	1,064.23	858.92	205.31	5.184		
10,800.00	7,065.12	11,435.80	7,228.68	107.83	108.81	-98.84	-3,143.22	-3,816.13	1,064.16	853.51	210.65	5.052		
10,900.00	7,064.79	11,535.80	7,228.28	110.53	111.48	-98.84	-3,143.83	-3,916.13	1,064.10	848.09	216.01	4.926		
11,000.00	7,064.47	11,635.80	7,227.87	113.23	114.17	-98.83	-3,144.45	-4,016.13	1,064.03	842.64	221.39	4.806		
11,100.00	7,064.14	11,735.80	7,227.47	115.95	116.86	-98.83	-3,145.06	-4,116.13	1,063.96	837.19	226.78	4.692		
11,200.00	7,063.82	11,835.80	7,227.06	118.66	119.56	-98.83	-3,145.67	-4,216.12	1,063.90	831.72	232.18	4.582		
11,300.00	7,063.49	11,935.80	7,226.66	121.39	122.26	-98.82	-3,146.28	-4,316.12	1,063.83	826.24	237.59	4.478		
11,400.00	7,063.17	12,035.80	7,226.25	124.12	124.98	-98.82	-3,146.90	-4,416.12	1,063.76	820.75	243.02	4.377		
11,500.00	7,062.84	12,135.80	7,225.84	126.86	127.69	-98.81	-3,147.51	-4,516.11	1,063.70	815.24	248.46	4.281		
11,600.00	7,062.52	12,235.80	7,225.44	129.60	130.42	-98.81	-3,148.12	-4,616.11	1,063.63	809.73	253.90	4.189		
11,700.00	7,062.19	12,335.80	7,225.03	132.35	133.15	-98.81	-3,148.73	-4,716.11	1,063.56	804.21	259.36	4.101		
11,800.00	7,061.87	12,435.80	7,224.63	135.10	135.89	-98.80	-3,149.35	-4,816.11	1,063.50	798.67	264.82	4.016		
11,900.00	7,061.54	12,535.80	7,224.22	137.85	138.63	-98.80	-3,149.96	-4,916.10	1,063.43	793.13	270.30	3.934		
12,000.00	7,061.22	12,635.80	7,223.82	140.61	141.38	-98.80	-3,150.57	-5,016.10	1,063.36	787.59	275.78	3.856		
12,100.00	7,060.89	12,735.80	7,223.41	143.38	144.13	-98.79	-3,151.18	-5,116.10	1,063.30	782.03	281.26	3.780		
12,200.00	7,060.57	12,835.80	7,223.00	146.15	146.88	-98.79	-3,151.80	-5,216.10	1,063.23	776.47	286.76	3.708		
12,300.00	7,060.24	12,935.80	7,222.60	148.92	149.64	-98.78	-3,152.41	-5,316.09	1,063.16	770.90	292.26	3.638		
12,400.00	7,059.92	13,035.80	7,222.19	151.69	152.40	-98.78	-3,153.02	-5,416.09	1,063.10	765.33	297.77	3.570		
12,500.00	7,059.59	13,135.80	7,221.79	154.47	155.17	-98.78	-3,153.63	-5,516.09	1,063.03	759.75	303.28	3.505		
12,600.00	7,059.27	13,235.80	7,221.38	157.25	157.94	-98.77	-3,154.25	-5,616.08	1,062.96	754.16	308.80	3.442		
12,700.00	7,058.94	13,335.80	7,220.98	160.03	160.71	-98.77	-3,154.86	-5,716.08	1,062.90	748.57	314.33	3.382		
12,800.00	7,058.62	13,435.80	7,220.57	162.82	163.48	-98.76	-3,155.47	-5,816.08	1,062.83	742.97	319.86	3.323		
12,900.00	7,058.29	13,535.80	7,220.16	165.61	166.26	-98.76	-3,156.08	-5,916.08	1,062.76	737.37	325.39	3.266		
13,000.00	7,057.97	13,635.80	7,219.76	168.40	169.04	-98.76	-3,156.70	-6,016.07	1,062.70	731.77	330.93	3.211		
13,100.00	7,057.64	13,735.80	7,219.35	171.19	171.83	-98.75	-3,157.31	-6,116.07	1,062.63	726.16	336.47	3.158		
13,200.00	7,057.32	13,835.80	7,218.95	173.99	174.61	-98.75	-3,157.92	-6,216.07	1,062.56	720.54	342.02	3.107		
13,300.00	7,057.00	13,935.80	7,218.54	176.78	177.40	-98.75	-3,158.53	-6,316.07	1,062.50	714.93	347.57	3.057		
13,400.00	7,056.67	14,035.80	7,218.14	179.58	180.19	-98.74	-3,159.15	-6,416.06	1,062.43	709.31	353.12	3.009		
13,500.00	7,056.35	14,135.80	7,217.73	182.38	182.98	-98.74	-3,159.76	-6,516.06	1,062.36	703.68	358.68	2.962		
13,600.00	7,056.02	14,235.80	7,217.32	185.19	185.78	-98.73	-3,160.37	-6,616.06	1,062.30	698.05	364.24	2.916		
13,700.00	7,055.70	14,335.80	7,216.92	187.99	188.57	-98.73	-3,160.98	-6,716.05	1,062.23	692.42	369.81	2.872		
13,800.00	7,055.37	14,435.80	7,216.51	190.80	191.37	-98.73	-3,161.59	-6,816.05	1,062.16	686.79	375.38	2.830		
13,900.00	7,055.05	14,535.80	7,216.11	193.60	194.17	-98.72	-3,162.21	-6,916.05	1,062.10	681.15	380.95	2.788		
14,000.00	7,054.72	14,635.80	7,215.70	196.41	196.97	-98.72	-3,162.82	-7,016.05	1,062.03	675.51	386.52	2.748		
14,100.00	7,054.40	14,735.80	7,215.29	199.22	199.78	-98.71	-3,163.43	-7,116.04	1,061.96	669.87	392.10	2.708		
14,200.00	7,054.07	14,835.80	7,214.89	202.03	202.58	-98.71	-3,164.04	-7,216.04	1,061.90	664.22	397.68	2.670		
14,300.00	7,053.75	14,935.80	7,214.48	204.85	205.39	-98.71	-3,164.66	-7,316.04	1,061.83	658.57	403.26	2.633		
14,400.00	7,053.42	15,035.80	7,214.08	207.66	208.20	-98.70	-3,165.27	-7,416.03	1,061.76	652.92	408.84	2.597		
14,500.00	7,053.10	15,135.80	7,213.67	210.48	211.00	-98.70	-3,165.88	-7,516.03	1,061.70	647.27	414.43	2.562		
14,600.00	7,052.77	15,235.80	7,213.27	213.29	213.81	-98.70	-3,166.49	-7,616.03	1,061.63	641.61	420.02	2.528		
14,700.00	7,052.45	15,335.80	7,212.86	216.11	216.63	-98.69	-3,167.11	-7,716.03	1,061.56	635.96	425.61	2.494		
14,800.00	7,052.12	15,435.80	7,212.45	218.93	219.44	-98.69	-3,167.72	-7,816.02	1,061.50	630.30	431.20	2.462		
14,900.00	7,051.80	15,535.80	7,212.05	221.75	222.25	-98.68	-3,168.33	-7,916.02	1,061.43	624.64	436.79	2.430		
15,000.00	7,051.47	15,635.80	7,211.64	224.57	225.07	-98.68	-3,168.94	-8,016.02	1,061.36	618.97	442.39	2.399		
15,100.00	7,051.15	15,735.80	7,211.24	227.39	227.89	-98.68	-3,169.56	-8,116.02	1,061.30	613.31	447.99	2.369		
15,145.13	7,051.00	15,780.93	7,211.05	228.67	229.16	-98.67	-3,169.83	-8,161.14	1,061.27	610.75	450.52	2.356 SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.46	279.78	2.23	279.79					
100.00	100.00	101.00	100.00	3.28	3.28	0.46	279.78	2.23	279.79	273.22	6.57	42.588		
200.00	200.00	201.00	200.00	3.34	3.34	0.46	279.78	2.23	279.79	273.11	6.67	41.917 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	176.09	279.78	2.23	281.53	274.64	6.89	40.883		
400.00	399.84	400.84	399.84	3.59	3.60	176.15	279.78	2.23	286.75	279.55	7.20	39.842		
500.00	499.45	500.45	499.45	3.79	3.81	176.26	279.78	2.23	295.45	287.85	7.60	38.877		
600.00	598.70	599.70	598.70	4.03	4.05	176.39	279.78	2.23	307.61	299.53	8.08	38.070		
700.00	697.47	706.51	692.48	4.31	4.33	176.30	280.58	0.94	324.04	315.39	8.65	37.471		
800.00	795.62	808.65	790.29	4.64	4.63	176.06	282.12	-1.52	344.59	335.34	9.26	37.230		
900.00	893.06	888.43	887.32	5.00	4.88	175.87	283.64	-3.96	368.55	358.71	9.84	37.453		
1,000.00	989.64	984.61	983.47	5.40	5.20	175.73	285.16	-6.38	395.86	385.35	10.51	37.652		
1,100.00	1,085.27	1,079.80	1,078.61	5.83	5.53	175.64	286.65	-8.78	426.51	415.28	11.22	38.000		
1,200.00	1,180.44	1,174.50	1,173.28	6.29	5.87	175.62	288.14	-11.16	458.61	446.67	11.94	38.412		
1,300.00	1,275.61	1,269.21	1,267.94	6.76	6.22	175.60	289.63	-13.54	490.72	478.04	12.68	38.702		
1,400.00	1,370.78	1,363.91	1,362.60	7.26	6.57	175.58	291.12	-15.93	522.83	509.39	13.44	38.901		
1,500.00	1,465.95	1,458.62	1,457.27	7.76	6.94	175.56	292.61	-18.31	554.94	540.72	14.22	39.032		
1,600.00	1,561.12	1,553.32	1,551.93	8.27	7.30	175.55	294.10	-20.69	587.04	572.03	15.01	39.111		
1,700.00	1,656.29	1,648.03	1,646.59	8.80	7.68	175.54	295.59	-23.08	619.15	603.34	15.81	39.152		
1,800.00	1,751.46	1,742.73	1,741.26	9.32	8.05	175.53	297.08	-25.46	651.26	634.63	16.63	39.165		
1,900.00	1,846.63	1,837.44	1,835.92	9.86	8.44	175.52	298.57	-27.84	683.37	665.91	17.45	39.156		
2,000.00	1,941.80	1,932.15	1,930.58	10.40	8.82	175.51	300.05	-30.22	715.47	697.19	18.28	39.132		
2,100.00	2,036.96	2,026.85	2,025.25	10.94	9.21	175.50	301.54	-32.61	747.58	728.46	19.12	39.095		
2,200.00	2,132.13	2,121.56	2,119.91	11.49	9.60	175.49	303.03	-34.99	779.69	759.72	19.97	39.051		
2,300.00	2,227.30	2,216.26	2,214.57	12.04	9.99	175.48	304.52	-37.37	811.80	790.98	20.82	39.000		
2,400.00	2,322.47	2,310.97	2,309.24	12.59	10.38	175.48	306.01	-39.76	843.90	822.23	21.67	38.945		
2,500.00	2,417.64	2,405.67	2,403.90	13.15	10.78	175.47	307.50	-42.14	876.01	853.48	22.53	38.887		
2,600.00	2,512.81	2,500.38	2,498.57	13.70	11.18	175.46	308.99	-44.52	908.12	884.73	23.39	38.828		
2,700.00	2,607.98	2,604.92	2,593.23	14.26	11.62	175.46	310.48	-46.90	940.23	915.93	24.29	38.701		
2,800.00	2,703.15	2,689.79	2,687.89	14.82	11.97	175.45	311.97	-49.29	972.33	947.21	25.12	38.707		
2,900.00	2,798.32	2,784.49	2,782.56	15.38	12.38	175.45	313.46	-51.67	1,004.44	978.45	25.99	38.646		
3,000.00	2,893.49	2,879.20	2,877.22	15.95	12.78	175.44	314.94	-54.05	1,036.55	1,009.69	26.86	38.586		
3,100.00	2,988.66	2,973.90	2,971.88	16.51	13.18	175.44	316.43	-56.44	1,068.66	1,040.92	27.74	38.527		
3,200.00	3,083.83	3,068.61	3,066.55	17.07	13.58	175.44	317.92	-58.82	1,100.77	1,072.15	28.61	38.469		
3,300.00	3,179.00	3,163.31	3,161.21	17.64	13.99	175.43	319.41	-61.20	1,132.87	1,103.38	29.49	38.412		
3,400.00	3,274.17	3,258.02	3,255.87	18.21	14.39	175.43	320.90	-63.58	1,164.98	1,134.61	30.37	38.357		
3,500.00	3,369.34	3,352.72	3,350.54	18.77	14.80	175.42	322.39	-65.97	1,197.09	1,165.84	31.25	38.303		
3,600.00	3,464.51	3,447.43	3,445.20	19.34	15.21	175.42	323.88	-68.35	1,229.20	1,197.06	32.14	38.250		
3,700.00	3,559.68	3,542.14	3,539.86	19.91	15.61	175.42	325.37	-70.73	1,261.30	1,228.28	33.02	38.198		
3,800.00	3,654.84	3,636.84	3,634.53	20.48	16.02	175.42	326.86	-73.12	1,293.41	1,259.51	33.91	38.148		
3,900.00	3,750.01	3,731.55	3,729.19	21.05	16.43	175.41	328.35	-75.50	1,325.52	1,290.73	34.79	38.099		
4,000.00	3,845.18	3,826.25	3,823.86	21.62	16.84	175.41	329.84	-77.88	1,357.63	1,321.95	35.68	38.052		
4,100.00	3,940.35	3,920.96	3,918.52	22.19	17.24	175.41	331.32	-80.27	1,389.74	1,353.17	36.57	38.006		
4,200.00	4,035.52	4,015.66	4,013.18	22.76	17.65	175.41	332.81	-82.65	1,421.84	1,384.39	37.46	37.961		
4,300.00	4,130.69	4,110.37	4,107.85	23.33	18.06	175.40	334.30	-85.03	1,453.95	1,415.61	38.34	37.918		
4,400.00	4,225.86	4,205.07	4,202.51	23.91	18.47	175.40	335.79	-87.41	1,486.06	1,446.82	39.24	37.876		
4,500.00	4,321.03	4,300.22	4,297.17	24.48	18.89	175.40	337.28	-89.80	1,518.17	1,478.04	40.13	37.833		
4,600.00	4,416.20	4,405.52	4,391.84	25.05	19.34	175.40	338.77	-92.18	1,550.27	1,509.21	41.07	37.751		
4,700.00	4,511.37	4,489.19	4,486.50	25.62	19.70	175.39	340.26	-94.56	1,582.38	1,540.47	41.91	37.756		
4,800.00	4,606.54	4,583.89	4,581.16	26.20	20.12	175.39	341.75	-96.95	1,614.49	1,571.69	42.80	37.719		
4,900.00	4,701.71	4,678.60	4,675.83	26.77	20.53	175.39	343.24	-99.33	1,646.60	1,602.90	43.70	37.682		
5,000.00	4,796.88	4,773.30	4,770.49	27.34	20.94	175.39	344.73	-101.71	1,678.71	1,634.11	44.59	37.646		
5,100.00	4,892.05	4,868.01	4,865.16	27.92	21.35	175.39	346.21	-104.09	1,710.81	1,665.33	45.49	37.612		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,962.71	4,959.82	28.49	21.76	175.39	347.70	-106.48	1,742.92	1,696.54	46.38	37.578		
5,300.00	5,082.39	5,057.42	5,054.48	29.07	22.17	175.39	349.19	-108.86	1,775.03	1,727.75	47.28	37.546		
5,400.00	5,177.56	5,152.12	5,149.15	29.64	22.59	175.38	350.68	-111.24	1,807.14	1,758.96	48.17	37.514		
5,500.00	5,272.72	5,246.83	5,243.81	30.21	23.00	175.38	352.17	-113.63	1,839.24	1,790.18	49.07	37.483		
5,600.00	5,367.89	5,341.54	5,338.47	30.79	23.41	175.38	353.66	-116.01	1,871.35	1,821.39	49.97	37.453		
5,700.00	5,463.06	5,436.24	5,433.14	31.36	23.82	175.38	355.15	-118.39	1,903.46	1,852.60	50.86	37.424		
5,800.00	5,558.23	5,530.95	5,527.80	31.94	24.24	175.38	356.64	-120.77	1,935.57	1,883.81	51.76	37.395		
5,900.00	5,653.40	5,625.65	5,622.46	32.51	24.65	175.38	358.13	-123.16	1,967.67	1,915.02	52.66	37.367		
6,000.00	5,748.57	5,720.36	5,717.13	33.09	25.06	175.38	359.62	-125.54	1,999.78	1,946.23	53.56	37.340		
6,100.00	5,843.74	5,815.06	5,811.79	33.67	25.48	175.37	361.10	-127.92	2,031.89	1,977.44	54.45	37.313		
6,200.00	5,938.91	5,909.77	5,906.45	34.24	25.89	175.37	362.59	-130.31	2,064.00	2,008.64	55.35	37.288		
6,300.00	6,034.08	6,004.47	6,001.12	34.82	26.30	175.37	364.08	-132.69	2,096.11	2,039.85	56.25	37.262		
6,400.00	6,129.25	6,100.82	6,095.78	35.39	26.72	175.37	365.57	-135.07	2,128.21	2,071.05	57.16	37.233		
6,500.00	6,224.42	6,206.12	6,190.45	35.97	27.18	175.37	367.06	-137.46	2,160.32	2,102.22	58.11	37.180		
6,600.00	6,319.59	6,288.59	6,285.11	36.54	27.54	175.37	368.55	-139.84	2,192.43	2,133.48	58.95	37.190		
6,700.00	6,414.76	6,383.29	6,379.77	37.12	27.96	175.37	370.04	-142.22	2,224.54	2,164.69	59.85	37.167		
6,800.00	6,509.91	6,477.99	6,474.43	37.70	28.37	167.29	371.53	-144.60	2,256.64	2,195.89	60.75	37.145		
6,900.00	6,603.99	6,571.92	6,568.32	38.26	28.78	141.73	373.00	-146.97	2,288.51	2,226.87	61.64	37.125		
7,000.00	6,694.76	6,666.35	6,662.65	38.78	29.19	124.98	374.48	-150.50	2,319.63	2,257.10	62.53	37.098		
7,100.00	6,779.96	6,768.87	6,763.64	39.24	29.65	114.29	375.96	-167.40	2,349.28	2,285.80	63.48	37.010		
7,200.00	6,857.50	6,878.13	6,866.79	39.65	30.14	107.13	377.33	-202.99	2,376.69	2,312.20	64.48	36.857		
7,300.00	6,925.48	6,995.32	6,968.92	40.02	30.68	102.18	378.52	-260.13	2,401.12	2,335.54	65.59	36.611		
7,400.00	6,982.21	7,121.30	7,065.03	40.33	31.32	98.73	379.43	-341.25	2,421.85	2,354.99	66.86	36.225		
7,500.00	7,026.31	7,256.16	7,148.08	40.63	32.14	96.38	379.95	-447.19	2,438.19	2,369.77	68.42	35.636		
7,600.00	7,056.68	7,398.73	7,209.59	40.91	33.28	94.89	379.95	-575.47	2,449.51	2,379.08	70.43	34.778		
7,700.00	7,072.58	7,546.30	7,241.60	41.25	34.80	94.11	379.36	-719.19	2,455.37	2,382.40	72.97	33.648		
7,800.00	7,074.86	7,668.56	7,244.83	41.69	36.31	93.97	378.48	-841.33	2,456.14	2,380.54	75.60	32.490		
7,900.00	7,074.54	7,768.56	7,244.51	42.34	37.72	93.97	377.71	-941.33	2,456.04	2,377.77	78.26	31.382		
8,000.00	7,074.21	7,868.56	7,244.20	43.27	39.29	93.97	376.94	-1,041.32	2,455.94	2,374.70	81.24	30.231		
8,100.00	7,073.89	7,968.56	7,243.89	44.47	40.99	93.97	376.18	-1,141.32	2,455.84	2,371.34	84.50	29.065		
8,200.00	7,073.57	8,068.56	7,243.58	45.91	42.82	93.97	375.41	-1,241.32	2,455.74	2,367.74	88.00	27.906		
8,300.00	7,073.24	8,168.56	7,243.27	47.53	44.76	93.97	374.64	-1,341.31	2,455.64	2,363.91	91.73	26.771		
8,400.00	7,072.92	8,268.56	7,242.96	49.31	46.79	93.97	373.87	-1,441.31	2,455.54	2,359.89	95.65	25.673		
8,500.00	7,072.59	8,368.56	7,242.64	51.20	48.90	93.97	373.11	-1,541.31	2,455.44	2,355.70	99.74	24.618		
8,600.00	7,072.27	8,468.56	7,242.33	53.19	51.09	93.97	372.34	-1,641.30	2,455.34	2,351.36	103.99	23.612		
8,700.00	7,071.94	8,568.56	7,242.02	55.27	53.34	93.97	371.57	-1,741.30	2,455.25	2,346.88	108.36	22.657		
8,800.00	7,071.62	8,668.56	7,241.71	57.43	55.64	93.97	370.80	-1,841.30	2,455.15	2,342.29	112.86	21.754		
8,900.00	7,071.29	8,768.56	7,241.40	59.64	58.00	93.97	370.04	-1,941.29	2,455.05	2,337.59	117.46	20.901		
9,000.00	7,070.97	8,868.56	7,241.08	61.92	60.40	93.97	369.27	-2,041.29	2,454.95	2,332.79	122.16	20.097		
9,100.00	7,070.64	8,968.56	7,240.77	64.24	62.84	93.97	368.50	-2,141.29	2,454.85	2,327.92	126.93	19.340		
9,200.00	7,070.32	9,068.56	7,240.46	66.61	65.31	93.97	367.73	-2,241.28	2,454.75	2,322.97	131.78	18.627		
9,300.00	7,069.99	9,168.56	7,240.15	69.01	67.81	93.98	366.97	-2,341.28	2,454.65	2,317.95	136.70	17.956		
9,400.00	7,069.67	9,268.56	7,239.84	71.45	70.34	93.98	366.20	-2,441.28	2,454.55	2,312.88	141.68	17.325		
9,500.00	7,069.34	9,368.56	7,239.52	73.92	72.89	93.98	365.43	-2,541.27	2,454.45	2,307.75	146.70	16.731		
9,600.00	7,069.02	9,468.56	7,239.21	76.42	75.47	93.98	364.66	-2,641.27	2,454.35	2,302.58	151.78	16.170		
9,700.00	7,068.69	9,568.56	7,238.90	78.95	78.06	93.98	363.90	-2,741.26	2,454.26	2,297.36	156.90	15.642		
9,800.00	7,068.37	9,668.56	7,238.59	81.49	80.67	93.98	363.13	-2,841.26	2,454.16	2,292.10	162.06	15.144		
9,900.00	7,068.04	9,768.56	7,238.28	84.06	83.30	93.98	362.36	-2,941.26	2,454.06	2,286.81	167.25	14.673		
10,000.00	7,067.72	9,868.56	7,237.96	86.65	85.95	93.98	361.59	-3,041.25	2,453.96	2,281.48	172.48	14.228		
10,100.00	7,067.39	9,968.56	7,237.65	89.25	88.60	93.98	360.82	-3,141.25	2,453.86	2,276.13	177.73	13.807		
10,200.00	7,067.07	10,068.56	7,237.34	91.87	91.27	93.98	360.06	-3,241.25	2,453.76	2,270.75	183.01	13.408		
10,300.00	7,066.74	10,168.56	7,237.03	94.50	93.95	93.98	359.29	-3,341.24	2,453.66	2,265.34	188.32	13.029		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,268.56	7,236.72	97.14	96.64	93.98	358.52	-3,441.24	2,453.56	2,259.92	193.65	12.670	
10,500.00	7,066.09	10,368.56	7,236.40	99.80	99.34	93.98	357.75	-3,541.24	2,453.46	2,254.47	199.00	12.329	
10,600.00	7,065.77	10,468.56	7,236.09	102.47	102.05	93.98	356.99	-3,641.23	2,453.37	2,249.00	204.37	12.005	
10,700.00	7,065.44	10,568.56	7,235.78	105.15	104.77	93.98	356.22	-3,741.23	2,453.27	2,243.51	209.75	11.696	
10,800.00	7,065.12	10,668.56	7,235.47	107.83	107.49	93.98	355.45	-3,841.23	2,453.17	2,238.01	215.16	11.402	
10,900.00	7,064.79	10,768.56	7,235.16	110.53	110.22	93.98	354.68	-3,941.22	2,453.07	2,232.50	220.57	11.121	
11,000.00	7,064.47	10,868.56	7,234.85	113.23	112.96	93.98	353.92	-4,041.22	2,452.97	2,226.96	226.01	10.854	
11,100.00	7,064.14	10,968.56	7,234.53	115.95	115.70	93.98	353.15	-4,141.22	2,452.87	2,221.42	231.45	10.598	
11,200.00	7,063.82	11,068.56	7,234.22	118.66	118.45	93.98	352.38	-4,241.21	2,452.77	2,215.86	236.91	10.353	
11,300.00	7,063.49	11,168.56	7,233.91	121.39	121.20	93.98	351.61	-4,341.21	2,452.67	2,210.30	242.38	10.119	
11,400.00	7,063.17	11,268.56	7,233.60	124.12	123.96	93.98	350.85	-4,441.21	2,452.57	2,204.72	247.85	9.895	
11,500.00	7,062.84	11,368.56	7,233.29	126.86	126.72	93.99	350.08	-4,541.20	2,452.47	2,199.13	253.34	9.680	
11,600.00	7,062.52	11,468.56	7,232.97	129.60	129.49	93.99	349.31	-4,641.20	2,452.38	2,193.53	258.84	9.474	
11,700.00	7,062.19	11,568.56	7,232.66	132.35	132.26	93.99	348.54	-4,741.20	2,452.28	2,187.93	264.35	9.277	
11,800.00	7,061.87	11,668.56	7,232.35	135.10	135.03	93.99	347.78	-4,841.19	2,452.18	2,182.31	269.86	9.087	
11,900.00	7,061.54	11,768.56	7,232.04	137.85	137.81	93.99	347.01	-4,941.19	2,452.08	2,176.69	275.39	8.904	
12,000.00	7,061.22	11,868.56	7,231.73	140.61	140.59	93.99	346.24	-5,041.18	2,451.98	2,171.06	280.92	8.729	
12,100.00	7,060.89	11,968.56	7,231.41	143.38	143.38	93.99	345.47	-5,141.18	2,451.88	2,165.43	286.45	8.559	
12,200.00	7,060.57	12,068.56	7,231.10	146.15	146.16	93.99	344.71	-5,241.18	2,451.78	2,159.79	292.00	8.397	
12,300.00	7,060.24	12,168.56	7,230.79	148.92	148.95	93.99	343.94	-5,341.17	2,451.68	2,154.14	297.54	8.240	
12,400.00	7,059.92	12,268.56	7,230.48	151.69	151.74	93.99	343.17	-5,441.17	2,451.58	2,148.48	303.10	8.088	
12,500.00	7,059.59	12,368.56	7,230.17	154.47	154.54	93.99	342.40	-5,541.17	2,451.48	2,142.82	308.66	7.942	
12,600.00	7,059.27	12,468.56	7,229.85	157.25	157.34	93.99	341.64	-5,641.16	2,451.39	2,137.16	314.23	7.801	
12,700.00	7,058.94	12,568.56	7,229.54	160.03	160.13	93.99	340.87	-5,741.16	2,451.29	2,131.49	319.80	7.665	
12,800.00	7,058.62	12,668.56	7,229.23	162.82	162.94	93.99	340.10	-5,841.16	2,451.19	2,125.82	325.37	7.534	
12,900.00	7,058.29	12,768.56	7,228.92	165.61	165.74	93.99	339.33	-5,941.15	2,451.09	2,120.14	330.95	7.406	
13,000.00	7,057.97	12,868.56	7,228.61	168.40	168.54	93.99	338.56	-6,041.15	2,450.99	2,114.46	336.53	7.283	
13,100.00	7,057.64	12,968.56	7,228.29	171.19	171.35	93.99	337.80	-6,141.15	2,450.89	2,108.77	342.12	7.164	
13,200.00	7,057.32	13,068.56	7,227.98	173.99	174.16	93.99	337.03	-6,241.14	2,450.79	2,103.08	347.71	7.048	
13,300.00	7,057.00	13,168.56	7,227.67	176.78	176.97	93.99	336.26	-6,341.14	2,450.69	2,097.39	353.31	6.936	
13,400.00	7,056.67	13,268.56	7,227.36	179.58	179.78	93.99	335.49	-6,441.14	2,450.59	2,091.69	358.90	6.828	
13,500.00	7,056.35	13,368.56	7,227.05	182.38	182.59	93.99	334.73	-6,541.13	2,450.50	2,085.99	364.51	6.723	
13,600.00	7,056.02	13,468.56	7,226.74	185.19	185.41	94.00	333.96	-6,641.13	2,450.40	2,080.29	370.11	6.621	
13,700.00	7,055.70	13,568.56	7,226.42	187.99	188.22	94.00	333.19	-6,741.13	2,450.30	2,074.58	375.72	6.522	
13,800.00	7,055.37	13,668.56	7,226.11	190.80	191.04	94.00	332.42	-6,841.12	2,450.20	2,068.87	381.33	6.425	
13,900.00	7,055.05	13,768.56	7,225.80	193.60	193.86	94.00	331.66	-6,941.12	2,450.10	2,063.16	386.94	6.332	
14,000.00	7,054.72	13,868.56	7,225.49	196.41	196.68	94.00	330.89	-7,041.12	2,450.00	2,057.44	392.56	6.241	
14,100.00	7,054.40	13,968.56	7,225.18	199.22	199.50	94.00	330.12	-7,141.11	2,449.90	2,051.73	398.17	6.153	
14,200.00	7,054.07	14,068.56	7,224.86	202.03	202.32	94.00	329.35	-7,241.11	2,449.80	2,046.01	403.79	6.067	
14,300.00	7,053.75	14,168.56	7,224.55	204.85	205.14	94.00	328.59	-7,341.10	2,449.70	2,040.29	409.42	5.983	
14,400.00	7,053.42	14,268.56	7,224.24	207.66	207.96	94.00	327.82	-7,441.10	2,449.60	2,034.56	415.04	5.902	
14,500.00	7,053.10	14,368.56	7,223.93	210.48	210.79	94.00	327.05	-7,541.10	2,449.51	2,028.84	420.67	5.823	
14,600.00	7,052.77	14,468.56	7,223.62	213.29	213.61	94.00	326.28	-7,641.09	2,449.41	2,023.11	426.30	5.746	
14,700.00	7,052.45	14,568.56	7,223.30	216.11	216.44	94.00	325.52	-7,741.09	2,449.31	2,017.38	431.93	5.671	
14,800.00	7,052.12	14,668.56	7,222.99	218.93	219.27	94.00	324.75	-7,841.09	2,449.21	2,011.65	437.56	5.597	
14,900.00	7,051.80	14,768.56	7,222.68	221.75	222.09	94.00	323.98	-7,941.08	2,449.11	2,005.91	443.20	5.526	
15,000.00	7,051.47	14,868.56	7,222.37	224.57	224.92	94.00	323.21	-8,041.08	2,449.01	2,000.18	448.83	5.456	
15,100.00	7,051.15	14,968.56	7,222.06	227.39	227.75	94.00	322.45	-8,141.08	2,448.91	1,994.44	454.47	5.388	
15,126.74	7,051.06	14,995.30	7,221.97	228.15	228.51	94.00	322.24	-8,167.82	2,448.89	1,992.91	455.98	5.371	
15,145.13	7,051.00	14,987.41	7,222.00	228.67	228.28	94.00	322.30	-8,159.93	2,449.01	1,992.83	456.18	5.369 SF	





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.27	59.73	0.28	59.73					
100.00	100.00	100.00	100.00	3.28	3.28	0.27	59.73	0.28	59.73	53.17	6.57	9.093		
200.00	200.00	200.00	200.00	3.34	3.34	0.27	59.73	0.28	59.73	53.06	6.67	8.950		
300.00	299.98	302.12	302.10	3.44	3.44	175.82	57.92	0.09	59.70	52.81	6.89	8.661		
400.00	399.84	404.23	404.06	3.59	3.60	175.66	52.50	-0.49	59.61	52.38	7.22	8.251		
500.00	499.45	506.34	505.76	3.79	3.81	175.39	43.46	-1.46	59.45	51.79	7.66	7.761		
600.00	598.70	608.44	607.06	4.03	4.06	175.01	30.83	-2.80	59.23	51.04	8.18	7.238		
700.00	697.47	710.53	707.83	4.31	4.35	174.51	14.62	-4.53	58.95	50.17	8.78	6.715		
800.00	795.62	812.61	807.95	4.64	4.68	173.90	-5.15	-6.64	58.61	49.18	9.43	6.213		
847.17	841.68	860.53	854.69	4.81	4.85	173.58	-15.63	-7.76	58.46	48.70	9.75	5.995 CC, ES		
900.00	893.06	913.35	906.16	5.00	5.05	173.28	-27.44	-9.02	58.94	48.84	10.10	5.833		
1,000.00	989.64	1,013.28	1,003.54	5.40	5.44	173.04	-49.78	-11.40	62.51	51.70	10.81	5.783		
1,100.00	1,085.27	1,113.03	1,100.73	5.83	5.85	173.18	-72.08	-13.78	69.53	57.97	11.56	6.014		
1,200.00	1,180.44	1,212.66	1,197.81	6.29	6.27	173.44	-94.35	-16.15	78.08	65.74	12.34	6.326		
1,300.00	1,275.61	1,312.29	1,294.90	6.76	6.71	173.65	-116.62	-18.53	86.64	73.48	13.15	6.587		
1,400.00	1,370.78	1,411.93	1,391.98	7.26	7.16	173.82	-138.89	-20.90	95.19	81.21	13.99	6.807		
1,500.00	1,465.95	1,511.56	1,489.06	7.76	7.62	173.96	-161.17	-23.28	103.75	88.91	14.84	6.992		
1,600.00	1,561.12	1,611.19	1,586.15	8.27	8.08	174.08	-183.44	-25.65	112.30	96.59	15.71	7.150		
1,700.00	1,656.29	1,710.83	1,683.23	8.80	8.55	174.18	-205.71	-28.03	120.86	104.27	16.59	7.285		
1,800.00	1,751.46	1,810.46	1,780.31	9.32	9.03	174.27	-227.98	-30.40	129.41	111.93	17.48	7.402		
1,900.00	1,846.63	1,910.09	1,877.39	9.86	9.51	174.35	-250.26	-32.78	137.97	119.58	18.39	7.503		
2,000.00	1,941.80	2,009.73	1,974.48	10.40	10.00	174.42	-272.53	-35.15	146.53	127.23	19.30	7.592		
2,100.00	2,036.96	2,109.36	2,071.56	10.94	10.48	174.48	-294.80	-37.53	155.08	134.86	20.22	7.669		
2,200.00	2,132.13	2,208.99	2,168.64	11.49	10.97	174.53	-317.08	-39.90	163.64	142.49	21.15	7.738		
2,300.00	2,227.30	2,308.62	2,265.72	12.04	11.47	174.58	-339.35	-42.28	172.20	150.12	22.08	7.799		
2,400.00	2,322.47	2,408.26	2,362.81	12.59	11.96	174.63	-361.62	-44.66	180.76	157.74	23.02	7.853		
2,500.00	2,417.64	2,507.89	2,459.89	13.15	12.46	174.67	-383.89	-47.03	189.31	165.36	23.96	7.902		
2,600.00	2,512.81	2,607.52	2,556.97	13.70	12.96	174.71	-406.17	-49.41	197.87	172.97	24.90	7.945		
2,700.00	2,607.98	2,707.16	2,654.05	14.26	13.46	174.74	-428.44	-51.78	206.43	180.58	25.85	7.985		
2,800.00	2,703.15	2,806.79	2,751.14	14.82	13.96	174.77	-450.71	-54.16	214.99	188.18	26.80	8.021		
2,900.00	2,798.32	2,906.42	2,848.22	15.38	14.46	174.80	-472.98	-56.53	223.55	195.79	27.76	8.053		
3,000.00	2,893.49	3,006.06	2,945.30	15.95	14.97	174.83	-495.26	-58.91	232.10	203.39	28.72	8.083		
3,100.00	2,988.66	3,105.69	3,042.38	16.51	15.47	174.85	-517.53	-61.28	240.66	210.99	29.68	8.110		
3,200.00	3,083.83	3,205.32	3,139.47	17.07	15.98	174.88	-539.80	-63.66	249.22	218.58	30.64	8.135		
3,300.00	3,179.00	3,304.96	3,236.55	17.64	16.48	174.90	-562.08	-66.03	257.78	226.18	31.60	8.157		
3,400.00	3,274.17	3,404.59	3,333.63	18.21	16.99	174.92	-584.35	-68.41	266.34	233.77	32.57	8.178		
3,500.00	3,369.34	3,504.22	3,430.71	18.77	17.50	174.94	-606.62	-70.78	274.89	241.36	33.53	8.198		
3,600.00	3,464.51	3,603.85	3,527.80	19.34	18.01	174.96	-628.89	-73.16	283.45	248.95	34.50	8.216		
3,700.00	3,559.68	3,703.49	3,624.88	19.91	18.52	174.97	-651.17	-75.53	292.01	256.54	35.47	8.233		
3,800.00	3,654.84	3,803.12	3,721.96	20.48	19.02	174.99	-673.44	-77.91	300.57	264.13	36.44	8.248		
3,900.00	3,750.01	3,902.75	3,819.05	21.05	19.53	175.00	-695.71	-80.28	309.13	271.72	37.41	8.263		
4,000.00	3,845.18	4,002.39	3,916.13	21.62	20.05	175.02	-717.98	-82.66	317.69	279.30	38.38	8.277		
4,100.00	3,940.35	4,102.02	4,013.21	22.19	20.56	175.03	-740.26	-85.03	326.24	286.89	39.36	8.289		
4,200.00	4,035.52	4,201.65	4,110.29	22.76	21.07	175.04	-762.53	-87.41	334.80	294.47	40.33	8.301		
4,300.00	4,130.69	4,301.29	4,207.38	23.33	21.58	175.06	-784.80	-89.78	343.36	302.06	41.31	8.313		
4,400.00	4,225.86	4,400.92	4,304.46	23.91	22.09	175.07	-807.08	-92.16	351.92	309.64	42.28	8.323		
4,500.00	4,321.03	4,500.55	4,401.54	24.48	22.60	175.08	-829.35	-94.53	360.48	317.22	43.26	8.333		
4,600.00	4,416.20	4,600.19	4,498.62	25.05	23.11	175.09	-851.62	-96.91	369.04	324.80	44.24	8.343		
4,700.00	4,511.37	4,700.18	4,595.71	25.62	23.63	175.10	-873.89	-99.28	377.59	332.38	45.22	8.351		
4,800.00	4,606.54	4,800.55	4,692.79	26.20	24.15	175.11	-896.17	-101.66	386.15	339.96	46.20	8.359		
4,900.00	4,701.71	4,900.92	4,789.87	26.77	24.66	175.12	-918.44	-104.03	394.71	347.53	47.18	8.366		
5,000.00	4,796.88	4,998.72	4,886.95	27.34	25.17	175.13	-940.71	-106.41	403.27	355.12	48.15	8.375		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,892.05	5,098.35	4,984.04	27.92	25.68	175.14	-962.98	-108.78	411.83	362.70	49.13	8.382	
5,200.00	4,987.22	5,197.98	5,081.12	28.49	26.19	175.14	-985.26	-111.16	420.39	370.28	50.11	8.389	
5,300.00	5,082.39	5,302.38	5,178.20	29.07	26.73	175.15	-1,007.53	-113.53	428.95	377.83	51.11	8.392	
5,400.00	5,177.56	5,397.25	5,275.28	29.64	27.22	175.16	-1,029.80	-115.91	437.50	385.43	52.07	8.402	
5,500.00	5,272.72	5,503.12	5,372.37	30.21	27.77	175.17	-1,052.08	-118.28	446.06	392.98	53.08	8.403	
5,600.00	5,367.89	5,603.48	5,469.45	30.79	28.29	175.17	-1,074.35	-120.66	454.62	400.55	54.07	8.408	
5,700.00	5,463.06	5,696.15	5,566.53	31.36	28.77	175.18	-1,096.62	-123.04	463.18	408.16	55.02	8.419	
5,800.00	5,558.23	5,804.22	5,663.61	31.94	29.32	175.19	-1,118.89	-125.41	471.74	415.70	56.04	8.418	
5,900.00	5,653.40	5,904.58	5,760.70	32.51	29.84	175.19	-1,141.17	-127.79	480.30	423.27	57.03	8.422	
6,000.00	5,748.57	6,004.95	5,857.78	33.09	30.36	175.20	-1,163.44	-130.16	488.86	430.84	58.01	8.427	
6,100.00	5,843.74	6,105.32	5,954.86	33.67	30.88	175.20	-1,185.71	-132.54	497.41	438.41	59.00	8.431	
6,200.00	5,938.91	6,205.69	6,051.95	34.24	31.40	175.21	-1,207.98	-134.91	505.97	445.98	59.99	8.435	
6,300.00	6,034.08	6,306.05	6,149.03	34.82	31.92	175.22	-1,230.26	-137.29	514.53	453.56	60.98	8.438	
6,400.00	6,129.25	6,406.42	6,246.11	35.39	32.44	175.22	-1,252.53	-139.66	523.09	461.13	61.96	8.442	
6,500.00	6,224.42	6,506.79	6,343.19	35.97	32.96	175.23	-1,274.80	-142.04	531.65	468.70	62.95	8.445	
6,600.00	6,319.59	6,592.85	6,440.28	36.54	33.40	175.23	-1,297.08	-144.41	540.21	476.34	63.87	8.458	
6,700.00	6,414.76	6,691.95	6,536.53	37.12	33.91	174.73	-1,319.19	-151.62	548.80	483.93	64.86	8.461	
6,800.00	6,509.91	6,787.50	6,627.25	37.70	34.38	165.34	-1,340.13	-172.68	557.88	492.02	65.86	8.471	
6,900.00	6,603.99	6,879.39	6,710.65	38.26	34.80	139.55	-1,359.46	-205.86	567.77	500.97	66.81	8.499	
7,000.00	6,694.76	6,968.76	6,786.46	38.78	35.17	122.36	-1,377.13	-249.61	578.01	510.37	67.64	8.545	
7,100.00	6,779.96	7,056.00	6,853.99	39.24	35.50	111.19	-1,392.95	-302.41	588.17	519.82	68.35	8.605	
7,200.00	6,857.50	7,141.49	6,912.72	39.65	35.80	103.61	-1,406.81	-362.88	597.82	528.87	68.95	8.670	
7,300.00	6,925.48	7,225.56	6,962.26	40.02	36.07	98.27	-1,418.60	-429.70	606.57	537.05	69.52	8.725	
7,400.00	6,982.21	7,308.51	7,002.30	40.33	36.33	94.47	-1,428.25	-501.62	614.07	543.93	70.15	8.754	
7,500.00	7,026.31	7,390.60	7,032.62	40.63	36.62	91.82	-1,435.70	-577.48	620.05	549.09	70.96	8.738	
7,600.00	7,056.68	7,472.08	7,053.07	40.91	36.98	90.11	-1,440.90	-656.13	624.27	552.22	72.05	8.664	
7,700.00	7,072.58	7,553.19	7,063.53	41.25	37.47	89.23	-1,443.82	-736.46	626.60	553.12	73.48	8.527	
7,800.00	7,074.86	7,642.50	7,064.90	41.69	38.23	89.09	-1,444.72	-825.72	627.07	551.58	75.48	8.308	
7,900.00	7,074.54	7,742.50	7,064.67	42.34	39.33	89.10	-1,445.32	-925.72	627.13	549.07	78.06	8.034	
8,000.00	7,074.21	7,842.50	7,064.44	43.27	40.67	89.11	-1,445.92	-1,025.72	627.20	546.24	80.96	7.747	
8,100.00	7,073.89	7,942.50	7,064.21	44.47	42.20	89.12	-1,446.51	-1,125.72	627.27	543.12	84.15	7.454	
8,200.00	7,073.57	8,042.50	7,063.98	45.91	43.88	89.12	-1,447.11	-1,225.72	627.33	539.74	87.60	7.162	
8,300.00	7,073.24	8,142.50	7,063.75	47.53	45.69	89.13	-1,447.71	-1,325.71	627.40	536.13	91.27	6.874	
8,400.00	7,072.92	8,242.50	7,063.52	49.31	47.62	89.14	-1,448.31	-1,425.71	627.47	532.32	95.15	6.594	
8,500.00	7,072.59	8,342.50	7,063.29	51.20	49.64	89.15	-1,448.91	-1,525.71	627.54	528.33	99.21	6.326	
8,600.00	7,072.27	8,442.50	7,063.06	53.19	51.74	89.16	-1,449.51	-1,625.71	627.60	524.18	103.42	6.068	
8,700.00	7,071.94	8,542.50	7,062.83	55.27	53.91	89.17	-1,450.11	-1,725.71	627.67	519.90	107.77	5.824	
8,800.00	7,071.62	8,642.50	7,062.60	57.43	56.15	89.18	-1,450.71	-1,825.70	627.74	515.49	112.25	5.592	
8,900.00	7,071.29	8,742.50	7,062.37	59.64	58.44	89.19	-1,451.31	-1,925.70	627.80	510.97	116.83	5.374	
9,000.00	7,070.97	8,842.50	7,062.14	61.92	60.78	89.19	-1,451.90	-2,025.70	627.87	506.36	121.51	5.167	
9,100.00	7,070.64	8,942.50	7,061.91	64.24	63.17	89.20	-1,452.50	-2,125.70	627.94	501.66	126.28	4.973	
9,200.00	7,070.32	9,042.50	7,061.68	66.61	65.59	89.21	-1,453.10	-2,225.69	628.01	496.89	131.12	4.790	
9,300.00	7,069.99	9,142.50	7,061.45	69.01	68.05	89.22	-1,453.70	-2,325.69	628.07	492.05	136.03	4.617	
9,400.00	7,069.67	9,242.50	7,061.22	71.45	70.54	89.23	-1,454.30	-2,425.69	628.14	487.14	141.00	4.455	
9,500.00	7,069.34	9,342.50	7,060.99	73.92	73.05	89.24	-1,454.90	-2,525.69	628.21	482.18	146.02	4.302	
9,600.00	7,069.02	9,442.50	7,060.76	76.42	75.59	89.25	-1,455.50	-2,625.69	628.28	477.18	151.10	4.158	
9,700.00	7,068.69	9,542.50	7,060.53	78.95	78.15	89.26	-1,456.10	-2,725.68	628.34	472.12	156.22	4.022	
9,800.00	7,068.37	9,642.50	7,060.30	81.49	80.74	89.26	-1,456.69	-2,825.68	628.41	467.03	161.38	3.894	
9,900.00	7,068.04	9,742.50	7,060.06	84.06	83.34	89.27	-1,457.29	-2,925.68	628.48	461.90	166.57	3.773	
10,000.00	7,067.72	9,842.50	7,059.83	86.65	85.96	89.28	-1,457.89	-3,025.68	628.55	456.74	171.80	3.659	
10,100.00	7,067.39	9,942.50	7,059.60	89.25	88.59	89.29	-1,458.49	-3,125.68	628.61	451.55	177.06	3.550	
10,200.00	7,067.07	10,042.50	7,059.37	91.87	91.23	89.30	-1,459.09	-3,225.67	628.68	446.33	182.35	3.448	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,142.50	7,059.14	94.50	93.89	89.31	-1,459.69	-3,325.67	628.75	441.08	187.66	3.350		
10,400.00	7,066.42	10,242.50	7,058.91	97.14	96.56	89.32	-1,460.29	-3,425.67	628.82	435.82	193.00	3.258		
10,500.00	7,066.09	10,342.50	7,058.68	99.80	99.24	89.32	-1,460.89	-3,525.67	628.88	430.53	198.36	3.170		
10,600.00	7,065.77	10,442.50	7,058.45	102.47	101.93	89.33	-1,461.49	-3,625.67	628.95	425.22	203.73	3.087		
10,700.00	7,065.44	10,542.50	7,058.22	105.15	104.63	89.34	-1,462.08	-3,725.66	629.02	419.89	209.13	3.008		
10,800.00	7,065.12	10,642.50	7,057.99	107.83	107.34	89.35	-1,462.68	-3,825.66	629.09	414.54	214.54	2.932		
10,900.00	7,064.79	10,742.49	7,057.76	110.53	110.06	89.36	-1,463.28	-3,925.66	629.15	409.18	219.97	2.860		
11,000.00	7,064.47	10,842.49	7,057.53	113.23	112.78	89.37	-1,463.88	-4,025.66	629.22	403.81	225.41	2.791		
11,100.00	7,064.14	10,942.49	7,057.30	115.95	115.51	89.38	-1,464.48	-4,125.65	629.29	398.42	230.87	2.726		
11,200.00	7,063.82	11,042.49	7,057.07	118.66	118.24	89.39	-1,465.08	-4,225.65	629.36	393.02	236.33	2.663		
11,300.00	7,063.49	11,142.49	7,056.84	121.39	120.98	89.39	-1,465.68	-4,325.65	629.42	387.61	241.81	2.603		
11,400.00	7,063.17	11,242.49	7,056.61	124.12	123.73	89.40	-1,466.28	-4,425.65	629.49	382.19	247.30	2.545		
11,500.00	7,062.84	11,342.49	7,056.38	126.86	126.48	89.41	-1,466.88	-4,525.65	629.56	376.75	252.80	2.490		
11,600.00	7,062.52	11,442.49	7,056.15	129.60	129.24	89.42	-1,467.47	-4,625.64	629.63	371.31	258.31	2.437		
11,700.00	7,062.19	11,542.49	7,055.92	132.35	132.00	89.43	-1,468.07	-4,725.64	629.69	365.86	263.83	2.387		
11,800.00	7,061.87	11,642.49	7,055.69	135.10	134.76	89.44	-1,468.67	-4,825.64	629.76	360.40	269.36	2.338		
11,900.00	7,061.54	11,742.49	7,055.46	137.85	137.53	89.45	-1,469.27	-4,925.64	629.83	354.93	274.90	2.291		
12,000.00	7,061.22	11,842.49	7,055.23	140.61	140.30	89.45	-1,469.87	-5,025.64	629.90	349.46	280.44	2.246		
12,100.00	7,060.89	11,942.49	7,055.00	143.38	143.08	89.46	-1,470.47	-5,125.63	629.97	343.98	285.99	2.203		
12,200.00	7,060.57	12,042.49	7,054.77	146.15	145.86	89.47	-1,471.07	-5,225.63	630.03	338.49	291.54	2.161		
12,300.00	7,060.24	12,142.49	7,054.54	148.92	148.64	89.48	-1,471.67	-5,325.63	630.10	333.00	297.11	2.121		
12,400.00	7,059.92	12,242.49	7,054.31	151.69	151.42	89.49	-1,472.26	-5,425.63	630.17	327.50	302.67	2.082		
12,500.00	7,059.59	12,342.49	7,054.07	154.47	154.21	89.50	-1,472.86	-5,525.62	630.24	321.99	308.25	2.045		
12,600.00	7,059.27	12,442.49	7,053.84	157.25	157.00	89.51	-1,473.46	-5,625.62	630.30	316.48	313.83	2.008		
12,700.00	7,058.94	12,542.49	7,053.61	160.03	159.79	89.52	-1,474.06	-5,725.62	630.37	310.96	319.41	1.974		
12,800.00	7,058.62	12,642.49	7,053.38	162.82	162.59	89.52	-1,474.66	-5,825.62	630.44	305.44	325.00	1.940		
12,900.00	7,058.29	12,742.49	7,053.15	165.61	165.38	89.53	-1,475.26	-5,925.62	630.51	299.92	330.59	1.907		
13,000.00	7,057.97	12,842.49	7,052.92	168.40	168.18	89.54	-1,475.86	-6,025.61	630.58	294.39	336.19	1.876		
13,100.00	7,057.64	12,942.49	7,052.69	171.19	170.98	89.55	-1,476.46	-6,125.61	630.64	288.85	341.79	1.845		
13,200.00	7,057.32	13,042.49	7,052.46	173.99	173.78	89.56	-1,477.06	-6,225.61	630.71	283.32	347.39	1.816		
13,300.00	7,057.00	13,142.49	7,052.23	176.78	176.59	89.57	-1,477.65	-6,325.61	630.78	277.78	353.00	1.787		
13,400.00	7,056.67	13,242.49	7,052.00	179.58	179.40	89.58	-1,478.25	-6,425.61	630.85	272.23	358.62	1.759		
13,500.00	7,056.35	13,342.49	7,051.77	182.38	182.20	89.58	-1,478.85	-6,525.60	630.92	266.68	364.23	1.732		
13,600.00	7,056.02	13,442.49	7,051.54	185.19	185.01	89.59	-1,479.45	-6,625.60	630.98	261.13	369.85	1.706		
13,700.00	7,055.70	13,542.49	7,051.31	187.99	187.82	89.60	-1,480.05	-6,725.60	631.05	255.58	375.47	1.681		
13,800.00	7,055.37	13,642.49	7,051.08	190.80	190.64	89.61	-1,480.65	-6,825.60	631.12	250.02	381.10	1.656		
13,900.00	7,055.05	13,742.49	7,050.85	193.60	193.45	89.62	-1,481.25	-6,925.60	631.19	244.46	386.72	1.632		
14,000.00	7,054.72	13,842.49	7,050.62	196.41	196.27	89.63	-1,481.85	-7,025.59	631.26	238.90	392.35	1.609		
14,100.00	7,054.40	13,942.49	7,050.39	199.22	199.08	89.64	-1,482.45	-7,125.59	631.32	233.34	397.99	1.586		
14,200.00	7,054.07	14,042.49	7,050.16	202.03	201.90	89.64	-1,483.04	-7,225.59	631.39	227.77	403.62	1.564		
14,300.00	7,053.75	14,142.49	7,049.93	204.85	204.72	89.65	-1,483.64	-7,325.59	631.46	222.20	409.26	1.543		
14,400.00	7,053.42	14,242.49	7,049.70	207.66	207.54	89.66	-1,484.24	-7,425.58	631.53	216.63	414.90	1.522		
14,500.00	7,053.10	14,342.49	7,049.47	210.48	210.36	89.67	-1,484.84	-7,525.58	631.60	211.06	420.54	1.502		
14,600.00	7,052.77	14,442.49	7,049.24	213.29	213.18	89.68	-1,485.44	-7,625.58	631.66	205.48	426.18	1.482 Level 3		
14,700.00	7,052.45	14,542.49	7,049.01	216.11	216.00	89.69	-1,486.04	-7,725.58	631.73	199.90	431.83	1.463 Level 3		
14,800.00	7,052.12	14,642.49	7,048.78	218.93	218.83	89.70	-1,486.64	-7,825.58	631.80	194.32	437.48	1.444 Level 3		
14,900.00	7,051.80	14,742.49	7,048.55	221.75	221.65	89.71	-1,487.24	-7,925.57	631.87	188.74	443.13	1.426 Level 3		
15,000.00	7,051.47	14,842.49	7,048.32	224.57	224.48	89.71	-1,487.83	-8,025.57	631.94	183.16	448.78	1.408 Level 3		
15,100.00	7,051.15	14,942.49	7,048.08	227.39	227.30	89.72	-1,488.43	-8,125.57	632.00	177.57	454.43	1.391 Level 3		
15,200.00	7,051.15	14,942.49	7,048.08	227.39	227.30	89.72	-1,488.43	-8,125.57	632.00	177.57	454.43	1.391 Level 3		
15,145.13	7,051.00	14,979.18	7,048.00	228.67	228.34	89.73	-1,488.65	-8,162.26	632.09	175.56	456.53	1.385 Level 3, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.20	-40.09	-0.56	40.09					
100.00	100.00	101.00	100.00	3.28	3.28	-179.20	-40.09	-0.56	40.09	33.52	6.57	6.102		
200.00	200.00	199.00	200.00	3.34	3.34	-179.20	-40.09	-0.56	40.09	33.42	6.67	6.008		
300.00	299.98	297.64	298.62	3.44	3.44	-3.63	-41.75	-0.66	40.03	33.15	6.89	5.813		
400.00	399.84	396.26	397.11	3.59	3.59	-3.73	-46.79	-0.98	39.93	32.72	7.21	5.540		
500.00	499.45	494.89	495.37	3.79	3.78	-3.91	-55.22	-1.52	39.78	32.15	7.63	5.214		
600.00	598.70	593.53	593.29	4.03	4.02	-4.15	-67.02	-2.27	39.59	31.45	8.14	4.865		
700.00	697.47	692.17	690.75	4.31	4.29	-4.47	-82.17	-3.23	39.36	30.64	8.72	4.514		
800.00	795.62	790.82	787.64	4.64	4.61	-4.86	-100.67	-4.41	39.08	29.72	9.36	4.177		
900.00	893.06	889.48	883.85	5.00	4.96	-5.32	-122.49	-5.79	38.76	28.72	10.04	3.860		
1,000.00	989.64	988.16	979.25	5.40	5.35	-5.87	-147.61	-7.39	38.40	27.63	10.77	3.565		
1,100.00	1,085.27	1,086.85	1,073.75	5.83	5.77	-6.49	-175.99	-9.19	38.01	26.48	11.54	3.295		
1,106.06	1,091.03	1,092.82	1,079.44	5.85	5.80	-6.53	-177.81	-9.31	38.01	26.42	11.58	3.281 CC		
1,200.00	1,180.44	1,185.51	1,167.19	6.29	6.23	-6.85	-207.59	-11.20	39.52	27.19	12.33	3.205		
1,300.00	1,275.61	1,284.77	1,260.21	6.76	6.71	-6.76	-242.15	-13.40	43.96	30.81	13.15	3.344		
1,400.00	1,370.78	1,384.65	1,353.69	7.26	7.22	-6.63	-277.26	-15.63	48.76	34.77	13.99	3.486		
1,500.00	1,465.95	1,484.54	1,447.17	7.76	7.75	-6.53	-312.38	-17.86	53.57	38.71	14.86	3.605		
1,600.00	1,561.12	1,584.42	1,540.66	8.27	8.29	-6.45	-347.49	-20.09	58.38	42.63	15.75	3.706		
1,700.00	1,656.29	1,684.31	1,634.14	8.80	8.84	-6.38	-382.61	-22.33	63.19	46.52	16.66	3.792		
1,800.00	1,751.46	1,784.19	1,727.62	9.32	9.40	-6.32	-417.72	-24.56	67.99	50.40	17.59	3.866		
1,900.00	1,846.63	1,884.08	1,821.10	9.86	9.96	-6.26	-452.84	-26.79	72.80	54.27	18.53	3.929		
2,000.00	1,941.80	1,983.96	1,914.58	10.40	10.53	-6.22	-487.95	-29.02	77.61	58.13	19.48	3.985		
2,100.00	2,036.96	2,083.84	2,008.06	10.94	11.11	-6.18	-523.07	-31.25	82.42	61.98	20.44	4.033		
2,200.00	2,132.13	2,183.73	2,101.55	11.49	11.69	-6.14	-558.18	-33.49	87.22	65.82	21.40	4.075		
2,300.00	2,227.30	2,283.61	2,195.03	12.04	12.27	-6.11	-593.30	-35.72	92.03	69.65	22.38	4.112		
2,400.00	2,322.47	2,383.50	2,288.51	12.59	12.86	-6.08	-628.41	-37.95	96.84	73.48	23.36	4.145		
2,500.00	2,417.64	2,483.38	2,381.99	13.15	13.44	-6.05	-663.53	-40.18	101.65	77.30	24.35	4.175		
2,600.00	2,512.81	2,583.27	2,475.47	13.70	14.03	-6.03	-698.64	-42.41	106.45	81.11	25.34	4.201		
2,700.00	2,607.98	2,683.15	2,568.95	14.26	14.63	-6.00	-733.76	-44.64	111.26	84.92	26.34	4.224		
2,800.00	2,703.15	2,783.03	2,662.44	14.82	15.22	-5.98	-768.88	-46.88	116.07	88.73	27.34	4.246		
2,900.00	2,798.32	2,882.92	2,755.92	15.38	15.82	-5.96	-803.99	-49.11	120.88	92.54	28.34	4.265		
3,000.00	2,893.49	2,982.80	2,849.40	15.95	16.42	-5.95	-839.11	-51.34	125.68	96.34	29.35	4.282		
3,100.00	2,988.66	3,082.69	2,942.88	16.51	17.02	-5.93	-874.22	-53.57	130.49	100.13	30.36	4.298		
3,200.00	3,083.83	3,182.57	3,036.36	17.07	17.62	-5.92	-909.34	-55.80	135.30	103.93	31.37	4.313		
3,300.00	3,179.00	3,282.46	3,129.84	17.64	18.22	-5.90	-944.45	-58.04	140.11	107.72	32.39	4.326		
3,400.00	3,274.17	3,382.34	3,223.33	18.21	18.82	-5.89	-979.57	-60.27	144.92	111.51	33.40	4.339		
3,500.00	3,369.34	3,482.23	3,316.81	18.77	19.42	-5.88	-1,014.68	-62.50	149.72	115.30	34.42	4.350		
3,600.00	3,464.51	3,582.11	3,410.29	19.34	20.02	-5.87	-1,049.80	-64.73	154.53	119.09	35.44	4.360		
3,700.00	3,559.68	3,681.99	3,503.77	19.91	20.63	-5.85	-1,084.91	-66.96	159.34	122.88	36.46	4.370		
3,800.00	3,654.84	3,781.88	3,597.25	20.48	21.23	-5.84	-1,120.03	-69.19	164.15	126.66	37.49	4.379		
3,900.00	3,750.01	3,881.76	3,690.73	21.05	21.84	-5.83	-1,155.14	-71.43	168.95	130.44	38.51	4.387		
4,000.00	3,845.18	3,981.65	3,784.22	21.62	22.45	-5.83	-1,190.26	-73.66	173.76	134.23	39.54	4.395		
4,100.00	3,940.35	4,081.53	3,877.70	22.19	23.05	-5.82	-1,225.37	-75.89	178.57	138.01	40.56	4.402		
4,200.00	4,035.52	4,181.42	3,971.18	22.76	23.66	-5.81	-1,260.49	-78.12	183.38	141.79	41.59	4.409		
4,300.00	4,130.69	4,281.30	4,064.66	23.33	24.27	-5.80	-1,295.60	-80.35	188.19	145.56	42.62	4.415		
4,400.00	4,225.86	4,381.18	4,158.14	23.91	24.88	-5.79	-1,330.72	-82.59	192.99	149.34	43.65	4.421		
4,500.00	4,321.03	4,481.07	4,251.62	24.48	25.48	-5.79	-1,365.83	-84.82	197.80	153.12	44.68	4.427		
4,600.00	4,416.20	4,580.95	4,345.11	25.05	26.09	-5.78	-1,400.95	-87.05	202.61	156.90	45.71	4.432		
4,700.00	4,511.37	4,680.84	4,438.59	25.62	26.70	-5.77	-1,436.06	-89.28	207.42	160.67	46.75	4.437		
4,800.00	4,606.54	4,780.72	4,532.07	26.20	27.31	-5.77	-1,471.18	-91.51	212.23	164.45	47.78	4.442		
4,900.00	4,701.71	4,880.61	4,625.55	26.77	27.92	-5.76	-1,506.29	-93.75	217.03	168.22	48.81	4.446		
5,000.00	4,796.88	4,980.49	4,719.03	27.34	28.53	-5.76	-1,541.41	-95.98	221.84	171.99	49.85	4.450		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,080.37	4,812.51	27.92	29.14	-5.75	-1,576.53	-98.21	226.65	175.77	50.88	4.454		
5,200.00	4,987.22	5,180.26	4,906.00	28.49	29.75	-5.75	-1,611.64	-100.44	231.46	179.54	51.92	4.458		
5,300.00	5,082.39	5,280.14	4,999.48	29.07	30.36	-5.74	-1,646.76	-102.67	236.26	183.31	52.96	4.462		
5,400.00	5,177.56	5,380.03	5,092.96	29.64	30.97	-5.74	-1,681.87	-104.90	241.07	187.08	53.99	4.465		
5,500.00	5,272.72	5,479.91	5,186.44	30.21	31.58	-5.73	-1,716.99	-107.14	245.88	190.85	55.03	4.468		
5,600.00	5,367.89	5,579.80	5,279.92	30.79	32.19	-5.73	-1,752.10	-109.37	250.69	194.62	56.07	4.471		
5,700.00	5,463.06	5,679.68	5,373.40	31.36	32.80	-5.73	-1,787.22	-111.60	255.50	198.39	57.10	4.474		
5,800.00	5,558.23	5,779.57	5,466.89	31.94	33.42	-5.72	-1,822.33	-113.83	260.30	202.16	58.14	4.477		
5,900.00	5,653.40	5,879.45	5,560.37	32.51	34.03	-5.72	-1,857.45	-116.06	265.11	205.93	59.18	4.480		
6,000.00	5,748.57	5,979.33	5,653.85	33.09	34.64	-5.71	-1,892.56	-118.30	269.92	209.70	60.22	4.482		
6,100.00	5,843.74	6,079.22	5,747.33	33.67	35.25	-5.71	-1,927.68	-120.53	274.73	213.47	61.26	4.485		
6,200.00	5,938.91	6,179.10	5,840.81	34.24	35.86	-5.71	-1,962.79	-122.76	279.54	217.24	62.30	4.487		
6,300.00	6,034.08	6,278.99	5,934.29	34.82	36.47	-5.70	-1,997.91	-124.99	284.34	221.00	63.34	4.489		
6,400.00	6,129.25	6,378.87	6,027.78	35.39	37.09	-5.70	-2,033.02	-127.22	289.15	224.77	64.38	4.491		
6,500.00	6,224.42	6,478.76	6,121.26	35.97	37.70	-5.70	-2,068.14	-129.45	293.96	228.54	65.42	4.493		
6,600.00	6,319.59	6,578.64	6,214.74	36.54	38.31	-5.69	-2,103.25	-131.69	298.77	232.31	66.46	4.495		
6,700.00	6,414.76	6,678.52	6,308.22	37.12	38.92	-5.69	-2,138.37	-133.92	303.58	236.07	67.50	4.497		
6,800.00	6,509.91	6,778.40	6,401.70	37.70	39.54	-12.95	-2,173.48	-136.15	308.39	239.85	68.55	4.499		
6,900.00	6,603.99	6,877.45	6,494.40	38.26	40.14	-37.50	-2,208.30	-138.36	313.64	243.97	69.67	4.502		
7,000.00	6,694.76	6,973.40	6,584.19	38.78	40.73	-55.99	-2,242.03	-140.51	321.02	250.03	70.98	4.522		
7,100.00	6,779.96	7,064.55	6,669.50	39.24	41.29	-70.11	-2,274.08	-142.56	333.88	261.25	72.63	4.597		
7,200.00	6,857.50	7,170.98	6,768.35	39.65	41.93	-81.98	-2,311.29	-154.61	353.35	278.69	74.66	4.733		
7,300.00	6,925.48	7,289.25	6,874.21	40.02	42.58	-91.40	-2,351.29	-188.39	376.80	300.82	75.97	4.960		
7,400.00	6,982.21	7,422.50	6,984.06	40.33	43.21	-98.97	-2,393.02	-250.70	401.79	326.21	75.59	5.316		
7,500.00	7,026.31	7,573.70	7,090.81	40.63	43.80	-104.93	-2,433.86	-349.13	425.39	352.51	72.88	5.837		
7,600.00	7,056.68	7,744.07	7,181.19	40.91	44.33	-109.21	-2,468.88	-488.63	444.30	376.00	68.30	6.505		
7,700.00	7,072.58	7,930.58	7,236.62	41.25	44.80	-111.57	-2,491.06	-664.63	455.35	391.08	64.26	7.085		
7,800.00	7,074.86	8,086.94	7,245.80	41.69	45.25	-111.96	-2,495.71	-820.35	457.18	392.73	64.45	7.093		
7,900.00	7,074.54	8,186.94	7,245.30	42.34	45.67	-111.94	-2,496.30	-920.35	457.04	390.28	66.76	6.846		
8,000.00	7,074.21	8,286.94	7,244.80	43.27	46.29	-111.92	-2,496.89	-1,020.35	456.90	387.51	69.39	6.584		
8,100.00	7,073.89	8,386.94	7,244.30	44.47	47.16	-111.91	-2,497.48	-1,120.35	456.76	384.43	72.33	6.315		
8,200.00	7,073.57	8,486.94	7,243.80	45.91	48.30	-111.89	-2,498.06	-1,220.34	456.62	381.08	75.54	6.045		
8,300.00	7,073.24	8,586.94	7,243.30	47.53	49.68	-111.87	-2,498.65	-1,320.34	456.48	377.50	78.98	5.779		
8,400.00	7,072.92	8,686.93	7,242.79	49.31	51.26	-111.86	-2,499.24	-1,420.34	456.34	373.71	82.63	5.523		
8,500.00	7,072.59	8,786.93	7,242.29	51.20	53.01	-111.84	-2,499.83	-1,520.33	456.21	369.74	86.46	5.276		
8,600.00	7,072.27	8,886.93	7,241.79	53.19	54.88	-111.82	-2,500.42	-1,620.33	456.07	365.62	90.45	5.042		
8,700.00	7,071.94	8,986.93	7,241.29	55.27	56.85	-111.81	-2,501.01	-1,720.33	455.93	361.35	94.57	4.821		
8,800.00	7,071.62	9,086.93	7,240.79	57.43	58.92	-111.79	-2,501.59	-1,820.32	455.79	356.97	98.82	4.612		
8,900.00	7,071.29	9,186.93	7,240.29	59.64	61.05	-111.77	-2,502.18	-1,920.32	455.65	352.48	103.17	4.416		
9,000.00	7,070.97	9,286.93	7,239.79	61.92	63.26	-111.75	-2,502.77	-2,020.32	455.51	347.89	107.62	4.233		
9,100.00	7,070.64	9,386.93	7,239.29	64.24	65.52	-111.74	-2,503.36	-2,120.31	455.37	343.23	112.15	4.061		
9,200.00	7,070.32	9,486.93	7,238.79	66.61	67.82	-111.72	-2,503.95	-2,220.31	455.23	338.49	116.75	3.899		
9,300.00	7,069.99	9,586.93	7,238.29	69.01	70.18	-111.70	-2,504.53	-2,320.31	455.09	333.68	121.41	3.748		
9,400.00	7,069.67	9,686.93	7,237.79	71.45	72.57	-111.69	-2,505.12	-2,420.30	454.96	328.82	126.13	3.607		
9,500.00	7,069.34	9,786.93	7,237.29	73.92	74.99	-111.67	-2,505.71	-2,520.30	454.82	323.91	130.91	3.474		
9,600.00	7,069.02	9,886.93	7,236.79	76.42	77.45	-111.65	-2,506.30	-2,620.30	454.68	318.95	135.73	3.350		
9,700.00	7,068.69	9,986.93	7,236.29	78.95	79.93	-111.64	-2,506.89	-2,720.29	454.54	313.95	140.59	3.233		
9,800.00	7,068.37	10,086.93	7,235.78	81.49	82.44	-111.62	-2,507.48	-2,820.29	454.40	308.91	145.49	3.123		
9,900.00	7,068.04	10,186.93	7,235.28	84.06	84.98	-111.60	-2,508.06	-2,920.29	454.26	303.84	150.43	3.020		
10,000.00	7,067.72	10,286.93	7,234.78	86.65	87.53	-111.59	-2,508.65	-3,020.28	454.12	298.73	155.39	2.922		
10,100.00	7,067.39	10,386.93	7,234.28	89.25	90.10	-111.57	-2,509.24	-3,120.28	453.99	293.60	160.39	2.831		
10,200.00	7,067.07	10,486.93	7,233.78	91.87	92.69	-111.55	-2,509.83	-3,220.28	453.85	288.44	165.41	2.744		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,586.93	7,233.28	94.50	95.30	-111.53	-2,510.42	-3,320.28	453.71	283.26	170.45	2.662		
10,400.00	7,066.42	10,686.93	7,232.78	97.14	97.91	-111.52	-2,511.00	-3,420.27	453.57	278.06	175.51	2.584		
10,500.00	7,066.09	10,786.93	7,232.28	99.80	100.55	-111.50	-2,511.59	-3,520.27	453.43	272.84	180.60	2.511		
10,600.00	7,065.77	10,886.93	7,231.78	102.47	103.19	-111.48	-2,512.18	-3,620.27	453.30	267.60	185.70	2.441		
10,700.00	7,065.44	10,986.93	7,231.28	105.15	105.85	-111.47	-2,512.77	-3,720.26	453.16	262.34	190.82	2.375		
10,800.00	7,065.12	11,086.93	7,230.78	107.83	108.52	-111.45	-2,513.36	-3,820.26	453.02	257.06	195.95	2.312		
10,900.00	7,064.79	11,186.93	7,230.28	110.53	111.19	-111.43	-2,513.95	-3,920.26	452.88	251.78	201.10	2.252		
11,000.00	7,064.47	11,286.93	7,229.78	113.23	113.88	-111.42	-2,514.53	-4,020.25	452.74	246.47	206.27	2.195		
11,100.00	7,064.14	11,386.93	7,229.28	115.95	116.57	-111.40	-2,515.12	-4,120.25	452.60	241.16	211.44	2.141		
11,200.00	7,063.82	11,486.93	7,228.78	118.66	119.27	-111.38	-2,515.71	-4,220.25	452.47	235.83	216.63	2.089		
11,300.00	7,063.49	11,586.93	7,228.27	121.39	121.98	-111.36	-2,516.30	-4,320.24	452.33	230.50	221.83	2.039		
11,400.00	7,063.17	11,686.93	7,227.77	124.12	124.70	-111.35	-2,516.89	-4,420.24	452.19	225.15	227.04	1.992		
11,500.00	7,062.84	11,786.93	7,227.27	126.86	127.42	-111.33	-2,517.47	-4,520.24	452.05	219.79	232.26	1.946		
11,600.00	7,062.52	11,886.93	7,226.77	129.60	130.15	-111.31	-2,518.06	-4,620.23	451.92	214.43	237.49	1.903		
11,700.00	7,062.19	11,986.93	7,226.27	132.35	132.88	-111.30	-2,518.65	-4,720.23	451.78	209.05	242.73	1.861		
11,800.00	7,061.87	12,086.93	7,225.77	135.10	135.62	-111.28	-2,519.24	-4,820.23	451.64	203.67	247.97	1.821		
11,900.00	7,061.54	12,186.93	7,225.27	137.85	138.37	-111.26	-2,519.83	-4,920.22	451.50	198.28	253.23	1.783		
12,000.00	7,061.22	12,286.93	7,224.77	140.61	141.11	-111.24	-2,520.42	-5,020.22	451.36	192.88	258.49	1.746		
12,100.00	7,060.89	12,386.93	7,224.27	143.38	143.87	-111.23	-2,521.00	-5,120.22	451.23	187.47	263.75	1.711		
12,200.00	7,060.57	12,486.93	7,223.77	146.15	146.62	-111.21	-2,521.59	-5,220.22	451.09	182.06	269.03	1.677		
12,300.00	7,060.24	12,586.93	7,223.27	148.92	149.38	-111.19	-2,522.18	-5,320.21	450.95	176.64	274.31	1.644		
12,400.00	7,059.92	12,686.93	7,222.77	151.69	152.15	-111.18	-2,522.77	-5,420.21	450.81	171.22	279.60	1.612		
12,500.00	7,059.59	12,786.93	7,222.27	154.47	154.92	-111.16	-2,523.36	-5,520.21	450.68	165.79	284.89	1.582		
12,600.00	7,059.27	12,886.93	7,221.77	157.25	157.69	-111.14	-2,523.94	-5,620.20	450.54	160.35	290.19	1.553		
12,700.00	7,058.94	12,986.93	7,221.27	160.03	160.46	-111.12	-2,524.53	-5,720.20	450.40	154.91	295.49	1.524		
12,800.00	7,058.62	13,086.93	7,220.76	162.82	163.24	-111.11	-2,525.12	-5,820.20	450.27	149.47	300.80	1.497 Level 3		
12,900.00	7,058.29	13,186.93	7,220.26	165.61	166.02	-111.09	-2,525.71	-5,920.19	450.13	144.02	306.11	1.470 Level 3		
13,000.00	7,057.97	13,286.93	7,219.76	168.40	168.80	-111.07	-2,526.30	-6,020.19	449.99	138.56	311.43	1.445 Level 3		
13,100.00	7,057.64	13,386.93	7,219.26	171.19	171.59	-111.06	-2,526.89	-6,120.19	449.85	133.10	316.75	1.420 Level 3		
13,200.00	7,057.32	13,486.93	7,218.76	173.99	174.37	-111.04	-2,527.47	-6,220.18	449.72	127.64	322.08	1.396 Level 3		
13,300.00	7,057.00	13,586.93	7,218.26	176.78	177.16	-111.02	-2,528.06	-6,320.18	449.58	122.17	327.41	1.373 Level 3		
13,400.00	7,056.67	13,686.93	7,217.76	179.58	179.95	-111.00	-2,528.65	-6,420.18	449.44	116.70	332.74	1.351 Level 3		
13,500.00	7,056.35	13,786.93	7,217.26	182.38	182.75	-110.99	-2,529.24	-6,520.17	449.31	111.22	338.08	1.329 Level 3		
13,600.00	7,056.02	13,886.93	7,216.76	185.19	185.54	-110.97	-2,529.83	-6,620.17	449.17	105.74	343.43	1.308 Level 3		
13,700.00	7,055.70	13,986.93	7,216.26	187.99	188.34	-110.95	-2,530.41	-6,720.17	449.03	100.26	348.77	1.287 Level 3		
13,800.00	7,055.37	14,086.92	7,215.76	190.80	191.14	-110.93	-2,531.00	-6,820.16	448.89	94.77	354.12	1.268 Level 3		
13,900.00	7,055.05	14,186.92	7,215.26	193.60	193.94	-110.92	-2,531.59	-6,920.16	448.76	89.28	359.47	1.248 Level 2		
14,000.00	7,054.72	14,286.92	7,214.76	196.41	196.75	-110.90	-2,532.18	-7,020.16	448.62	83.79	364.83	1.230 Level 2		
14,100.00	7,054.40	14,386.92	7,214.26	199.22	199.55	-110.88	-2,532.77	-7,120.16	448.48	78.29	370.19	1.211 Level 2		
14,200.00	7,054.07	14,486.92	7,213.76	202.03	202.36	-110.87	-2,533.36	-7,220.15	448.35	72.80	375.55	1.194 Level 2		
14,300.00	7,053.75	14,586.92	7,213.25	204.85	205.17	-110.85	-2,533.94	-7,320.15	448.21	67.29	380.92	1.177 Level 2		
14,400.00	7,053.42	14,686.92	7,212.75	207.66	207.97	-110.83	-2,534.53	-7,420.15	448.07	61.79	386.29	1.160 Level 2		
14,500.00	7,053.10	14,786.92	7,212.25	210.48	210.78	-110.81	-2,535.12	-7,520.14	447.94	56.28	391.66	1.144 Level 2		
14,600.00	7,052.77	14,886.92	7,211.75	213.29	213.60	-110.80	-2,535.71	-7,620.14	447.80	50.77	397.03	1.128 Level 2		
14,700.00	7,052.45	14,986.92	7,211.25	216.11	216.41	-110.78	-2,536.30	-7,720.14	447.66	45.26	402.41	1.112 Level 2		
14,800.00	7,052.12	15,086.92	7,210.75	218.93	219.22	-110.76	-2,536.88	-7,820.13	447.53	39.74	407.79	1.097 Level 2		
14,900.00	7,051.80	15,186.92	7,210.25	221.75	222.04	-110.74	-2,537.47	-7,920.13	447.39	34.22	413.17	1.083 Level 2		
15,000.00	7,051.47	15,286.92	7,209.75	224.57	224.86	-110.73	-2,538.06	-8,020.13	447.26	28.70	418.55	1.069 Level 2		
15,100.00	7,051.15	15,386.92	7,209.25	227.39	227.67	-110.71	-2,538.65	-8,120.12	447.12	23.18	423.94	1.055 Level 2		
15,145.13	7,051.00	15,432.05	7,209.02	228.67	228.94	-110.70	-2,538.91	-8,165.25	447.06	20.68	426.37	1.049 Level 2, ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.21	-20.05	-0.28	20.05					
100.00	100.00	101.00	100.00	3.28	3.28	-179.21	-20.05	-0.28	20.05	13.48	6.57	3.052		
200.00	200.00	199.00	200.00	3.34	3.34	-179.21	-20.05	-0.28	20.05	13.38	6.67	3.005		
300.00	299.98	298.31	299.29	3.44	3.44	-3.64	-21.73	-0.39	20.01	13.12	6.89	2.905		
400.00	399.84	397.62	398.47	3.59	3.59	-3.76	-26.85	-0.75	19.94	12.73	7.21	2.765		
500.00	499.45	496.93	497.40	3.79	3.79	-3.96	-35.39	-1.34	19.85	12.21	7.64	2.599		
600.00	598.70	596.25	595.99	4.03	4.02	-4.25	-47.34	-2.17	19.73	11.59	8.15	2.422		
700.00	697.47	695.57	694.10	4.31	4.30	-4.62	-62.70	-3.23	19.60	10.87	8.73	2.245		
800.00	795.62	794.89	791.63	4.64	4.62	-5.07	-81.45	-4.53	19.45	10.07	9.37	2.075		
900.00	893.06	894.22	888.45	5.00	4.98	-5.62	-103.55	-6.05	19.27	9.21	10.06	1.916		
1,000.00	989.64	993.56	984.45	5.40	5.37	-6.25	-129.00	-7.81	19.08	8.28	10.79	1.768		
1,100.00	1,085.27	1,092.91	1,079.52	5.83	5.80	-6.98	-157.75	-9.80	18.87	7.31	11.56	1.632		
1,100.38	1,085.63	1,093.28	1,079.88	5.83	5.80	-6.98	-157.86	-9.81	18.87	7.31	11.57	1.632 CC		
1,200.00	1,180.44	1,192.41	1,173.72	6.29	6.25	-7.12	-189.71	-12.01	20.46	8.10	12.36	1.656		
1,300.00	1,275.61	1,307.62	1,268.06	6.76	6.82	-6.96	-222.69	-14.30	22.97	9.73	13.24	1.735		
1,400.00	1,370.78	1,407.66	1,362.41	7.26	7.32	-6.84	-255.67	-16.58	25.48	11.39	14.08	1.809		
1,500.00	1,465.95	1,507.69	1,456.75	7.76	7.84	-6.73	-288.65	-18.86	27.98	13.03	14.96	1.871		
1,600.00	1,561.12	1,607.72	1,551.09	8.27	8.37	-6.65	-321.64	-21.14	30.49	14.64	15.85	1.924		
1,700.00	1,656.29	1,707.75	1,645.44	8.80	8.91	-6.57	-354.62	-23.42	33.00	16.24	16.76	1.969		
1,800.00	1,751.46	1,807.78	1,739.78	9.32	9.46	-6.51	-387.60	-25.70	35.51	17.83	17.68	2.008		
1,900.00	1,846.63	1,907.81	1,834.12	9.86	10.01	-6.46	-420.59	-27.98	38.02	19.40	18.62	2.042		
2,000.00	1,941.80	1,992.16	1,928.47	10.40	10.48	-6.41	-453.57	-30.27	40.53	21.04	19.49	2.080		
2,100.00	2,036.96	2,107.88	2,022.81	10.94	11.12	-6.37	-486.55	-32.55	43.04	22.52	20.52	2.097		
2,200.00	2,132.13	2,207.91	2,117.15	11.49	11.69	-6.33	-519.53	-34.83	45.55	24.06	21.48	2.120		
2,300.00	2,227.30	2,307.94	2,211.49	12.04	12.26	-6.30	-552.52	-37.11	48.05	25.60	22.45	2.140		
2,400.00	2,322.47	2,407.97	2,305.84	12.59	12.83	-6.27	-585.50	-39.39	50.56	27.14	23.43	2.158		
2,500.00	2,417.64	2,492.00	2,400.18	13.15	13.31	-6.24	-618.48	-41.67	53.07	28.74	24.33	2.181		
2,600.00	2,512.81	2,591.97	2,494.52	13.70	13.88	-6.21	-651.47	-43.95	55.58	30.27	25.31	2.196		
2,700.00	2,607.98	2,691.94	2,588.87	14.26	14.46	-6.19	-684.45	-46.24	58.09	31.79	26.30	2.208		
2,800.00	2,703.15	2,791.90	2,683.21	14.82	15.04	-6.17	-717.43	-48.52	60.60	33.30	27.30	2.220		
2,900.00	2,798.32	2,891.87	2,777.55	15.38	15.62	-6.15	-750.41	-50.80	63.11	34.81	28.29	2.231		
3,000.00	2,893.49	3,008.16	2,871.90	15.95	16.29	-6.13	-783.40	-53.08	65.62	36.24	29.37	2.234		
3,100.00	2,988.66	3,091.81	2,966.24	16.51	16.78	-6.12	-816.38	-55.36	68.13	37.83	30.29	2.249		
3,200.00	3,083.83	3,208.22	3,060.58	17.07	17.46	-6.10	-849.36	-57.64	70.63	39.25	31.38	2.251		
3,300.00	3,179.00	3,291.75	3,154.93	17.64	17.95	-6.09	-882.35	-59.93	73.14	40.84	32.30	2.264		
3,400.00	3,274.17	3,408.28	3,249.27	18.21	18.63	-6.07	-915.33	-62.21	75.65	42.25	33.40	2.265		
3,500.00	3,369.34	3,491.68	3,343.61	18.77	19.12	-6.06	-948.31	-64.49	78.16	43.84	34.32	2.277		
3,600.00	3,464.51	3,591.65	3,437.96	19.34	19.70	-6.05	-981.29	-66.77	80.67	45.33	35.34	2.283		
3,700.00	3,559.68	3,708.38	3,532.30	19.91	20.39	-6.04	-1,014.28	-69.05	83.18	46.74	36.43	2.283		
3,800.00	3,654.84	3,808.41	3,626.64	20.48	20.98	-6.03	-1,047.26	-71.33	85.69	48.24	37.45	2.288		
3,900.00	3,750.01	3,908.44	3,720.99	21.05	21.57	-6.02	-1,080.24	-73.61	88.20	49.73	38.47	2.293		
4,000.00	3,845.18	4,008.47	3,815.33	21.62	22.16	-6.01	-1,113.22	-75.90	90.71	51.22	39.48	2.297		
4,100.00	3,940.35	4,108.51	3,909.67	22.19	22.75	-6.00	-1,146.21	-78.18	93.21	52.71	40.50	2.301		
4,200.00	4,035.52	4,208.54	4,004.02	22.76	23.34	-5.99	-1,179.19	-80.46	95.72	54.20	41.52	2.305		
4,300.00	4,130.69	4,291.43	4,098.36	23.33	23.83	-5.98	-1,212.17	-82.74	98.23	55.78	42.46	2.314		
4,400.00	4,225.86	4,408.60	4,192.70	23.91	24.52	-5.98	-1,245.16	-85.02	100.74	57.17	43.57	2.312		
4,500.00	4,321.03	4,508.63	4,287.04	24.48	25.11	-5.97	-1,278.14	-87.30	103.25	58.66	44.59	2.316		
4,600.00	4,416.20	4,608.66	4,381.39	25.05	25.70	-5.96	-1,311.12	-89.59	105.76	60.15	45.61	2.319		
4,700.00	4,511.37	4,708.69	4,475.73	25.62	26.29	-5.96	-1,344.10	-91.87	108.27	61.63	46.64	2.322		
4,800.00	4,606.54	4,808.73	4,570.07	26.20	26.89	-5.95	-1,377.09	-94.15	110.78	63.12	47.66	2.324		
4,900.00	4,701.71	4,908.76	4,664.42	26.77	27.48	-5.95	-1,410.07	-96.43	113.29	64.60	48.69	2.327		
5,000.00	4,796.88	5,008.79	4,758.76	27.34	28.07	-5.94	-1,443.05	-98.71	115.79	66.08	49.71	2.329		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,108.82	4,853.10	27.92	28.66	-5.93	-1,476.04	-100.99	118.30	67.57	50.74	2.332		
5,200.00	4,987.22	5,208.85	4,947.45	28.49	29.26	-5.93	-1,509.02	-103.27	120.81	69.05	51.76	2.334		
5,300.00	5,082.39	5,291.12	5,041.79	29.07	29.75	-5.92	-1,542.00	-105.56	123.32	70.62	52.70	2.340		
5,400.00	5,177.56	5,408.91	5,136.13	29.64	30.44	-5.92	-1,574.98	-107.84	125.83	72.01	53.82	2.338		
5,500.00	5,272.72	5,508.95	5,230.48	30.21	31.04	-5.91	-1,607.97	-110.12	128.34	73.49	54.85	2.340		
5,600.00	5,367.89	5,608.98	5,324.82	30.79	31.63	-5.91	-1,640.95	-112.40	130.85	74.97	55.88	2.342		
5,700.00	5,463.06	5,709.01	5,419.16	31.36	32.23	-5.91	-1,673.93	-114.68	133.36	76.45	56.91	2.343		
5,800.00	5,558.23	5,790.96	5,513.51	31.94	32.71	-5.90	-1,706.92	-116.96	135.87	78.02	57.84	2.349		
5,900.00	5,653.40	5,909.07	5,607.85	32.51	33.42	-5.90	-1,739.90	-119.24	138.37	79.41	58.97	2.347		
6,000.00	5,748.57	6,009.10	5,702.19	33.09	34.01	-5.89	-1,772.88	-121.53	140.88	80.89	60.00	2.348		
6,100.00	5,843.74	6,090.87	5,796.54	33.67	34.50	-5.89	-1,805.86	-123.81	143.39	82.46	60.93	2.353		
6,200.00	5,938.91	6,209.17	5,890.88	34.24	35.20	-5.89	-1,838.85	-126.09	145.90	83.84	62.06	2.351		
6,300.00	6,034.08	6,290.80	5,985.22	34.82	35.68	-5.88	-1,871.83	-128.37	148.41	85.42	62.99	2.356		
6,400.00	6,129.25	6,409.23	6,079.56	35.39	36.39	-5.88	-1,904.81	-130.65	150.92	86.80	64.12	2.354		
6,500.00	6,224.42	6,490.74	6,173.91	35.97	36.87	-5.88	-1,937.79	-132.93	153.43	88.37	65.05	2.358		
6,600.00	6,319.59	6,609.29	6,268.25	36.54	37.58	-5.87	-1,970.78	-135.22	155.94	89.75	66.18	2.356		
6,700.00	6,414.76	6,709.32	6,362.59	37.12	38.17	-5.87	-2,003.76	-137.50	158.45	91.23	67.22	2.357		
6,800.00	6,509.91	6,790.64	6,456.93	37.70	38.66	-13.28	-2,036.74	-139.78	160.97	92.81	68.16	2.362		
6,900.00	6,603.99	6,889.78	6,550.49	38.26	39.25	-39.99	-2,069.45	-142.04	164.20	94.82	69.38	2.367		
7,000.00	6,694.76	6,991.53	6,646.05	38.78	39.85	-61.12	-2,102.91	-151.04	169.95	98.96	70.99	2.394		
7,100.00	6,779.96	7,097.29	6,742.59	39.24	40.43	-75.90	-2,136.86	-177.28	177.76	105.26	72.50	2.452		
7,200.00	6,857.50	7,207.06	6,836.96	39.65	40.97	-86.56	-2,170.20	-222.01	186.87	113.59	73.28	2.550		
7,300.00	6,925.48	7,320.92	6,925.65	40.02	41.45	-94.42	-2,201.70	-285.83	196.39	123.49	72.90	2.694		
7,400.00	6,982.21	7,438.78	7,004.58	40.33	41.88	-100.18	-2,229.95	-368.42	205.41	134.06	71.35	2.879		
7,500.00	7,026.31	7,560.23	7,069.44	40.63	42.26	-104.24	-2,253.42	-468.16	213.09	144.03	69.06	3.086		
7,600.00	7,056.68	7,684.60	7,116.08	40.91	42.59	-106.86	-2,270.64	-581.95	218.72	151.82	66.89	3.270		
7,700.00	7,072.58	7,810.90	7,141.17	41.25	42.95	-108.17	-2,280.41	-705.13	221.77	155.92	65.85	3.368		
7,800.00	7,074.86	7,927.03	7,144.77	41.69	43.36	-108.34	-2,282.61	-821.10	222.20	155.20	67.00	3.317		
7,900.00	7,074.54	8,027.03	7,144.20	42.34	43.89	-108.28	-2,283.22	-921.09	222.07	152.67	69.39	3.200		
8,000.00	7,074.21	8,127.03	7,143.63	43.27	44.66	-108.23	-2,283.83	-1,021.09	221.94	149.81	72.13	3.077		
8,100.00	7,073.89	8,227.03	7,143.06	44.47	45.70	-108.17	-2,284.45	-1,121.09	221.81	146.64	75.17	2.951		
8,200.00	7,073.57	8,327.03	7,142.49	45.91	47.01	-108.12	-2,285.06	-1,221.08	221.69	143.20	78.48	2.825		
8,300.00	7,073.24	8,427.03	7,141.93	47.53	48.53	-108.06	-2,285.67	-1,321.08	221.56	139.53	82.03	2.701		
8,400.00	7,072.92	8,527.03	7,141.36	49.31	50.22	-108.00	-2,286.28	-1,421.07	221.43	135.65	85.78	2.581		
8,500.00	7,072.59	8,627.03	7,140.79	51.20	52.05	-107.95	-2,286.90	-1,521.07	221.30	131.58	89.72	2.467		
8,600.00	7,072.27	8,727.03	7,140.22	53.19	53.98	-107.89	-2,287.51	-1,621.07	221.18	127.36	93.82	2.358		
8,700.00	7,071.94	8,827.03	7,139.65	55.27	56.02	-107.84	-2,288.12	-1,721.06	221.05	123.00	98.05	2.254		
8,800.00	7,071.62	8,927.03	7,139.08	57.43	58.13	-107.78	-2,288.74	-1,821.06	220.92	118.51	102.41	2.157		
8,900.00	7,071.29	9,027.03	7,138.51	59.64	60.31	-107.73	-2,289.35	-1,921.06	220.80	113.92	106.88	2.066		
9,000.00	7,070.97	9,127.03	7,137.95	61.92	62.56	-107.67	-2,289.96	-2,021.05	220.67	109.22	111.45	1.980		
9,100.00	7,070.64	9,227.03	7,137.38	64.24	64.85	-107.61	-2,290.58	-2,121.05	220.55	104.45	116.10	1.900		
9,200.00	7,070.32	9,327.03	7,136.81	66.61	67.19	-107.56	-2,291.19	-2,221.04	220.42	99.60	120.82	1.824		
9,300.00	7,069.99	9,427.03	7,136.24	69.01	69.57	-107.50	-2,291.80	-2,321.04	220.30	94.68	125.62	1.754		
9,400.00	7,069.67	9,527.03	7,135.67	71.45	71.99	-107.45	-2,292.41	-2,421.04	220.17	89.70	130.47	1.687		
9,500.00	7,069.34	9,627.03	7,135.10	73.92	74.44	-107.39	-2,293.03	-2,521.03	220.05	84.66	135.38	1.625		
9,600.00	7,069.02	9,727.03	7,134.54	76.42	76.92	-107.33	-2,293.64	-2,621.03	219.92	79.58	140.34	1.567		
9,700.00	7,068.69	9,827.03	7,133.97	78.95	79.42	-107.28	-2,294.25	-2,721.03	219.80	74.45	145.34	1.512		
9,800.00	7,068.37	9,927.03	7,133.40	81.49	81.95	-107.22	-2,294.87	-2,821.02	219.67	69.29	150.38	1.461 Level 3		
9,900.00	7,068.04	10,027.03	7,132.83	84.06	84.50	-107.16	-2,295.48	-2,921.02	219.55	64.08	155.46	1.412 Level 3		
10,000.00	7,067.72	10,127.02	7,132.26	86.65	87.08	-107.11	-2,296.09	-3,021.01	219.42	58.85	160.58	1.366 Level 3		
10,100.00	7,067.39	10,227.02	7,131.69	89.25	89.66	-107.05	-2,296.70	-3,121.01	219.30	53.58	165.72	1.323 Level 3		
10,200.00	7,067.07	10,327.02	7,131.12	91.87	92.27	-106.99	-2,297.32	-3,221.01	219.18	48.29	170.89	1.283 Level 3		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,427.02	7,130.56	94.50	94.89	-106.94	-2,297.93	-3,321.00	219.05	42.97	176.09	1.244	Level 2	
10,400.00	7,066.42	10,527.02	7,129.99	97.14	97.52	-106.88	-2,298.54	-3,421.00	218.93	37.62	181.31	1.208	Level 2	
10,500.00	7,066.09	10,627.02	7,129.42	99.80	100.17	-106.82	-2,299.16	-3,520.99	218.81	32.26	186.55	1.173	Level 2	
10,600.00	7,065.77	10,727.02	7,128.85	102.47	102.83	-106.77	-2,299.77	-3,620.99	218.69	26.87	191.81	1.140	Level 2	
10,700.00	7,065.44	10,827.02	7,128.28	105.15	105.49	-106.71	-2,300.38	-3,720.99	218.56	21.47	197.09	1.109	Level 2	
10,800.00	7,065.12	10,927.02	7,127.71	107.83	108.17	-106.65	-2,301.00	-3,820.98	218.44	16.05	202.39	1.079	Level 2	
10,900.00	7,064.79	11,027.02	7,127.15	110.53	110.86	-106.60	-2,301.61	-3,920.98	218.32	10.61	207.71	1.051	Level 2	
11,000.00	7,064.47	11,127.02	7,126.58	113.23	113.55	-106.54	-2,302.22	-4,020.98	218.20	5.15	213.04	1.024	Level 2	
11,100.00	7,064.14	11,227.02	7,126.01	115.95	116.26	-106.48	-2,302.83	-4,120.97	218.08	-0.32	218.39	0.999	Level 1	
11,200.00	7,063.82	11,327.02	7,125.44	118.66	118.97	-106.42	-2,303.45	-4,220.97	217.95	-5.80	223.75	0.974	Level 1	
11,300.00	7,063.49	11,427.02	7,124.87	121.39	121.69	-106.37	-2,304.06	-4,320.96	217.83	-11.29	229.13	0.951	Level 1	
11,400.00	7,063.17	11,527.02	7,124.30	124.12	124.41	-106.31	-2,304.67	-4,420.96	217.71	-16.80	234.51	0.928	Level 1	
11,500.00	7,062.84	11,627.02	7,123.73	126.86	127.14	-106.25	-2,305.29	-4,520.96	217.59	-22.32	239.91	0.907	Level 1	
11,600.00	7,062.52	11,727.02	7,123.17	129.60	129.88	-106.19	-2,305.90	-4,620.95	217.47	-27.85	245.32	0.886	Level 1	
11,700.00	7,062.19	11,827.02	7,122.60	132.35	132.62	-106.14	-2,306.51	-4,720.95	217.35	-33.39	250.74	0.867	Level 1	
11,800.00	7,061.87	11,927.02	7,122.03	135.10	135.36	-106.08	-2,307.13	-4,820.95	217.23	-38.94	256.17	0.848	Level 1	
11,900.00	7,061.54	12,027.02	7,121.46	137.85	138.11	-106.02	-2,307.74	-4,920.94	217.11	-44.50	261.61	0.830	Level 1	
12,000.00	7,061.22	12,127.02	7,120.89	140.61	140.87	-105.96	-2,308.35	-5,020.94	216.99	-50.07	267.06	0.813	Level 1	
12,100.00	7,060.89	12,227.02	7,120.32	143.38	143.63	-105.90	-2,308.96	-5,120.93	216.87	-55.64	272.52	0.796	Level 1	
12,200.00	7,060.57	12,327.02	7,119.76	146.15	146.39	-105.85	-2,309.58	-5,220.93	216.75	-61.23	277.98	0.780	Level 1	
12,300.00	7,060.24	12,427.02	7,119.19	148.92	149.16	-105.79	-2,310.19	-5,320.93	216.64	-66.82	283.46	0.764	Level 1	
12,400.00	7,059.92	12,527.02	7,118.62	151.69	151.93	-105.73	-2,310.80	-5,420.92	216.52	-72.42	288.94	0.749	Level 1	
12,500.00	7,059.59	12,627.02	7,118.05	154.47	154.70	-105.67	-2,311.42	-5,520.92	216.40	-78.03	294.43	0.735	Level 1	
12,600.00	7,059.27	12,727.02	7,117.48	157.25	157.48	-105.61	-2,312.03	-5,620.91	216.28	-83.64	299.92	0.721	Level 1	
12,700.00	7,058.94	12,827.02	7,116.91	160.03	160.26	-105.56	-2,312.64	-5,720.91	216.16	-89.26	305.43	0.708	Level 1	
12,800.00	7,058.62	12,927.02	7,116.34	162.82	163.04	-105.50	-2,313.26	-5,820.91	216.04	-94.89	310.94	0.695	Level 1	
12,900.00	7,058.29	13,027.02	7,115.78	165.61	165.82	-105.44	-2,313.87	-5,920.90	215.93	-100.52	316.45	0.682	Level 1	
13,000.00	7,057.97	13,127.02	7,115.21	168.40	168.61	-105.38	-2,314.48	-6,020.90	215.81	-106.16	321.97	0.670	Level 1	
13,100.00	7,057.64	13,227.02	7,114.64	171.19	171.40	-105.32	-2,315.09	-6,120.90	215.69	-111.81	327.50	0.659	Level 1	
13,200.00	7,057.32	13,327.02	7,114.07	173.99	174.19	-105.26	-2,315.71	-6,220.89	215.58	-117.46	333.04	0.647	Level 1	
13,300.00	7,057.00	13,427.01	7,113.50	176.78	176.98	-105.20	-2,316.32	-6,320.89	215.46	-123.12	338.58	0.636	Level 1	
13,400.00	7,056.67	13,527.01	7,112.93	179.58	179.78	-105.15	-2,316.93	-6,420.88	215.34	-128.78	344.12	0.626	Level 1	
13,500.00	7,056.35	13,627.01	7,112.37	182.38	182.58	-105.09	-2,317.55	-6,520.88	215.23	-134.45	349.67	0.616	Level 1	
13,600.00	7,056.02	13,727.01	7,111.80	185.19	185.38	-105.03	-2,318.16	-6,620.88	215.11	-140.12	355.23	0.606	Level 1	
13,700.00	7,055.70	13,827.01	7,111.23	187.99	188.18	-104.97	-2,318.77	-6,720.87	215.00	-145.80	360.79	0.596	Level 1	
13,800.00	7,055.37	13,927.01	7,110.66	190.80	190.98	-104.91	-2,319.38	-6,820.87	214.88	-151.48	366.36	0.587	Level 1	
13,900.00	7,055.05	14,027.01	7,110.09	193.60	193.79	-104.85	-2,320.00	-6,920.87	214.76	-157.16	371.93	0.577	Level 1	
14,000.00	7,054.72	14,127.01	7,109.52	196.41	196.59	-104.79	-2,320.61	-7,020.86	214.65	-162.85	377.50	0.569	Level 1	
14,100.00	7,054.40	14,227.01	7,108.96	199.22	199.40	-104.73	-2,321.22	-7,120.86	214.54	-168.55	383.08	0.560	Level 1	
14,200.00	7,054.07	14,327.01	7,108.39	202.03	202.21	-104.67	-2,321.84	-7,220.85	214.42	-174.25	388.67	0.552	Level 1	
14,300.00	7,053.75	14,427.01	7,107.82	204.85	205.02	-104.61	-2,322.45	-7,320.85	214.31	-179.95	394.26	0.544	Level 1	
14,400.00	7,053.42	14,527.01	7,107.25	207.66	207.83	-104.56	-2,323.06	-7,420.85	214.19	-185.66	399.85	0.536	Level 1	
14,500.00	7,053.10	14,627.01	7,106.68	210.48	210.65	-104.50	-2,323.68	-7,520.84	214.08	-191.37	405.45	0.528	Level 1	
14,600.00	7,052.77	14,727.01	7,106.11	213.29	213.46	-104.44	-2,324.29	-7,620.84	213.96	-197.09	411.05	0.521	Level 1	
14,700.00	7,052.45	14,827.01	7,105.54	216.11	216.28	-104.38	-2,324.90	-7,720.83	213.85	-202.81	416.66	0.513	Level 1	
14,800.00	7,052.12	14,927.01	7,104.98	218.93	219.09	-104.32	-2,325.51	-7,820.83	213.74	-208.53	422.27	0.506	Level 1	
14,900.00	7,051.80	15,027.01	7,104.41	221.75	221.91	-104.26	-2,326.13	-7,920.83	213.63	-214.26	427.88	0.499	Level 1	
15,000.00	7,051.47	15,127.01	7,103.84	224.57	224.73	-104.20	-2,326.74	-8,020.82	213.51	-219.99	433.50	0.493	Level 1	
15,100.00	7,051.15	15,227.01	7,103.27	227.39	227.55	-104.14	-2,327.35	-8,120.82	213.40	-225.72	439.12	0.486	Level 1	
15,145.13	7,051.00	15,272.14	7,103.01	228.67	228.82	-104.11	-2,327.63	-8,165.95	213.35	-228.31	441.66	0.483	Level 1, ES, SF	





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	0.00	0.46	379.97	3.06	379.98					
100.00	100.00	102.00	100.00	3.28	0.18	0.46	379.97	3.06	379.98	376.51	3.47	109.536		
200.00	200.00	202.00	200.00	3.34	0.62	0.46	379.97	3.06	379.98	376.02	3.96	95.952 CC, ES		
300.00	299.98	301.98	299.98	3.44	1.06	176.09	379.97	3.06	381.72	377.22	4.50	84.793		
400.00	399.84	401.84	399.84	3.59	1.50	176.14	379.97	3.06	386.94	381.85	5.09	75.988		
500.00	499.45	501.45	499.45	3.79	1.94	176.21	379.97	3.06	395.64	389.91	5.73	69.053		
600.00	598.70	598.25	586.23	4.03	2.32	176.26	381.31	2.88	409.33	402.97	6.37	64.305		
700.00	697.47	673.82	671.71	4.31	2.70	176.28	385.19	2.35	429.40	422.35	7.04	60.988		
800.00	795.62	757.51	755.17	4.64	3.07	176.26	391.43	1.50	455.69	447.95	7.74	58.906		
900.00	893.06	838.88	836.09	5.00	3.43	176.20	399.80	0.36	488.04	479.60	8.44	57.834		
1,000.00	989.64	917.53	914.05	5.40	3.78	176.13	410.06	-1.03	526.22	517.09	9.14	57.586		
1,100.00	1,085.27	993.13	988.69	5.83	4.12	176.04	421.92	-2.65	570.01	560.18	9.84	57.954		
1,200.00	1,180.44	1,073.36	1,067.60	6.29	4.48	175.99	436.35	-4.61	617.22	606.70	10.52	58.670		
1,300.00	1,275.61	1,161.34	1,154.06	6.76	4.87	175.94	452.46	-6.80	664.75	653.49	11.26	59.057		
1,400.00	1,370.78	1,249.33	1,240.53	7.26	5.27	175.90	468.57	-8.99	712.27	700.27	12.01	59.316		
1,500.00	1,465.95	1,337.31	1,327.00	7.76	5.67	175.86	484.68	-11.19	759.80	747.03	12.77	59.482		
1,600.00	1,561.12	1,425.29	1,413.46	8.27	6.08	175.83	500.79	-13.38	807.33	793.78	13.55	59.578		
1,700.00	1,656.29	1,513.27	1,499.93	8.80	6.49	175.80	516.90	-15.57	854.86	840.52	14.34	59.622		
1,800.00	1,751.46	1,601.26	1,586.40	9.32	6.90	175.78	533.02	-17.76	902.39	887.26	15.13	59.628		
1,900.00	1,846.63	1,689.24	1,672.86	9.86	7.31	175.75	549.13	-19.95	949.92	933.98	15.94	59.607		
2,000.00	1,941.80	1,777.22	1,759.33	10.40	7.72	175.73	565.24	-22.15	997.45	980.70	16.75	59.565		
2,100.00	2,036.96	1,865.20	1,845.80	10.94	8.14	175.71	581.35	-24.34	1,044.98	1,027.42	17.56	59.508		
2,200.00	2,132.13	1,953.18	1,932.26	11.49	8.55	175.69	597.46	-26.53	1,092.51	1,074.13	18.38	59.441		
2,300.00	2,227.30	2,041.17	2,018.73	12.04	8.97	175.68	613.57	-28.72	1,140.03	1,120.83	19.20	59.367		
2,400.00	2,322.47	2,129.15	2,105.20	12.59	9.38	175.66	629.68	-30.91	1,187.56	1,167.53	20.03	59.288		
2,500.00	2,417.64	2,217.13	2,191.66	13.15	9.80	175.65	645.80	-33.10	1,235.09	1,214.23	20.86	59.207		
2,600.00	2,512.81	2,305.11	2,278.13	13.70	10.21	175.64	661.91	-35.30	1,282.62	1,260.93	21.69	59.123		
2,700.00	2,607.98	2,406.90	2,364.60	14.26	10.70	175.63	678.02	-37.49	1,330.15	1,307.56	22.59	58.872		
2,800.00	2,703.15	2,481.08	2,451.06	14.82	11.05	175.62	694.13	-39.68	1,377.68	1,354.31	23.37	58.956		
2,900.00	2,798.32	2,569.06	2,537.53	15.38	11.47	175.61	710.24	-41.87	1,425.21	1,401.00	24.21	58.873		
3,000.00	2,893.49	2,657.04	2,624.00	15.95	11.88	175.60	726.35	-44.06	1,472.74	1,447.69	25.05	58.791		
3,100.00	2,988.66	2,745.03	2,710.47	16.51	12.30	175.59	742.47	-46.26	1,520.27	1,494.38	25.89	58.711		
3,200.00	3,083.83	2,833.01	2,796.93	17.07	12.72	175.58	758.58	-48.45	1,567.80	1,541.06	26.74	58.632		
3,300.00	3,179.00	2,920.99	2,883.40	17.64	13.14	175.57	774.69	-50.64	1,615.33	1,587.74	27.59	58.556		
3,400.00	3,274.17	3,008.97	2,969.87	18.21	13.55	175.56	790.80	-52.83	1,662.86	1,634.43	28.43	58.481		
3,500.00	3,369.34	3,103.05	3,056.33	18.77	14.00	175.56	806.91	-55.02	1,710.39	1,681.08	29.31	58.352		
3,600.00	3,464.51	3,184.94	3,142.80	19.34	14.39	175.55	823.02	-57.21	1,757.92	1,727.79	30.13	58.337		
3,700.00	3,559.68	3,272.92	3,229.27	19.91	14.81	175.54	839.13	-59.41	1,805.45	1,774.46	30.98	58.269		
3,800.00	3,654.84	3,360.90	3,315.73	20.48	15.23	175.54	855.25	-61.60	1,852.98	1,821.14	31.84	58.202		
3,900.00	3,750.01	3,448.88	3,402.20	21.05	15.65	175.53	871.36	-63.79	1,900.51	1,867.82	32.69	58.137		
4,000.00	3,845.18	3,536.87	3,488.67	21.62	16.06	175.53	887.47	-65.98	1,948.04	1,914.49	33.54	58.074		
4,100.00	3,940.35	3,624.85	3,575.13	22.19	16.48	175.52	903.58	-68.17	1,995.57	1,961.17	34.40	58.013		
4,200.00	4,035.52	3,712.83	3,661.60	22.76	16.90	175.52	919.69	-70.37	2,043.10	2,007.84	35.25	57.954		
4,300.00	4,130.69	3,800.81	3,748.07	23.33	17.32	175.51	935.80	-72.56	2,090.63	2,054.52	36.11	57.896		
4,400.00	4,225.86	3,888.80	3,834.53	23.91	17.74	175.51	951.92	-74.75	2,138.16	2,101.19	36.97	57.840		
4,500.00	4,321.03	3,976.78	3,921.00	24.48	18.16	175.50	968.03	-76.94	2,185.69	2,147.86	37.82	57.786		
4,600.00	4,416.20	4,064.76	4,007.47	25.05	18.58	175.50	984.14	-79.13	2,233.22	2,194.54	38.68	57.733		
4,700.00	4,511.37	4,152.74	4,093.93	25.62	19.00	175.50	1,000.25	-81.32	2,280.75	2,241.21	39.54	57.682		
4,800.00	4,606.54	4,240.73	4,180.40	26.20	19.42	175.49	1,016.36	-83.52	2,328.28	2,287.88	40.40	57.632		
4,900.00	4,701.71	4,328.71	4,266.87	26.77	19.84	175.49	1,032.47	-85.71	2,375.81	2,334.55	41.26	57.584		
5,000.00	4,796.88	4,416.69	4,353.33	27.34	20.26	175.48	1,048.58	-87.90	2,423.34	2,381.22	42.12	57.537		
5,100.00	4,892.05	4,504.67	4,439.80	27.92	20.67	175.48	1,064.70	-90.09	2,470.87	2,427.89	42.98	57.491		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,607.35	4,526.27	28.49	21.16	175.48	1,080.81	-92.28	2,518.40	2,474.49	43.91	57.357		
5,300.00	5,082.39	4,680.64	4,612.73	29.07	21.51	175.47	1,096.92	-94.48	2,565.93	2,521.23	44.70	57.403		
5,400.00	5,177.56	4,768.62	4,699.20	29.64	21.93	175.47	1,113.03	-96.67	2,613.46	2,567.90	45.56	57.361		
5,500.00	5,272.72	4,856.60	4,785.67	30.21	22.35	175.47	1,129.14	-98.86	2,660.99	2,614.56	46.42	57.320		
5,600.00	5,367.89	4,944.58	4,872.14	30.79	22.77	175.47	1,145.25	-101.05	2,708.52	2,661.23	47.29	57.280		
5,700.00	5,463.06	5,032.57	4,958.60	31.36	23.19	175.46	1,161.36	-103.24	2,756.05	2,707.90	48.15	57.241		
5,800.00	5,558.23	5,120.55	5,045.07	31.94	23.61	175.46	1,177.48	-105.43	2,803.58	2,754.57	49.01	57.203		
5,900.00	5,653.40	5,208.53	5,131.54	32.51	24.03	175.46	1,193.59	-107.63	2,851.11	2,801.23	49.87	57.165		
6,000.00	5,748.57	5,296.51	5,218.00	33.09	24.45	175.46	1,209.70	-109.82	2,898.64	2,847.90	50.74	57.129		
6,100.00	5,843.74	5,384.50	5,304.47	33.67	24.87	175.45	1,225.81	-112.01	2,946.17	2,894.56	51.60	57.094		
6,200.00	5,938.91	5,472.48	5,390.94	34.24	25.29	175.45	1,241.92	-114.20	2,993.70	2,941.23	52.47	57.059		
6,300.00	6,034.08	5,560.46	5,477.40	34.82	25.71	175.45	1,258.03	-116.39	3,041.23	2,987.89	53.33	57.025		
6,400.00	6,129.25	5,648.44	5,563.87	35.39	26.13	175.45	1,274.15	-118.59	3,088.76	3,034.56	54.20	56.992		
6,500.00	6,224.42	5,736.43	5,650.34	35.97	26.55	175.45	1,290.26	-120.78	3,136.29	3,081.22	55.06	56.959		
6,600.00	6,319.59	5,824.41	5,738.80	36.54	26.97	175.44	1,306.37	-122.97	3,183.82	3,127.89	55.93	56.927		
6,700.00	6,414.76	5,912.39	5,823.27	37.12	27.39	175.44	1,322.48	-125.16	3,231.35	3,174.55	56.79	56.896		
6,800.00	6,509.91	6,000.37	5,909.73	37.70	27.81	166.88	1,338.59	-127.35	3,278.87	3,221.21	57.66	56.866		
6,900.00	6,603.99	6,087.63	5,995.49	38.26	28.23	139.45	1,354.57	-129.53	3,326.04	3,267.52	58.52	56.838		
7,000.00	6,694.76	6,172.18	6,078.59	38.78	28.63	120.86	1,370.05	-131.63	3,371.93	3,312.60	59.34	56.827		
7,100.00	6,779.96	6,251.94	6,156.97	39.24	29.01	108.52	1,384.66	-133.62	3,415.77	3,355.67	60.10	56.836		
7,200.00	6,857.50	6,324.94	6,228.71	39.65	29.36	99.95	1,398.03	-135.44	3,456.96	3,396.16	60.80	56.855		
7,300.00	6,925.48	6,389.38	6,292.04	40.02	29.67	93.73	1,409.83	-137.04	3,495.09	3,433.62	61.47	56.859		
7,400.00	6,982.21	6,443.68	6,345.40	40.33	29.93	89.05	1,419.77	-138.40	3,529.83	3,467.70	62.13	56.814		
7,500.00	7,026.31	6,486.49	6,387.48	40.63	30.13	85.46	1,427.61	-139.46	3,560.93	3,498.11	62.82	56.682		
7,600.00	7,056.68	6,516.77	6,417.24	40.91	30.27	82.70	1,433.16	-140.22	3,588.16	3,524.58	63.58	56.435		
7,700.00	7,072.58	6,533.78	6,433.95	41.25	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
7,800.00	7,074.86	6,538.24	6,438.34	41.69	30.38	79.67	1,437.09	-140.75	3,630.54	3,565.22	65.32	55.580		
7,900.00	7,074.54	6,540.29	6,440.35	42.34	30.39	79.70	1,437.46	-140.80	3,651.21	3,584.84	66.36	55.018		
8,000.00	7,074.21	6,536.61	6,436.57	43.27	30.39	79.70	1,437.46	-140.80	3,651.21	3,584.84	66.36	55.018		
8,100.00	7,073.89	6,533.78	6,433.95	44.47	30.39	79.70	1,437.46	-140.80	3,651.21	3,584.84	66.36	55.018		
8,200.00	7,073.57	6,530.34	6,430.51	45.91	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,300.00	7,073.24	6,526.90	6,427.07	47.53	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,400.00	7,072.92	6,523.46	6,423.63	49.31	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,500.00	7,072.59	6,520.02	6,420.19	51.20	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,600.00	7,072.27	6,516.58	6,416.75	53.19	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,700.00	7,071.94	6,513.14	6,413.31	55.27	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,800.00	7,071.62	6,509.70	6,409.87	57.43	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
8,900.00	7,071.29	6,506.26	6,406.43	59.64	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,000.00	7,070.97	6,502.82	6,402.99	61.92	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,100.00	7,070.64	6,499.38	6,399.55	64.24	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,200.00	7,070.32	6,495.94	6,396.11	66.61	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,300.00	7,069.99	6,492.50	6,392.67	69.01	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,400.00	7,069.67	6,489.06	6,389.23	71.45	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,500.00	7,069.34	6,485.62	6,385.79	73.92	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,600.00	7,069.02	6,482.18	6,382.35	76.42	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,700.00	7,068.69	6,478.74	6,378.91	78.95	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,800.00	7,068.37	6,475.30	6,375.47	81.49	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
9,900.00	7,068.04	6,471.86	6,372.03	84.06	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
10,000.00	7,067.72	6,468.42	6,368.59	86.65	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
10,100.00	7,067.39	6,464.98	6,365.15	89.25	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
10,200.00	7,067.07	6,461.54	6,361.71	91.87	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		
10,300.00	7,066.74	6,458.10	6,358.27	94.50	30.36	80.61	1,436.27	-140.64	3,611.25	3,546.84	64.41	56.063		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	10,436.49	7,248.67	97.14	98.54	92.88	1,535.58	-3,482.82	3,629.72	3,434.48	195.24	18.591		
10,500.00	7,066.09	10,536.49	7,248.25	99.80	101.23	92.88	1,533.93	-3,582.80	3,628.73	3,428.14	200.59	18.090		
10,600.00	7,065.77	10,636.48	7,247.83	102.47	103.92	92.88	1,532.27	-3,682.78	3,627.73	3,421.78	205.95	17.614		
10,700.00	7,065.44	10,736.48	7,247.41	105.15	106.62	92.88	1,530.61	-3,782.76	3,626.74	3,415.40	211.34	17.161		
10,800.00	7,065.12	10,836.47	7,246.99	107.83	109.33	92.88	1,528.95	-3,882.74	3,625.74	3,409.01	216.74	16.729		
10,900.00	7,064.79	10,936.47	7,246.57	110.53	112.04	92.88	1,527.29	-3,982.72	3,624.75	3,402.60	222.15	16.317		
11,000.00	7,064.47	11,036.46	7,246.15	113.23	114.77	92.88	1,525.63	-4,082.70	3,623.75	3,396.17	227.58	15.923		
11,100.00	7,064.14	11,136.46	7,245.73	115.95	117.50	92.88	1,523.98	-4,182.68	3,622.76	3,389.74	233.02	15.547		
11,200.00	7,063.82	11,236.45	7,245.31	118.66	120.23	92.87	1,522.32	-4,282.66	3,621.76	3,383.29	238.48	15.187		
11,300.00	7,063.49	11,336.45	7,244.89	121.39	122.97	92.87	1,520.66	-4,382.64	3,620.77	3,376.82	243.95	14.843		
11,400.00	7,063.17	11,436.44	7,244.47	124.12	125.72	92.87	1,519.00	-4,482.62	3,619.77	3,370.35	249.42	14.513		
11,500.00	7,062.84	11,536.44	7,244.05	126.86	128.47	92.87	1,517.34	-4,582.60	3,618.78	3,363.87	254.91	14.196		
11,600.00	7,062.52	11,636.43	7,243.63	129.60	131.22	92.87	1,515.68	-4,682.58	3,617.79	3,357.38	260.41	13.893		
11,700.00	7,062.19	11,736.43	7,243.21	132.35	133.98	92.87	1,514.02	-4,782.56	3,616.79	3,350.88	265.91	13.601		
11,800.00	7,061.87	11,836.42	7,242.79	135.10	136.74	92.87	1,512.37	-4,882.54	3,615.80	3,344.37	271.43	13.321		
11,900.00	7,061.54	11,936.42	7,242.37	137.85	139.51	92.87	1,510.71	-4,982.52	3,614.80	3,337.85	276.95	13.052		
12,000.00	7,061.22	12,036.41	7,241.95	140.61	142.28	92.87	1,509.05	-5,082.50	3,613.81	3,331.33	282.48	12.793		
12,100.00	7,060.89	12,136.41	7,241.52	143.38	145.05	92.87	1,507.39	-5,182.48	3,612.81	3,324.80	288.01	12.544		
12,200.00	7,060.57	12,236.40	7,241.10	146.15	147.83	92.87	1,505.73	-5,282.46	3,611.82	3,318.26	293.56	12.304		
12,300.00	7,060.24	12,336.40	7,240.68	148.92	150.61	92.87	1,504.07	-5,382.44	3,610.82	3,311.72	299.10	12.072		
12,400.00	7,059.92	12,436.39	7,240.26	151.69	153.39	92.87	1,502.41	-5,482.42	3,609.83	3,305.17	304.66	11.849		
12,500.00	7,059.59	12,536.39	7,239.84	154.47	156.18	92.86	1,500.76	-5,582.40	3,608.83	3,298.61	310.22	11.633		
12,600.00	7,059.27	12,636.38	7,239.42	157.25	158.97	92.86	1,499.10	-5,682.38	3,607.84	3,292.05	315.78	11.425		
12,700.00	7,058.94	12,736.38	7,239.00	160.03	161.75	92.86	1,497.44	-5,782.37	3,606.84	3,285.49	321.36	11.224		
12,800.00	7,058.62	12,836.37	7,238.58	162.82	164.55	92.86	1,495.78	-5,882.35	3,605.85	3,278.92	326.93	11.029		
12,900.00	7,058.29	12,936.37	7,238.16	165.61	167.34	92.86	1,494.12	-5,982.33	3,604.85	3,272.34	332.51	10.841		
13,000.00	7,057.97	13,036.36	7,237.74	168.40	170.14	92.86	1,492.46	-6,082.31	3,603.86	3,265.77	338.09	10.659		
13,100.00	7,057.64	13,136.36	7,237.32	171.19	172.94	92.86	1,490.80	-6,182.29	3,602.86	3,259.18	343.68	10.483		
13,200.00	7,057.32	13,236.35	7,236.90	173.99	175.74	92.86	1,489.15	-6,282.27	3,601.87	3,252.60	349.27	10.312		
13,300.00	7,057.00	13,336.35	7,236.48	176.78	178.54	92.86	1,487.49	-6,382.25	3,600.87	3,246.01	354.87	10.147		
13,400.00	7,056.67	13,436.34	7,236.06	179.58	181.34	92.86	1,485.83	-6,482.23	3,599.88	3,239.41	360.47	9.987		
13,500.00	7,056.35	13,536.34	7,235.64	182.38	184.14	92.86	1,484.17	-6,582.21	3,598.89	3,232.82	366.07	9.831		
13,600.00	7,056.02	13,636.33	7,235.22	185.19	186.95	92.86	1,482.51	-6,682.19	3,597.89	3,226.22	371.67	9.680		
13,700.00	7,055.70	13,736.33	7,234.80	187.99	189.76	92.86	1,480.85	-6,782.17	3,596.90	3,219.61	377.28	9.534		
13,800.00	7,055.37	13,836.32	7,234.38	190.80	192.57	92.86	1,479.19	-6,882.15	3,595.90	3,213.01	382.89	9.391		
13,900.00	7,055.05	13,936.32	7,233.96	193.60	195.38	92.85	1,477.54	-6,982.13	3,594.91	3,206.40	388.51	9.253		
14,000.00	7,054.72	14,036.31	7,233.54	196.41	198.19	92.85	1,475.88	-7,082.11	3,593.91	3,199.79	394.12	9.119		
14,100.00	7,054.40	14,136.31	7,233.12	199.22	201.00	92.85	1,474.22	-7,182.09	3,592.92	3,193.17	399.74	8.988		
14,200.00	7,054.07	14,236.30	7,232.70	202.03	203.82	92.85	1,472.56	-7,282.07	3,591.92	3,186.56	405.37	8.861		
14,300.00	7,053.75	14,336.30	7,232.28	204.85	206.63	92.85	1,470.90	-7,382.05	3,590.93	3,179.94	410.99	8.737		
14,400.00	7,053.42	14,436.29	7,231.86	207.66	209.45	92.85	1,469.24	-7,482.03	3,589.93	3,173.32	416.62	8.617		
14,500.00	7,053.10	14,536.29	7,231.44	210.48	212.27	92.85	1,467.58	-7,582.01	3,588.94	3,166.69	422.24	8.500		
14,600.00	7,052.77	14,636.28	7,231.02	213.29	215.09	92.85	1,465.93	-7,681.99	3,587.94	3,160.07	427.88	8.385		
14,700.00	7,052.45	14,736.28	7,230.60	216.11	217.91	92.85	1,464.27	-7,781.97	3,586.95	3,153.44	433.51	8.274		
14,800.00	7,052.12	14,836.27	7,230.18	218.93	220.73	92.85	1,462.61	-7,881.95	3,585.95	3,146.81	439.14	8.166		
14,900.00	7,051.80	14,936.27	7,229.76	221.75	223.55	92.85	1,460.95	-7,981.93	3,584.96	3,140.18	444.78	8.060		
15,000.00	7,051.47	15,036.26	7,229.34	224.57	226.37	92.85	1,459.29	-8,081.91	3,583.96	3,133.55	450.42	7.957		
15,100.00	7,051.15	15,136.21	7,228.92	227.39	228.63	92.85	1,457.97	-8,181.85	3,583.03	3,127.54	455.49	7.866		
15,115.60	7,051.10	15,116.21	7,229.00	227.83	228.63	92.85	1,457.97	-8,161.85	3,582.99	3,127.08	455.91	7.859		
15,145.13	7,051.00	15,116.21	7,229.00	228.67	228.63	92.85	1,457.97	-8,161.85	3,583.11	3,126.42	456.70	7.846 SF		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	8.30	1,690.37	246.69	1,708.28					
100.00	100.00	110.72	110.72	3.28	3.29	8.31	1,690.01	246.76	1,707.96	1,701.39	6.57	259.811		
200.00	200.00	217.02	217.02	3.34	3.34	8.31	1,689.08	246.84	1,707.11	1,700.43	6.68	255.634		
230.83	230.83	249.16	249.16	3.36	3.37	-176.07	1,688.75	246.80	1,706.96	1,700.22	6.73	253.485		
300.00	299.98	320.40	320.39	3.44	3.46	-176.07	1,687.95	246.75	1,707.75	1,700.85	6.90	247.665		
400.00	399.84	411.38	411.36	3.59	3.60	-176.08	1,687.08	246.57	1,712.00	1,704.81	7.19	238.065		
500.00	499.45	506.20	506.18	3.79	3.79	-176.10	1,686.65	246.17	1,720.19	1,712.61	7.58	226.944		
600.00	598.70	614.46	614.44	4.03	4.05	-176.12	1,686.02	245.80	1,731.73	1,723.65	8.08	214.366		
700.00	697.47	708.59	708.57	4.31	4.30	-176.15	1,685.41	245.18	1,746.61	1,738.00	8.61	202.876		
800.00	795.62	806.19	806.16	4.64	4.59	-176.20	1,685.00	244.13	1,765.09	1,755.89	9.20	191.806		
900.00	893.06	908.75	908.71	5.00	4.91	-176.26	1,684.30	242.96	1,786.72	1,776.86	9.86	181.211		
1,000.00	989.64	992.88	992.83	5.40	5.19	-176.31	1,683.91	241.83	1,811.94	1,801.45	10.49	172.662		
1,100.00	1,085.27	1,063.94	1,063.86	5.83	5.43	-176.38	1,684.53	239.99	1,841.59	1,830.48	11.11	165.713		
1,200.00	1,180.44	1,138.07	1,137.91	6.29	5.68	-176.53	1,686.23	236.87	1,873.87	1,862.13	11.74	159.621		
1,300.00	1,275.61	1,206.48	1,206.15	6.76	5.92	-176.71	1,688.77	232.88	1,907.31	1,894.94	12.36	154.298		
1,400.00	1,370.78	1,278.04	1,277.40	7.26	6.18	-176.93	1,692.59	227.50	1,942.04	1,929.03	13.01	149.282		
1,500.00	1,465.95	1,356.10	1,354.93	7.76	6.47	-177.22	1,697.58	219.88	1,977.60	1,963.90	13.70	144.355		
1,600.00	1,561.12	1,426.82	1,424.98	8.27	6.75	-177.52	1,702.92	211.81	2,014.10	1,999.73	14.37	140.147		
1,700.00	1,656.29	1,507.74	1,504.99	8.80	7.07	-177.88	1,709.81	201.84	2,051.47	2,036.37	15.11	135.812		
1,800.00	1,751.46	1,596.96	1,593.14	9.32	7.45	-178.26	1,717.72	190.56	2,089.24	2,073.34	15.90	131.424		
1,900.00	1,846.63	1,710.61	1,705.45	9.86	7.95	-178.74	1,727.39	176.10	2,126.78	2,109.94	16.84	126.317		
2,000.00	1,941.80	1,806.69	1,800.48	10.40	8.38	-179.12	1,734.76	164.06	2,163.62	2,145.92	17.70	122.250		
2,100.00	2,036.96	1,930.22	1,922.79	10.94	8.94	-179.58	1,743.36	148.96	2,199.92	2,181.20	18.73	117.469		
2,200.00	2,132.13	2,025.22	2,016.94	11.49	9.38	-179.91	1,749.15	137.67	2,235.49	2,215.88	19.61	114.017		
2,300.00	2,227.30	2,101.16	2,092.19	12.04	9.73	-179.84	1,754.03	128.71	2,271.43	2,251.05	20.38	111.458		
2,400.00	2,322.47	2,176.31	2,166.59	12.59	10.09	-179.59	1,759.43	119.63	2,308.11	2,286.96	21.15	109.127		
2,500.00	2,417.64	2,271.09	2,260.38	13.15	10.54	-179.28	1,766.67	108.08	2,345.27	2,323.23	22.05	106.378		
2,600.00	2,512.81	2,352.29	2,340.79	13.70	10.93	-179.03	1,772.80	98.49	2,382.43	2,359.57	22.86	104.216		
2,700.00	2,607.98	2,441.89	2,429.49	14.26	11.36	-178.77	1,780.04	88.13	2,420.13	2,396.40	23.73	101.988		
2,800.00	2,703.15	2,528.80	2,515.58	14.82	11.78	-178.53	1,786.95	78.42	2,457.77	2,433.18	24.58	99.978		
2,900.00	2,798.32	2,621.01	2,606.88	15.38	12.23	-178.28	1,794.67	68.11	2,495.83	2,470.36	25.47	97.977		
3,000.00	2,893.49	2,726.44	2,711.32	15.95	12.75	-178.00	1,802.90	56.27	2,533.41	2,506.95	26.46	95.757		
3,100.00	2,988.66	2,815.99	2,799.99	16.51	13.19	-177.77	1,809.76	45.79	2,570.88	2,543.54	27.34	94.034		
3,200.00	3,083.83	2,900.72	2,883.82	17.07	13.61	-177.54	1,816.48	35.45	2,608.61	2,580.42	28.19	92.522		
3,300.00	3,179.00	2,998.45	2,980.48	17.64	14.10	-177.28	1,824.40	23.36	2,646.57	2,617.43	29.14	90.817		
3,400.00	3,274.17	3,099.14	3,080.16	18.21	14.61	-177.03	1,831.96	11.34	2,683.99	2,653.88	30.11	89.137		
3,500.00	3,369.34	3,184.70	3,164.86	18.77	15.04	-176.83	1,838.52	1.18	2,721.62	2,690.65	30.98	87.861		
3,600.00	3,464.51	3,313.07	3,291.88	19.34	15.69	-176.52	1,848.06	-14.70	2,759.17	2,727.03	32.15	85.833		
3,700.00	3,559.68	3,423.63	3,401.50	19.91	16.24	-176.28	1,854.66	-27.51	2,795.27	2,762.08	33.19	84.226		
3,800.00	3,654.84	3,515.58	3,492.75	20.48	16.69	-176.10	1,860.00	-37.41	2,831.28	2,797.18	34.10	83.040		
3,900.00	3,750.01	3,583.66	3,560.38	21.05	17.03	-175.99	1,864.22	-44.08	2,867.69	2,832.85	34.83	82.324		
4,000.00	3,845.18	3,652.76	3,628.96	21.62	17.36	-175.87	1,869.16	-50.96	2,904.98	2,869.40	35.58	81.654		
4,100.00	3,940.35	3,732.76	3,708.32	22.19	17.76	-175.74	1,875.40	-58.89	2,942.88	2,906.49	36.39	80.860		
4,200.00	4,035.52	3,828.52	3,803.33	22.76	18.23	-175.59	1,882.79	-68.28	2,980.74	2,943.41	37.33	79.857		
4,300.00	4,130.69	3,890.94	3,865.26	23.33	18.54	-175.50	1,887.97	-74.20	3,019.15	2,981.14	38.01	79.424		
4,400.00	4,225.86	3,954.91	3,929.63	23.91	19.02	-175.14	-1,123.17	-165.60	2,967.90	2,932.42	35.48	83.649		
4,500.00	4,321.03	4,019.06	4,000.84	24.48	19.59	-175.11	-1,142.32	-165.91	2,873.05	2,837.17	35.88	80.074		
4,600.00	4,416.20	4,093.83	4,075.13	25.05	20.17	-175.08	-1,162.08	-166.29	2,778.34	2,742.04	36.30	76.546		
4,700.00	4,511.37	4,170.00	4,151.76	25.62	20.75	-175.02	-1,181.41	-167.01	2,683.70	2,655.64	28.06	95.628		
4,800.00	4,606.54	4,246.35	4,228.26	26.20	21.33	-174.96	-1,200.57	-167.74	2,588.92	2,551.72	37.21	69.583		
4,900.00	4,701.71	4,321.14	4,303.67	26.77	21.91	-174.86	-1,219.35	-168.79	2,493.97	2,456.30	37.66	66.216		
5,000.00	4,796.88	4,396.33	4,379.31	27.34	22.49	-174.67	-1,237.53	-170.26	2,398.78	2,360.68	38.10	62.958		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	10,232.00	7,193.91	27.92	76.45	174.61	-1,400.19	-170.66	2,303.09	2,264.57	38.52	59.790		
5,200.00	4,987.22	10,263.87	7,193.38	28.49	77.08	174.51	-1,432.05	-171.30	2,207.41	2,168.47	38.94	56.690		
5,300.00	5,082.39	10,296.39	7,192.78	29.07	77.72	174.39	-1,464.56	-172.13	2,111.69	2,072.33	39.36	53.656		
5,400.00	5,177.56	10,328.66	7,192.13	29.64	78.36	174.24	-1,496.81	-173.06	2,015.92	1,976.15	39.77	50.686		
5,500.00	5,272.72	10,360.56	7,191.43	30.21	78.99	174.07	-1,528.68	-174.03	1,920.10	1,879.91	40.19	47.776		
5,600.00	5,367.89	10,383.88	7,190.94	30.79	79.46	173.94	-1,551.99	-174.78	1,824.31	1,783.66	40.64	44.886		
5,700.00	5,463.06	10,413.25	7,190.36	31.36	80.04	173.74	-1,581.33	-175.78	1,728.56	1,687.48	41.08	42.080		
5,800.00	5,558.23	10,441.18	7,189.79	31.94	80.60	173.52	-1,609.23	-176.79	1,632.79	1,591.26	41.53	39.320		
5,900.00	5,653.40	10,468.80	7,189.25	32.51	81.14	173.28	-1,636.83	-177.77	1,537.05	1,495.07	41.98	36.613		
6,000.00	5,748.57	10,495.93	7,188.74	33.09	81.69	173.01	-1,663.94	-178.80	1,441.34	1,398.89	42.45	33.953		
6,100.00	5,843.74	10,518.00	7,188.36	33.67	82.13	172.75	-1,685.99	-179.70	1,345.70	1,302.71	42.99	31.306		
6,200.00	5,938.91	10,541.28	7,188.09	34.24	82.59	172.46	-1,709.25	-180.58	1,250.21	1,206.67	43.54	28.716		
6,300.00	6,034.08	10,564.54	7,187.98	34.82	83.05	172.16	-1,732.50	-181.30	1,154.92	1,110.80	44.12	26.177		
6,400.00	6,129.25	10,591.84	7,188.00	35.39	83.60	171.77	-1,759.79	-182.06	1,059.79	1,015.11	44.67	23.724		
6,500.00	6,224.42	10,621.99	7,188.02	35.97	84.21	171.23	-1,789.92	-183.05	964.68	919.48	45.19	21.345		
6,600.00	6,319.59	10,651.83	7,188.12	36.54	84.80	170.57	-1,819.74	-184.12	869.67	823.93	45.74	19.014		
6,700.00	6,414.76	10,692.85	7,187.96	37.12	85.63	169.45	-1,860.75	-185.36	774.43	728.45	45.99	16.841		
6,800.00	6,509.91	10,725.03	7,187.55	37.70	86.28	168.97	-1,892.91	-186.04	678.93	632.50	46.43	14.622		
6,900.00	6,603.99	10,756.15	7,187.14	38.26	86.90	175.16	-1,924.03	-186.56	583.84	537.11	46.72	12.496		
7,000.00	6,694.76	10,786.22	7,186.58	38.78	87.51	-177.80	-1,954.09	-187.13	491.92	444.72	47.20	10.422		
7,100.00	6,779.96	10,812.66	7,186.08	39.24	88.05	-173.87	-1,980.51	-187.63	408.76	358.29	50.47	8.099		
7,200.00	6,857.50	10,836.44	7,185.68	39.65	88.53	-171.78	-2,004.29	-188.00	344.00	281.76	62.24	5.527		
7,300.00	6,925.48	10,858.31	7,185.34	40.02	88.97	-170.42	-2,026.15	-188.28	311.87	227.03	84.84	3.676		
7,323.98	6,940.17	10,863.05	7,185.26	40.09	89.07	-170.18	-2,030.89	-188.33	310.54	219.64	90.90	3.416 CC		
7,400.00	6,982.21	10,877.94	7,185.02	40.33	89.37	-169.37	-2,045.78	-188.50	323.65	215.72	107.94	2.999 ES, SF		
7,500.00	7,026.31	10,895.13	7,184.72	40.63	89.72	-168.43	-2,062.97	-188.77	375.44	253.96	121.48	3.091		
7,600.00	7,056.68	10,907.01	7,184.48	40.91	89.96	-168.14	-2,074.84	-189.00	453.16	326.02	127.13	3.564		
7,700.00	7,072.58	10,914.04	7,184.34	41.25	90.11	-169.01	-2,081.87	-189.12	544.67	415.49	129.19	4.216		
7,800.00	7,074.86	10,917.08	7,184.28	41.69	90.17	-170.77	-2,084.91	-189.17	642.34	512.47	129.88	4.946		
7,900.00	7,074.54	10,919.32	7,184.23	42.34	90.21	-169.61	-2,087.15	-189.21	741.09	610.84	130.25	5.690		
8,000.00	7,074.21	10,921.52	7,184.18	43.27	90.26	-168.47	-2,089.35	-189.25	840.13	709.62	130.51	6.437		
8,100.00	7,073.89	10,923.67	7,184.13	44.47	90.30	-167.37	-2,091.50	-189.29	939.36	808.66	130.70	7.187		
8,200.00	7,073.57	10,925.78	7,184.09	45.91	90.34	-166.29	-2,093.61	-189.32	1,038.74	907.88	130.86	7.938		
8,300.00	7,073.24	10,927.85	7,184.04	47.53	90.39	-165.25	-2,095.68	-189.35	1,138.22	1,007.23	130.99	8.689		
8,400.00	7,072.92	10,929.88	7,184.00	49.31	90.43	-164.23	-2,097.71	-189.39	1,237.78	1,106.68	131.10	9.441		
8,500.00	7,072.59	10,931.98	7,183.95	51.20	90.47	-163.19	-2,099.81	-189.42	1,337.40	1,206.20	131.20	10.193		
8,600.00	7,072.27	10,934.21	7,183.90	53.19	90.51	-162.09	-2,102.04	-189.45	1,437.08	1,305.78	131.30	10.945		
8,700.00	7,071.94	10,936.44	7,183.85	55.27	90.56	-161.01	-2,104.26	-189.49	1,536.79	1,405.39	131.39	11.696		
8,800.00	7,071.62	10,938.67	7,183.80	57.43	90.61	-159.94	-2,106.49	-189.52	1,636.53	1,505.05	131.48	12.447		
8,900.00	7,071.29	10,940.90	7,183.75	59.64	90.65	-158.89	-2,108.72	-189.56	1,736.30	1,604.73	131.57	13.197		
9,000.00	7,070.97	10,943.13	7,183.70	61.92	90.70	-157.85	-2,110.95	-189.59	1,836.10	1,704.44	131.66	13.946		
9,100.00	7,070.64	10,945.36	7,183.65	64.24	90.74	-156.82	-2,113.18	-189.63	1,935.91	1,804.17	131.74	14.695		
9,200.00	7,070.32	10,947.59	7,183.60	66.61	90.79	-155.80	-2,115.41	-189.66	2,035.74	1,903.91	131.82	15.443		
9,300.00	7,069.99	10,949.82	7,183.55	69.01	90.83	-154.81	-2,117.64	-189.70	2,135.58	2,003.67	131.91	16.190		
9,400.00	7,069.67	10,952.05	7,183.51	71.45	90.88	-153.82	-2,119.87	-189.73	2,235.43	2,103.44	131.99	16.936		
9,500.00	7,069.34	10,954.28	7,183.46	73.92	90.92	-152.86	-2,122.09	-189.77	2,335.29	2,203.22	132.07	17.682		
9,600.00	7,069.02	10,956.51	7,183.41	76.42	90.97	-151.91	-2,124.32	-189.80	2,435.17	2,303.01	132.16	18.426		
9,700.00	7,068.69	10,958.74	7,183.36	78.95	91.01	-150.97	-2,126.55	-189.84	2,535.05	2,402.81	132.24	19.170		
9,800.00	7,068.37	10,960.97	7,183.32	81.49	91.06	-150.05	-2,128.78	-189.87	2,634.94	2,502.61	132.32	19.913		
9,900.00	7,068.04	10,963.21	7,183.27	84.06	91.10	-149.14	-2,131.02	-189.91	2,734.83	2,602.42	132.41	20.654		
10,000.00	7,067.72	10,965.47	7,183.22	86.65	91.15	-148.24	-2,133.28	-189.94	2,834.73	2,702.23	132.50	21.395		
10,100.00	7,067.39	10,967.73	7,183.17	89.25	91.20	-147.36	-2,135.54	-189.98	2,934.64	2,802.05	132.58	22.134		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,067.07	10,969.98	7,183.13	91.87	91.24	-146.49	-2,137.79	-190.02	3,034.55	2,901.87	132.67	22.873		
10,300.00	7,066.74	10,972.24	7,183.08	94.50	91.29	-145.64	-2,140.05	-190.05	3,134.46	3,001.70	132.76	23.610		
10,400.00	7,066.42	10,974.50	7,183.03	97.14	91.33	-144.81	-2,142.31	-190.09	3,234.38	3,101.53	132.85	24.346		
10,500.00	7,066.09	10,976.76	7,182.98	99.80	91.38	-143.99	-2,144.56	-190.12	3,334.30	3,201.36	132.94	25.081		
10,600.00	7,065.77	10,979.01	7,182.93	102.47	91.43	-143.19	-2,146.82	-190.16	3,434.22	3,301.19	133.03	25.815		
10,700.00	7,065.44	10,981.27	7,182.88	105.15	91.47	-142.40	-2,149.08	-190.19	3,534.15	3,401.03	133.12	26.548		
10,800.00	7,065.12	10,983.53	7,182.83	107.83	91.52	-141.63	-2,151.34	-190.23	3,634.08	3,500.86	133.22	27.280		
10,900.00	7,064.79	10,985.79	7,182.78	110.53	91.56	-140.87	-2,153.59	-190.26	3,734.01	3,600.70	133.31	28.010		
11,000.00	7,064.47	10,988.05	7,182.73	113.23	91.61	-140.13	-2,155.85	-190.30	3,833.94	3,700.54	133.40	28.740		
11,100.00	7,064.14	10,990.31	7,182.68	115.95	91.66	-139.41	-2,158.11	-190.33	3,933.88	3,800.38	133.50	29.468		
11,200.00	7,063.82	10,992.56	7,182.63	118.66	91.70	-138.70	-2,160.37	-190.37	4,033.82	3,900.22	133.59	30.194		
11,300.00	7,063.49	10,995.01	7,182.57	121.39	91.75	-137.94	-2,162.61	-190.41	4,133.76	4,000.06	133.70	30.919		
11,400.00	7,063.17	10,997.82	7,182.51	124.12	91.81	-137.10	-2,165.62	-190.45	4,233.70	4,099.89	133.81	31.639		
11,500.00	7,062.84	11,000.66	7,182.45	126.86	91.87	-136.26	-2,168.46	-190.50	4,333.64	4,199.72	133.93	32.358		
11,600.00	7,062.52	11,003.54	7,182.39	129.60	91.93	-135.44	-2,171.34	-190.54	4,433.59	4,299.54	134.04	33.076		
11,700.00	7,062.19	11,006.47	7,182.34	132.35	91.99	-134.63	-2,174.26	-190.59	4,533.53	4,399.37	134.16	33.791		
11,800.00	7,061.87	11,009.43	7,182.28	135.10	92.05	-133.83	-2,177.22	-190.64	4,633.48	4,499.19	134.28	34.505		
11,900.00	7,061.54	11,012.43	7,182.23	137.85	92.11	-133.05	-2,180.23	-190.69	4,733.42	4,599.02	134.41	35.217		
12,000.00	7,061.22	11,015.47	7,182.17	140.61	92.17	-132.27	-2,183.27	-190.74	4,833.37	4,698.84	134.53	35.927		
12,100.00	7,060.89	11,018.56	7,182.12	143.38	92.23	-131.51	-2,186.36	-190.79	4,933.32	4,798.66	134.66	36.635		
12,200.00	7,060.57	12,200.00	7,181.81	146.15	116.32	-126.73	-2,208.08	-191.22	5,033.25	4,874.27	158.98	31.660		
12,300.00	7,060.24	12,300.00	7,181.77	148.92	118.36	-126.18	-2,210.85	-191.28	5,133.19	4,972.11	161.08	31.867		
12,400.00	7,059.92	12,400.00	7,181.73	151.69	120.40	-125.65	-2,213.61	-191.34	5,233.13	5,069.94	163.19	32.068		
12,500.00	7,059.59	12,500.00	7,181.70	154.47	122.44	-125.14	-2,216.37	-191.40	5,333.07	5,167.78	165.29	32.264		
12,600.00	7,059.27	12,600.00	7,181.66	157.25	124.48	-124.63	-2,219.14	-191.45	5,433.01	5,265.61	167.40	32.455		
12,700.00	7,058.94	11,064.40	7,181.48	160.03	93.17	-122.41	-2,232.18	-191.75	5,532.94	5,396.72	136.23	40.615		
12,800.00	7,058.62	11,065.72	7,181.46	162.82	93.19	-122.20	-2,233.49	-191.78	5,632.88	5,496.57	136.31	41.323		
12,900.00	7,058.29	11,067.01	7,181.44	165.61	93.22	-122.00	-2,234.79	-191.80	5,732.82	5,596.43	136.40	42.030		
13,000.00	7,057.97	11,068.27	7,181.43	168.40	93.25	-121.80	-2,236.05	-191.83	5,832.77	5,696.28	136.48	42.737		
13,100.00	7,057.64	11,069.52	7,181.41	171.19	93.27	-121.61	-2,237.29	-191.86	5,932.71	5,796.14	136.57	43.442		
13,200.00	7,057.32	11,070.74	7,181.40	173.99	93.30	-121.42	-2,238.51	-191.89	6,032.65	5,896.00	136.65	44.147		
13,300.00	7,057.00	11,071.93	7,181.38	176.78	93.32	-121.24	-2,239.71	-191.91	6,132.60	5,995.86	136.73	44.851		
13,400.00	7,056.67	11,073.11	7,181.37	179.58	93.34	-121.07	-2,240.88	-191.94	6,232.54	6,095.73	136.82	45.553		
13,500.00	7,056.35	11,074.26	7,181.35	182.38	93.37	-120.90	-2,242.04	-191.96	6,332.49	6,195.59	136.90	46.255		
13,600.00	7,056.02	11,075.39	7,181.34	185.19	93.39	-120.73	-2,243.17	-191.98	6,432.44	6,295.45	136.99	46.956		
13,700.00	7,055.70	11,076.51	7,181.33	187.99	93.41	-120.57	-2,244.28	-192.01	6,532.39	6,395.32	137.07	47.656		
13,800.00	7,055.37	11,077.60	7,181.31	190.80	93.44	-120.41	-2,245.37	-192.03	6,632.34	6,495.18	137.16	48.355		
13,900.00	7,055.05	11,078.67	7,181.30	193.60	93.46	-120.26	-2,246.45	-192.05	6,732.29	6,595.05	137.24	49.054		
14,000.00	7,054.72	11,079.73	7,181.29	196.41	93.48	-120.11	-2,247.50	-192.07	6,832.25	6,694.92	137.33	49.751		
14,100.00	7,054.40	11,080.00	7,181.19	199.22	93.67	-118.85	-2,256.77	-192.24	6,932.21	6,794.56	137.65	50.360		
14,200.00	7,054.07	11,080.00	7,181.19	202.03	93.67	-118.85	-2,256.77	-192.24	7,032.17	6,894.46	137.71	51.065		
14,300.00	7,053.75	11,080.00	7,181.19	204.85	93.67	-118.85	-2,256.77	-192.24	7,132.12	6,994.35	137.77	51.769		
14,400.00	7,053.42	11,080.00	7,181.19	207.66	93.67	-118.85	-2,256.77	-192.24	7,232.07	7,094.25	137.83	52.472		
14,500.00	7,053.10	11,080.00	7,181.19	210.48	93.67	-118.85	-2,256.77	-192.24	7,332.03	7,194.14	137.89	53.175		
14,600.00	7,052.77	11,080.00	7,181.19	213.29	93.67	-118.85	-2,256.77	-192.24	7,431.99	7,294.04	137.94	53.877		
14,700.00	7,052.45	11,080.00	7,181.19	216.11	93.67	-118.85	-2,256.77	-192.24	7,531.95	7,393.94	138.01	54.577		
14,800.00	7,052.12	11,080.00	7,181.19	218.93	93.67	-118.85	-2,256.77	-192.24	7,631.90	7,493.84	138.07	55.277		
14,900.00	7,051.80	11,080.00	7,181.19	221.75	93.67	-118.85	-2,256.77	-192.24	7,731.87	7,593.74	138.13	55.976		
15,000.00	7,051.47	11,080.00	7,181.19	224.57	93.67	-118.85	-2,256.77	-192.24	7,831.83	7,693.64	138.19	56.674		
15,100.00	7,051.15	11,080.00	7,181.19	227.39	93.67	-118.85	-2,256.77	-192.24	7,931.79	7,793.54	138.25	57.371		
15,145.13	7,051.00	11,080.00	7,181.19	228.67	93.67	-118.85	-2,256.77	-192.24	7,976.90	7,838.62	138.28	57.685		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	9.33	1,691.83	277.84	1,714.49					
100.00	100.00	104.15	104.15	3.28	3.29	9.33	1,691.67	278.05	1,714.37	1,707.80	6.57	260.833		
200.00	200.00	212.98	212.98	3.34	3.34	9.35	1,691.09	278.56	1,713.93	1,707.25	6.67	256.791		
227.26	227.26	243.51	243.51	3.36	3.36	-175.03	1,690.80	278.68	1,713.82	1,707.10	6.72	254.846		
300.00	299.98	316.48	316.48	3.44	3.45	-175.04	1,690.16	278.36	1,714.75	1,707.86	6.89	248.984		
400.00	399.84	420.64	420.62	3.59	3.61	-175.07	1,689.19	277.40	1,718.89	1,711.69	7.20	238.691		
500.00	499.45	523.96	523.93	3.79	3.82	-175.08	1,687.77	277.41	1,726.22	1,718.61	7.61	226.778		
600.00	598.70	615.95	615.92	4.03	4.04	-175.08	1,686.64	277.64	1,737.20	1,729.12	8.08	215.128		
700.00	697.47	718.72	718.67	4.31	4.32	-175.08	1,685.44	278.15	1,751.72	1,743.09	8.63	202.943		
800.00	795.62	820.87	820.81	4.64	4.63	-175.07	1,683.88	278.79	1,769.36	1,760.11	9.24	191.393		
900.00	893.06	914.25	914.18	5.00	4.93	-175.06	1,682.55	279.50	1,790.51	1,780.64	9.88	181.283		
1,000.00	989.64	1,004.33	1,004.25	5.40	5.23	-175.04	1,681.40	280.60	1,815.28	1,804.74	10.53	172.320		
1,100.00	1,085.27	1,090.40	1,090.31	5.83	5.52	-175.04	1,680.85	281.48	1,843.95	1,832.74	11.21	164.450		
1,200.00	1,180.44	1,184.01	1,183.92	6.29	5.85	-175.09	1,680.54	282.15	1,874.35	1,862.42	11.92	157.185		
1,300.00	1,275.61	1,280.84	1,280.74	6.76	6.21	-175.15	1,680.22	282.88	1,904.75	1,892.08	12.67	150.295		
1,400.00	1,370.78	1,375.58	1,375.48	7.26	6.56	-175.21	1,679.81	283.43	1,935.04	1,921.61	13.43	144.032		
1,500.00	1,465.95	1,463.36	1,463.26	7.76	6.89	-175.26	1,679.72	283.99	1,965.64	1,951.46	14.18	138.617		
1,600.00	1,561.12	1,558.46	1,558.35	8.27	7.25	-175.31	1,679.74	284.66	1,996.38	1,981.41	14.97	133.371		
1,700.00	1,656.29	1,653.28	1,653.17	8.80	7.62	-175.36	1,679.78	285.43	2,027.15	2,011.38	15.77	128.556		
1,800.00	1,751.46	1,753.93	1,753.82	9.32	8.02	-175.41	1,679.73	286.07	2,057.81	2,041.21	16.61	123.903		
1,900.00	1,846.63	1,850.65	1,850.53	9.86	8.40	-175.46	1,679.33	286.75	2,088.14	2,070.70	17.44	119.752		
2,000.00	1,941.80	1,929.05	1,928.94	10.40	8.70	-175.52	1,679.52	286.57	2,118.95	2,100.78	18.17	116.594		
2,100.00	2,036.96	2,005.29	2,005.16	10.94	8.99	-175.60	1,680.47	285.59	2,150.56	2,131.67	18.89	113.832		
2,200.00	2,132.13	2,074.51	2,074.35	11.49	9.25	-175.70	1,682.12	284.14	2,183.13	2,163.55	19.58	111.503		
2,300.00	2,227.30	2,140.41	2,140.18	12.04	9.50	-175.79	1,684.54	282.39	2,216.86	2,196.61	20.25	109.484		
2,400.00	2,322.47	2,204.14	2,203.80	12.59	9.75	-175.90	1,687.78	280.55	2,251.84	2,230.94	20.90	107.725		
2,500.00	2,417.64	2,280.21	2,279.70	13.15	10.05	-176.02	1,692.43	278.39	2,287.81	2,266.18	21.63	105.787		
2,600.00	2,512.81	2,355.72	2,355.00	13.70	10.35	-176.13	1,697.60	276.38	2,324.49	2,302.14	22.35	104.013		
2,700.00	2,607.98	2,433.77	2,432.80	14.26	10.66	-176.25	1,703.52	274.25	2,361.85	2,338.76	23.09	102.309		
2,800.00	2,703.15	2,512.04	2,510.76	14.82	10.98	-176.38	1,709.95	271.57	2,399.72	2,375.90	23.83	100.720		
2,900.00	2,798.32	2,585.73	2,584.11	15.38	11.28	-176.51	1,716.54	268.96	2,438.27	2,413.73	24.54	99.361		
3,000.00	2,893.49	2,661.42	2,659.39	15.95	11.59	-176.64	1,723.85	266.24	2,477.47	2,452.21	25.27	98.055		
3,100.00	2,988.66	2,731.47	2,729.00	16.51	11.88	-176.76	1,731.16	263.52	2,517.37	2,491.41	25.96	96.981		
3,200.00	3,083.83	2,810.64	2,807.59	17.07	12.22	-176.91	1,740.14	260.00	2,558.03	2,531.32	26.71	95.778		
3,300.00	3,179.00	2,917.19	2,913.33	17.64	12.68	-177.11	1,752.16	254.89	2,598.64	2,571.00	27.64	94.005		
3,400.00	3,274.17	3,020.24	3,015.68	18.21	13.13	-177.30	1,763.03	249.75	2,638.56	2,610.00	28.56	92.383		
3,500.00	3,369.34	3,115.55	3,110.31	18.77	13.55	-177.48	1,773.02	244.31	2,678.38	2,648.95	29.43	91.004		
3,600.00	3,464.51	3,224.74	3,218.76	19.34	14.03	-177.69	1,784.07	238.13	2,717.90	2,687.51	30.40	89.408		
3,700.00	3,559.68	3,313.55	3,307.05	19.91	14.42	-177.83	1,792.60	233.69	2,757.03	2,725.80	31.23	88.277		
3,800.00	3,654.84	3,394.68	3,387.69	20.48	14.78	-177.96	1,800.63	230.02	2,796.49	2,764.47	32.01	87.354		
3,900.00	3,750.01	3,477.89	3,470.38	21.05	15.16	-178.08	1,809.19	226.19	2,836.29	2,803.48	32.81	86.446		
4,000.00	3,845.18	3,567.50	3,559.41	21.62	15.56	-178.21	1,818.54	222.28	2,876.29	2,842.63	33.65	85.469		
4,100.00	3,940.35	3,664.20	3,655.49	22.19	16.00	-178.34	1,828.58	217.88	2,916.22	2,881.67	34.55	84.410		
4,200.00	4,035.52	3,764.11	3,754.74	22.76	16.46	-178.49	1,838.77	212.74	2,955.95	2,920.48	35.47	83.340		
4,300.00	4,130.69	3,849.12	3,839.21	23.33	16.85	-178.62	1,847.28	208.26	2,995.51	2,959.23	36.29	82.554		
4,400.00	4,225.86	4,400.00	7,235.85	23.91	60.11	-166.29	-1,128.42	148.82	3,019.38	2,987.66	31.72	95.174		
4,500.00	4,321.03	10,081.56	7,235.52	24.48	71.96	-165.11	-1,174.11	154.96	2,924.83	2,887.89	36.94	79.181		
4,600.00	4,416.20	10,152.46	7,234.31	25.05	73.37	-163.14	-1,244.46	163.67	2,829.96	2,792.30	37.65	75.156		
4,700.00	4,511.37	10,188.57	7,233.51	25.62	74.09	-162.08	-1,280.39	167.19	2,735.04	2,696.81	38.23	71.544		
4,800.00	4,606.54	10,194.21	7,233.43	26.20	74.20	-161.91	-1,286.00	167.76	2,640.29	2,601.58	38.72	68.194		
4,900.00	4,701.71	10,204.38	7,233.31	26.77	74.41	-161.59	-1,296.12	168.79	2,545.84	2,506.58	39.26	64.847		
5,000.00	4,796.88	5,000.00	7,233.06	27.34	48.15	-160.55	-1,328.23	172.02	2,451.59	2,424.39	27.20	90.144		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	10,264.56	7,232.77	27.92	75.61	-159.60	-1,356.02	174.53	2,357.34	2,316.77	40.56	58.116		
5,200.00	4,987.22	10,280.31	7,232.73	28.49	75.93	-159.05	-1,371.71	175.85	2,263.38	2,222.15	41.23	54.894		
5,300.00	5,082.39	10,352.22	7,232.44	29.07	77.37	-156.54	-1,443.55	178.24	2,169.29	2,127.30	41.99	51.664		
5,400.00	5,177.56	10,365.24	7,232.39	29.64	77.63	-156.07	-1,456.57	178.25	2,075.19	2,032.48	42.71	48.583		
5,500.00	5,272.72	10,388.24	7,232.45	30.21	78.09	-155.20	-1,479.56	178.42	1,981.44	1,937.94	43.50	45.552		
5,600.00	5,367.89	10,432.37	7,232.45	30.79	78.97	-153.38	-1,523.70	178.68	1,887.77	1,843.45	44.33	42.589		
5,700.00	5,463.06	10,468.85	7,232.23	31.36	79.70	-151.72	-1,560.18	178.85	1,794.07	1,748.86	45.21	39.682		
5,800.00	5,558.23	10,507.34	7,231.84	31.94	80.47	-149.81	-1,598.67	178.85	1,700.39	1,654.23	46.16	36.838		
5,900.00	5,653.40	10,535.30	7,231.49	32.51	81.03	-148.28	-1,626.62	179.06	1,606.92	1,559.70	47.22	34.030		
6,000.00	5,748.57	10,575.23	7,230.91	33.09	81.83	-145.92	-1,666.55	178.85	1,513.56	1,465.22	48.35	31.305		
6,100.00	5,843.74	10,600.19	7,230.56	33.67	82.33	-144.33	-1,691.50	178.46	1,420.47	1,370.82	49.64	28.613		
6,200.00	5,938.91	10,617.61	7,230.39	34.24	82.69	-143.14	-1,708.92	178.37	1,327.93	1,276.78	51.15	25.961		
6,300.00	6,034.08	10,645.41	7,230.25	34.82	83.25	-141.09	-1,736.72	178.61	1,236.08	1,183.22	52.85	23.388		
6,400.00	6,129.25	10,675.94	7,230.01	35.39	83.86	-138.64	-1,767.24	178.91	1,144.72	1,089.90	54.82	20.883		
6,500.00	6,224.42	10,722.43	7,229.45	35.97	84.81	-134.49	-1,813.73	179.34	1,054.02	996.96	57.06	18.471		
6,600.00	6,319.59	10,739.72	7,229.16	36.54	85.16	-132.81	-1,831.02	179.48	964.05	904.15	59.90	16.095		
6,700.00	6,414.76	10,753.00	7,229.03	37.12	85.43	-131.45	-1,844.29	179.72	875.68	812.32	63.36	13.820		
6,800.00	6,509.91	10,774.84	7,229.07	37.70	85.87	-134.30	-1,866.12	180.33	789.62	721.99	67.64	11.674		
6,900.00	6,603.99	10,801.85	7,229.53	38.26	86.42	-149.09	-1,893.12	181.30	712.69	638.71	73.98	9.633		
7,000.00	6,694.76	10,830.86	7,230.02	38.78	87.02	-158.14	-1,922.11	182.18	651.82	568.74	83.08	7.846		
7,100.00	6,779.96	10,852.92	7,230.52	39.24	87.47	-163.68	-1,944.15	182.97	614.05	519.71	94.34	6.509		
7,179.42	6,842.27	10,868.81	7,231.01	39.57	87.80	-166.49	-1,960.01	183.61	604.39	500.82	103.57	5.836 CC		
7,200.00	6,857.50	10,872.73	7,231.15	39.65	87.88	-167.07	-1,963.93	183.78	605.05	499.21	105.84	5.717 ES		
7,300.00	6,925.48	10,898.04	7,232.18	40.02	88.40	-168.66	-1,989.20	184.77	626.47	511.02	115.44	5.427 SF		
7,400.00	6,982.21	10,929.16	7,233.64	40.33	89.04	-168.83	-2,020.27	185.43	674.93	552.75	122.18	5.524		
7,500.00	7,026.31	10,973.06	7,235.73	40.63	89.93	-166.71	-2,064.12	185.11	744.29	617.74	126.55	5.881		
7,600.00	7,056.68	10,996.60	7,236.74	40.91	90.41	-165.81	-2,087.62	184.32	828.10	699.25	128.86	6.427		
7,700.00	7,072.58	11,013.15	7,237.39	41.25	90.75	-164.74	-2,104.15	183.65	921.22	791.15	130.07	7.083		
7,800.00	7,074.86	11,017.31	7,237.53	41.69	90.83	-164.80	-2,108.30	183.48	1,019.20	888.67	130.53	7.808		
7,900.00	7,074.54	11,022.52	7,237.70	42.34	90.94	-163.09	-2,113.51	183.26	1,117.99	987.11	130.88	8.542		
8,000.00	7,074.21	11,027.73	7,237.86	43.27	91.04	-161.41	-2,118.71	183.04	1,216.95	1,085.77	131.18	9.277		
8,100.00	7,073.89	11,032.95	7,238.00	44.47	91.15	-159.77	-2,123.92	182.82	1,316.05	1,184.61	131.44	10.012		
8,200.00	7,073.57	11,038.16	7,238.14	45.91	91.25	-158.16	-2,129.13	182.61	1,415.26	1,283.57	131.68	10.747		
8,300.00	7,073.24	11,045.39	7,238.30	47.53	91.40	-155.99	-2,136.35	182.30	1,514.55	1,382.60	131.95	11.478		
8,400.00	7,072.92	11,053.37	7,238.44	49.31	91.56	-153.67	-2,144.32	181.95	1,613.91	1,481.68	132.23	12.206		
8,500.00	7,072.59	11,061.80	7,238.53	51.20	91.73	-151.32	-2,152.74	181.57	1,713.31	1,580.81	132.50	12.931		
8,600.00	7,072.27	8,600.00	7,238.49	53.19	42.15	-144.68	-2,178.64	180.21	1,812.68	1,729.57	83.12	21.809		
8,700.00	7,071.94	11,110.17	7,238.31	55.27	92.71	-139.67	-2,201.04	178.89	1,912.11	1,778.36	133.76	14.296		
8,800.00	7,071.62	11,116.00	7,238.24	57.43	92.83	-138.47	-2,206.85	178.53	2,011.52	1,877.56	133.97	15.015		
8,900.00	7,071.29	11,121.71	7,238.15	59.64	92.94	-137.33	-2,212.55	178.17	2,110.98	1,976.80	134.17	15.733		
9,000.00	7,070.97	11,127.33	7,238.07	61.92	93.06	-136.25	-2,218.16	177.82	2,210.46	2,076.08	134.38	16.450		
9,100.00	7,070.64	11,133.00	7,237.98	64.24	93.17	-135.19	-2,223.82	177.47	2,309.97	2,175.39	134.58	17.165		
9,200.00	7,070.32	11,133.00	7,237.98	66.61	93.17	-135.19	-2,223.82	177.47	2,409.51	2,274.87	134.64	17.896		
9,300.00	7,069.99	11,133.00	7,237.98	69.01	93.17	-135.19	-2,223.82	177.47	2,509.09	2,374.40	134.69	18.628		
9,400.00	7,069.67	11,133.00	7,237.98	71.45	93.17	-135.19	-2,223.82	177.47	2,608.70	2,473.95	134.75	19.360		
9,500.00	7,069.34	11,143.08	7,237.84	73.92	93.38	-133.41	-2,233.88	176.89	2,708.29	2,573.24	135.05	20.054		
9,600.00	7,069.02	11,145.35	7,237.81	76.42	93.42	-133.03	-2,236.14	176.76	2,807.93	2,672.77	135.16	20.775		
9,700.00	7,068.69	11,147.51	7,237.79	78.95	93.47	-132.66	-2,238.30	176.65	2,907.59	2,772.33	135.26	21.496		
9,800.00	7,068.37	11,149.58	7,237.76	81.49	93.51	-132.32	-2,240.37	176.54	3,007.27	2,871.91	135.36	22.216		
9,900.00	7,068.04	11,151.57	7,237.74	84.06	93.55	-131.99	-2,242.36	176.44	3,106.97	2,971.51	135.46	22.936		
10,000.00	7,067.72	11,153.48	7,237.72	86.65	93.59	-131.69	-2,244.26	176.35	3,206.68	3,071.13	135.56	23.656		
10,100.00	7,067.39	11,155.31	7,237.70	89.25	93.62	-131.39	-2,246.09	176.26	3,306.41	3,170.76	135.65	24.375		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,067.07	11,165.00	7,237.62	91.87	93.82	-129.91	-2,255.77	175.83	3,406.18	3,270.23	135.95	25.055		
10,300.00	7,066.74	11,165.00	7,237.62	94.50	93.82	-129.91	-2,255.77	175.83	3,505.92	3,369.93	135.99	25.781		
10,400.00	7,066.42	11,165.00	7,237.62	97.14	93.82	-129.91	-2,255.77	175.83	3,605.67	3,469.64	136.04	26.505		
10,500.00	7,066.09	11,165.00	7,237.62	99.80	93.82	-129.91	-2,255.77	175.83	3,705.44	3,569.36	136.08	27.230		
10,600.00	7,065.77	11,165.00	7,237.62	102.47	93.82	-129.91	-2,255.77	175.83	3,805.22	3,669.10	136.12	27.954		
10,700.00	7,065.44	11,165.00	7,237.62	105.15	93.82	-129.91	-2,255.77	175.83	3,905.01	3,768.85	136.17	28.678		
10,800.00	7,065.12	11,168.82	7,237.59	107.83	93.90	-129.34	-2,259.59	175.67	4,004.81	3,868.50	136.31	29.380		
10,900.00	7,064.79	11,172.77	7,237.57	110.53	93.98	-128.78	-2,263.54	175.50	4,104.62	3,968.16	136.46	30.079		
11,000.00	7,064.47	11,176.69	7,237.54	113.23	94.06	-128.23	-2,267.45	175.34	4,204.43	4,067.82	136.61	30.776		
11,100.00	7,064.14	11,180.57	7,237.51	115.95	94.14	-127.70	-2,271.33	175.18	4,304.24	4,167.48	136.76	31.473		
11,200.00	7,063.82	11,184.42	7,237.49	118.66	94.21	-127.18	-2,275.17	175.02	4,404.06	4,267.15	136.91	32.167		
11,300.00	7,063.49	11,188.23	7,237.46	121.39	94.29	-126.68	-2,278.98	174.87	4,503.88	4,366.82	137.06	32.861		
11,400.00	7,063.17	11,192.01	7,237.43	124.12	94.37	-126.20	-2,282.76	174.71	4,603.71	4,466.50	137.21	33.552		
11,500.00	7,062.84	11,195.76	7,237.41	126.86	94.44	-125.73	-2,286.50	174.56	4,703.54	4,566.18	137.36	34.243		
11,600.00	7,062.52	11,197.00	7,237.40	129.60	94.47	-125.58	-2,287.74	174.51	4,803.38	4,665.94	137.44	34.949		
11,700.00	7,062.19	11,197.00	7,237.40	132.35	94.47	-125.58	-2,287.74	174.51	4,903.22	4,765.73	137.49	35.663		
11,800.00	7,061.87	11,203.77	7,237.35	135.10	94.61	-124.76	-2,294.51	174.25	5,003.05	4,865.33	137.72	36.327		
11,900.00	7,061.54	11,206.22	7,237.33	137.85	94.66	-124.47	-2,296.96	174.15	5,102.90	4,965.06	137.84	37.021		
12,000.00	7,061.22	11,208.63	7,237.32	140.61	94.71	-124.20	-2,299.37	174.06	5,202.75	5,064.80	137.95	37.714		
12,100.00	7,060.89	11,211.00	7,237.30	143.38	94.76	-123.93	-2,301.73	173.97	5,302.60	5,164.54	138.07	38.406		
12,200.00	7,060.57	11,213.32	7,237.28	146.15	94.80	-123.67	-2,304.05	173.88	5,402.46	5,264.28	138.18	39.097		
12,300.00	7,060.24	11,215.61	7,237.27	148.92	94.85	-123.41	-2,306.34	173.80	5,502.32	5,364.02	138.30	39.786		
12,400.00	7,059.92	11,217.85	7,237.25	151.69	94.90	-123.17	-2,308.58	173.71	5,602.18	5,463.77	138.41	40.475		
12,500.00	7,059.59	11,220.06	7,237.24	154.47	94.94	-122.93	-2,310.78	173.63	5,702.05	5,563.53	138.52	41.163		
12,600.00	7,059.27	11,228.00	7,237.18	157.25	95.10	-122.09	-2,318.72	173.35	5,801.93	5,663.13	138.80	41.801		
12,700.00	7,058.94	11,228.00	7,237.18	160.03	95.10	-122.09	-2,318.72	173.35	5,901.80	5,762.94	138.85	42.504		
12,800.00	7,058.62	11,228.00	7,237.18	162.82	95.10	-122.09	-2,318.72	173.35	6,001.67	5,862.76	138.90	43.207		
12,900.00	7,058.29	11,231.52	7,237.16	165.61	95.17	-121.74	-2,322.24	173.23	6,101.55	5,962.49	139.06	43.878		
13,000.00	7,057.97	11,246.26	7,237.02	168.40	95.47	-120.31	-2,336.97	172.70	6,201.42	6,061.89	139.53	44.444		
13,100.00	7,057.64	13,100.00	7,236.52	171.19	133.30	-117.57	-2,368.54	171.45	6,301.26	6,123.57	177.69	35.463		
13,200.00	7,057.32	13,200.00	7,236.43	173.99	135.35	-117.19	-2,373.31	171.25	6,401.12	6,221.29	179.83	35.596		
13,300.00	7,057.00	13,300.00	7,236.34	176.78	137.39	-116.82	-2,378.08	171.06	6,500.97	6,319.00	181.97	35.726		
13,400.00	7,056.67	13,400.00	7,236.26	179.58	139.43	-116.46	-2,382.84	170.86	6,600.82	6,416.71	184.11	35.853		
13,500.00	7,056.35	11,291.00	7,236.28	182.38	96.39	-116.55	-2,381.67	170.91	6,700.68	6,559.57	141.11	47.486		
13,600.00	7,056.02	11,301.30	7,236.04	185.19	96.60	-115.79	-2,391.96	170.47	6,800.52	6,659.05	141.47	48.070		
13,700.00	7,055.70	11,302.96	7,236.00	187.99	96.63	-115.67	-2,393.61	170.41	6,900.38	6,758.80	141.58	48.739		
13,800.00	7,055.37	11,304.58	7,235.97	190.80	96.66	-115.56	-2,395.24	170.34	7,000.24	6,858.56	141.69	49.407		
13,900.00	7,055.05	11,306.18	7,235.93	193.60	96.70	-115.44	-2,396.83	170.28	7,100.11	6,958.32	141.79	50.074		
14,000.00	7,054.72	11,307.74	7,235.89	196.41	96.73	-115.34	-2,398.39	170.22	7,199.98	7,058.08	141.90	50.740		
14,100.00	7,054.40	11,309.28	7,235.85	199.22	96.76	-115.23	-2,399.93	170.16	7,299.85	7,157.84	142.01	51.405		
14,200.00	7,054.07	11,310.79	7,235.82	202.03	96.79	-115.12	-2,401.43	170.10	7,399.72	7,257.61	142.11	52.069		
14,300.00	7,053.75	11,312.27	7,235.78	204.85	96.82	-115.02	-2,402.91	170.04	7,499.59	7,357.37	142.22	52.733		
14,400.00	7,053.42	11,323.00	7,235.52	207.66	97.04	-114.31	-2,413.63	169.65	7,599.49	7,456.89	142.60	53.292		
14,500.00	7,053.10	11,323.00	7,235.52	210.48	97.04	-114.31	-2,413.63	169.65	7,699.36	7,556.70	142.66	53.968		
14,600.00	7,052.77	11,323.00	7,235.52	213.29	97.04	-114.31	-2,413.63	169.65	7,799.24	7,656.51	142.73	54.644		
14,700.00	7,052.45	11,323.00	7,235.52	216.11	97.04	-114.31	-2,413.63	169.65	7,899.12	7,756.33	142.79	55.319		
14,800.00	7,052.12	11,323.00	7,235.52	218.93	97.04	-114.31	-2,413.63	169.65	7,999.01	7,856.15	142.86	55.993		
14,900.00	7,051.80	11,323.00	7,235.52	221.75	97.04	-114.31	-2,413.63	169.65	8,098.89	7,955.97	142.92	56.666		
15,000.00	7,051.47	11,323.00	7,235.52	224.57	97.04	-114.31	-2,413.63	169.65	8,198.78	8,055.79	142.99	57.338		
15,100.00	7,051.15	11,324.41	7,235.49	227.39	97.07	-114.22	-2,415.04	169.60	8,298.68	8,155.58	143.10	57.992		
15,145.13	7,051.00	11,327.99	7,235.40	228.67	97.14	-113.99	-2,418.62	169.48	8,343.75	8,200.52	143.24	58.251		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	10.26	1,687.46	305.38	1,714.87					
100.00	100.00	77.93	77.93	3.28	3.29	10.28	1,687.86	305.98	1,715.51	1,708.94	6.57	261.115		
200.00	200.00	160.01	159.97	3.34	3.30	10.33	1,689.12	307.91	1,717.42	1,710.78	6.64	258.545		
300.00	299.98	280.29	280.19	3.44	3.41	-173.95	1,690.77	311.55	1,721.09	1,714.24	6.85	251.366		
400.00	399.84	373.20	373.05	3.59	3.54	-173.86	1,691.03	314.31	1,727.14	1,720.01	7.13	242.175		
500.00	499.45	464.19	464.02	3.79	3.70	-173.85	1,693.06	315.20	1,738.12	1,730.62	7.50	231.791		
600.00	598.70	591.19	591.00	4.03	3.99	-173.89	1,694.38	315.16	1,751.18	1,743.16	8.02	218.336		
700.00	697.47	679.04	678.85	4.31	4.22	-173.89	1,694.90	315.49	1,767.39	1,758.86	8.53	207.240		
800.00	795.62	767.26	767.07	4.64	4.47	-173.89	1,695.99	316.18	1,787.69	1,778.60	9.09	196.684		
900.00	893.06	876.46	876.25	5.00	4.81	-173.91	1,697.38	317.01	1,811.43	1,801.67	9.76	185.589		
1,000.00	989.64	970.81	970.59	5.40	5.12	-173.92	1,698.24	317.57	1,838.15	1,827.72	10.43	176.295		
1,100.00	1,085.27	1,052.18	1,051.96	5.83	5.39	-173.93	1,699.33	317.99	1,868.57	1,857.49	11.08	168.568		
1,200.00	1,180.44	1,144.29	1,144.05	6.29	5.72	-174.02	1,701.01	318.51	1,900.91	1,889.13	11.79	161.278		
1,300.00	1,275.61	1,250.53	1,250.27	6.76	6.10	-174.14	1,702.80	318.38	1,933.03	1,920.47	12.57	153.837		
1,400.00	1,370.78	1,340.85	1,340.58	7.26	6.43	-174.25	1,704.22	317.72	1,964.95	1,951.65	13.30	147.742		
1,500.00	1,465.95	1,439.19	1,438.90	7.76	6.80	-174.38	1,705.82	316.88	1,996.90	1,982.82	14.08	141.778		
1,600.00	1,561.12	1,510.78	1,510.48	8.27	7.08	-174.44	1,707.17	317.06	2,029.29	2,014.52	14.77	137.409		
1,700.00	1,656.29	1,579.15	1,578.80	8.80	7.34	-174.46	1,709.03	318.79	2,062.81	2,047.36	15.44	133.568		
1,800.00	1,751.46	1,648.53	1,648.07	9.32	7.62	-174.45	1,711.62	321.80	2,097.54	2,081.41	16.13	130.049		
1,900.00	1,846.63	1,727.00	1,726.31	9.86	7.94	-174.39	1,714.96	326.72	2,133.08	2,116.22	16.86	126.493		
2,000.00	1,941.80	1,794.17	1,793.18	10.40	8.21	-174.32	1,718.28	332.05	2,169.52	2,151.98	17.54	123.656		
2,100.00	2,036.96	1,858.78	1,857.42	10.94	8.48	-174.23	1,722.18	337.82	2,207.13	2,188.92	18.21	121.180		
2,200.00	2,132.13	1,923.61	1,921.81	11.49	8.76	-174.15	1,726.94	343.69	2,245.94	2,227.06	18.88	118.937		
2,300.00	2,227.30	2,007.09	2,004.64	12.04	9.12	-174.04	1,733.65	351.54	2,285.46	2,265.80	19.66	116.233		
2,400.00	2,322.47	2,087.61	2,084.55	12.59	9.47	-173.95	1,740.54	358.69	2,325.37	2,304.94	20.43	113.832		
2,500.00	2,417.64	2,177.89	2,174.16	13.15	9.87	-173.88	1,748.71	365.86	2,365.58	2,344.33	21.26	111.291		
2,600.00	2,512.81	2,275.82	2,271.31	13.70	10.31	-173.77	1,757.22	374.87	2,405.67	2,383.54	22.14	108.669		
2,700.00	2,607.98	2,404.96	2,399.45	14.26	10.90	-173.61	1,767.11	387.46	2,444.94	2,421.72	23.22	105.290		
2,800.00	2,703.15	2,490.45	2,484.37	14.82	11.29	-173.52	1,773.20	395.25	2,483.62	2,459.58	24.04	103.320		
2,900.00	2,798.32	2,569.16	2,562.53	15.38	11.65	-173.44	1,779.13	402.39	2,522.67	2,497.85	24.81	101.660		
3,000.00	2,893.49	2,641.92	2,634.72	15.95	11.99	-173.36	1,785.01	409.26	2,562.29	2,536.74	25.55	100.270		
3,100.00	2,988.66	2,732.47	2,724.49	16.51	12.42	-173.26	1,792.81	418.25	2,602.47	2,576.06	26.41	98.533		
3,200.00	3,083.83	2,822.42	2,813.15	17.07	13.12	-173.06	1,803.60	434.64	2,641.61	2,613.94	27.67	95.468		
3,300.00	3,179.00	2,918.92	2,908.90	17.64	13.58	-172.93	1,809.34	445.09	2,679.56	2,650.98	28.58	93.760		
3,400.00	3,274.17	3,014.82	3,004.25	18.21	14.03	-172.85	1,815.20	453.58	2,717.30	2,687.82	29.48	92.169		
3,500.00	3,369.34	3,111.66	3,101.61	18.77	14.39	-172.78	1,820.11	460.48	2,755.33	2,725.07	30.26	91.057		
3,600.00	3,464.51	3,225.10	3,213.53	19.34	14.74	-172.71	1,825.13	467.73	2,793.93	2,762.92	31.02	90.080		
3,700.00	3,559.68	3,354.19	3,341.78	19.91	15.35	-172.60	1,833.88	479.53	2,832.39	2,800.24	32.15	88.101		
3,800.00	3,654.84	3,438.98	3,426.10	20.48	15.75	-172.55	1,839.23	486.54	2,870.23	2,837.25	32.98	87.024		
3,900.00	3,750.01	3,527.54	3,514.14	21.05	16.16	-172.48	1,844.92	494.32	2,908.27	2,874.42	33.84	85.935		
4,000.00	3,845.18	3,606.49	3,592.59	21.62	16.54	-172.43	1,850.19	501.35	2,946.57	2,911.93	34.64	85.068		
4,100.00	3,940.35	3,701.19	3,686.68	22.19	16.99	-172.36	1,856.76	509.85	2,985.12	2,949.58	35.54	83.984		
4,200.00	4,035.52	3,800.67	3,785.46	22.76	17.47	-172.27	1,863.23	519.74	3,023.46	2,986.97	36.49	82.861		
4,300.00	4,130.69	3,865.85	3,850.12	23.33	17.79	-172.21	1,867.50	526.69	3,062.02	3,024.82	37.19	82.329		
4,400.00	4,225.86	4,039.63	4,018.93	23.91	17.98	-172.16	1,871.50	533.69	3,100.27	3,061.57	37.98	81.800		
4,500.00	4,321.03	4,118.35	4,101.35	24.48	18.37	-172.11	1,875.25	540.74	3,137.92	3,098.62	38.77	81.275		
4,600.00	4,416.20	4,203.00	4,185.00	25.05	18.76	-172.06	1,878.87	547.84	3,174.97	3,135.17	39.56	80.754		
4,700.00	4,511.37	4,287.14	4,268.14	25.62	19.15	-172.01	1,882.37	554.99	3,211.52	3,171.22	40.35	80.237		
4,800.00	4,606.54	4,370.82	4,350.82	26.20	19.54	-171.96	1,885.75	562.19	3,247.57	3,206.77	41.14	79.724		
4,900.00	4,701.71	4,454.95	4,434.95	26.77	19.93	-171.91	1,888.99	569.44	3,283.02	3,241.72	41.93	79.215		
5,000.00	4,796.88	4,538.57	4,518.57	27.34	20.32	-171.86	1,892.10	576.74	3,317.97	3,276.17	42.72	78.710		
5,100.00	4,892.05	4,621.77	4,601.77	27.92	20.71	-171.81	1,895.09	584.09	3,352.42	3,310.12	43.51	78.209		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	10,195.03	7,119.76	28.49	76.01	-133.22	-1,405.41	638.44	2,259.12	2,209.25	49.87	45.304		
5,300.00	5,082.39	10,228.23	7,120.23	29.07	76.66	-131.88	-1,438.55	636.63	2,170.14	2,118.84	51.31	42.298		
5,400.00	5,177.56	10,260.51	7,120.64	29.64	77.29	-130.52	-1,470.79	634.98	2,081.68	2,028.82	52.86	39.381		
5,500.00	5,272.72	10,305.86	7,120.99	30.21	78.18	-128.50	-1,516.07	632.74	1,993.66	1,939.09	54.57	36.533		
5,600.00	5,367.89	10,345.60	7,121.09	30.79	78.97	-126.65	-1,555.76	630.67	1,906.13	1,849.72	56.41	33.788		
5,700.00	5,463.06	10,417.46	7,120.19	31.36	80.38	-123.06	-1,627.50	626.57	1,818.77	1,760.29	58.48	31.099		
5,800.00	5,558.23	10,447.65	7,119.43	31.94	80.98	-121.45	-1,657.63	625.02	1,732.14	1,671.47	60.67	28.550		
5,900.00	5,653.40	10,491.68	7,118.11	32.51	81.85	-119.01	-1,701.58	622.62	1,646.37	1,583.27	63.11	26.088		
6,000.00	5,748.57	10,521.94	7,117.10	33.09	82.45	-117.27	-1,731.77	620.74	1,561.63	1,495.87	65.76	23.747		
6,100.00	5,843.74	10,558.63	7,115.77	33.67	83.18	-115.09	-1,768.37	618.63	1,478.29	1,409.57	68.72	21.511		
6,200.00	5,938.91	10,597.38	7,114.28	34.24	83.95	-112.71	-1,806.98	615.67	1,396.25	1,324.27	71.98	19.397		
6,300.00	6,034.08	10,628.46	7,113.12	34.82	84.56	-110.75	-1,837.92	613.03	1,316.05	1,240.46	75.59	17.411		
6,400.00	6,129.25	10,651.02	7,112.35	35.39	85.01	-109.30	-1,860.39	611.00	1,238.12	1,158.53	79.59	15.557		
6,500.00	6,224.42	10,671.11	7,111.71	35.97	85.41	-107.98	-1,880.39	609.32	1,163.08	1,079.05	84.03	13.841		
6,600.00	6,319.59	10,690.15	7,111.16	36.54	85.78	-106.71	-1,899.36	607.85	1,091.56	1,002.62	88.94	12.272		
6,700.00	6,414.76	10,716.17	7,110.56	37.12	86.30	-104.95	-1,925.31	605.97	1,024.24	929.92	94.32	10.860		
6,800.00	6,509.91	10,749.34	7,110.02	37.70	86.96	-109.71	-1,958.37	603.25	962.13	862.02	100.11	9.611		
6,900.00	6,603.99	10,782.94	7,109.55	38.26	87.63	-129.83	-1,991.83	600.25	915.80	809.24	106.56	8.594		
7,000.00	6,694.76	10,810.56	7,109.22	38.78	88.17	-142.44	-2,019.33	597.73	892.45	779.28	113.17	7.886		
7,041.52	6,730.93	10,821.06	7,109.16	38.97	88.38	-145.94	-2,029.79	596.78	890.21	774.46	115.74	7.691 CC, ES		
7,100.00	6,779.96	10,838.19	7,109.12	39.24	88.72	-149.47	-2,046.85	595.26	894.63	775.55	119.08	7.513		
7,200.00	6,857.50	10,870.62	7,109.06	39.65	89.37	-152.90	-2,079.14	592.36	922.00	798.27	123.73	7.452 SF		
7,300.00	6,925.48	10,900.57	7,108.96	40.02	89.96	-154.28	-2,108.97	589.58	971.81	844.83	126.98	7.653		
7,400.00	6,982.21	10,923.02	7,108.82	40.33	90.41	-154.40	-2,131.33	587.55	1,040.07	911.04	129.03	8.061		
7,500.00	7,026.31	10,942.70	7,108.73	40.63	90.80	-152.77	-2,150.93	585.83	1,122.12	991.85	130.27	8.614		
7,600.00	7,056.68	10,958.89	7,108.70	40.91	91.13	-148.08	-2,167.06	584.44	1,213.55	1,082.52	131.02	9.262		
7,700.00	7,072.58	10,971.17	7,108.73	41.25	91.37	-133.42	-2,179.30	583.41	1,310.54	1,179.07	131.47	9.968		
7,800.00	7,074.86	10,979.61	7,108.79	41.69	91.54	-103.18	-2,187.71	582.71	1,409.89	1,278.16	131.73	10.703		
7,900.00	7,074.54	10,985.00	7,108.84	42.34	91.65	-102.68	-2,193.08	582.26	1,509.48	1,377.56	131.92	11.442		
8,000.00	7,074.21	10,992.84	7,108.94	43.27	91.81	-102.02	-2,200.90	581.63	1,609.08	1,476.93	132.15	12.176		
8,100.00	7,073.89	10,998.67	7,109.03	44.47	91.92	-101.59	-2,206.70	581.17	1,708.70	1,576.36	132.34	12.911		
8,200.00	7,073.57	11,004.28	7,109.13	45.91	92.04	-101.21	-2,212.30	580.73	1,808.34	1,675.81	132.53	13.645		
8,300.00	7,073.24	11,009.70	7,109.25	47.53	92.14	-100.87	-2,217.70	580.32	1,907.98	1,775.27	132.71	14.377		
8,400.00	7,072.92	11,017.00	7,109.42	49.31	92.29	-100.45	-2,224.98	579.78	2,007.65	1,874.72	132.93	15.103		
8,500.00	7,072.59	11,017.00	7,109.42	51.20	92.29	-100.45	-2,224.98	579.78	2,107.32	1,974.32	133.00	15.844		
8,600.00	7,072.27	11,024.77	7,109.64	53.19	92.45	-100.06	-2,232.72	579.22	2,207.01	2,073.78	133.23	16.565		
8,700.00	7,071.94	11,029.43	7,109.78	55.27	92.54	-99.84	-2,237.37	578.89	2,306.71	2,173.31	133.40	17.292		
8,800.00	7,071.62	11,033.93	7,109.92	57.43	92.63	-99.65	-2,241.86	578.58	2,406.41	2,272.86	133.56	18.018		
8,900.00	7,071.29	11,038.29	7,110.07	59.64	92.72	-99.47	-2,246.21	578.29	2,506.13	2,372.42	133.71	18.743		
9,000.00	7,070.97	11,042.51	7,110.22	61.92	92.81	-99.30	-2,250.41	578.01	2,605.86	2,471.99	133.87	19.466		
9,100.00	7,070.64	11,048.00	7,110.43	64.24	92.92	-99.11	-2,255.89	577.65	2,705.60	2,571.55	134.05	20.184		
9,200.00	7,070.32	11,052.58	7,110.60	66.61	93.01	-98.95	-2,260.45	577.35	2,805.34	2,671.13	134.21	20.903		
9,300.00	7,069.99	11,059.65	7,110.88	69.01	93.15	-98.72	-2,267.50	576.90	2,905.08	2,770.66	134.43	21.611		
9,400.00	7,069.67	11,066.72	7,111.16	71.45	93.30	-98.51	-2,274.55	576.44	3,004.83	2,870.18	134.65	22.316		
9,500.00	7,069.34	11,073.78	7,111.45	73.92	93.44	-98.32	-2,281.60	575.99	3,104.57	2,969.70	134.87	23.019		
9,600.00	7,069.02	11,080.85	7,111.75	76.42	93.58	-98.14	-2,288.64	575.53	3,204.32	3,069.22	135.09	23.719		
9,700.00	7,068.69	11,080.00	7,111.71	78.95	93.56	-98.16	-2,287.80	575.58	3,304.07	3,168.94	135.13	24.451		
9,800.00	7,068.37	11,088.66	7,112.07	81.49	93.74	-97.95	-2,296.43	575.03	3,403.82	3,268.43	135.40	25.140		
9,900.00	7,068.04	11,092.59	7,112.23	84.06	93.82	-97.85	-2,300.35	574.79	3,503.59	3,368.04	135.55	25.848		
10,000.00	7,067.72	11,096.42	7,112.38	86.65	93.90	-97.77	-2,304.17	574.56	3,603.35	3,467.66	135.70	26.555		
10,100.00	7,067.39	11,100.17	7,112.53	89.25	93.97	-97.69	-2,307.90	574.33	3,703.13	3,567.28	135.84	27.260		
10,200.00	7,067.07	11,103.82	7,112.68	91.87	94.05	-97.61	-2,311.55	574.11	3,802.90	3,666.92	135.99	27.965		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	11,112.00	7,112.99	94.50	94.21	-97.44	-2,319.71	573.63	3,902.69	3,766.45	136.25	28.644		
10,400.00	7,066.42	11,112.00	7,112.99	97.14	94.21	-97.44	-2,319.71	573.63	4,002.48	3,866.18	136.30	29.365		
10,500.00	7,066.09	11,116.26	7,113.16	99.80	94.30	-97.36	-2,323.96	573.39	4,102.27	3,965.81	136.47	30.061		
10,600.00	7,065.77	11,122.63	7,113.41	102.47	94.43	-97.24	-2,330.32	573.02	4,202.06	4,065.38	136.68	30.743		
10,700.00	7,065.44	11,129.00	7,113.66	105.15	94.56	-97.12	-2,336.67	572.66	4,301.86	4,164.96	136.90	31.423		
10,800.00	7,065.12	11,135.37	7,113.92	107.83	94.69	-97.02	-2,343.02	572.29	4,401.65	4,264.53	137.12	32.100		
10,900.00	7,064.79	11,141.74	7,114.19	110.53	94.82	-96.91	-2,349.38	571.92	4,501.44	4,364.10	137.34	32.775		
11,000.00	7,064.47	11,180.59	7,115.69	113.23	95.61	-96.36	-2,388.13	569.54	4,601.20	4,462.78	138.42	33.241		
11,100.00	7,064.14	11,187.82	7,115.94	115.95	95.75	-96.27	-2,395.34	569.07	4,700.95	4,562.27	138.67	33.900		
11,200.00	7,063.82	11,195.05	7,116.16	118.66	95.90	-96.17	-2,402.55	568.61	4,800.69	4,661.77	138.93	34.556		
11,300.00	7,063.49	11,202.29	7,116.37	121.39	96.05	-96.08	-2,409.76	568.14	4,900.44	4,761.26	139.18	35.209		
11,400.00	7,063.17	11,206.00	7,116.47	124.12	96.12	-96.03	-2,413.47	567.90	5,000.18	4,860.84	139.34	35.884		
11,500.00	7,062.84	11,206.00	7,116.47	126.86	96.12	-96.03	-2,413.47	567.90	5,099.94	4,960.54	139.40	36.584		
11,600.00	7,062.52	11,206.00	7,116.47	129.60	96.12	-96.03	-2,413.47	567.90	5,199.70	5,060.24	139.46	37.283		
11,700.00	7,062.19	11,206.00	7,116.47	132.35	96.12	-96.03	-2,413.47	567.90	5,299.48	5,159.95	139.53	37.982		
11,800.00	7,061.87	11,206.00	7,116.47	135.10	96.12	-96.03	-2,413.47	567.90	5,399.26	5,259.67	139.59	38.681		
11,900.00	7,061.54	11,206.00	7,116.47	137.85	96.12	-96.03	-2,413.47	567.90	5,499.05	5,359.40	139.65	39.378		
12,000.00	7,061.22	11,218.36	7,116.77	140.61	96.37	-95.88	-2,425.80	567.14	5,598.80	5,458.75	140.05	39.978		
12,100.00	7,060.89	11,220.08	7,116.80	143.38	96.41	-95.85	-2,427.52	567.04	5,698.59	5,558.43	140.16	40.658		
12,200.00	7,060.57	11,221.76	7,116.84	146.15	96.44	-95.83	-2,429.20	566.94	5,798.38	5,658.12	140.27	41.339		
12,300.00	7,060.24	11,223.40	7,116.87	148.92	96.48	-95.81	-2,430.83	566.85	5,898.18	5,757.81	140.37	42.018		
12,400.00	7,059.92	11,224.99	7,116.91	151.69	96.51	-95.79	-2,432.42	566.76	5,997.99	5,857.51	140.48	42.697		
12,500.00	7,059.59	11,226.55	7,116.94	154.47	96.54	-95.77	-2,433.97	566.68	6,097.80	5,957.21	140.58	43.375		
12,600.00	7,059.27	11,238.00	7,117.14	157.25	96.77	-95.63	-2,445.41	566.09	6,197.64	6,056.67	140.97	43.964		
12,700.00	7,058.94	11,238.00	7,117.14	160.03	96.77	-95.63	-2,445.41	566.09	6,297.45	6,156.42	141.03	44.652		
12,800.00	7,058.62	11,238.00	7,117.14	162.82	96.77	-95.63	-2,445.41	566.09	6,397.27	6,256.17	141.10	45.340		
12,900.00	7,058.29	11,238.00	7,117.14	165.61	96.77	-95.63	-2,445.41	566.09	6,497.09	6,355.93	141.16	46.027		
13,000.00	7,057.97	11,238.00	7,117.14	168.40	96.77	-95.63	-2,445.41	566.09	6,596.92	6,455.70	141.22	46.713		
13,100.00	7,057.64	11,238.00	7,117.14	171.19	96.77	-95.63	-2,445.41	566.09	6,696.75	6,555.46	141.29	47.399		
13,200.00	7,057.32	11,238.00	7,117.14	173.99	96.77	-95.63	-2,445.41	566.09	6,796.59	6,655.24	141.35	48.084		
13,300.00	7,057.00	11,238.00	7,117.14	176.78	96.77	-95.63	-2,445.41	566.09	6,896.43	6,755.02	141.41	48.768		
13,400.00	7,056.67	11,238.00	7,117.14	179.58	96.77	-95.63	-2,445.41	566.09	6,996.28	6,854.80	141.48	49.451		
13,500.00	7,056.35	11,238.00	7,117.14	182.38	96.77	-95.63	-2,445.41	566.09	7,096.13	6,954.58	141.54	50.134		
13,600.00	7,056.02	11,238.00	7,117.14	185.19	96.77	-95.63	-2,445.41	566.09	7,195.98	7,054.37	141.61	50.817		
13,700.00	7,055.70	11,238.00	7,117.14	187.99	96.77	-95.63	-2,445.41	566.09	7,295.84	7,154.17	141.67	51.498		
13,800.00	7,055.37	11,238.00	7,117.14	190.80	96.77	-95.63	-2,445.41	566.09	7,395.70	7,253.97	141.74	52.179		
13,900.00	7,055.05	11,248.57	7,117.30	193.60	96.99	-95.51	-2,455.97	565.59	7,495.55	7,353.44	142.11	52.745		
14,000.00	7,054.72	11,250.29	7,117.32	196.41	97.03	-95.49	-2,457.68	565.51	7,595.41	7,453.18	142.23	53.403		
14,100.00	7,054.40	11,251.97	7,117.35	199.22	97.06	-95.47	-2,459.37	565.43	7,695.27	7,552.93	142.34	54.061		
14,200.00	7,054.07	11,253.63	7,117.37	202.03	97.09	-95.45	-2,461.02	565.36	7,795.14	7,652.68	142.46	54.719		
14,300.00	7,053.75	11,255.26	7,117.39	204.85	97.13	-95.43	-2,462.65	565.28	7,895.01	7,752.43	142.57	55.375		
14,400.00	7,053.42	11,256.86	7,117.41	207.66	97.16	-95.41	-2,464.24	565.21	7,994.88	7,852.19	142.69	56.030		
14,500.00	7,053.10	11,258.43	7,117.44	210.48	97.19	-95.39	-2,465.82	565.15	8,094.75	7,951.95	142.80	56.684		
14,600.00	7,052.77	11,270.00	7,117.58	213.29	97.43	-95.26	-2,477.38	564.66	8,194.65	8,051.43	143.21	57.219		
14,700.00	7,052.45	11,270.00	7,117.58	216.11	97.43	-95.26	-2,477.38	564.66	8,294.52	8,151.24	143.28	57.888		
14,800.00	7,052.12	11,270.00	7,117.58	218.93	97.43	-95.26	-2,477.38	564.66	8,394.40	8,251.04	143.36	58.557		
14,900.00	7,051.80	11,270.00	7,117.58	221.75	97.43	-95.26	-2,477.38	564.66	8,494.28	8,350.85	143.43	59.224		
15,000.00	7,051.47	11,270.00	7,117.58	224.57	97.43	-95.26	-2,477.38	564.66	8,594.16	8,450.66	143.50	59.891		
15,100.00	7,051.15	15,100.00	7,117.75	227.39	175.91	-95.12	-2,491.14	564.07	8,694.03	8,471.81	222.22	39.123		
15,145.13	7,051.00	15,145.13	7,117.78	228.67	176.84	-95.10	-2,493.36	563.98	8,739.10	8,515.90	223.20	39.154		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	13.15	3.15	3.28	3.28	45.21	1,683.86	1,695.98	2,389.92					
100.00	100.00	144.60	134.59	3.28	3.30	45.18	1,683.76	1,694.62	2,389.13	2,382.56	6.58	363.203		
200.00	200.00	256.50	246.45	3.34	3.37	45.13	1,684.01	1,691.69	2,387.43	2,380.72	6.71	355.862		
277.67	277.66	343.48	333.37	3.41	3.48	-139.36	1,684.76	1,688.31	2,386.57	2,379.68	6.89	346.225		
300.00	299.98	357.87	347.73	3.44	3.50	-139.38	1,684.96	1,687.71	2,386.64	2,379.70	6.94	343.830		
400.00	399.84	444.50	434.27	3.59	3.66	-139.51	1,686.68	1,683.97	2,388.96	2,381.72	7.24	329.814		
500.00	499.45	541.97	531.61	3.79	3.87	-139.69	1,689.12	1,679.54	2,394.20	2,386.54	7.65	312.832		
600.00	598.70	635.99	625.46	4.03	4.11	-139.89	1,692.14	1,674.83	2,402.31	2,394.18	8.13	295.306		
700.00	697.47	727.84	717.11	4.31	4.37	-140.11	1,695.63	1,669.91	2,413.36	2,404.68	8.68	278.081		
800.00	795.62	822.02	811.05	4.64	4.67	-140.37	1,699.86	1,664.64	2,427.52	2,418.24	9.29	261.357		
900.00	893.06	919.51	908.28	5.00	5.00	-140.65	1,704.15	1,658.97	2,444.29	2,434.33	9.96	245.407		
1,000.00	989.64	998.92	987.48	5.40	5.28	-140.83	1,707.92	1,654.58	2,464.35	2,453.73	10.61	232.195		
1,100.00	1,085.27	1,235.56	1,221.71	5.83	6.24	-142.34	1,726.09	1,627.60	2,486.82	2,474.84	11.98	207.576		
1,200.00	1,180.44	1,361.60	1,345.40	6.29	6.83	-143.41	1,735.27	1,605.17	2,505.51	2,492.53	12.98	193.054		
1,300.00	1,275.61	1,454.50	1,436.49	6.76	7.29	-144.19	1,741.79	1,588.08	2,524.22	2,510.36	13.86	182.159		
1,400.00	1,370.78	1,400.00	1,560.82	7.26	7.01	-145.24	1,750.54	1,564.46	2,543.35	2,529.32	14.03	181.280		
1,500.00	1,465.95	1,740.70	1,716.83	7.76	8.79	-146.51	1,757.49	1,532.92	2,560.13	2,543.92	16.21	157.930		
1,600.00	1,561.12	1,839.76	1,813.87	8.27	9.32	-147.26	1,760.15	1,513.23	2,576.27	2,559.08	17.18	149.918		
1,700.00	1,656.29	1,900.07	1,873.08	8.80	9.64	-147.71	1,761.84	1,501.87	2,593.52	2,575.56	17.96	144.387		
1,800.00	1,751.46	1,965.55	1,937.52	9.32	9.99	-148.18	1,763.98	1,490.42	2,612.27	2,593.51	18.77	139.205		
1,900.00	1,846.63	2,028.85	1,999.92	9.86	10.32	-148.62	1,766.29	1,480.08	2,632.34	2,612.79	19.56	134.603		
2,000.00	1,941.80	2,083.53	2,053.91	10.40	10.60	-148.99	1,768.78	1,471.75	2,654.01	2,633.71	20.30	130.761		
2,100.00	2,036.96	2,155.47	2,124.98	10.94	10.98	-149.48	1,772.77	1,461.37	2,677.17	2,656.03	21.13	126.693		
2,200.00	2,132.13	2,234.63	2,203.14	11.49	11.39	-150.01	1,777.68	1,449.76	2,701.07	2,679.06	22.01	122.720		
2,300.00	2,227.30	2,308.04	2,275.55	12.04	11.78	-150.51	1,782.85	1,438.92	2,725.90	2,703.04	22.86	119.243		
2,400.00	2,322.47	2,382.06	2,348.53	12.59	12.17	-151.01	1,788.67	1,427.96	2,751.67	2,727.95	23.72	116.028		
2,500.00	2,417.64	2,489.90	2,454.93	13.15	12.74	-151.72	1,796.96	1,412.49	2,777.88	2,753.10	24.78	112.121		
2,600.00	2,512.81	2,567.19	2,531.31	13.70	13.14	-152.20	1,802.44	1,402.07	2,804.31	2,778.67	25.64	109.364		
2,700.00	2,607.98	2,661.48	2,624.58	14.26	13.63	-152.77	1,809.08	1,389.89	2,831.26	2,804.65	26.61	106.410		
2,800.00	2,703.15	2,762.30	2,724.35	14.82	14.15	-153.36	1,815.82	1,377.03	2,858.26	2,830.65	27.61	103.518		
2,900.00	2,798.32	2,903.65	2,863.85	15.38	14.90	-154.21	1,825.10	1,356.30	2,884.53	2,855.64	28.89	99.849		
3,000.00	2,893.49	3,009.13	2,967.56	15.95	15.49	-154.88	1,832.05	1,338.35	2,910.05	2,880.08	29.96	97.119		
3,100.00	2,988.66	3,106.00	3,062.96	16.51	16.03	-155.46	1,837.84	1,322.57	2,935.72	2,904.73	30.98	94.755		
3,200.00	3,083.83	3,198.47	3,154.07	17.07	16.54	-156.01	1,843.09	1,307.68	2,961.50	2,929.53	31.97	92.635		
3,300.00	3,179.00	3,291.73	3,245.99	17.64	17.05	-156.54	1,848.43	1,292.83	2,987.65	2,954.70	32.96	90.658		
3,400.00	3,274.17	3,438.38	3,391.13	18.21	17.81	-157.29	1,853.94	1,272.67	3,013.45	2,979.21	34.25	87.994		
3,500.00	3,369.34	3,508.50	3,460.61	18.77	18.17	-157.63	1,855.84	1,263.42	3,038.70	3,003.63	35.06	86.665		
3,600.00	3,464.51	3,575.04	3,526.62	19.34	18.51	-157.94	1,857.93	1,255.22	3,064.86	3,029.00	35.85	85.485		
3,700.00	3,559.68	3,639.49	3,590.50	19.91	18.83	-158.24	1,860.70	1,247.17	3,092.08	3,055.45	36.63	84.423		
3,800.00	3,654.84	3,706.26	3,656.62	20.48	19.18	-158.56	1,864.32	1,238.62	3,120.30	3,082.89	37.42	83.396		
3,900.00	3,750.01	3,785.83	3,735.28	21.05	19.60	-158.96	1,869.51	1,227.79	3,149.34	3,111.04	38.30	82.234		
4,000.00	3,845.18	3,875.73	3,823.87	21.62	20.10	-159.43	1,876.28	1,214.08	3,178.80	3,139.54	39.26	80.961		
4,100.00	3,940.35	3,990.52	3,936.73	22.19	20.75	-160.05	1,885.21	1,195.13	3,208.26	3,167.84	40.42	79.373		
4,200.00	4,035.52	4,128.45	4,072.21	22.76	21.55	-160.78	1,894.73	1,171.10	3,236.86	3,195.11	41.75	77.526		
4,300.00	4,130.69	4,238.94	4,180.69	23.33	22.18	-161.36	1,901.24	1,151.13	3,264.57	3,221.69	42.88	76.130		
4,400.00	4,225.86	4,343.93	4,283.61	23.91	22.91	-162.01	1,907.80	1,131.10	3,292.90	3,249.90	44.01	74.923		
4,500.00	4,321.03	4,448.92	4,388.78	24.48	23.64	-162.72	1,914.41	1,111.13	3,321.87	3,279.81	45.14	73.896		
4,600.00	4,416.20	4,553.91	4,493.95	25.05	24.35	-163.48	1,921.07	1,091.22	3,351.38	3,309.32	46.27	72.929		
4,700.00	4,511.37	4,658.90	4,599.12	25.62	25.09	-164.29	1,927.68	1,071.31	3,381.43	3,339.37	47.40	72.012		
4,800.00	4,606.54	4,763.89	4,704.29	26.19	25.76	-165.14	1,934.24	1,051.36	3,412.02	3,369.96	48.53	71.145		
4,900.00	4,701.71	4,868.88	4,809.48	26.77	26.43	-166.02	1,940.75	1,031.37	3,443.15	3,401.09	49.66	70.328		
5,000.00	4,796.88	4,973.87	4,914.67	27.34	27.10	-166.94	1,947.21	1,011.34	3,474.82	3,432.76	50.79	69.561		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	10,254.47	7,237.89	27.92	75.43	-128.30	-1,313.28	975.26	2,583.00	2,523.85	59.15	43.669		
5,200.00	4,987.22	10,362.47	7,238.39	28.49	77.54	-124.58	-1,421.27	975.12	2,497.91	2,436.25	61.66	40.512		
5,300.00	5,082.39	10,394.52	7,238.28	29.07	78.17	-123.42	-1,453.32	974.58	2,413.22	2,349.71	63.51	38.000		
5,400.00	5,177.56	10,436.93	7,238.02	29.64	79.00	-121.85	-1,495.72	973.77	2,329.25	2,263.67	65.58	35.519		
5,500.00	5,272.72	10,476.55	7,237.65	30.21	79.78	-120.34	-1,535.32	972.83	2,246.04	2,178.29	67.75	33.152		
5,600.00	5,367.89	10,514.32	7,237.17	30.79	80.52	-118.86	-1,573.09	971.87	2,163.72	2,093.68	70.05	30.890		
5,700.00	5,463.06	10,551.08	7,236.60	31.36	81.25	-117.39	-1,609.82	970.84	2,082.43	2,009.95	72.49	28.729		
5,800.00	5,558.23	10,583.11	7,236.01	31.94	81.88	-116.07	-1,641.83	969.95	2,002.34	1,927.31	75.04	26.685		
5,900.00	5,653.40	10,620.64	7,235.20	32.51	82.63	-114.50	-1,679.34	968.86	1,923.59	1,845.76	77.83	24.714		
6,000.00	5,748.57	10,656.30	7,234.29	33.09	83.33	-112.97	-1,714.97	967.76	1,846.33	1,765.53	80.80	22.851		
6,100.00	5,843.74	10,694.69	7,233.15	33.67	84.10	-111.29	-1,753.32	966.53	1,770.80	1,686.79	84.01	21.079		
6,200.00	5,938.91	10,730.51	7,231.92	34.24	84.81	-109.69	-1,789.10	965.21	1,697.13	1,609.74	87.39	19.420		
6,300.00	6,034.08	10,748.47	7,231.31	34.82	85.17	-108.88	-1,807.03	964.52	1,625.83	1,535.10	90.73	17.919		
6,400.00	6,129.25	10,761.07	7,230.96	35.39	85.42	-108.30	-1,819.62	964.13	1,557.44	1,463.27	94.17	16.538		
6,500.00	6,224.42	10,775.39	7,230.66	35.97	85.71	-107.65	-1,833.94	963.80	1,492.39	1,394.58	97.80	15.259		
6,600.00	6,319.59	10,796.17	7,230.31	36.54	86.12	-106.69	-1,854.71	963.42	1,431.00	1,329.31	101.69	14.073		
6,700.00	6,414.76	10,813.64	7,230.08	37.12	86.47	-105.87	-1,872.18	963.20	1,373.73	1,268.12	105.61	13.007		
6,800.00	6,509.91	10,835.00	7,230.00	37.70	86.90	-111.91	-1,893.54	963.09	1,321.70	1,212.03	109.67	12.052		
6,900.00	6,603.99	10,849.20	7,230.05	38.26	87.19	-133.55	-1,907.74	963.12	1,285.41	1,171.72	113.70	11.306		
7,000.00	6,694.76	10,870.46	7,230.20	38.78	87.61	-146.92	-1,929.00	963.27	1,270.79	1,153.05	117.74	10.793		
7,014.34	6,707.37	10,873.84	7,230.23	38.84	87.68	-148.30	-1,932.37	963.30	1,270.56	1,152.26	118.29	10.741 CC, ES		
7,100.00	6,779.96	10,893.00	7,230.38	39.24	88.07	-154.75	-1,951.53	963.54	1,278.94	1,157.59	121.34	10.540		
7,200.00	6,857.50	10,917.58	7,230.53	39.65	88.56	-159.40	-1,976.11	963.93	1,309.29	1,184.96	124.33	10.531 SF		
7,300.00	6,925.48	10,941.45	7,230.62	40.02	89.04	-162.29	-1,999.98	964.30	1,359.74	1,233.15	126.59	10.742		
7,400.00	6,982.21	10,962.89	7,230.67	40.33	89.48	-164.19	-2,021.41	964.58	1,427.13	1,298.95	128.18	11.134		
7,500.00	7,026.31	10,975.75	7,230.68	40.63	89.74	-165.98	-2,034.27	964.75	1,507.83	1,378.74	129.09	11.680		
7,600.00	7,056.68	10,984.41	7,230.68	40.91	89.91	-168.14	-2,042.93	964.86	1,598.13	1,468.53	129.61	12.331		
7,700.00	7,072.58	10,988.61	7,230.67	41.25	90.00	-173.13	-2,047.13	964.92	1,694.54	1,564.70	129.84	13.051		
7,800.00	7,074.86	10,988.72	7,230.67	41.69	90.00	175.23	-2,047.25	964.92	1,793.86	1,663.97	129.89	13.810		
7,900.00	7,074.54	10,988.07	7,230.67	42.34	89.98	174.98	-2,046.59	964.91	1,893.52	1,763.62	129.90	14.576		
8,000.00	7,074.21	10,987.42	7,230.67	43.27	89.97	174.74	-2,045.95	964.90	1,993.22	1,863.31	129.91	15.343		
8,100.00	7,073.89	10,986.78	7,230.67	44.47	89.96	174.49	-2,045.31	964.89	2,092.95	1,963.03	129.92	16.110		
8,200.00	7,073.57	10,986.15	7,230.68	45.91	89.95	174.25	-2,044.67	964.88	2,192.70	2,062.78	129.92	16.877		
8,300.00	7,073.24	10,985.52	7,230.68	47.53	89.93	174.02	-2,044.05	964.88	2,292.48	2,162.55	129.93	17.644		
8,400.00	7,072.92	10,984.90	7,230.68	49.31	89.92	173.78	-2,043.42	964.87	2,392.27	2,262.34	129.93	18.412		
8,500.00	7,072.59	10,984.29	7,230.68	51.20	89.91	173.55	-2,042.81	964.86	2,492.08	2,362.14	129.93	19.180		
8,600.00	7,072.27	10,983.68	7,230.68	53.19	89.90	173.32	-2,042.20	964.85	2,591.90	2,461.96	129.94	19.947		
8,700.00	7,071.94	10,983.08	7,230.68	55.27	89.88	173.09	-2,041.60	964.84	2,691.74	2,561.80	129.94	20.715		
8,800.00	7,071.62	10,982.48	7,230.68	57.43	89.87	172.87	-2,041.00	964.83	2,791.59	2,661.64	129.94	21.483		
8,900.00	7,071.29	10,981.89	7,230.68	59.64	89.86	172.65	-2,040.41	964.83	2,891.44	2,761.50	129.95	22.251		
9,000.00	7,070.97	10,981.30	7,230.68	61.92	89.85	172.43	-2,039.83	964.82	2,991.31	2,861.36	129.95	23.018		
9,100.00	7,070.64	10,980.72	7,230.68	64.24	89.84	172.21	-2,039.25	964.81	3,091.19	2,961.23	129.96	23.786		
9,200.00	7,070.32	10,980.15	7,230.68	66.61	89.82	172.00	-2,038.67	964.80	3,191.07	3,061.11	129.96	24.553		
9,300.00	7,069.99	10,979.58	7,230.68	69.01	89.81	171.78	-2,038.11	964.80	3,290.96	3,160.99	129.97	25.321		
9,400.00	7,069.67	10,979.02	7,230.68	71.45	89.80	171.57	-2,037.54	964.79	3,390.86	3,260.88	129.98	26.088		
9,500.00	7,069.34	10,978.46	7,230.68	73.92	89.79	171.36	-2,036.99	964.78	3,490.76	3,360.78	129.99	26.855		
9,600.00	7,069.02	10,977.91	7,230.68	76.42	89.78	171.16	-2,036.43	964.77	3,590.67	3,460.67	130.00	27.621		
9,700.00	7,068.69	10,977.36	7,230.68	78.95	89.77	170.96	-2,035.89	964.77	3,690.58	3,560.58	130.01	28.388		
9,800.00	7,068.37	10,976.82	7,230.68	81.49	89.76	170.75	-2,035.34	964.76	3,790.50	3,660.48	130.02	29.154		
9,900.00	7,068.04	10,976.28	7,230.68	84.06	89.75	170.55	-2,034.81	964.75	3,890.42	3,760.39	130.03	29.920		
10,000.00	7,067.72	10,975.75	7,230.68	86.65	89.74	170.36	-2,034.28	964.75	3,990.35	3,860.31	130.04	30.685		
10,100.00	7,067.39	10,975.22	7,230.68	89.25	89.72	170.16	-2,033.75	964.74	4,090.28	3,960.22	130.05	31.451		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,067.07	10,974.70	7,230.68	91.87	89.71	169.97	-2,033.23	964.73	4,190.21	4,060.14	130.07	32.215		
10,300.00	7,066.74	10,974.18	7,230.68	94.50	89.70	169.78	-2,032.71	964.72	4,290.14	4,160.06	130.08	32.980		
10,400.00	7,066.42	10,973.67	7,230.68	97.14	89.69	169.59	-2,032.20	964.72	4,390.08	4,259.98	130.10	33.744		
10,500.00	7,066.09	10,973.16	7,230.68	99.80	89.68	169.40	-2,031.69	964.71	4,490.02	4,359.91	130.12	34.507		
10,600.00	7,065.77	10,972.66	7,230.68	102.47	89.67	169.21	-2,031.18	964.71	4,589.97	4,459.83	130.14	35.271		
10,700.00	7,065.44	10,972.16	7,230.68	105.15	89.66	169.03	-2,030.69	964.70	4,689.91	4,559.76	130.15	36.033		
10,800.00	7,065.12	10,971.67	7,230.68	107.83	89.65	168.85	-2,030.19	964.69	4,789.86	4,659.69	130.17	36.796		
10,900.00	7,064.79	10,971.18	7,230.68	110.53	89.64	168.67	-2,029.70	964.69	4,889.81	4,759.61	130.20	37.557		
11,000.00	7,064.47	10,970.69	7,230.68	113.23	89.63	168.49	-2,029.22	964.68	4,989.76	4,859.54	130.22	38.319		
11,100.00	7,064.14	10,970.21	7,230.68	115.95	89.62	168.31	-2,028.73	964.67	5,089.72	4,959.48	130.24	39.079		
11,200.00	7,063.82	10,969.73	7,230.68	118.66	89.61	168.14	-2,028.26	964.67	5,189.67	5,059.41	130.26	39.839		
11,300.00	7,063.49	10,969.26	7,230.68	121.39	89.60	167.96	-2,027.78	964.66	5,289.63	5,159.34	130.29	40.599		
11,400.00	7,063.17	10,968.79	7,230.68	124.12	89.60	167.79	-2,027.32	964.66	5,389.59	5,259.27	130.32	41.358		
11,500.00	7,062.84	10,968.33	7,230.67	126.86	89.59	167.62	-2,026.85	964.65	5,489.55	5,359.21	130.34	42.117		
11,600.00	7,062.52	10,967.87	7,230.67	129.60	89.58	167.46	-2,026.39	964.64	5,589.51	5,459.14	130.37	42.874		
11,700.00	7,062.19	10,967.41	7,230.67	132.35	89.57	167.29	-2,025.93	964.64	5,689.47	5,559.07	130.40	43.632		
11,800.00	7,061.87	10,966.96	7,230.67	135.10	89.56	167.12	-2,025.48	964.63	5,789.44	5,659.01	130.43	44.388		
11,900.00	7,061.54	10,966.51	7,230.67	137.85	89.55	166.96	-2,025.03	964.63	5,889.40	5,758.94	130.46	45.144		
12,000.00	7,061.22	12,000.00	7,230.65	140.61	110.46	163.48	-2,015.28	964.50	5,989.37	5,837.90	151.47	39.543		
12,100.00	7,060.89	12,100.00	7,230.65	143.38	112.48	163.22	-2,014.54	964.49	6,089.33	5,935.79	153.54	39.660		
12,200.00	7,060.57	12,200.00	7,230.65	146.15	114.51	162.96	-2,013.81	964.48	6,189.30	6,033.69	155.61	39.773		
12,300.00	7,060.24	12,300.00	7,230.65	148.92	116.54	162.71	-2,013.07	964.47	6,289.27	6,131.58	157.69	39.884		
12,400.00	7,059.92	12,400.00	7,230.64	151.69	118.57	162.45	-2,012.34	964.46	6,389.24	6,229.47	159.77	39.991		
12,500.00	7,059.59	12,500.00	7,230.64	154.47	120.60	162.19	-2,011.60	964.45	6,489.21	6,327.36	161.84	40.095		
12,600.00	7,059.27	12,600.00	7,230.64	157.25	122.63	161.94	-2,010.86	964.44	6,589.18	6,425.26	163.92	40.197		
12,700.00	7,058.94	10,967.44	7,230.67	160.03	89.57	167.30	-2,025.96	964.64	6,689.16	6,558.31	130.85	51.122		
12,800.00	7,058.62	10,965.43	7,230.67	162.82	89.53	166.57	-2,023.96	964.61	6,789.13	6,658.29	130.84	51.887		
12,900.00	7,058.29	10,963.24	7,230.67	165.61	89.48	165.78	-2,021.77	964.59	6,889.11	6,758.27	130.84	52.654		
13,000.00	7,057.97	10,960.84	7,230.66	168.40	89.43	164.93	-2,019.37	964.56	6,989.08	6,858.25	130.83	53.422		
13,100.00	7,057.64	10,958.20	7,230.66	171.19	89.38	163.99	-2,016.73	964.52	7,089.06	6,958.25	130.81	54.193		
13,200.00	7,057.32	10,955.28	7,230.65	173.99	89.32	162.96	-2,013.81	964.49	7,189.03	7,058.24	130.79	54.966		
13,300.00	7,057.00	10,952.04	7,230.65	176.78	89.26	161.84	-2,010.56	964.44	7,289.01	7,158.25	130.76	55.743		
13,400.00	7,056.67	10,948.41	7,230.64	179.58	89.18	160.59	-2,006.93	964.39	7,388.99	7,258.26	130.72	56.524		
13,500.00	7,056.35	10,944.32	7,230.63	182.38	89.10	159.21	-2,002.85	964.34	7,488.96	7,358.29	130.68	57.309		
13,600.00	7,056.02	10,939.68	7,230.61	185.19	89.01	157.68	-1,998.21	964.27	7,588.94	7,458.33	130.62	58.101		
13,700.00	7,055.70	10,934.38	7,230.60	187.99	88.90	155.97	-1,992.91	964.19	7,688.92	7,558.38	130.54	58.901		
13,800.00	7,055.37	10,929.75	7,230.58	190.80	88.81	154.50	-1,988.28	964.12	7,788.90	7,658.41	130.48	59.694		
13,900.00	7,055.05	10,928.82	7,230.58	193.60	88.79	154.22	-1,987.35	964.10	7,888.87	7,758.36	130.52	60.444		
14,000.00	7,054.72	10,927.89	7,230.57	196.41	88.77	153.93	-1,986.42	964.09	7,988.85	7,858.30	130.55	61.193		
14,100.00	7,054.40	10,926.96	7,230.57	199.22	88.75	153.64	-1,985.49	964.07	8,088.83	7,958.24	130.59	61.941		
14,200.00	7,054.07	10,926.03	7,230.57	202.03	88.73	153.36	-1,984.56	964.06	8,188.81	8,058.18	130.63	62.689		
14,300.00	7,053.75	10,925.10	7,230.56	204.85	88.71	153.07	-1,983.63	964.04	8,288.79	8,158.12	130.66	63.436		
14,400.00	7,053.42	10,924.17	7,230.56	207.66	88.70	152.79	-1,982.70	964.03	8,388.77	8,258.06	130.70	64.181		
14,500.00	7,053.10	10,923.25	7,230.56	210.48	88.68	152.51	-1,981.77	964.02	8,488.75	8,358.00	130.74	64.927		
14,600.00	7,052.77	10,922.32	7,230.55	213.29	88.66	152.23	-1,980.84	964.00	8,588.73	8,457.94	130.78	65.671		
14,700.00	7,052.45	10,921.39	7,230.55	216.11	88.64	151.95	-1,979.92	963.99	8,688.71	8,557.88	130.83	66.414		
14,800.00	7,052.12	10,920.46	7,230.54	218.93	88.62	151.67	-1,978.99	963.97	8,788.69	8,657.82	130.87	67.157		
14,900.00	7,051.80	10,919.53	7,230.54	221.75	88.60	151.40	-1,978.06	963.96	8,888.67	8,757.76	130.91	67.899		
15,000.00	7,051.47	10,918.60	7,230.54	224.57	88.58	151.13	-1,977.13	963.94	8,988.65	8,857.70	130.95	68.639		
15,100.00	7,051.15	10,917.67	7,230.53	227.39	88.56	150.85	-1,976.20	963.93	9,088.63	8,957.64	131.00	69.379		
15,145.13	7,051.00	10,917.25	7,230.53	228.67	88.56	150.73	-1,975.78	963.92	9,133.75	9,002.73	131.02	69.713		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	39.70	0.28	39.70					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	39.70	0.28	39.70	33.13	6.57	6.044		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	39.70	0.28	39.70	33.03	6.67	5.949		
300.00	299.98	301.40	301.38	3.44	3.44	175.97	37.91	0.11	39.68	32.79	6.89	5.757		
400.00	399.84	402.80	402.63	3.59	3.60	175.82	32.56	-0.39	39.61	32.39	7.22	5.486		
500.00	499.45	504.19	503.62	3.79	3.80	175.59	23.64	-1.24	39.51	31.85	7.65	5.162		
600.00	598.70	605.58	604.23	4.03	4.05	175.25	11.17	-2.41	39.35	31.18	8.17	4.815		
700.00	697.47	706.96	704.32	4.31	4.33	174.82	-4.84	-3.92	39.16	30.40	8.77	4.467		
800.00	795.62	808.33	803.77	4.64	4.67	174.29	-24.36	-5.76	38.93	29.51	9.42	4.133		
900.00	893.06	909.70	902.46	5.00	5.04	173.65	-47.37	-7.92	38.66	28.54	10.12	3.821		
943.42	935.10	953.58	944.93	5.17	5.21	173.34	-58.40	-8.96	38.55	28.12	10.43	3.695 CC		
1,000.00	989.64	1,010.16	999.60	5.40	5.43	173.06	-72.88	-10.33	39.10	28.27	10.84	3.609		
1,100.00	1,085.27	1,110.09	1,096.17	5.83	5.86	173.06	-98.46	-12.74	42.79	31.21	11.59	3.694		
1,200.00	1,180.44	1,209.95	1,192.68	6.29	6.30	173.28	-124.03	-15.14	48.01	35.64	12.37	3.881		
1,300.00	1,275.61	1,309.82	1,289.18	6.76	6.75	173.46	-149.59	-17.55	53.23	40.05	13.18	4.038		
1,400.00	1,370.78	1,409.68	1,385.69	7.26	7.22	173.60	-175.16	-19.96	58.46	44.43	14.02	4.168		
1,500.00	1,465.95	1,509.54	1,482.19	7.76	7.69	173.73	-200.73	-22.37	63.68	48.79	14.88	4.278		
1,600.00	1,561.12	1,609.41	1,578.70	8.27	8.18	173.83	-226.29	-24.78	68.90	53.14	15.76	4.371		
1,700.00	1,656.29	1,709.27	1,675.20	8.80	8.67	173.92	-251.86	-27.19	74.12	57.47	16.65	4.451		
1,800.00	1,751.46	1,809.13	1,771.71	9.32	9.17	174.00	-277.42	-29.59	79.34	61.79	17.56	4.519		
1,900.00	1,846.63	1,909.00	1,868.21	9.86	9.67	174.07	-302.99	-32.00	84.57	66.09	18.47	4.578		
2,000.00	1,941.80	2,008.86	1,964.72	10.40	10.17	174.13	-328.55	-34.41	89.79	70.39	19.40	4.629		
2,100.00	2,036.96	2,108.72	2,061.23	10.94	10.68	174.18	-354.12	-36.82	95.01	74.68	20.33	4.674		
2,200.00	2,132.13	2,208.59	2,157.73	11.49	11.19	174.23	-379.68	-39.23	100.23	78.97	21.27	4.713		
2,300.00	2,227.30	2,308.45	2,254.24	12.04	11.71	174.27	-405.25	-41.64	105.46	83.25	22.21	4.748		
2,400.00	2,322.47	2,408.32	2,350.74	12.59	12.23	174.31	-430.82	-44.04	110.68	87.52	23.16	4.779		
2,500.00	2,417.64	2,508.18	2,447.25	13.15	12.74	174.35	-456.38	-46.45	115.90	91.79	24.11	4.806		
2,600.00	2,512.81	2,608.04	2,543.75	13.70	13.27	174.38	-481.95	-48.86	121.13	96.05	25.07	4.831		
2,700.00	2,607.98	2,707.91	2,640.26	14.26	13.79	174.41	-507.51	-51.27	126.35	100.32	26.03	4.853		
2,800.00	2,703.15	2,807.77	2,736.76	14.82	14.31	174.44	-533.08	-53.68	131.57	104.57	27.00	4.873		
2,900.00	2,798.32	2,907.63	2,833.27	15.38	14.84	174.46	-558.64	-56.08	136.80	108.83	27.97	4.892		
3,000.00	2,893.49	3,007.50	2,929.78	15.95	15.36	174.49	-584.21	-58.49	142.02	113.08	28.94	4.908		
3,100.00	2,988.66	3,107.36	3,026.28	16.51	15.89	174.51	-609.77	-60.90	147.24	117.33	29.91	4.923		
3,200.00	3,083.83	3,207.22	3,122.79	17.07	16.42	174.53	-635.34	-63.31	152.46	121.58	30.88	4.937		
3,300.00	3,179.00	3,307.09	3,219.29	17.64	16.95	174.55	-660.90	-65.72	157.69	125.83	31.86	4.949		
3,400.00	3,274.17	3,406.95	3,315.80	18.21	17.48	174.57	-686.47	-68.13	162.91	130.07	32.84	4.961		
3,500.00	3,369.34	3,506.81	3,412.30	18.77	18.01	174.58	-712.04	-70.53	168.13	134.32	33.82	4.972		
3,600.00	3,464.51	3,606.68	3,508.81	19.34	18.54	174.60	-737.60	-72.94	173.36	138.56	34.80	4.982		
3,700.00	3,559.68	3,706.54	3,605.31	19.91	19.07	174.61	-763.17	-75.35	178.58	142.80	35.78	4.991		
3,800.00	3,654.84	3,806.40	3,701.82	20.48	19.60	174.63	-788.73	-77.76	183.80	147.04	36.77	4.999		
3,900.00	3,750.01	3,906.27	3,798.33	21.05	20.13	174.64	-814.30	-80.17	189.03	151.27	37.75	5.007		
4,000.00	3,845.18	4,006.13	3,894.83	21.62	20.67	174.65	-839.86	-82.58	194.25	155.51	38.74	5.014		
4,100.00	3,940.35	4,105.99	3,991.34	22.19	21.20	174.66	-865.43	-84.98	199.47	159.75	39.73	5.021		
4,200.00	4,035.52	4,205.86	4,087.84	22.76	21.73	174.68	-890.99	-87.39	204.70	163.98	40.71	5.028		
4,300.00	4,130.69	4,305.72	4,184.35	23.33	22.27	174.69	-916.56	-89.80	209.92	168.22	41.70	5.034		
4,400.00	4,225.86	4,405.58	4,280.85	23.91	22.80	174.70	-942.13	-92.21	215.14	172.45	42.69	5.039		
4,500.00	4,321.03	4,505.45	4,377.36	24.48	23.34	174.71	-967.69	-94.62	220.37	176.68	43.68	5.045		
4,600.00	4,416.20	4,605.31	4,473.86	25.05	23.87	174.71	-993.26	-97.02	225.59	180.92	44.67	5.050		
4,700.00	4,511.37	4,705.18	4,570.37	25.62	24.41	174.72	-1,018.82	-99.43	230.81	185.15	45.67	5.054		
4,800.00	4,606.54	4,805.04	4,666.88	26.20	24.94	174.73	-1,044.39	-101.84	236.04	189.38	46.66	5.059		
4,900.00	4,701.71	4,904.90	4,763.38	26.77	25.48	174.74	-1,069.95	-104.25	241.26	193.61	47.65	5.063		
5,000.00	4,796.88	5,004.77	4,859.89	27.34	26.01	174.75	-1,095.52	-106.66	246.48	197.84	48.64	5.067		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,104.63	4,956.39	27.92	26.55	174.76	-1,121.08	-109.07	251.71	202.07	49.64	5.071		
5,200.00	4,987.22	5,204.49	5,052.90	28.49	27.09	174.76	-1,146.65	-111.47	256.93	206.30	50.63	5.074		
5,300.00	5,082.39	5,304.36	5,149.40	29.07	27.62	174.77	-1,172.21	-113.88	262.15	210.53	51.63	5.078		
5,400.00	5,177.56	5,404.22	5,245.91	29.64	28.16	174.78	-1,197.78	-116.29	267.38	214.75	52.62	5.081		
5,500.00	5,272.72	5,504.08	5,342.41	30.21	28.70	174.78	-1,223.35	-118.70	272.60	218.98	53.62	5.084		
5,600.00	5,367.89	5,603.95	5,438.92	30.79	29.23	174.79	-1,248.91	-121.11	277.82	223.21	54.61	5.087		
5,700.00	5,463.06	5,703.81	5,535.43	31.36	29.77	174.79	-1,274.48	-123.52	283.05	227.44	55.61	5.090		
5,800.00	5,558.23	5,803.67	5,631.93	31.94	30.31	174.80	-1,300.04	-125.92	288.27	231.66	56.61	5.092		
5,900.00	5,653.40	5,903.54	5,728.44	32.51	30.85	174.80	-1,325.61	-128.33	293.49	235.89	57.60	5.095		
6,000.00	5,748.57	6,003.40	5,824.94	33.09	31.38	174.81	-1,351.17	-130.74	298.72	240.11	58.60	5.097		
6,100.00	5,843.74	6,103.26	5,921.45	33.67	31.92	174.81	-1,376.74	-133.15	303.94	244.34	59.60	5.100		
6,200.00	5,938.91	6,203.13	6,017.95	34.24	32.46	174.82	-1,402.30	-135.56	309.16	248.57	60.60	5.102		
6,300.00	6,034.08	6,302.99	6,114.46	34.82	33.00	174.82	-1,427.87	-137.96	314.39	252.79	61.60	5.104		
6,400.00	6,129.25	6,402.85	6,210.96	35.39	33.54	174.83	-1,453.44	-140.37	319.61	257.02	62.59	5.106		
6,500.00	6,224.42	6,502.72	6,307.47	35.97	34.07	174.83	-1,479.00	-142.78	324.83	261.24	63.59	5.108		
6,600.00	6,319.59	6,602.18	6,403.46	36.54	34.61	174.43	-1,504.45	-147.54	330.09	265.49	64.60	5.110		
6,700.00	6,414.76	6,698.78	6,495.11	37.12	35.11	171.77	-1,528.83	-165.41	335.96	270.30	65.66	5.116		
6,800.00	6,509.91	6,788.97	6,577.39	37.70	35.54	159.80	-1,550.82	-194.86	344.36	277.64	66.73	5.161		
6,900.00	6,603.99	6,874.46	6,650.92	38.26	35.92	131.63	-1,570.56	-233.62	355.63	288.07	67.55	5.264		
7,000.00	6,694.76	6,957.04	6,716.54	38.78	36.25	112.41	-1,588.26	-280.41	368.50	300.56	67.94	5.424		
7,100.00	6,779.96	7,037.26	6,774.16	39.24	36.54	99.58	-1,603.89	-333.92	381.99	314.17	67.82	5.632		
7,200.00	6,857.50	7,115.59	6,823.70	39.65	36.81	90.68	-1,617.41	-393.00	395.21	327.93	67.28	5.874		
7,300.00	6,925.48	7,192.41	6,865.10	40.02	37.05	84.33	-1,628.82	-456.64	407.39	340.91	66.49	6.127		
7,400.00	6,982.21	7,268.07	6,898.35	40.33	37.28	79.78	-1,638.09	-523.92	417.93	352.26	65.67	6.364		
7,500.00	7,026.31	7,342.86	6,923.39	40.63	37.54	76.60	-1,645.21	-593.98	426.35	361.26	65.09	6.551		
7,600.00	7,056.68	7,417.04	6,940.21	40.91	37.83	74.56	-1,650.17	-666.01	432.30	367.34	64.96	6.655		
7,700.00	7,072.58	7,490.84	6,948.80	41.25	38.22	73.52	-1,652.95	-739.22	435.55	370.10	65.45	6.655		
7,800.00	7,074.86	7,575.67	6,949.84	41.69	38.81	73.34	-1,653.82	-824.02	436.18	369.19	66.99	6.511		
7,900.00	7,074.54	7,675.67	6,949.46	42.34	39.78	73.34	-1,654.42	-924.02	436.26	366.80	69.45	6.281		
8,000.00	7,074.21	7,775.67	6,949.08	43.27	41.02	73.33	-1,655.02	-1,024.02	436.34	364.09	72.25	6.040		
8,100.00	7,073.89	7,875.67	6,948.70	44.47	42.48	73.33	-1,655.62	-1,124.01	436.42	361.08	75.34	5.793		
8,200.00	7,073.57	7,975.67	6,948.33	45.91	44.12	73.33	-1,656.22	-1,224.01	436.50	357.81	78.70	5.547		
8,300.00	7,073.24	8,075.67	6,947.95	47.53	45.90	73.32	-1,656.82	-1,324.01	436.58	354.30	82.28	5.306		
8,400.00	7,072.92	8,175.67	6,947.57	49.31	47.79	73.32	-1,657.42	-1,424.00	436.67	350.59	86.08	5.073		
8,500.00	7,072.59	8,275.67	6,947.19	51.20	49.79	73.31	-1,658.01	-1,524.00	436.75	346.70	90.05	4.850		
8,600.00	7,072.27	8,375.67	6,946.81	53.19	51.87	73.31	-1,658.61	-1,624.00	436.83	342.66	94.17	4.639		
8,700.00	7,071.94	8,475.67	6,946.43	55.27	54.03	73.31	-1,659.21	-1,724.00	436.91	338.48	98.43	4.439		
8,800.00	7,071.62	8,575.67	6,946.05	57.43	56.26	73.30	-1,659.81	-1,823.99	436.99	334.19	102.81	4.251		
8,900.00	7,071.29	8,675.67	6,945.67	59.64	58.54	73.30	-1,660.41	-1,923.99	437.07	329.79	107.29	4.074		
9,000.00	7,070.97	8,775.67	6,945.29	61.92	60.87	73.29	-1,661.01	-2,023.99	437.15	325.30	111.86	3.908		
9,100.00	7,070.64	8,875.67	6,944.91	64.24	63.25	73.29	-1,661.61	-2,123.99	437.24	320.72	116.51	3.753		
9,200.00	7,070.32	8,975.67	6,944.53	66.61	65.66	73.28	-1,662.20	-2,223.98	437.32	316.08	121.24	3.607		
9,300.00	7,069.99	9,075.67	6,944.15	69.01	68.11	73.28	-1,662.80	-2,323.98	437.40	311.37	126.02	3.471		
9,400.00	7,069.67	9,175.67	6,943.77	71.45	70.59	73.28	-1,663.40	-2,423.98	437.48	306.61	130.87	3.343		
9,500.00	7,069.34	9,275.67	6,943.39	73.92	73.10	73.27	-1,664.00	-2,523.98	437.56	301.80	135.76	3.223		
9,600.00	7,069.02	9,375.67	6,943.01	76.42	75.64	73.27	-1,664.60	-2,623.97	437.64	296.94	140.70	3.110		
9,700.00	7,068.69	9,475.67	6,942.64	78.95	78.20	73.26	-1,665.20	-2,723.97	437.73	292.04	145.68	3.005		
9,800.00	7,068.37	9,575.67	6,942.26	81.49	80.77	73.26	-1,665.80	-2,823.97	437.81	287.11	150.70	2.905		
9,900.00	7,068.04	9,675.67	6,941.88	84.06	83.37	73.25	-1,666.40	-2,923.97	437.89	282.14	155.75	2.812		
10,000.00	7,067.72	9,775.67	6,941.50	86.65	85.98	73.25	-1,666.99	-3,023.96	437.97	277.15	160.83	2.723		
10,100.00	7,067.39	9,875.67	6,941.12	89.25	88.61	73.25	-1,667.59	-3,123.96	438.05	272.12	165.93	2.640		
10,200.00	7,067.07	9,975.67	6,940.74	91.87	91.26	73.24	-1,668.19	-3,223.96	438.13	267.07	171.06	2.561		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,075.67	6,940.36	94.50	93.91	73.24	-1,668.79	-3,323.96	438.22	262.00	176.21	2.487		
10,400.00	7,066.42	10,175.67	6,939.98	97.14	96.58	73.23	-1,669.39	-3,423.95	438.30	256.91	181.39	2.416		
10,500.00	7,066.09	10,275.67	6,939.60	99.80	99.26	73.23	-1,669.99	-3,523.95	438.38	251.80	186.58	2.350		
10,600.00	7,065.77	10,375.67	6,939.22	102.47	101.94	73.22	-1,670.59	-3,623.95	438.46	246.67	191.79	2.286		
10,700.00	7,065.44	10,475.67	6,938.84	105.15	104.64	73.22	-1,671.18	-3,723.95	438.54	241.53	197.01	2.226		
10,800.00	7,065.12	10,575.67	6,938.46	107.83	107.35	73.22	-1,671.78	-3,823.94	438.62	236.37	202.25	2.169		
10,900.00	7,064.79	10,675.67	6,938.08	110.53	110.06	73.21	-1,672.38	-3,923.94	438.71	231.20	207.50	2.114		
11,000.00	7,064.47	10,775.67	6,937.70	113.23	112.78	73.21	-1,672.98	-4,023.94	438.79	226.02	212.77	2.062		
11,100.00	7,064.14	10,875.67	6,937.32	115.95	115.51	73.20	-1,673.58	-4,123.94	438.87	220.83	218.04	2.013		
11,200.00	7,063.82	10,975.67	6,936.95	118.66	118.24	73.20	-1,674.18	-4,223.93	438.95	215.62	223.33	1.965		
11,300.00	7,063.49	11,075.67	6,936.57	121.39	120.98	73.20	-1,674.78	-4,323.93	439.03	210.41	228.63	1.920		
11,400.00	7,063.17	11,175.67	6,936.19	124.12	123.72	73.19	-1,675.37	-4,423.93	439.11	205.18	233.93	1.877		
11,500.00	7,062.84	11,275.67	6,935.81	126.86	126.47	73.19	-1,675.97	-4,523.93	439.19	199.95	239.25	1.836		
11,600.00	7,062.52	11,375.67	6,935.43	129.60	129.23	73.18	-1,676.57	-4,623.92	439.28	194.71	244.57	1.796		
11,700.00	7,062.19	11,475.67	6,935.05	132.35	131.99	73.18	-1,677.17	-4,723.92	439.36	189.46	249.90	1.758		
11,800.00	7,061.87	11,575.67	6,934.67	135.10	134.75	73.17	-1,677.77	-4,823.92	439.44	184.20	255.24	1.722		
11,900.00	7,061.54	11,675.67	6,934.29	137.85	137.52	73.17	-1,678.37	-4,923.92	439.52	178.94	260.58	1.687		
12,000.00	7,061.22	11,775.67	6,933.91	140.61	140.29	73.17	-1,678.97	-5,023.91	439.60	173.67	265.93	1.653		
12,100.00	7,060.89	11,875.67	6,933.53	143.38	143.06	73.16	-1,679.57	-5,123.91	439.68	168.40	271.29	1.621		
12,200.00	7,060.57	11,975.67	6,933.15	146.15	145.84	73.16	-1,680.16	-5,223.91	439.77	163.12	276.65	1.590		
12,300.00	7,060.24	12,075.67	6,932.77	148.92	148.62	73.15	-1,680.76	-5,323.91	439.85	157.83	282.01	1.560		
12,400.00	7,059.92	12,175.67	6,932.39	151.69	151.40	73.15	-1,681.36	-5,423.90	439.93	152.55	287.38	1.531		
12,500.00	7,059.59	12,275.67	6,932.01	154.47	154.19	73.14	-1,681.96	-5,523.90	440.01	147.25	292.76	1.503		
12,600.00	7,059.27	12,375.67	6,931.63	157.25	156.98	73.14	-1,682.56	-5,623.90	440.09	141.95	298.14	1.476 Level 3		
12,700.00	7,058.94	12,475.67	6,931.26	160.03	159.77	73.14	-1,683.16	-5,723.90	440.17	136.65	303.52	1.450 Level 3		
12,800.00	7,058.62	12,575.67	6,930.88	162.82	162.56	73.13	-1,683.76	-5,823.89	440.26	131.34	308.91	1.425 Level 3		
12,900.00	7,058.29	12,675.67	6,930.50	165.61	165.36	73.13	-1,684.35	-5,923.89	440.34	126.04	314.30	1.401 Level 3		
13,000.00	7,057.97	12,775.67	6,930.12	168.40	168.16	73.12	-1,684.95	-6,023.89	440.42	120.72	319.70	1.378 Level 3		
13,100.00	7,057.64	12,875.67	6,929.74	171.19	170.96	73.12	-1,685.55	-6,123.89	440.50	115.41	325.10	1.355 Level 3		
13,200.00	7,057.32	12,975.67	6,929.36	173.99	173.76	73.12	-1,686.15	-6,223.88	440.58	110.09	330.50	1.333 Level 3		
13,300.00	7,057.00	13,075.67	6,928.98	176.78	176.56	73.11	-1,686.75	-6,323.88	440.66	104.76	335.90	1.312 Level 3		
13,400.00	7,056.67	13,175.67	6,928.60	179.58	179.37	73.11	-1,687.35	-6,423.88	440.75	99.44	341.31	1.291 Level 3		
13,500.00	7,056.35	13,275.67	6,928.22	182.38	182.17	73.10	-1,687.95	-6,523.88	440.83	94.11	346.72	1.271 Level 3		
13,600.00	7,056.02	13,375.67	6,927.84	185.19	184.98	73.10	-1,688.55	-6,623.87	440.91	88.78	352.13	1.252 Level 3		
13,700.00	7,055.70	13,475.67	6,927.46	187.99	187.79	73.09	-1,689.14	-6,723.87	440.99	83.45	357.54	1.233 Level 2		
13,800.00	7,055.37	13,575.67	6,927.08	190.80	190.61	73.09	-1,689.74	-6,823.87	441.07	78.11	362.96	1.215 Level 2		
13,900.00	7,055.05	13,675.67	6,926.70	193.60	193.42	73.09	-1,690.34	-6,923.86	441.15	72.78	368.38	1.198 Level 2		
14,000.00	7,054.72	13,775.67	6,926.32	196.41	196.23	73.08	-1,690.94	-7,023.86	441.24	67.44	373.80	1.180 Level 2		
14,100.00	7,054.40	13,875.67	6,925.94	199.22	199.05	73.08	-1,691.54	-7,123.86	441.32	62.10	379.22	1.164 Level 2		
14,200.00	7,054.07	13,975.67	6,925.57	202.03	201.87	73.07	-1,692.14	-7,223.86	441.40	56.75	384.65	1.148 Level 2		
14,300.00	7,053.75	14,075.67	6,925.19	204.85	204.68	73.07	-1,692.74	-7,323.85	441.48	51.41	390.07	1.132 Level 2		
14,400.00	7,053.42	14,175.67	6,924.81	207.66	207.50	73.07	-1,693.33	-7,423.85	441.56	46.06	395.50	1.116 Level 2		
14,500.00	7,053.10	14,275.67	6,924.43	210.48	210.32	73.06	-1,693.93	-7,523.85	441.65	40.72	400.93	1.102 Level 2		
14,600.00	7,052.77	14,375.67	6,924.05	213.29	213.14	73.06	-1,694.53	-7,623.85	441.73	35.37	406.36	1.087 Level 2		
14,700.00	7,052.45	14,475.67	6,923.67	216.11	215.97	73.05	-1,695.13	-7,723.84	441.81	30.02	411.79	1.073 Level 2		
14,800.00	7,052.12	14,575.67	6,923.29	218.93	218.79	73.05	-1,695.73	-7,823.84	441.89	24.66	417.23	1.059 Level 2		
14,900.00	7,051.80	14,675.67	6,922.91	221.75	221.61	73.04	-1,696.33	-7,923.84	441.97	19.31	422.66	1.046 Level 2		
15,000.00	7,051.47	14,775.67	6,922.53	224.57	224.44	73.04	-1,696.93	-8,023.84	442.05	13.95	428.10	1.033 Level 2		
15,100.00	7,051.15	14,875.67	6,922.15	227.39	227.26	73.04	-1,697.52	-8,123.83	442.14	8.60	433.54	1.020 Level 2		
15,101.01	7,051.14	14,876.67	6,922.15	227.42	227.29	73.04	-1,697.53	-8,124.84	442.14	8.54	433.59	1.020 Level 2		
15,145.13	7,051.00	14,915.55	6,922.00	228.67	228.39	73.04	-1,697.76	-8,163.72	442.20	6.56	435.64	1.015 Level 2, ES, SF		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	79.78	0.56	79.78					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	79.78	0.56	79.78	73.21	6.57	12.144		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	79.78	0.56	79.78	73.11	6.67	11.954		
300.00	299.98	302.84	302.82	3.44	3.44	175.94	77.95	0.32	79.74	72.85	6.89	11.567		
400.00	399.84	405.68	405.50	3.59	3.60	175.73	72.46	-0.39	79.62	72.39	7.23	11.018		
500.00	499.45	508.51	507.91	3.79	3.81	175.37	63.32	-1.57	79.42	71.75	7.67	10.361		
600.00	598.70	611.33	609.91	4.03	4.06	174.87	50.54	-3.21	79.15	70.96	8.19	9.663		
700.00	697.47	714.13	711.37	4.31	4.36	174.23	34.15	-5.33	78.80	70.01	8.79	8.966		
723.99	721.07	738.48	735.31	4.39	4.43	174.05	29.76	-5.90	78.73	69.80	8.94	8.809 CC, ES		
800.00	795.62	814.48	810.03	4.64	4.68	173.61	15.95	-7.68	79.74	70.34	9.40	8.486		
900.00	893.06	914.37	908.24	5.00	5.04	173.28	-2.19	-10.02	84.12	74.06	10.05	8.367		
1,000.00	989.64	1,014.06	1,006.24	5.40	5.41	173.25	-20.29	-12.35	91.96	81.20	10.76	8.546		
1,100.00	1,085.27	1,113.42	1,103.92	5.83	5.81	173.44	-38.33	-14.68	103.24	91.73	11.51	8.970		
1,200.00	1,180.44	1,212.59	1,201.42	6.29	6.21	173.69	-56.34	-17.00	116.05	103.77	12.28	9.448		
1,300.00	1,275.61	1,311.77	1,298.92	6.76	6.63	173.90	-74.35	-19.32	128.86	115.78	13.08	9.849		
1,400.00	1,370.78	1,410.94	1,396.41	7.26	7.06	174.07	-92.36	-21.65	141.68	127.77	13.91	10.187		
1,500.00	1,465.95	1,510.12	1,493.91	7.76	7.49	174.21	-110.37	-23.97	154.49	139.74	14.75	10.475		
1,600.00	1,561.12	1,609.29	1,591.41	8.27	7.93	174.33	-128.37	-26.29	167.30	151.70	15.60	10.721		
1,700.00	1,656.29	1,708.47	1,688.91	8.80	8.38	174.43	-146.38	-28.62	180.12	163.65	16.47	10.933		
1,800.00	1,751.46	1,807.64	1,786.41	9.32	8.83	174.52	-164.39	-30.94	192.94	175.58	17.35	11.117		
1,900.00	1,846.63	1,906.82	1,883.91	9.86	9.29	174.60	-182.40	-33.26	205.75	187.51	18.24	11.277		
2,000.00	1,941.80	2,005.99	1,981.40	10.40	9.75	174.67	-200.41	-35.59	218.57	199.43	19.14	11.418		
2,100.00	2,036.96	2,105.17	2,078.90	10.94	10.21	174.73	-218.42	-37.91	231.39	211.34	20.05	11.541		
2,200.00	2,132.13	2,204.34	2,176.40	11.49	10.67	174.78	-236.43	-40.23	244.20	223.24	20.96	11.651		
2,300.00	2,227.30	2,303.52	2,273.90	12.04	11.14	174.83	-254.44	-42.55	257.02	235.14	21.88	11.749		
2,400.00	2,322.47	2,402.69	2,371.40	12.59	11.61	174.88	-272.45	-44.88	269.84	247.04	22.80	11.836		
2,500.00	2,417.64	2,501.87	2,468.90	13.15	12.08	174.92	-290.46	-47.20	282.66	258.93	23.72	11.915		
2,600.00	2,512.81	2,601.04	2,566.40	13.70	12.55	174.95	-308.47	-49.52	295.47	270.82	24.65	11.986		
2,700.00	2,607.98	2,700.22	2,663.89	14.26	13.03	174.99	-326.47	-51.85	308.29	282.71	25.58	12.050		
2,800.00	2,703.15	2,800.61	2,761.39	14.82	13.51	175.02	-344.48	-54.17	321.11	294.58	26.53	12.106		
2,900.00	2,798.32	2,901.43	2,858.89	15.38	13.99	175.05	-362.49	-56.49	333.93	306.46	27.47	12.155		
3,000.00	2,893.49	3,002.26	2,956.39	15.95	14.48	175.07	-380.50	-58.82	346.74	318.33	28.42	12.201		
3,100.00	2,988.66	3,103.08	3,053.89	16.51	14.96	175.10	-398.51	-61.14	359.56	330.19	29.37	12.243		
3,200.00	3,083.83	3,203.91	3,151.39	17.07	15.45	175.12	-416.52	-63.46	372.38	342.06	30.32	12.281		
3,300.00	3,179.00	3,304.73	3,248.88	17.64	15.94	175.14	-434.53	-65.78	385.20	353.92	31.28	12.316		
3,400.00	3,274.17	3,405.56	3,346.38	18.21	16.43	175.16	-452.54	-68.11	398.02	365.79	32.23	12.349		
3,500.00	3,369.34	3,506.38	3,443.88	18.77	16.92	175.18	-470.55	-70.43	410.84	377.65	33.19	12.379		
3,600.00	3,464.51	3,607.21	3,541.38	19.34	17.41	175.20	-488.56	-72.75	423.65	389.51	34.15	12.407		
3,700.00	3,559.68	3,708.03	3,638.88	19.91	17.90	175.22	-506.57	-75.08	436.47	401.37	35.11	12.433		
3,800.00	3,654.84	3,791.14	3,736.38	20.48	18.30	175.23	-524.57	-77.40	449.29	413.31	35.99	12.485		
3,900.00	3,750.01	3,890.32	3,833.87	21.05	18.78	175.25	-542.58	-79.72	462.11	425.17	36.94	12.510		
4,000.00	3,845.18	3,989.49	3,931.37	21.62	19.27	175.26	-560.59	-82.05	474.93	437.03	37.89	12.533		
4,100.00	3,940.35	4,088.67	4,028.87	22.19	19.75	175.27	-578.60	-84.37	487.75	448.90	38.85	12.554		
4,200.00	4,035.52	4,187.84	4,126.37	22.76	20.24	175.29	-596.61	-86.69	500.57	460.76	39.81	12.575		
4,300.00	4,130.69	4,287.02	4,223.87	23.33	20.72	175.30	-614.62	-89.01	513.38	472.62	40.77	12.594		
4,400.00	4,225.86	4,386.19	4,321.37	23.91	21.21	175.31	-632.63	-91.34	526.20	484.48	41.72	12.612		
4,500.00	4,321.03	4,485.37	4,418.87	24.48	21.69	175.32	-650.64	-93.66	539.02	496.34	42.68	12.629		
4,600.00	4,416.20	4,584.54	4,516.36	25.05	22.18	175.33	-668.65	-95.98	551.84	508.20	43.64	12.645		
4,700.00	4,511.37	4,683.72	4,613.86	25.62	22.66	175.34	-686.66	-98.31	564.66	520.06	44.60	12.660		
4,800.00	4,606.54	4,782.89	4,711.36	26.20	23.15	175.35	-704.67	-100.63	577.48	531.91	45.56	12.674		
4,900.00	4,701.71	4,882.07	4,808.86	26.77	23.64	175.36	-722.67	-102.95	590.30	543.77	46.53	12.688		
5,000.00	4,796.88	4,981.24	4,906.36	27.34	24.12	175.37	-740.68	-105.28	603.12	555.63	47.49	12.701		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,080.42	5,003.86	27.92	24.61	175.38	-758.69	-107.60	615.93	567.49	48.45	12.713		
5,200.00	4,987.22	5,179.59	5,101.35	28.49	25.10	175.38	-776.70	-109.92	628.75	579.34	49.41	12.725		
5,300.00	5,082.39	5,278.77	5,198.85	29.07	25.58	175.39	-794.71	-112.24	641.57	591.20	50.38	12.736		
5,400.00	5,177.56	5,377.94	5,296.35	29.64	26.07	175.40	-812.72	-114.57	654.39	603.05	51.34	12.746		
5,500.00	5,272.72	5,477.12	5,393.85	30.21	26.56	175.41	-830.73	-116.89	667.21	614.91	52.30	12.757		
5,600.00	5,367.89	5,576.29	5,491.35	30.79	27.04	175.41	-848.74	-119.21	680.03	626.76	53.27	12.766		
5,700.00	5,463.06	5,675.47	5,588.85	31.36	27.53	175.42	-866.75	-121.54	692.85	638.62	54.23	12.776		
5,800.00	5,558.23	5,774.64	5,686.35	31.94	28.02	175.43	-884.76	-123.86	705.67	650.47	55.20	12.785		
5,900.00	5,653.40	5,873.82	5,783.84	32.51	28.51	175.43	-902.77	-126.18	718.48	662.32	56.16	12.793		
6,000.00	5,748.57	5,972.99	5,881.34	33.09	29.00	175.44	-920.77	-128.51	731.30	674.18	57.13	12.801		
6,100.00	5,843.74	6,072.17	5,978.84	33.67	29.48	175.44	-938.78	-130.83	744.12	686.03	58.09	12.809		
6,200.00	5,938.91	6,171.34	6,076.34	34.24	29.97	175.45	-956.79	-133.15	756.94	697.88	59.06	12.817		
6,300.00	6,034.08	6,270.52	6,173.84	34.82	30.46	175.45	-974.80	-135.47	769.76	709.73	60.03	12.824		
6,400.00	6,129.25	6,369.69	6,271.34	35.39	30.95	175.46	-992.81	-137.80	782.58	721.59	60.99	12.831		
6,500.00	6,224.42	6,468.87	6,368.83	35.97	31.44	175.46	-1,010.82	-140.12	795.40	733.44	61.96	12.837		
6,600.00	6,319.59	6,568.04	6,466.33	36.54	31.93	175.47	-1,028.83	-142.44	808.22	745.29	62.93	12.844		
6,700.00	6,414.76	6,667.78	6,564.34	37.12	32.42	175.41	-1,046.95	-145.71	821.02	757.12	63.90	12.849		
6,800.00	6,509.91	6,766.90	6,660.50	37.70	32.90	166.96	-1,064.93	-161.04	833.77	768.89	64.88	12.851		
6,900.00	6,603.99	6,863.25	6,750.60	38.26	33.33	141.89	-1,082.02	-190.30	846.53	780.71	65.83	12.860		
7,000.00	6,694.76	6,957.52	6,833.53	38.78	33.73	125.33	-1,098.00	-232.00	858.97	792.25	66.72	12.875		
7,100.00	6,779.96	7,050.01	6,908.10	39.24	34.08	114.71	-1,112.63	-284.58	870.72	803.16	67.56	12.889		
7,200.00	6,857.50	7,140.96	6,973.34	39.65	34.40	107.58	-1,125.69	-346.47	881.44	813.06	68.38	12.891		
7,300.00	6,925.48	7,230.64	7,028.51	40.02	34.70	102.60	-1,137.02	-416.17	890.81	821.57	69.24	12.866		
7,400.00	6,982.21	7,319.26	7,073.02	40.33	35.01	99.08	-1,146.49	-492.13	898.56	828.34	70.22	12.797		
7,500.00	7,026.31	7,407.05	7,106.44	40.63	35.37	96.63	-1,154.00	-572.88	904.45	833.06	71.39	12.669		
7,600.00	7,056.68	7,494.17	7,128.49	40.91	35.88	95.05	-1,159.47	-656.92	908.30	835.47	72.83	12.471		
7,700.00	7,072.58	7,580.82	7,139.03	41.25	36.59	94.23	-1,162.84	-742.79	910.01	835.45	74.56	12.205		
7,800.00	7,074.86	7,674.65	7,139.70	41.69	37.56	94.09	-1,164.53	-836.59	909.59	832.86	76.73	11.854		
7,900.00	7,074.54	7,774.65	7,139.16	42.34	38.83	94.08	-1,166.10	-936.57	908.67	829.32	79.36	11.450		
8,000.00	7,074.21	7,874.64	7,138.62	43.27	40.28	94.07	-1,167.67	-1,036.55	907.76	825.47	82.29	11.031		
8,100.00	7,073.89	7,974.64	7,138.07	44.47	41.89	94.06	-1,169.24	-1,136.53	906.84	821.34	85.51	10.605		
8,200.00	7,073.57	8,074.63	7,137.53	45.91	43.64	94.05	-1,170.81	-1,236.52	905.93	816.96	88.97	10.182		
8,300.00	7,073.24	8,174.63	7,136.99	47.53	45.51	94.04	-1,172.38	-1,336.50	905.01	812.36	92.66	9.767		
8,400.00	7,072.92	8,274.63	7,136.45	49.31	47.47	94.03	-1,173.95	-1,436.48	904.10	807.56	96.54	9.365		
8,500.00	7,072.59	8,374.62	7,135.91	51.20	49.53	94.02	-1,175.52	-1,536.46	903.18	802.59	100.59	8.979		
8,600.00	7,072.27	8,474.62	7,135.36	53.19	51.66	94.01	-1,177.09	-1,636.44	902.27	797.47	104.80	8.610		
8,700.00	7,071.94	8,574.61	7,134.82	55.27	53.87	94.00	-1,178.66	-1,736.43	901.35	792.21	109.14	8.259		
8,800.00	7,071.62	8,674.61	7,134.28	57.43	56.13	93.99	-1,180.23	-1,836.41	900.43	786.83	113.60	7.926		
8,900.00	7,071.29	8,774.60	7,133.74	59.64	58.44	93.98	-1,181.80	-1,936.39	899.52	781.35	118.17	7.612		
9,000.00	7,070.97	8,874.60	7,133.20	61.92	60.80	93.97	-1,183.37	-2,036.37	898.60	775.77	122.84	7.315		
9,100.00	7,070.64	8,974.60	7,132.65	64.24	63.20	93.96	-1,184.94	-2,136.35	897.69	770.10	127.58	7.036		
9,200.00	7,070.32	9,074.59	7,132.11	66.61	65.64	93.95	-1,186.51	-2,236.34	896.77	764.36	132.41	6.773		
9,300.00	7,069.99	9,174.59	7,131.57	69.01	68.12	93.94	-1,188.08	-2,336.32	895.86	758.56	137.30	6.525		
9,400.00	7,069.67	9,274.58	7,131.03	71.45	70.62	93.93	-1,189.65	-2,436.30	894.94	752.69	142.25	6.291		
9,500.00	7,069.34	9,374.58	7,130.49	73.92	73.14	93.92	-1,191.22	-2,536.28	894.03	746.77	147.26	6.071		
9,600.00	7,069.02	9,474.57	7,129.95	76.42	75.69	93.91	-1,192.79	-2,636.26	893.11	740.80	152.31	5.864		
9,700.00	7,068.69	9,574.57	7,129.40	78.95	78.26	93.90	-1,194.36	-2,736.25	892.20	734.79	157.41	5.668		
9,800.00	7,068.37	9,674.57	7,128.86	81.49	80.86	93.89	-1,195.93	-2,836.23	891.28	728.73	162.55	5.483		
9,900.00	7,068.04	9,774.56	7,128.32	84.06	83.46	93.88	-1,197.50	-2,936.21	890.36	722.64	167.72	5.309		
10,000.00	7,067.72	9,874.56	7,127.78	86.65	86.09	93.87	-1,199.07	-3,036.19	889.45	716.52	172.93	5.143		
10,100.00	7,067.39	9,974.55	7,127.24	89.25	88.72	93.86	-1,200.64	-3,136.17	888.53	710.37	178.17	4.987		
10,200.00	7,067.07	10,074.55	7,126.69	91.87	91.38	93.85	-1,202.21	-3,236.15	887.62	704.18	183.43	4.839		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,174.54	7,126.15	94.50	94.04	93.84	-1,203.78	-3,336.14	886.70	697.98	188.73	4.698		
10,400.00	7,066.42	10,274.54	7,125.61	97.14	96.71	93.83	-1,205.35	-3,436.12	885.79	691.75	194.04	4.565		
10,500.00	7,066.09	10,374.54	7,125.07	99.80	99.40	93.82	-1,206.92	-3,536.10	884.87	685.50	199.38	4.438		
10,600.00	7,065.77	10,474.53	7,124.53	102.47	102.09	93.81	-1,208.49	-3,636.08	883.96	679.23	204.73	4.318		
10,700.00	7,065.44	10,574.53	7,123.98	105.15	104.79	93.80	-1,210.06	-3,736.06	883.04	672.94	210.11	4.203		
10,800.00	7,065.12	10,674.52	7,123.44	107.83	107.50	93.79	-1,211.63	-3,836.05	882.13	666.63	215.50	4.093		
10,900.00	7,064.79	10,774.52	7,122.90	110.53	110.22	93.78	-1,213.20	-3,936.03	881.21	660.31	220.91	3.989		
11,000.00	7,064.47	10,874.51	7,122.36	113.23	112.95	93.77	-1,214.77	-4,036.01	880.30	653.97	226.33	3.889		
11,100.00	7,064.14	10,974.51	7,121.82	115.95	115.68	93.76	-1,216.34	-4,135.99	879.38	647.62	231.76	3.794		
11,200.00	7,063.82	11,074.50	7,121.27	118.66	118.41	93.75	-1,217.91	-4,235.97	878.47	641.26	237.21	3.703		
11,300.00	7,063.49	11,174.50	7,120.73	121.39	121.16	93.74	-1,219.48	-4,335.96	877.55	634.88	242.67	3.616		
11,400.00	7,063.17	11,274.50	7,120.19	124.12	123.90	93.73	-1,221.05	-4,435.94	876.64	628.50	248.14	3.533		
11,500.00	7,062.84	11,374.49	7,119.65	126.86	126.65	93.72	-1,222.62	-4,535.92	875.72	622.10	253.62	3.453		
11,600.00	7,062.52	11,474.49	7,119.11	129.60	129.41	93.71	-1,224.19	-4,635.90	874.81	615.70	259.11	3.376		
11,700.00	7,062.19	11,574.48	7,118.56	132.35	132.17	93.70	-1,225.76	-4,735.88	873.89	609.28	264.61	3.303		
11,800.00	7,061.87	11,674.48	7,118.02	135.10	134.94	93.69	-1,227.33	-4,835.87	872.98	602.86	270.12	3.232		
11,900.00	7,061.54	11,774.47	7,117.48	137.85	137.70	93.68	-1,228.90	-4,935.85	872.07	596.43	275.64	3.164		
12,000.00	7,061.22	11,874.47	7,116.94	140.61	140.48	93.67	-1,230.47	-5,035.83	871.15	589.99	281.16	3.098		
12,100.00	7,060.89	11,974.47	7,116.40	143.38	143.25	93.66	-1,232.04	-5,135.81	870.24	583.54	286.69	3.035		
12,200.00	7,060.57	12,074.46	7,115.85	146.15	146.03	93.65	-1,233.61	-5,235.79	869.32	577.09	292.23	2.975		
12,300.00	7,060.24	12,174.46	7,115.31	148.92	148.81	93.64	-1,235.18	-5,335.77	868.41	570.63	297.78	2.916		
12,400.00	7,059.92	12,274.45	7,114.77	151.69	151.60	93.63	-1,236.75	-5,435.76	867.49	564.17	303.33	2.860		
12,500.00	7,059.59	12,374.45	7,114.23	154.47	154.38	93.62	-1,238.32	-5,535.74	866.58	557.70	308.88	2.806		
12,600.00	7,059.27	12,474.44	7,113.69	157.25	157.17	93.61	-1,239.89	-5,635.72	865.66	551.22	314.44	2.753		
12,700.00	7,058.94	12,574.44	7,113.15	160.03	159.96	93.60	-1,241.46	-5,735.70	864.75	544.74	320.01	2.702		
12,800.00	7,058.62	12,674.44	7,112.60	162.82	162.76	93.58	-1,243.03	-5,835.68	863.83	538.25	325.58	2.653		
12,900.00	7,058.29	12,774.43	7,112.06	165.61	165.55	93.57	-1,244.60	-5,935.67	862.92	531.76	331.16	2.606		
13,000.00	7,057.97	12,874.43	7,111.52	168.40	168.35	93.56	-1,246.17	-6,035.65	862.01	525.27	336.74	2.560		
13,100.00	7,057.64	12,974.42	7,110.98	171.19	171.15	93.55	-1,247.74	-6,135.63	861.09	518.77	342.32	2.515		
13,200.00	7,057.32	13,074.42	7,110.44	173.99	173.95	93.54	-1,249.31	-6,235.61	860.18	512.26	347.91	2.472		
13,300.00	7,057.00	13,174.41	7,109.89	176.78	176.75	93.53	-1,250.88	-6,335.59	859.26	505.76	353.50	2.431		
13,400.00	7,056.67	13,274.41	7,109.35	179.58	179.56	93.52	-1,252.45	-6,435.58	858.35	499.25	359.10	2.390		
13,500.00	7,056.35	13,374.41	7,108.81	182.38	182.36	93.51	-1,254.02	-6,535.56	857.43	492.73	364.70	2.351		
13,600.00	7,056.02	13,474.40	7,108.27	185.19	185.17	93.50	-1,255.59	-6,635.54	856.52	486.22	370.30	2.313		
13,700.00	7,055.70	13,574.40	7,107.73	187.99	187.98	93.49	-1,257.16	-6,735.52	855.61	479.70	375.91	2.276		
13,800.00	7,055.37	13,674.39	7,107.18	190.80	190.79	93.48	-1,258.73	-6,835.50	854.69	473.17	381.52	2.240		
13,900.00	7,055.05	13,774.39	7,106.64	193.60	193.60	93.47	-1,260.30	-6,935.48	853.78	466.65	387.13	2.205		
14,000.00	7,054.72	13,874.38	7,106.10	196.41	196.42	93.46	-1,261.87	-7,035.47	852.86	460.12	392.75	2.172		
14,100.00	7,054.40	13,974.38	7,105.56	199.22	199.23	93.44	-1,263.44	-7,135.45	851.95	453.59	398.36	2.139		
14,200.00	7,054.07	14,074.38	7,105.02	202.03	202.05	93.43	-1,265.01	-7,235.43	851.04	447.05	403.98	2.107		
14,300.00	7,053.75	14,174.37	7,104.47	204.85	204.86	93.42	-1,266.58	-7,335.41	850.12	440.51	409.61	2.075		
14,400.00	7,053.42	14,274.37	7,103.93	207.66	207.68	93.41	-1,268.15	-7,435.39	849.21	433.98	415.23	2.045		
14,500.00	7,053.10	14,374.36	7,103.39	210.48	210.50	93.40	-1,269.72	-7,535.38	848.29	427.43	420.86	2.016		
14,600.00	7,052.77	14,474.36	7,102.85	213.29	213.32	93.39	-1,271.29	-7,635.36	847.38	420.89	426.49	1.987		
14,700.00	7,052.45	14,574.35	7,102.31	216.11	216.14	93.38	-1,272.86	-7,735.34	846.47	414.34	432.12	1.959		
14,800.00	7,052.12	14,674.35	7,101.76	218.93	218.96	93.37	-1,274.43	-7,835.32	845.55	407.80	437.75	1.932		
14,900.00	7,051.80	14,774.35	7,101.22	221.75	221.79	93.36	-1,276.00	-7,935.30	844.64	401.25	443.39	1.905		
15,000.00	7,051.47	14,874.34	7,100.68	224.57	224.61	93.35	-1,277.57	-8,035.29	843.72	394.70	449.03	1.879		
15,100.00	7,051.15	14,974.34	7,100.14	227.39	227.43	93.33	-1,279.14	-8,135.27	842.81	388.14	454.67	1.854		
15,135.42	7,051.03	15,009.76	7,099.95	228.39	228.43	93.33	-1,279.70	-8,170.69	842.49	385.82	456.67	1.845 SF		
15,145.13	7,051.00	15,000.73	7,100.00	228.67	228.18	93.33	-1,279.56	-8,161.65	842.61	386.25	456.35	1.846		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.47	-60.11	-0.56	60.12					
100.00	100.00	101.00	100.00	3.28	3.28	-179.47	-60.11	-0.56	60.12	53.55	6.57	9.151		
200.00	200.00	199.00	200.00	3.34	3.34	-179.47	-60.11	-0.56	60.12	53.44	6.67	9.009		
300.00	299.98	296.97	297.95	3.44	3.44	-3.89	-61.75	-0.65	60.05	53.16	6.89	8.721		
400.00	399.84	394.92	395.77	3.59	3.58	-3.98	-66.73	-0.95	59.91	52.71	7.20	8.316		
500.00	499.45	492.88	493.37	3.79	3.78	-4.13	-75.05	-1.45	59.71	52.08	7.63	7.831		
600.00	598.70	590.84	590.63	4.03	4.01	-4.34	-86.69	-2.14	59.44	51.31	8.13	7.310		
700.00	697.47	688.82	687.45	4.31	4.28	-4.61	-101.64	-3.03	59.10	50.40	8.71	6.788		
800.00	795.62	786.81	783.71	4.64	4.59	-4.95	-119.90	-4.12	58.70	49.36	9.34	6.283		
900.00	893.06	884.81	879.31	5.00	4.94	-5.35	-141.43	-5.40	58.24	48.22	10.02	5.810		
1,000.00	989.64	982.83	974.12	5.40	5.33	-5.83	-166.22	-6.88	57.72	46.97	10.75	5.368		
1,100.00	1,085.27	1,080.87	1,068.05	5.83	5.74	-6.37	-194.24	-8.55	57.14	45.63	11.51	4.963		
1,111.86	1,096.56	1,092.50	1,079.13	5.88	5.79	-6.43	-197.78	-8.76	57.12	45.51	11.61	4.921 CC, ES		
1,200.00	1,180.44	1,178.90	1,160.96	6.29	6.19	-6.76	-225.44	-10.41	58.44	46.14	12.30	4.750		
1,300.00	1,275.61	1,276.73	1,252.55	6.76	6.68	-6.80	-259.73	-12.45	63.14	50.03	13.11	4.815		
1,400.00	1,370.78	1,374.97	1,343.39	7.26	7.19	-6.57	-297.09	-14.68	71.02	57.08	13.94	5.094		
1,500.00	1,465.95	1,474.60	1,435.24	7.76	7.73	-6.34	-335.63	-16.97	79.61	64.80	14.81	5.375		
1,600.00	1,561.12	1,574.23	1,527.08	8.27	8.29	-6.15	-374.17	-19.27	88.20	72.49	15.70	5.617		
1,700.00	1,656.29	1,673.86	1,618.93	8.80	8.86	-6.00	-412.71	-21.56	96.79	80.17	16.62	5.825		
1,800.00	1,751.46	1,773.49	1,710.77	9.32	9.44	-5.87	-451.25	-23.86	105.38	87.83	17.55	6.006		
1,900.00	1,846.63	1,873.12	1,802.62	9.86	10.03	-5.76	-489.79	-26.16	113.97	95.48	18.49	6.164		
2,000.00	1,941.80	1,972.75	1,894.46	10.40	10.62	-5.66	-528.33	-28.45	122.56	103.12	19.45	6.303		
2,100.00	2,036.96	2,072.38	1,986.31	10.94	11.22	-5.58	-566.87	-30.75	131.16	110.74	20.41	6.425		
2,200.00	2,132.13	2,172.01	2,078.15	11.49	11.82	-5.51	-605.41	-33.05	139.75	118.36	21.39	6.534		
2,300.00	2,227.30	2,271.64	2,170.00	12.04	12.43	-5.45	-643.95	-35.34	148.34	125.97	22.37	6.631		
2,400.00	2,322.47	2,371.27	2,261.84	12.59	13.04	-5.39	-682.49	-37.64	156.93	133.57	23.36	6.717		
2,500.00	2,417.64	2,470.90	2,353.69	13.15	13.66	-5.34	-721.03	-39.94	165.53	141.17	24.36	6.795		
2,600.00	2,512.81	2,570.53	2,445.53	13.70	14.28	-5.29	-759.57	-42.23	174.12	148.76	25.36	6.865		
2,700.00	2,607.98	2,670.16	2,537.38	14.26	14.90	-5.25	-798.11	-44.53	182.71	156.35	26.37	6.929		
2,800.00	2,703.15	2,769.79	2,629.22	14.82	15.52	-5.21	-836.65	-46.82	191.31	163.93	27.38	6.987		
2,900.00	2,798.32	2,869.42	2,721.07	15.38	16.14	-5.18	-875.19	-49.12	199.90	171.51	28.40	7.040		
3,000.00	2,893.49	2,969.05	2,812.91	15.95	16.77	-5.15	-913.73	-51.42	208.50	179.08	29.41	7.088		
3,100.00	2,988.66	3,068.68	2,904.76	16.51	17.40	-5.12	-952.27	-53.71	217.09	186.65	30.44	7.133		
3,200.00	3,083.83	3,168.31	2,996.60	17.07	18.02	-5.09	-990.81	-56.01	225.68	194.22	31.46	7.173		
3,300.00	3,179.00	3,267.94	3,088.45	17.64	18.65	-5.07	-1,029.35	-58.31	234.28	201.79	32.49	7.211		
3,400.00	3,274.17	3,367.57	3,180.29	18.21	19.28	-5.04	-1,067.89	-60.60	242.87	209.35	33.52	7.246		
3,500.00	3,369.34	3,467.20	3,272.14	18.77	19.91	-5.02	-1,106.43	-62.90	251.46	216.92	34.55	7.279		
3,600.00	3,464.51	3,566.83	3,363.98	19.34	20.55	-5.00	-1,144.97	-65.19	260.06	224.48	35.58	7.309		
3,700.00	3,559.68	3,666.46	3,455.83	19.91	21.18	-4.98	-1,183.51	-67.49	268.65	232.04	36.62	7.337		
3,800.00	3,654.84	3,766.09	3,547.68	20.48	21.81	-4.97	-1,222.05	-69.79	277.25	239.59	37.65	7.363		
3,900.00	3,750.01	3,865.72	3,639.52	21.05	22.45	-4.95	-1,260.59	-72.08	285.84	247.15	38.69	7.388		
4,000.00	3,845.18	3,965.35	3,731.37	21.62	23.08	-4.93	-1,299.13	-74.38	294.43	254.70	39.73	7.411		
4,100.00	3,940.35	4,064.98	3,823.21	22.19	23.72	-4.92	-1,337.67	-76.68	303.03	262.26	40.77	7.433		
4,200.00	4,035.52	4,164.61	3,915.06	22.76	24.35	-4.90	-1,376.21	-78.97	311.62	269.81	41.81	7.453		
4,300.00	4,130.69	4,264.24	4,006.90	23.33	24.99	-4.89	-1,414.75	-81.27	320.22	277.36	42.85	7.472		
4,400.00	4,225.86	4,363.87	4,098.75	23.91	25.63	-4.88	-1,453.29	-83.57	328.81	284.91	43.90	7.490		
4,500.00	4,321.03	4,463.50	4,190.59	24.48	26.26	-4.87	-1,491.83	-85.86	337.40	292.46	44.94	7.507		
4,600.00	4,416.20	4,563.13	4,282.44	25.05	26.90	-4.86	-1,530.37	-88.16	346.00	300.01	45.99	7.524		
4,700.00	4,511.37	4,662.76	4,374.28	25.62	27.54	-4.85	-1,568.91	-90.45	354.59	307.56	47.03	7.539		
4,800.00	4,606.54	4,762.39	4,466.13	26.20	28.18	-4.84	-1,607.45	-92.75	363.19	315.10	48.08	7.554		
4,900.00	4,701.71	4,862.02	4,557.97	26.77	28.82	-4.83	-1,645.99	-95.05	371.78	322.65	49.13	7.567		
5,000.00	4,796.88	4,961.65	4,649.82	27.34	29.45	-4.82	-1,684.53	-97.34	380.37	330.20	50.18	7.581		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,061.28	4,741.66	27.92	30.09	-4.81	-1,723.07	-99.64	388.97	337.74	51.23	7.593		
5,200.00	4,987.22	5,160.91	4,833.51	28.49	30.73	-4.80	-1,761.61	-101.94	397.56	345.29	52.28	7.605		
5,300.00	5,082.39	5,260.54	4,925.35	29.07	31.37	-4.79	-1,800.15	-104.23	406.16	352.83	53.33	7.616		
5,400.00	5,177.56	5,360.17	5,017.20	29.64	32.01	-4.78	-1,838.69	-106.53	414.75	360.37	54.38	7.627		
5,500.00	5,272.72	5,459.80	5,109.04	30.21	32.65	-4.78	-1,877.23	-108.82	423.34	367.92	55.43	7.638		
5,600.00	5,367.89	5,559.43	5,200.89	30.79	33.29	-4.77	-1,915.77	-111.12	431.94	375.46	56.48	7.648		
5,700.00	5,463.06	5,659.06	5,292.73	31.36	33.93	-4.76	-1,954.31	-113.42	440.53	383.00	57.53	7.657		
5,800.00	5,558.23	5,758.69	5,384.58	31.94	34.57	-4.75	-1,992.85	-115.71	449.13	390.54	58.58	7.666		
5,900.00	5,653.40	5,858.32	5,476.42	32.51	35.21	-4.75	-2,031.39	-118.01	457.72	398.08	59.64	7.675		
6,000.00	5,748.57	5,957.95	5,568.27	33.09	35.85	-4.74	-2,069.93	-120.31	466.32	405.63	60.69	7.684		
6,100.00	5,843.74	6,057.58	5,660.11	33.67	36.50	-4.74	-2,108.47	-122.60	474.91	413.17	61.74	7.692		
6,200.00	5,938.91	6,157.21	5,751.96	34.24	37.14	-4.73	-2,147.01	-124.90	483.50	420.71	62.80	7.699		
6,300.00	6,034.08	6,256.84	5,843.80	34.82	37.78	-4.72	-2,185.55	-127.20	492.10	428.25	63.85	7.707		
6,400.00	6,129.25	6,356.47	5,935.65	35.39	38.42	-4.72	-2,224.09	-129.49	500.69	435.79	64.91	7.714		
6,500.00	6,224.42	6,456.10	6,027.49	35.97	39.06	-4.71	-2,262.63	-131.79	509.29	443.33	65.96	7.721		
6,600.00	6,319.59	6,555.73	6,119.34	36.54	39.70	-4.71	-2,301.17	-134.08	517.88	450.86	67.02	7.728		
6,700.00	6,414.76	6,655.36	6,211.18	37.12	40.34	-4.70	-2,339.71	-136.38	526.47	458.40	68.07	7.734		
6,800.00	6,509.91	6,754.99	6,303.02	37.70	40.99	-11.83	-2,378.25	-138.68	535.07	465.94	69.13	7.740		
6,900.00	6,603.99	6,853.80	6,394.11	38.26	41.62	-35.15	-2,416.47	-140.95	543.76	473.53	70.22	7.743		
7,000.00	6,694.76	6,949.53	6,482.36	38.78	42.24	-51.47	-2,453.50	-143.16	553.35	481.97	71.39	7.751		
7,100.00	6,779.96	7,050.51	6,575.10	39.24	42.88	-62.94	-2,492.46	-151.00	565.03	492.25	72.78	7.764		
7,200.00	6,857.50	7,160.20	6,673.14	39.65	43.54	-71.09	-2,533.77	-177.15	578.18	503.91	74.26	7.785		
7,300.00	6,925.48	7,278.75	6,772.68	40.02	44.16	-77.19	-2,575.87	-225.45	592.02	516.46	75.56	7.835		
7,400.00	6,982.21	7,407.34	6,869.22	40.33	44.73	-81.88	-2,616.90	-299.45	605.57	529.16	76.41	7.925		
7,500.00	7,026.31	7,546.58	6,955.94	40.63	45.23	-85.44	-2,654.01	-401.49	617.61	540.85	76.76	8.046		
7,600.00	7,056.68	7,695.85	7,023.78	40.91	45.66	-87.92	-2,683.40	-530.77	626.87	549.94	76.94	8.148		
7,700.00	7,072.58	7,852.75	7,063.14	41.25	46.04	-89.29	-2,700.99	-681.22	632.20	554.58	77.62	8.145		
7,800.00	7,074.86	8,009.87	7,069.88	41.69	46.45	-89.55	-2,704.81	-818.19	633.15	553.50	79.65	7.949		
7,900.00	7,074.54	8,109.87	7,069.59	42.34	46.82	-89.55	-2,705.41	-918.19	633.08	550.96	82.12	7.709		
8,000.00	7,074.21	8,209.87	7,069.29	43.27	47.36	-89.55	-2,706.01	-1,018.19	633.01	548.11	84.90	7.456		
8,100.00	7,073.89	8,309.87	7,068.99	44.47	48.11	-89.56	-2,706.61	-1,118.19	632.94	544.97	87.97	7.195		
8,200.00	7,073.57	8,409.87	7,068.69	45.91	49.13	-89.56	-2,707.20	-1,218.18	632.87	541.58	91.29	6.933		
8,300.00	7,073.24	8,509.87	7,068.40	47.53	50.41	-89.56	-2,707.80	-1,318.18	632.80	537.96	94.84	6.672		
8,400.00	7,072.92	8,590.13	7,068.10	49.31	51.60	-89.56	-2,708.40	-1,418.18	632.73	534.51	98.22	6.442		
8,500.00	7,072.59	8,709.87	7,067.80	51.20	53.60	-89.57	-2,709.00	-1,518.18	632.66	530.13	102.53	6.170		
8,600.00	7,072.27	8,790.13	7,067.50	53.19	55.06	-89.57	-2,709.59	-1,618.17	632.59	526.37	106.22	5.955		
8,700.00	7,071.94	8,909.87	7,067.21	55.27	57.38	-89.57	-2,710.19	-1,718.17	632.52	521.65	110.87	5.705		
8,800.00	7,071.62	9,009.87	7,066.91	57.43	59.42	-89.57	-2,710.79	-1,818.17	632.45	517.22	115.24	5.488		
8,900.00	7,071.29	9,109.87	7,066.61	59.64	61.54	-89.58	-2,711.39	-1,918.17	632.38	512.66	119.72	5.282		
9,000.00	7,070.97	9,209.87	7,066.31	61.92	63.73	-89.58	-2,711.99	-2,018.17	632.31	508.01	124.30	5.087		
9,100.00	7,070.64	9,309.87	7,066.02	64.24	65.99	-89.58	-2,712.58	-2,118.16	632.24	503.27	128.97	4.902		
9,200.00	7,070.32	9,409.87	7,065.72	66.61	68.29	-89.58	-2,713.18	-2,218.16	632.17	498.44	133.73	4.727		
9,300.00	7,069.99	9,509.87	7,065.42	69.01	70.63	-89.59	-2,713.78	-2,318.16	632.10	493.55	138.56	4.562		
9,400.00	7,069.67	9,609.87	7,065.12	71.45	73.02	-89.59	-2,714.38	-2,418.16	632.03	488.58	143.45	4.406		
9,500.00	7,069.34	9,709.87	7,064.82	73.92	75.44	-89.59	-2,714.98	-2,518.15	631.96	483.56	148.40	4.258		
9,600.00	7,069.02	9,809.87	7,064.53	76.42	77.90	-89.59	-2,715.57	-2,618.15	631.89	478.49	153.41	4.119		
9,700.00	7,068.69	9,909.87	7,064.23	78.95	80.38	-89.60	-2,716.17	-2,718.15	631.82	473.37	158.46	3.987		
9,800.00	7,068.37	10,009.87	7,063.93	81.49	82.89	-89.60	-2,716.77	-2,818.15	631.75	468.20	163.56	3.863		
9,900.00	7,068.04	10,109.87	7,063.63	84.06	85.42	-89.60	-2,717.37	-2,918.15	631.68	462.99	168.69	3.745		
10,000.00	7,067.72	10,209.87	7,063.34	86.65	87.97	-89.60	-2,717.97	-3,018.14	631.61	457.75	173.86	3.633		
10,100.00	7,067.39	10,309.87	7,063.04	89.25	90.54	-89.61	-2,718.56	-3,118.14	631.55	452.47	179.07	3.527		
10,200.00	7,067.07	10,409.87	7,062.74	91.87	93.13	-89.61	-2,719.16	-3,218.14	631.48	447.17	184.31	3.426		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,509.87	7,062.44	94.50	95.73	-89.61	-2,719.76	-3,318.14	631.41	441.84	189.57	3.331		
10,400.00	7,066.42	10,609.88	7,062.15	97.14	98.35	-89.61	-2,720.36	-3,418.13	631.34	436.48	194.86	3.240		
10,500.00	7,066.09	10,709.88	7,061.85	99.80	100.98	-89.61	-2,720.96	-3,518.13	631.27	431.09	200.17	3.154		
10,600.00	7,065.77	10,809.88	7,061.55	102.47	103.63	-89.62	-2,721.55	-3,618.13	631.20	425.69	205.51	3.071		
10,700.00	7,065.44	10,909.88	7,061.25	105.15	106.28	-89.62	-2,722.15	-3,718.13	631.13	420.27	210.86	2.993		
10,800.00	7,065.12	10,990.13	7,060.96	107.83	108.42	-89.62	-2,722.75	-3,818.12	631.06	415.35	215.70	2.926		
10,900.00	7,064.79	11,109.88	7,060.66	110.53	111.63	-89.62	-2,723.35	-3,918.12	630.99	409.36	221.62	2.847		
11,000.00	7,064.47	11,209.88	7,060.36	113.23	114.31	-89.63	-2,723.95	-4,018.12	630.92	403.89	227.03	2.779		
11,100.00	7,064.14	11,309.88	7,060.06	115.95	117.00	-89.63	-2,724.54	-4,118.12	630.85	398.40	232.45	2.714		
11,200.00	7,063.82	11,409.88	7,059.77	118.66	119.71	-89.63	-2,725.14	-4,218.12	630.78	392.89	237.89	2.652		
11,300.00	7,063.49	11,509.88	7,059.47	121.39	122.41	-89.63	-2,725.74	-4,318.11	630.71	387.37	243.33	2.592		
11,400.00	7,063.17	11,609.88	7,059.17	124.12	125.13	-89.64	-2,726.34	-4,418.11	630.64	381.84	248.79	2.535		
11,500.00	7,062.84	11,709.88	7,058.87	126.86	127.85	-89.64	-2,726.93	-4,518.11	630.57	376.30	254.26	2.480		
11,600.00	7,062.52	11,809.88	7,058.58	129.60	130.58	-89.64	-2,727.53	-4,618.11	630.50	370.75	259.75	2.427		
11,700.00	7,062.19	11,909.88	7,058.28	132.35	133.31	-89.64	-2,728.13	-4,718.10	630.43	365.19	265.24	2.377		
11,800.00	7,061.87	11,990.13	7,057.98	135.10	135.51	-89.65	-2,728.73	-4,818.10	630.36	360.16	270.20	2.333		
11,900.00	7,061.54	12,109.88	7,057.68	137.85	138.79	-89.65	-2,729.33	-4,918.10	630.29	354.04	276.25	2.282		
12,000.00	7,061.22	12,209.88	7,057.39	140.61	141.54	-89.65	-2,729.92	-5,018.10	630.22	348.45	281.77	2.237		
12,100.00	7,060.89	12,309.88	7,057.09	143.38	144.29	-89.65	-2,730.52	-5,118.10	630.15	342.86	287.29	2.193		
12,200.00	7,060.57	12,409.88	7,056.79	146.15	147.05	-89.66	-2,731.12	-5,218.09	630.08	337.26	292.83	2.152		
12,300.00	7,060.24	12,509.88	7,056.49	148.92	149.81	-89.66	-2,731.72	-5,318.09	630.01	331.65	298.37	2.112		
12,400.00	7,059.92	12,609.88	7,056.19	151.69	152.57	-89.66	-2,732.32	-5,418.09	629.94	326.03	303.91	2.073		
12,500.00	7,059.59	12,709.88	7,055.90	154.47	155.34	-89.66	-2,732.91	-5,518.09	629.87	320.41	309.46	2.035		
12,600.00	7,059.27	12,809.88	7,055.60	157.25	158.11	-89.67	-2,733.51	-5,618.08	629.80	314.78	315.02	1.999		
12,700.00	7,058.94	12,909.88	7,055.30	160.03	160.89	-89.67	-2,734.11	-5,718.08	629.73	309.14	320.59	1.964		
12,800.00	7,058.62	13,009.88	7,055.00	162.82	163.66	-89.67	-2,734.71	-5,818.08	629.66	303.51	326.16	1.931		
12,900.00	7,058.29	13,109.88	7,054.71	165.61	166.44	-89.67	-2,735.31	-5,918.08	629.59	297.86	331.73	1.898		
13,000.00	7,057.97	13,190.12	7,054.41	168.40	168.68	-89.68	-2,735.90	-6,018.08	629.52	292.76	336.76	1.869		
13,100.00	7,057.64	13,309.88	7,054.11	171.19	172.01	-89.68	-2,736.50	-6,118.07	629.45	286.56	342.89	1.836		
13,200.00	7,057.32	13,409.88	7,053.81	173.99	174.80	-89.68	-2,737.10	-6,218.07	629.38	280.90	348.48	1.806		
13,300.00	7,057.00	13,509.88	7,053.52	176.78	177.59	-89.68	-2,737.70	-6,318.07	629.31	275.24	354.07	1.777		
13,400.00	7,056.67	13,609.88	7,053.22	179.58	180.38	-89.69	-2,738.30	-6,418.07	629.24	269.57	359.67	1.750		
13,500.00	7,056.35	13,709.88	7,052.92	182.38	183.17	-89.69	-2,738.89	-6,518.06	629.17	263.90	365.27	1.722		
13,600.00	7,056.02	13,809.88	7,052.62	185.19	185.97	-89.69	-2,739.49	-6,618.06	629.10	258.23	370.87	1.696		
13,700.00	7,055.70	13,909.88	7,052.33	187.99	188.77	-89.69	-2,740.09	-6,718.06	629.03	252.55	376.48	1.671		
13,800.00	7,055.37	14,009.88	7,052.03	190.80	191.57	-89.70	-2,740.69	-6,818.06	628.97	246.88	382.09	1.646		
13,900.00	7,055.05	14,109.88	7,051.73	193.60	194.37	-89.70	-2,741.28	-6,918.05	628.90	241.19	387.70	1.622		
14,000.00	7,054.72	14,209.88	7,051.43	196.41	197.17	-89.70	-2,741.88	-7,018.05	628.83	235.51	393.32	1.599		
14,100.00	7,054.40	14,309.88	7,051.14	199.22	199.97	-89.70	-2,742.48	-7,118.05	628.76	229.82	398.94	1.576		
14,200.00	7,054.07	14,409.88	7,050.84	202.03	202.78	-89.71	-2,743.08	-7,218.05	628.69	224.13	404.56	1.554		
14,300.00	7,053.75	14,509.88	7,050.54	204.85	205.59	-89.71	-2,743.68	-7,318.05	628.62	218.43	410.18	1.533		
14,400.00	7,053.42	14,609.88	7,050.24	207.66	208.40	-89.71	-2,744.27	-7,418.04	628.55	212.74	415.81	1.512		
14,500.00	7,053.10	14,709.88	7,049.95	210.48	211.21	-89.71	-2,744.87	-7,518.04	628.48	207.04	421.44	1.491 Level 3		
14,600.00	7,052.77	14,809.88	7,049.65	213.29	214.02	-89.72	-2,745.47	-7,618.04	628.41	201.34	427.07	1.471 Level 3		
14,700.00	7,052.45	14,909.88	7,049.35	216.11	216.83	-89.72	-2,746.07	-7,718.04	628.34	195.63	432.71	1.452 Level 3		
14,800.00	7,052.12	15,009.88	7,049.05	218.93	219.64	-89.72	-2,746.67	-7,818.03	628.27	189.93	438.34	1.433 Level 3		
14,900.00	7,051.80	15,109.88	7,048.75	221.75	222.46	-89.72	-2,747.26	-7,918.03	628.20	184.22	443.98	1.415 Level 3		
15,000.00	7,051.47	15,190.12	7,048.46	224.57	224.72	-89.73	-2,747.86	-8,018.03	628.13	179.07	449.06	1.399 Level 3		
15,100.00	7,051.15	15,290.12	7,048.16	227.39	227.54	-89.73	-2,748.46	-8,118.03	628.06	173.35	454.71	1.381 Level 3		
15,145.13	7,051.00	15,335.25	7,048.03	228.67	228.81	-89.73	-2,748.73	-8,163.15	628.03	170.78	457.25	1.373 Level 3, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	299.82	2.50	299.83					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	299.82	2.50	299.83	293.26	6.57	45.639		
200.00	200.00	201.00	200.00	3.34	3.34	0.48	299.82	2.50	299.83	293.16	6.67	44.920	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	176.11	299.82	2.50	301.57	294.69	6.89	43.794		
400.00	399.84	400.84	399.84	3.59	3.60	176.17	299.82	2.50	306.80	299.60	7.20	42.628		
500.00	499.45	500.45	499.45	3.79	3.81	176.26	299.82	2.50	315.49	307.89	7.60	41.515		
600.00	598.70	590.54	589.53	4.03	4.02	176.25	301.09	1.85	329.04	320.98	8.06	40.804		
700.00	697.47	682.33	681.22	4.31	4.27	176.05	304.82	-0.09	348.61	340.02	8.59	40.567		
800.00	795.62	779.50	778.25	4.64	4.55	175.84	309.37	-2.44	372.20	363.02	9.18	40.536		
900.00	893.06	875.78	874.40	5.00	4.86	175.68	313.88	-4.78	399.17	389.35	9.81	40.672		
1,000.00	989.64	971.08	969.56	5.40	5.17	175.57	318.34	-7.09	429.47	418.99	10.48	40.974		
1,100.00	1,085.27	1,065.26	1,063.62	5.83	5.50	175.50	322.75	-9.37	463.06	451.87	11.19	41.399		
1,200.00	1,180.44	1,158.92	1,157.15	6.29	5.83	175.50	327.14	-11.64	498.10	486.20	11.89	41.886		
1,300.00	1,275.61	1,252.58	1,250.68	6.76	6.18	175.49	331.52	-13.91	533.13	520.51	12.62	42.235		
1,400.00	1,370.78	1,346.24	1,344.21	7.26	6.53	175.49	335.91	-16.18	568.17	554.80	13.37	42.482		
1,500.00	1,465.95	1,439.90	1,437.74	7.76	6.89	175.49	340.29	-18.46	603.21	589.07	14.14	42.651		
1,600.00	1,561.12	1,533.56	1,531.27	8.27	7.26	175.49	344.68	-20.73	638.25	623.32	14.93	42.761		
1,700.00	1,656.29	1,627.23	1,624.80	8.80	7.63	175.49	349.06	-23.00	673.29	657.57	15.72	42.826		
1,800.00	1,751.46	1,720.89	1,718.33	9.32	8.00	175.48	353.45	-25.27	708.33	691.80	16.53	42.858		
1,900.00	1,846.63	1,814.55	1,811.86	9.86	8.38	175.48	357.84	-27.54	743.37	726.02	17.34	42.865		
2,000.00	1,941.80	1,908.21	1,905.39	10.40	8.76	175.48	362.22	-29.81	778.40	760.24	18.16	42.852		
2,100.00	2,036.96	2,001.87	1,998.92	10.94	9.15	175.48	366.61	-32.08	813.44	794.45	18.99	42.826		
2,200.00	2,132.13	2,104.47	2,092.45	11.49	9.57	175.48	370.99	-34.35	848.48	828.61	19.87	42.709		
2,300.00	2,227.30	2,189.19	2,185.98	12.04	9.92	175.48	375.38	-36.62	883.52	862.85	20.67	42.743		
2,400.00	2,322.47	2,282.85	2,279.51	12.59	10.31	175.48	379.76	-38.90	918.56	897.04	21.52	42.693		
2,500.00	2,417.64	2,376.51	2,373.04	13.15	10.71	175.48	384.15	-41.17	953.60	931.23	22.36	42.639		
2,600.00	2,512.81	2,470.17	2,466.57	13.70	11.10	175.48	388.53	-43.44	988.64	965.42	23.22	42.581		
2,700.00	2,607.98	2,563.83	2,560.10	14.26	11.50	175.48	392.92	-45.71	1,023.67	999.60	24.07	42.523		
2,800.00	2,703.15	2,657.49	2,653.63	14.82	11.89	175.47	397.30	-47.98	1,058.71	1,033.78	24.93	42.463		
2,900.00	2,798.32	2,751.15	2,747.16	15.38	12.29	175.47	401.69	-50.25	1,093.75	1,067.96	25.79	42.403		
3,000.00	2,893.49	2,844.81	2,840.69	15.95	12.69	175.47	406.07	-52.52	1,128.79	1,102.13	26.66	42.343		
3,100.00	2,988.66	2,938.47	2,934.22	16.51	13.09	175.47	410.46	-54.79	1,163.83	1,136.30	27.52	42.284		
3,200.00	3,083.83	3,032.13	3,027.75	17.07	13.49	175.47	414.84	-57.06	1,198.87	1,170.48	28.39	42.225		
3,300.00	3,179.00	3,125.79	3,121.28	17.64	13.89	175.47	419.23	-59.34	1,233.91	1,204.64	29.26	42.168		
3,400.00	3,274.17	3,219.45	3,214.81	18.21	14.29	175.47	423.62	-61.61	1,268.94	1,238.81	30.13	42.111		
3,500.00	3,369.34	3,313.12	3,308.34	18.77	14.69	175.47	428.00	-63.88	1,303.98	1,272.98	31.01	42.055		
3,600.00	3,464.51	3,406.78	3,401.87	19.34	15.10	175.47	432.39	-66.15	1,339.02	1,307.14	31.88	42.001		
3,700.00	3,559.68	3,500.44	3,495.40	19.91	15.50	175.47	436.77	-68.42	1,374.06	1,341.30	32.76	41.948		
3,800.00	3,654.84	3,605.90	3,588.93	20.48	15.96	175.47	441.16	-70.69	1,409.10	1,375.41	33.68	41.833		
3,900.00	3,750.01	3,687.76	3,682.46	21.05	16.31	175.47	445.54	-72.96	1,444.14	1,409.63	34.51	41.846		
4,000.00	3,845.18	3,781.42	3,775.99	21.62	16.72	175.47	449.93	-75.23	1,479.18	1,443.79	35.39	41.797		
4,100.00	3,940.35	3,875.08	3,869.52	22.19	17.12	175.47	454.31	-77.50	1,514.21	1,477.95	36.27	41.750		
4,200.00	4,035.52	3,968.74	3,963.05	22.76	17.53	175.47	458.70	-79.78	1,549.25	1,512.10	37.15	41.703		
4,300.00	4,130.69	4,062.40	4,056.58	23.33	17.93	175.47	463.08	-82.05	1,584.29	1,546.26	38.03	41.658		
4,400.00	4,225.86	4,156.06	4,150.11	23.91	18.34	175.47	467.47	-84.32	1,619.33	1,580.42	38.91	41.614		
4,500.00	4,321.03	4,249.72	4,243.64	24.48	18.75	175.47	471.85	-86.59	1,654.37	1,614.57	39.80	41.571		
4,600.00	4,416.20	4,343.38	4,337.17	25.05	19.15	175.47	476.24	-88.86	1,689.41	1,648.73	40.68	41.530		
4,700.00	4,511.37	4,437.04	4,430.71	25.62	19.56	175.47	480.63	-91.13	1,724.45	1,682.88	41.56	41.489		
4,800.00	4,606.54	4,530.70	4,524.24	26.20	19.97	175.47	485.01	-93.40	1,759.48	1,717.04	42.45	41.450		
4,900.00	4,701.71	4,624.36	4,617.77	26.77	20.38	175.47	489.40	-95.67	1,794.52	1,751.19	43.33	41.412		
5,000.00	4,796.88	4,718.02	4,711.30	27.34	20.78	175.47	493.78	-97.94	1,829.56	1,785.34	44.22	41.374		
5,100.00	4,892.05	4,811.68	4,804.83	27.92	21.19	175.47	498.17	-100.22	1,864.60	1,819.49	45.11	41.338		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,905.34	4,898.36	28.49	21.60	175.47	502.55	-102.49	1,899.64	1,853.65	45.99	41.303		
5,300.00	5,082.39	4,999.01	4,991.89	29.07	22.01	175.47	506.94	-104.76	1,934.68	1,887.80	46.88	41.268		
5,400.00	5,177.56	5,107.33	5,085.42	29.64	22.48	175.47	511.32	-107.03	1,969.72	1,921.88	47.83	41.180		
5,500.00	5,272.72	5,186.33	5,178.95	30.21	22.83	175.47	515.71	-109.30	2,004.75	1,956.10	48.66	41.202		
5,600.00	5,367.89	5,279.99	5,272.48	30.79	23.24	175.47	520.09	-111.57	2,039.79	1,990.25	49.54	41.171		
5,700.00	5,463.06	5,373.65	5,366.01	31.36	23.65	175.47	524.48	-113.84	2,074.83	2,024.40	50.43	41.140		
5,800.00	5,558.23	5,467.31	5,459.54	31.94	24.06	175.47	528.86	-116.11	2,109.87	2,058.55	51.32	41.109		
5,900.00	5,653.40	5,560.97	5,553.07	32.51	24.47	175.47	533.25	-118.38	2,144.91	2,092.70	52.21	41.080		
6,000.00	5,748.57	5,654.63	5,646.60	33.09	24.87	175.47	537.63	-120.66	2,179.95	2,126.84	53.10	41.051		
6,100.00	5,843.74	5,748.29	5,740.13	33.67	25.28	175.46	542.02	-122.93	2,214.99	2,160.99	53.99	41.023		
6,200.00	5,938.91	5,841.95	5,833.66	34.24	25.69	175.46	546.41	-125.20	2,250.02	2,195.14	54.88	40.996		
6,300.00	6,034.08	5,935.61	5,927.19	34.82	26.10	175.46	550.79	-127.47	2,285.06	2,229.29	55.78	40.969		
6,400.00	6,129.25	6,029.27	6,020.72	35.39	26.51	175.46	555.18	-129.74	2,320.10	2,263.43	56.67	40.943		
6,500.00	6,224.42	6,122.93	6,114.25	35.97	26.93	175.46	559.56	-132.01	2,355.14	2,297.58	57.56	40.917		
6,600.00	6,319.59	6,216.59	6,207.78	36.54	27.34	175.46	563.95	-134.28	2,390.18	2,331.73	58.45	40.892		
6,700.00	6,414.76	6,310.25	6,301.31	37.12	27.75	175.46	568.33	-136.55	2,425.22	2,365.87	59.34	40.868		
6,800.00	6,509.91	6,403.91	6,394.83	37.70	28.16	167.30	572.72	-138.82	2,460.25	2,400.02	60.24	40.844		
6,900.00	6,603.99	6,499.50	6,490.19	38.26	28.58	141.37	577.17	-143.18	2,495.02	2,433.88	61.14	40.806		
7,000.00	6,694.76	6,599.03	6,587.86	38.78	29.01	124.01	581.65	-161.22	2,528.67	2,466.59	62.07	40.737		
7,100.00	6,779.96	6,701.53	6,684.26	39.24	29.47	112.65	585.95	-195.48	2,560.36	2,497.35	63.01	40.634		
7,200.00	6,857.50	6,807.54	6,776.85	39.65	29.95	104.87	589.97	-246.70	2,589.31	2,525.34	63.98	40.473		
7,300.00	6,925.48	6,917.38	6,862.46	40.02	30.49	99.35	593.54	-315.20	2,614.80	2,549.77	65.03	40.210		
7,400.00	6,982.21	7,031.05	6,937.33	40.33	31.15	95.39	596.49	-400.48	2,636.14	2,569.88	66.26	39.787		
7,500.00	7,026.31	7,148.17	6,997.38	40.63	31.99	92.61	598.64	-500.82	2,652.77	2,585.00	67.77	39.143		
7,600.00	7,056.68	7,267.89	7,038.75	40.91	33.09	90.81	599.83	-612.97	2,664.23	2,594.56	69.67	38.238		
7,700.00	7,072.58	7,388.93	7,058.55	41.25	34.42	89.85	599.97	-732.20	2,670.21	2,598.24	71.97	37.104		
7,800.00	7,074.86	7,501.40	7,059.05	41.69	35.85	89.66	599.26	-841.82	2,671.07	2,596.59	74.48	35.864		
7,900.00	7,074.54	7,601.41	7,057.30	42.34	37.30	89.63	598.50	-941.79	2,670.99	2,593.81	77.18	34.608		
8,000.00	7,074.21	7,701.42	7,055.55	43.27	38.91	89.60	597.75	-1,041.77	2,670.92	2,590.72	80.20	33.304		
8,100.00	7,073.89	7,801.43	7,053.80	44.47	40.66	89.57	597.00	-1,141.74	2,670.84	2,587.34	83.50	31.987		
8,200.00	7,073.57	7,901.44	7,052.05	45.91	42.52	89.54	596.25	-1,241.71	2,670.77	2,583.72	87.05	30.682		
8,300.00	7,073.24	8,001.45	7,050.30	47.53	44.50	89.51	595.49	-1,341.68	2,670.69	2,579.88	90.82	29.408		
8,400.00	7,072.92	8,101.46	7,048.56	49.31	46.56	89.48	594.74	-1,441.65	2,670.62	2,575.84	94.78	28.177		
8,500.00	7,072.59	8,201.47	7,046.81	51.20	48.70	89.45	593.99	-1,541.62	2,670.55	2,571.63	98.92	26.998		
8,600.00	7,072.27	8,301.48	7,045.06	53.19	50.92	89.42	593.23	-1,641.60	2,670.48	2,567.28	103.20	25.877		
8,700.00	7,071.94	8,401.49	7,043.31	55.27	53.19	89.39	592.48	-1,741.57	2,670.41	2,562.79	107.62	24.814		
8,800.00	7,071.62	8,501.50	7,041.56	57.43	55.52	89.36	591.73	-1,841.54	2,670.34	2,558.19	112.15	23.810		
8,900.00	7,071.29	8,601.51	7,039.81	59.64	57.90	89.32	590.98	-1,941.51	2,670.27	2,553.48	116.79	22.864		
9,000.00	7,070.97	8,701.52	7,038.06	61.92	60.32	89.29	590.22	-2,041.48	2,670.20	2,548.68	121.52	21.973		
9,100.00	7,070.64	8,801.53	7,036.31	64.24	62.78	89.26	589.47	-2,141.45	2,670.13	2,543.80	126.33	21.136		
9,200.00	7,070.32	8,901.54	7,034.56	66.61	65.26	89.23	588.72	-2,241.43	2,670.07	2,538.86	131.21	20.349		
9,300.00	7,069.99	9,001.55	7,032.81	69.01	67.78	89.20	587.97	-2,341.40	2,670.00	2,533.84	136.16	19.609		
9,400.00	7,069.67	9,101.56	7,031.06	71.45	70.33	89.17	587.21	-2,441.37	2,669.94	2,528.77	141.16	18.914		
9,500.00	7,069.34	9,201.57	7,029.31	73.92	72.89	89.14	586.46	-2,541.34	2,669.87	2,523.65	146.22	18.259		
9,600.00	7,069.02	9,301.58	7,027.56	76.42	75.48	89.11	585.71	-2,641.31	2,669.81	2,518.48	151.32	17.643		
9,700.00	7,068.69	9,401.59	7,025.81	78.95	78.09	89.08	584.96	-2,741.28	2,669.75	2,513.28	156.47	17.062		
9,800.00	7,068.37	9,501.60	7,024.06	81.49	80.71	89.05	584.20	-2,841.26	2,669.68	2,508.03	161.65	16.515		
9,900.00	7,068.04	9,598.39	7,022.31	84.06	83.27	89.02	583.45	-2,941.23	2,669.62	2,502.84	166.78	16.006		
10,000.00	7,067.72	9,701.62	7,020.57	86.65	86.01	89.00	582.70	-3,041.20	2,669.56	2,497.44	172.12	15.510		
10,100.00	7,067.39	9,801.63	7,018.82	89.25	88.67	88.96	581.95	-3,141.17	2,669.50	2,492.11	177.40	15.048		
10,200.00	7,067.07	9,901.64	7,017.07	91.87	91.35	88.93	581.19	-3,241.14	2,669.44	2,486.74	182.70	14.611		
10,300.00	7,066.74	10,001.65	7,015.32	94.50	94.04	88.90	580.44	-3,341.11	2,669.39	2,481.36	188.03	14.197		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	10,101.66	7,013.57	97.14	96.74	88.87	579.69	-3,441.09	2,669.33	2,475.95	193.38	13.804		
10,500.00	7,066.09	10,201.67	7,011.82	99.80	99.44	88.84	578.94	-3,541.06	2,669.27	2,470.53	198.75	13.431		
10,600.00	7,065.77	10,301.68	7,010.07	102.47	102.16	88.80	578.18	-3,641.03	2,669.22	2,465.08	204.13	13.076		
10,700.00	7,065.44	10,401.69	7,008.32	105.15	104.88	88.77	577.43	-3,741.00	2,669.16	2,459.62	209.54	12.738		
10,800.00	7,065.12	10,501.70	7,006.57	107.83	107.61	88.74	576.68	-3,840.97	2,669.11	2,454.15	214.96	12.417		
10,900.00	7,064.79	10,601.71	7,004.82	110.53	110.35	88.71	575.93	-3,940.94	2,669.05	2,448.66	220.39	12.110		
11,000.00	7,064.47	10,701.72	7,003.07	113.23	113.09	88.68	575.17	-4,040.92	2,669.00	2,443.16	225.84	11.818		
11,100.00	7,064.14	10,801.73	7,001.32	115.95	115.84	88.65	574.42	-4,140.89	2,668.95	2,437.65	231.30	11.539		
11,200.00	7,063.82	10,901.74	6,999.57	118.66	118.59	88.62	573.67	-4,240.86	2,668.90	2,432.12	236.77	11.272		
11,300.00	7,063.49	11,001.75	6,997.82	121.39	121.35	88.59	572.92	-4,340.83	2,668.85	2,426.59	242.26	11.017		
11,400.00	7,063.17	11,101.76	6,996.07	124.12	124.11	88.56	572.16	-4,440.80	2,668.80	2,421.04	247.75	10.772		
11,500.00	7,062.84	11,201.77	6,994.33	126.86	126.88	88.53	571.41	-4,540.77	2,668.75	2,415.49	253.25	10.538		
11,600.00	7,062.52	11,301.78	6,992.58	129.60	129.65	88.50	570.66	-4,640.75	2,668.70	2,409.93	258.77	10.313		
11,700.00	7,062.19	11,401.79	6,990.83	132.35	132.42	88.47	569.91	-4,740.72	2,668.65	2,404.37	264.29	10.098		
11,800.00	7,061.87	11,498.20	6,989.08	135.10	135.10	88.44	569.15	-4,840.69	2,668.60	2,398.89	269.71	9.894		
11,900.00	7,061.54	11,601.81	6,987.33	137.85	137.98	88.41	568.40	-4,940.66	2,668.56	2,393.21	275.35	9.692		
12,000.00	7,061.22	11,701.82	6,985.58	140.61	140.77	88.38	567.65	-5,040.63	2,668.51	2,387.62	280.89	9.500		
12,100.00	7,060.89	11,801.83	6,983.83	143.38	143.55	88.35	566.90	-5,140.60	2,668.47	2,382.03	286.44	9.316		
12,200.00	7,060.57	11,901.84	6,982.08	146.15	146.34	88.31	566.14	-5,240.58	2,668.43	2,376.43	291.99	9.139		
12,300.00	7,060.24	12,001.85	6,980.33	148.92	149.14	88.28	565.39	-5,340.55	2,668.38	2,370.83	297.55	8.968		
12,400.00	7,059.92	12,101.86	6,978.58	151.69	151.93	88.25	564.64	-5,440.52	2,668.34	2,365.22	303.12	8.803		
12,500.00	7,059.59	12,201.88	6,976.83	154.47	154.73	88.22	563.88	-5,540.49	2,668.30	2,359.61	308.69	8.644		
12,600.00	7,059.27	12,301.89	6,975.08	157.25	157.53	88.19	563.13	-5,640.46	2,668.26	2,354.00	314.26	8.491		
12,700.00	7,058.94	12,401.90	6,973.33	160.03	160.33	88.16	562.38	-5,740.43	2,668.22	2,348.38	319.84	8.342		
12,800.00	7,058.62	12,501.91	6,971.58	162.82	163.13	88.13	561.63	-5,840.41	2,668.18	2,342.75	325.42	8.199		
12,900.00	7,058.29	12,601.92	6,969.83	165.61	165.94	88.10	560.87	-5,940.38	2,668.14	2,337.13	331.01	8.061		
13,000.00	7,057.97	12,701.93	6,968.08	168.40	168.75	88.07	560.12	-6,040.35	2,668.10	2,331.50	336.60	7.927		
13,100.00	7,057.64	12,801.94	6,966.34	171.19	171.56	88.04	559.37	-6,140.32	2,668.07	2,325.87	342.20	7.797		
13,200.00	7,057.32	12,901.95	6,964.59	173.99	174.37	88.01	558.62	-6,240.29	2,668.03	2,320.23	347.80	7.671		
13,300.00	7,057.00	13,001.96	6,962.84	176.78	177.18	87.98	557.86	-6,340.26	2,667.99	2,314.60	353.40	7.550		
13,400.00	7,056.67	13,101.97	6,961.09	179.58	179.99	87.95	557.11	-6,440.24	2,667.96	2,308.96	359.00	7.432		
13,500.00	7,056.35	13,201.98	6,959.34	182.38	182.81	87.92	556.36	-6,540.21	2,667.93	2,303.32	364.61	7.317		
13,600.00	7,056.02	13,301.99	6,957.59	185.19	185.62	87.89	555.61	-6,640.18	2,667.89	2,297.67	370.22	7.206		
13,700.00	7,055.70	13,402.00	6,955.84	187.99	188.44	87.86	554.85	-6,740.15	2,667.86	2,292.03	375.83	7.099		
13,800.00	7,055.37	13,502.01	6,954.09	190.80	191.26	87.82	554.10	-6,840.12	2,667.83	2,286.38	381.45	6.994		
13,900.00	7,055.05	13,602.02	6,952.34	193.60	194.08	87.79	553.35	-6,940.09	2,667.80	2,280.73	387.07	6.892		
14,000.00	7,054.72	13,702.03	6,950.59	196.41	196.90	87.76	552.60	-7,040.07	2,667.77	2,275.08	392.69	6.794		
14,100.00	7,054.40	13,802.04	6,948.84	199.22	199.72	87.73	551.84	-7,140.04	2,667.74	2,269.43	398.31	6.698		
14,200.00	7,054.07	13,902.05	6,947.09	202.03	202.55	87.70	551.09	-7,240.01	2,667.71	2,263.78	403.93	6.604		
14,300.00	7,053.75	13,997.94	6,945.34	204.85	205.25	87.67	550.34	-7,339.98	2,667.68	2,258.24	409.44	6.515		
14,400.00	7,053.42	14,102.07	6,943.59	207.66	208.19	87.64	549.59	-7,439.95	2,667.66	2,252.47	415.18	6.425		
14,500.00	7,053.10	14,202.08	6,941.84	210.48	211.02	87.61	548.83	-7,539.92	2,667.63	2,246.82	420.81	6.339		
14,600.00	7,052.77	14,302.09	6,940.09	213.29	213.85	87.58	548.08	-7,639.90	2,667.61	2,241.16	426.44	6.255		
14,700.00	7,052.45	14,402.10	6,938.35	216.11	216.67	87.55	547.33	-7,739.87	2,667.58	2,235.50	432.08	6.174		
14,800.00	7,052.12	14,502.11	6,936.60	218.93	219.50	87.52	546.58	-7,839.84	2,667.56	2,229.85	437.71	6.094		
14,900.00	7,051.80	14,602.12	6,934.85	221.75	222.33	87.49	545.82	-7,939.81	2,667.53	2,224.19	443.35	6.017		
15,000.00	7,051.47	14,702.13	6,933.10	224.57	225.16	87.46	545.07	-8,039.78	2,667.51	2,218.53	448.98	5.941		
15,100.00	7,051.15	14,797.86	6,931.35	227.39	227.87	87.43	544.32	-8,139.76	2,667.49	2,212.99	454.50	5.869		
15,119.87	7,051.08	14,817.73	6,931.00	227.95	228.43	87.42	544.17	-8,159.62	2,667.49	2,211.87	455.62	5.855		
15,145.13	7,051.00	14,817.75	6,931.00	228.67	228.43	87.42	544.17	-8,159.64	2,667.60	2,211.34	456.25	5.847 SF		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	0.00	0.00	3.28	3.28	0.48	99.82	0.83	99.82					
100.00	100.00	100.00	100.00	3.28	3.28	0.48	99.82	0.83	99.82	93.25	6.57	15.195		
200.00	200.00	200.00	200.00	3.34	3.34	0.48	99.82	0.83	99.82	93.15	6.67	14.956		
300.00	299.98	303.58	303.55	3.44	3.44	176.02	97.96	0.57	99.77	92.87	6.90	14.469		
400.00	399.84	407.15	406.97	3.59	3.61	175.81	92.40	-0.21	99.62	92.39	7.23	13.778		
500.00	499.45	510.71	510.10	3.79	3.82	175.45	83.15	-1.52	99.37	91.70	7.67	12.955		
600.00	598.70	614.25	612.81	4.03	4.10	174.95	70.21	-3.35	99.03	90.83	8.20	12.076		
664.11	662.08	680.62	678.37	4.21	4.31	174.56	59.99	-4.79	98.76	90.18	8.58	11.511 CC		
700.00	697.47	716.22	713.48	4.31	4.43	174.35	54.22	-5.61	98.95	90.17	8.78	11.272 ES		
800.00	795.62	816.17	812.08	4.64	4.81	173.91	37.99	-7.90	101.79	92.42	9.38	10.854		
900.00	893.06	915.96	910.52	5.00	5.21	173.70	21.78	-10.19	108.11	98.07	10.04	10.768		
1,000.00	989.64	1,015.48	1,008.69	5.40	5.65	173.69	5.62	-12.47	117.89	107.14	10.75	10.969		
1,100.00	1,085.27	1,114.59	1,106.47	5.83	6.10	173.85	-10.48	-14.75	131.10	119.61	11.50	11.403		
1,200.00	1,180.44	1,213.50	1,204.03	6.29	6.56	174.06	-26.54	-17.02	145.84	133.57	12.27	11.888		
1,300.00	1,275.61	1,312.41	1,301.60	6.76	7.04	174.23	-42.61	-19.29	160.58	147.52	13.07	12.290		
1,400.00	1,370.78	1,411.31	1,399.17	7.26	7.53	174.37	-58.67	-21.56	175.32	161.44	13.89	12.627		
1,500.00	1,465.95	1,510.22	1,496.74	7.76	8.03	174.49	-74.74	-23.82	190.07	175.34	14.72	12.910		
1,600.00	1,561.12	1,609.13	1,594.30	8.27	8.53	174.60	-90.80	-26.09	204.81	189.23	15.57	13.150		
1,700.00	1,656.29	1,708.03	1,691.87	8.80	9.04	174.69	-106.86	-28.36	219.55	203.11	16.44	13.355		
1,800.00	1,751.46	1,806.94	1,789.44	9.32	9.56	174.77	-122.93	-30.63	234.30	216.98	17.32	13.531		
1,900.00	1,846.63	1,905.85	1,887.00	9.86	10.08	174.84	-138.99	-32.90	249.04	230.84	18.20	13.683		
2,000.00	1,941.80	2,004.75	1,984.57	10.40	10.60	174.90	-155.05	-35.17	263.79	244.69	19.09	13.816		
2,100.00	2,036.96	2,103.66	2,082.14	10.94	11.13	174.95	-171.12	-37.44	278.53	258.54	19.99	13.931		
2,200.00	2,132.13	2,202.57	2,179.70	11.49	11.66	175.00	-187.18	-39.71	293.28	272.38	20.90	14.033		
2,300.00	2,227.30	2,301.47	2,277.27	12.04	12.19	175.05	-203.24	-41.98	308.02	286.21	21.81	14.123		
2,400.00	2,322.47	2,400.38	2,374.84	12.59	12.72	175.09	-219.31	-44.25	322.77	300.04	22.73	14.203		
2,500.00	2,417.64	2,499.29	2,472.41	13.15	13.26	175.12	-235.37	-46.52	337.52	313.87	23.65	14.274		
2,600.00	2,512.81	2,598.19	2,569.97	13.70	13.79	175.16	-251.44	-48.79	352.26	327.69	24.57	14.338		
2,700.00	2,607.98	2,702.90	2,667.54	14.26	14.36	175.19	-267.50	-51.06	367.01	341.49	25.52	14.380		
2,800.00	2,703.15	2,803.99	2,765.11	14.82	14.91	175.22	-283.56	-53.33	381.75	355.29	26.46	14.427		
2,900.00	2,798.32	2,905.09	2,862.67	15.38	15.47	175.24	-299.63	-55.60	396.50	369.10	27.40	14.469		
3,000.00	2,893.49	3,006.18	2,960.24	15.95	16.02	175.27	-315.69	-57.86	411.25	382.90	28.35	14.507		
3,100.00	2,988.66	3,107.27	3,057.81	16.51	16.57	175.29	-331.75	-60.13	425.99	396.70	29.29	14.542		
3,200.00	3,083.83	3,208.37	3,155.37	17.07	17.13	175.31	-347.82	-62.40	440.74	410.50	30.24	14.574		
3,300.00	3,179.00	3,309.46	3,252.94	17.64	17.69	175.33	-363.88	-64.67	455.49	424.29	31.19	14.602		
3,400.00	3,274.17	3,389.45	3,350.51	18.21	18.13	175.35	-379.95	-66.94	470.23	438.19	32.05	14.672		
3,500.00	3,369.34	3,488.35	3,448.08	18.77	18.67	175.37	-396.01	-69.21	484.98	451.99	32.99	14.700		
3,600.00	3,464.51	3,587.26	3,545.64	19.34	19.22	175.39	-412.07	-71.48	499.73	465.79	33.94	14.725		
3,700.00	3,559.68	3,686.17	3,643.21	19.91	19.76	175.40	-428.14	-73.75	514.48	479.59	34.88	14.749		
3,800.00	3,654.84	3,785.07	3,740.78	20.48	20.31	175.42	-444.20	-76.02	529.22	493.39	35.83	14.770		
3,900.00	3,750.01	3,883.98	3,838.34	21.05	20.86	175.43	-460.26	-78.29	543.97	507.19	36.78	14.791		
4,000.00	3,845.18	3,982.89	3,935.91	21.62	21.41	175.45	-476.33	-80.56	558.72	520.99	37.73	14.810		
4,100.00	3,940.35	4,081.79	4,033.48	22.19	21.95	175.46	-492.39	-82.83	573.46	534.79	38.68	14.827		
4,200.00	4,035.52	4,180.70	4,131.04	22.76	22.50	175.47	-508.45	-85.10	588.21	548.58	39.63	14.844		
4,300.00	4,130.69	4,279.60	4,228.61	23.33	23.05	175.48	-524.52	-87.37	602.96	562.38	40.58	14.859		
4,400.00	4,225.86	4,378.51	4,326.18	23.91	23.60	175.49	-540.58	-89.63	617.70	576.17	41.53	14.873		
4,500.00	4,321.03	4,477.42	4,423.75	24.48	24.15	175.50	-556.65	-91.90	632.45	589.97	42.48	14.887		
4,600.00	4,416.20	4,576.32	4,521.31	25.05	24.70	175.51	-572.71	-94.17	647.20	603.76	43.44	14.900		
4,700.00	4,511.37	4,675.23	4,618.88	25.62	25.25	175.52	-588.77	-96.44	661.95	617.55	44.39	14.912		
4,800.00	4,606.54	4,774.14	4,716.45	26.20	25.80	175.53	-604.84	-98.71	676.69	631.35	45.35	14.923		
4,900.00	4,701.71	4,873.04	4,814.01	26.77	26.35	175.54	-620.90	-100.98	691.44	645.14	46.30	14.934		
5,000.00	4,796.88	4,971.95	4,911.58	27.34	26.90	175.55	-636.96	-103.25	706.19	658.93	47.26	14.944		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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: O-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,070.86	5,009.15	27.92	27.45	175.56	-653.03	-105.52	720.93	672.72	48.21	14.953		
5,200.00	4,987.22	5,169.76	5,106.71	28.49	28.00	175.56	-669.09	-107.79	735.68	686.51	49.17	14.962		
5,300.00	5,082.39	5,268.67	5,204.28	29.07	28.55	175.57	-685.15	-110.06	750.43	700.30	50.13	14.971		
5,400.00	5,177.56	5,367.58	5,301.85	29.64	29.10	175.58	-701.22	-112.33	765.18	714.09	51.08	14.979		
5,500.00	5,272.72	5,466.48	5,399.42	30.21	29.65	175.58	-717.28	-114.60	779.92	727.88	52.04	14.987		
5,600.00	5,367.89	5,565.39	5,496.98	30.79	30.20	175.59	-733.35	-116.87	794.67	741.67	53.00	14.994		
5,700.00	5,463.06	5,664.30	5,594.55	31.36	30.76	175.60	-749.41	-119.14	809.42	755.46	53.96	15.001		
5,800.00	5,558.23	5,763.20	5,692.12	31.94	31.31	175.60	-765.47	-121.41	824.17	769.25	54.92	15.008		
5,900.00	5,653.40	5,862.11	5,789.68	32.51	31.86	175.61	-781.54	-123.67	838.91	783.04	55.88	15.014		
6,000.00	5,748.57	5,961.02	5,887.25	33.09	32.41	175.62	-797.60	-125.94	853.66	796.83	56.83	15.020		
6,100.00	5,843.74	6,059.92	5,984.82	33.67	32.96	175.62	-813.66	-128.21	868.41	810.61	57.79	15.026		
6,200.00	5,938.91	6,158.83	6,082.38	34.24	33.51	175.63	-829.73	-130.48	883.15	824.40	58.75	15.031		
6,300.00	6,034.08	6,257.74	6,179.95	34.82	34.07	175.63	-845.79	-132.75	897.90	838.19	59.71	15.037		
6,400.00	6,129.25	6,356.64	6,277.52	35.39	34.62	175.64	-861.85	-135.02	912.65	851.98	60.67	15.042		
6,500.00	6,224.42	6,455.55	6,375.09	35.97	35.17	175.64	-877.92	-137.29	927.40	865.76	61.63	15.047		
6,600.00	6,319.59	6,554.46	6,472.65	36.54	35.72	175.65	-893.98	-139.56	942.14	879.55	62.60	15.051		
6,700.00	6,414.76	6,653.36	6,570.22	37.12	36.28	175.65	-910.05	-141.83	956.89	893.34	63.56	15.056		
6,800.00	6,509.91	6,752.65	6,668.12	37.70	36.83	167.99	-926.17	-145.11	971.63	907.11	64.52	15.059		
6,900.00	6,603.99	6,852.50	6,765.31	38.26	37.39	143.74	-942.26	-160.75	986.22	920.71	65.51	15.055		
7,000.00	6,694.76	6,952.28	6,858.82	38.78	37.95	127.92	-957.85	-191.56	1,000.30	933.81	66.49	15.044		
7,100.00	6,779.96	7,052.04	6,946.40	39.24	38.50	117.95	-972.56	-236.78	1,013.54	946.06	67.49	15.019		
7,200.00	6,857.50	7,151.85	7,025.96	39.65	39.05	111.39	-986.04	-295.34	1,025.61	957.08	68.53	14.966		
7,300.00	6,925.48	7,251.72	7,095.56	40.02	39.62	106.88	-997.96	-365.83	1,036.21	966.51	69.70	14.867		
7,400.00	6,982.21	7,351.68	7,153.47	40.33	40.23	103.73	-1,008.03	-446.55	1,045.08	973.99	71.09	14.702		
7,500.00	7,026.31	7,451.69	7,198.22	40.63	40.92	101.55	-1,015.99	-535.52	1,052.00	979.21	72.79	14.453		
7,600.00	7,056.68	7,551.71	7,228.67	40.91	41.75	100.15	-1,021.63	-630.51	1,056.80	981.94	74.85	14.118		
7,700.00	7,072.58	7,651.68	7,244.08	41.25	42.76	99.42	-1,024.83	-729.13	1,059.36	982.06	77.29	13.705		
7,800.00	7,074.86	7,751.61	7,245.76	41.69	43.98	99.28	-1,025.78	-829.01	1,059.81	979.72	80.09	13.233		
7,900.00	7,074.54	7,851.61	7,245.23	42.34	45.43	99.27	-1,026.36	-929.01	1,059.86	976.65	83.21	12.737		
8,000.00	7,074.21	7,951.61	7,244.70	43.27	47.11	99.26	-1,026.94	-1,029.00	1,059.91	973.26	86.65	12.232		
8,100.00	7,073.89	8,051.61	7,244.17	44.47	48.99	99.24	-1,027.53	-1,129.00	1,059.96	969.58	90.37	11.729		
8,200.00	7,073.57	8,151.61	7,243.64	45.91	51.06	99.23	-1,028.11	-1,229.00	1,060.01	965.66	94.34	11.235		
8,300.00	7,073.24	8,251.61	7,243.11	47.53	53.27	99.22	-1,028.70	-1,328.99	1,060.06	961.52	98.53	10.758		
8,400.00	7,072.92	8,351.61	7,242.58	49.31	55.61	99.21	-1,029.28	-1,428.99	1,060.11	957.19	102.91	10.301		
8,500.00	7,072.59	8,451.61	7,242.06	51.20	58.07	99.20	-1,029.87	-1,528.99	1,060.16	952.69	107.46	9.865		
8,600.00	7,072.27	8,551.61	7,241.53	53.19	60.62	99.19	-1,030.45	-1,628.98	1,060.20	948.04	112.16	9.452		
8,700.00	7,071.94	8,651.61	7,241.00	55.27	63.25	99.17	-1,031.03	-1,728.98	1,060.25	943.26	116.99	9.063		
8,800.00	7,071.62	8,751.61	7,240.47	57.43	65.95	99.16	-1,031.62	-1,828.98	1,060.30	938.37	121.93	8.696		
8,900.00	7,071.29	8,851.61	7,239.94	59.64	68.71	99.15	-1,032.20	-1,928.97	1,060.35	933.37	126.98	8.351		
9,000.00	7,070.97	8,951.61	7,239.41	61.92	71.52	99.14	-1,032.79	-2,028.97	1,060.40	928.29	132.12	8.026		
9,100.00	7,070.64	9,051.61	7,238.88	64.24	74.38	99.13	-1,033.37	-2,128.97	1,060.45	923.12	137.33	7.722		
9,200.00	7,070.32	9,151.61	7,238.35	66.61	77.28	99.12	-1,033.96	-2,228.96	1,060.50	917.88	142.62	7.436		
9,300.00	7,069.99	9,251.61	7,237.83	69.01	80.21	99.11	-1,034.54	-2,328.96	1,060.55	912.58	147.97	7.167		
9,400.00	7,069.67	9,351.61	7,237.30	71.45	83.18	99.09	-1,035.12	-2,428.96	1,060.60	907.22	153.38	6.915		
9,500.00	7,069.34	9,451.61	7,236.77	73.92	86.18	99.08	-1,035.71	-2,528.95	1,060.65	901.81	158.85	6.677		
9,600.00	7,069.02	9,551.61	7,236.24	76.42	89.20	99.07	-1,036.29	-2,628.95	1,060.70	896.35	164.35	6.454		
9,700.00	7,068.69	9,651.61	7,235.71	78.95	92.24	99.06	-1,036.88	-2,728.95	1,060.75	890.85	169.90	6.243		
9,800.00	7,068.37	9,751.61	7,235.18	81.49	95.30	99.05	-1,037.46	-2,828.94	1,060.80	885.31	175.49	6.045		
9,900.00	7,068.04	9,851.60	7,234.65	84.06	98.38	99.04	-1,038.05	-2,928.94	1,060.85	879.74	181.12	5.857		
10,000.00	7,067.72	9,951.60	7,234.12	86.65	101.48	99.02	-1,038.63	-3,028.93	1,060.90	874.13	186.77	5.680		
10,100.00	7,067.39	10,051.60	7,233.60	89.25	104.59	99.01	-1,039.22	-3,128.93	1,060.95	868.50	192.46	5.513		
10,200.00	7,067.07	10,151.60	7,233.07	91.87	107.72	99.00	-1,039.80	-3,228.93	1,061.00	862.84	198.17	5.354		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	10,251.60	7,232.54	94.50	110.86	98.99	-1,040.38	-3,328.92	1,061.05	857.15	203.90	5.204		
10,400.00	7,066.42	10,351.60	7,232.01	97.14	114.01	98.98	-1,040.97	-3,428.92	1,061.10	851.45	209.66	5.061		
10,500.00	7,066.09	10,451.60	7,231.48	99.80	117.17	98.97	-1,041.55	-3,528.92	1,061.15	845.72	215.44	4.926		
10,600.00	7,065.77	10,551.60	7,230.95	102.47	120.34	98.95	-1,042.14	-3,628.91	1,061.20	839.97	221.23	4.797		
10,700.00	7,065.44	10,651.60	7,230.42	105.15	123.51	98.94	-1,042.72	-3,728.91	1,061.25	834.21	227.05	4.674		
10,800.00	7,065.12	10,751.60	7,229.89	107.83	126.70	98.93	-1,043.31	-3,828.91	1,061.30	828.43	232.88	4.557		
10,900.00	7,064.79	10,851.60	7,229.37	110.53	129.90	98.92	-1,043.89	-3,928.90	1,061.35	822.63	238.72	4.446		
11,000.00	7,064.47	10,951.60	7,228.84	113.23	133.10	98.91	-1,044.47	-4,028.90	1,061.41	816.82	244.58	4.340		
11,100.00	7,064.14	11,051.60	7,228.31	115.95	136.30	98.90	-1,045.06	-4,128.90	1,061.46	811.00	250.45	4.238		
11,200.00	7,063.82	11,151.60	7,227.78	118.66	139.52	98.89	-1,045.64	-4,228.89	1,061.51	805.17	256.34	4.141		
11,300.00	7,063.49	11,251.60	7,227.25	121.39	142.74	98.87	-1,046.23	-4,328.89	1,061.56	799.32	262.24	4.048		
11,400.00	7,063.17	11,351.60	7,226.72	124.12	145.96	98.86	-1,046.81	-4,428.89	1,061.61	793.46	268.14	3.959		
11,500.00	7,062.84	11,451.60	7,226.19	126.86	149.19	98.85	-1,047.40	-4,528.88	1,061.66	787.60	274.06	3.874		
11,600.00	7,062.52	11,551.60	7,225.67	129.60	152.43	98.84	-1,047.98	-4,628.88	1,061.71	781.72	279.99	3.792		
11,700.00	7,062.19	11,651.60	7,225.14	132.35	155.66	98.83	-1,048.57	-4,728.88	1,061.76	775.84	285.92	3.713		
11,800.00	7,061.87	11,751.60	7,224.61	135.10	158.91	98.82	-1,049.15	-4,828.87	1,061.81	769.95	291.87	3.638		
11,900.00	7,061.54	11,851.60	7,224.08	137.85	162.15	98.80	-1,049.73	-4,928.87	1,061.86	764.04	297.82	3.565		
12,000.00	7,061.22	11,951.60	7,223.55	140.61	165.40	98.79	-1,050.32	-5,028.87	1,061.91	758.14	303.78	3.496		
12,100.00	7,060.89	12,051.60	7,223.02	143.38	168.65	98.78	-1,050.90	-5,128.86	1,061.96	752.22	309.74	3.429		
12,200.00	7,060.57	12,151.60	7,222.49	146.15	171.91	98.77	-1,051.49	-5,228.86	1,062.02	746.30	315.72	3.364		
12,300.00	7,060.24	12,251.60	7,221.96	148.92	175.17	98.76	-1,052.07	-5,328.86	1,062.07	740.37	321.69	3.301		
12,400.00	7,059.92	12,351.60	7,221.44	151.69	178.43	98.75	-1,052.66	-5,428.85	1,062.12	734.44	327.68	3.241		
12,500.00	7,059.59	12,451.60	7,220.91	154.47	181.70	98.74	-1,053.24	-5,528.85	1,062.17	728.50	333.67	3.183		
12,600.00	7,059.27	12,551.60	7,220.38	157.25	184.96	98.72	-1,053.82	-5,628.85	1,062.22	722.55	339.67	3.127		
12,700.00	7,058.94	12,651.60	7,219.85	160.03	188.23	98.71	-1,054.41	-5,728.84	1,062.27	716.60	345.67	3.073		
12,800.00	7,058.62	12,751.60	7,219.32	162.82	191.50	98.70	-1,054.99	-5,828.84	1,062.32	710.65	351.67	3.021		
12,900.00	7,058.29	12,851.60	7,218.79	165.61	194.78	98.69	-1,055.58	-5,928.84	1,062.37	704.69	357.68	2.970		
13,000.00	7,057.97	12,951.60	7,218.26	168.40	198.05	98.68	-1,056.16	-6,028.83	1,062.43	698.73	363.70	2.921		
13,100.00	7,057.64	13,051.60	7,217.73	171.19	201.33	98.67	-1,056.75	-6,128.83	1,062.48	692.76	369.72	2.874		
13,200.00	7,057.32	13,151.60	7,217.21	173.99	204.61	98.65	-1,057.33	-6,228.83	1,062.53	686.79	375.74	2.828		
13,300.00	7,057.00	13,251.60	7,216.68	176.78	207.89	98.64	-1,057.92	-6,328.82	1,062.58	680.81	381.77	2.783		
13,400.00	7,056.67	13,351.60	7,216.15	179.58	211.17	98.63	-1,058.50	-6,428.82	1,062.63	674.83	387.80	2.740		
13,500.00	7,056.35	13,451.60	7,215.62	182.38	214.46	98.62	-1,059.08	-6,528.82	1,062.68	668.85	393.83	2.698		
13,600.00	7,056.02	13,551.60	7,215.09	185.19	217.74	98.61	-1,059.67	-6,628.81	1,062.73	662.86	399.87	2.658		
13,700.00	7,055.70	13,651.60	7,214.56	187.99	221.03	98.60	-1,060.25	-6,728.81	1,062.79	656.87	405.91	2.618		
13,800.00	7,055.37	13,751.60	7,214.03	190.80	224.32	98.59	-1,060.84	-6,828.81	1,062.84	650.88	411.96	2.580		
13,900.00	7,055.05	13,851.60	7,213.50	193.60	227.61	98.57	-1,061.42	-6,928.80	1,062.89	644.89	418.00	2.543		
14,000.00	7,054.72	13,951.60	7,212.98	196.41	230.90	98.56	-1,062.01	-7,028.80	1,062.94	638.89	424.05	2.507		
14,100.00	7,054.40	14,051.59	7,212.45	199.22	234.19	98.55	-1,062.59	-7,128.80	1,062.99	632.89	430.11	2.471		
14,200.00	7,054.07	14,151.59	7,211.92	202.03	237.49	98.54	-1,063.17	-7,228.79	1,063.05	626.88	436.16	2.437		
14,300.00	7,053.75	14,251.59	7,211.39	204.85	240.78	98.53	-1,063.76	-7,328.79	1,063.10	620.88	442.22	2.404		
14,400.00	7,053.42	14,351.59	7,210.86	207.66	244.08	98.52	-1,064.34	-7,428.79	1,063.15	614.87	448.28	2.372		
14,500.00	7,053.10	14,451.59	7,210.33	210.48	247.37	98.50	-1,064.93	-7,528.78	1,063.20	608.86	454.34	2.340		
14,600.00	7,052.77	14,551.59	7,209.80	213.29	250.67	98.49	-1,065.51	-7,628.78	1,063.25	602.85	460.41	2.309		
14,700.00	7,052.45	14,651.59	7,209.28	216.11	253.97	98.48	-1,066.10	-7,728.78	1,063.31	596.83	466.48	2.279		
14,800.00	7,052.12	14,751.59	7,208.75	218.93	257.27	98.47	-1,066.68	-7,828.77	1,063.36	590.81	472.54	2.250		
14,900.00	7,051.80	14,851.59	7,208.22	221.75	260.57	98.46	-1,067.26	-7,928.77	1,063.41	584.79	478.62	2.222		
15,000.00	7,051.47	14,951.59	7,207.69	224.57	263.87	98.45	-1,067.85	-8,028.77	1,063.46	578.77	484.69	2.194		
15,100.00	7,051.15	15,051.59	7,207.16	227.39	267.17	98.44	-1,068.43	-8,128.76	1,063.51	572.75	490.77	2.167		
15,100.35	7,051.15	15,051.94	7,207.16	227.40	267.19	98.44	-1,068.44	-8,129.11	1,063.51	572.73	490.79	2.167		
15,145.13	7,051.00	15,081.89	7,207.00	228.67	268.17	98.43	-1,068.61	-8,159.06	1,063.64	570.96	492.69	2.159 SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.44	219.67	1.67	219.68					
100.00	100.00	101.00	100.00	3.28	3.28	0.44	219.67	1.67	219.68	213.11	6.57	33.439		
200.00	200.00	201.00	200.00	3.34	3.34	0.44	219.67	1.67	219.68	213.00	6.67	32.911	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	176.08	219.67	1.67	221.42	214.53	6.89	32.154		
400.00	399.84	400.84	399.84	3.59	3.60	176.16	219.67	1.67	226.64	219.44	7.20	31.491		
500.00	499.45	500.49	499.49	3.79	3.81	176.29	219.67	1.67	235.34	227.74	7.60	30.967		
600.00	598.70	608.61	607.59	4.03	4.06	176.33	217.72	1.03	245.70	237.60	8.09	30.357		
700.00	697.47	717.15	715.94	4.31	4.34	176.15	211.86	-0.90	255.93	247.27	8.66	29.547		
800.00	795.62	817.13	815.61	4.64	4.62	175.90	204.41	-3.34	267.58	258.33	9.26	28.910		
900.00	893.06	915.97	914.15	5.00	4.92	175.72	197.04	-5.76	282.68	272.78	9.90	28.562		
1,000.00	989.64	1,014.24	1,012.11	5.40	5.25	175.60	189.72	-8.16	301.21	290.63	10.58	28.471		
1,100.00	1,085.27	1,111.80	1,109.37	5.83	5.59	175.53	182.44	-10.55	323.14	311.84	11.30	28.589		
1,200.00	1,180.44	1,209.01	1,206.29	6.29	5.94	175.52	175.20	-12.92	346.57	334.53	12.04	28.784		
1,300.00	1,275.61	1,306.23	1,303.21	6.76	6.30	175.52	167.95	-15.30	370.00	357.20	12.80	28.899		
1,400.00	1,370.78	1,403.44	1,400.12	7.26	6.67	175.51	160.70	-17.68	393.44	379.85	13.59	28.955		
1,500.00	1,465.95	1,500.66	1,497.04	7.76	7.05	175.51	153.45	-20.06	416.87	402.48	14.39	28.970		
1,600.00	1,561.12	1,602.12	1,593.95	8.27	7.45	175.50	146.21	-22.43	440.30	425.08	15.22	28.922		
1,700.00	1,656.29	1,704.91	1,690.87	8.80	7.87	175.50	138.96	-24.81	463.73	447.66	16.08	28.846		
1,800.00	1,751.46	1,807.69	1,787.79	9.32	8.29	175.50	131.71	-27.19	487.17	470.23	16.94	28.759		
1,900.00	1,846.63	1,889.52	1,884.70	9.86	8.62	175.49	124.46	-29.57	510.60	492.87	17.73	28.803		
2,000.00	1,941.80	1,986.74	1,981.62	10.40	9.03	175.49	117.21	-31.95	534.03	515.45	18.59	28.734		
2,100.00	2,036.96	2,083.96	2,078.53	10.94	9.43	175.49	109.97	-34.32	557.46	538.01	19.45	28.662		
2,200.00	2,132.13	2,181.17	2,175.45	11.49	9.84	175.49	102.72	-36.70	580.90	560.57	20.32	28.587		
2,300.00	2,227.30	2,278.39	2,272.37	12.04	10.26	175.48	95.47	-39.08	604.33	583.13	21.20	28.511		
2,400.00	2,322.47	2,375.60	2,369.28	12.59	10.67	175.48	88.22	-41.46	627.76	605.68	22.08	28.435		
2,500.00	2,417.64	2,472.82	2,466.20	13.15	11.09	175.48	80.98	-43.84	651.19	628.23	22.96	28.359		
2,600.00	2,512.81	2,570.03	2,563.12	13.70	11.50	175.48	73.73	-46.21	674.62	650.77	23.85	28.286		
2,700.00	2,607.98	2,667.25	2,660.03	14.26	11.92	175.48	66.48	-48.59	698.06	673.31	24.74	28.213		
2,800.00	2,703.15	2,764.47	2,756.95	14.82	12.35	175.47	59.23	-50.97	721.49	695.85	25.64	28.143		
2,900.00	2,798.32	2,861.68	2,853.86	15.38	12.77	175.47	51.99	-53.35	744.92	718.39	26.53	28.074		
3,000.00	2,893.49	2,958.90	2,950.78	15.95	13.19	175.47	44.74	-55.72	768.35	740.92	27.43	28.007		
3,100.00	2,988.66	3,056.11	3,047.70	16.51	13.62	175.47	37.49	-58.10	791.79	763.45	28.34	27.943		
3,200.00	3,083.83	3,153.33	3,144.61	17.07	14.04	175.47	30.24	-60.48	815.22	785.98	29.24	27.881		
3,300.00	3,179.00	3,250.55	3,241.53	17.64	14.47	175.47	22.99	-62.86	838.65	808.51	30.14	27.821		
3,400.00	3,274.17	3,347.76	3,338.44	18.21	14.89	175.47	15.75	-65.24	862.08	831.03	31.05	27.762		
3,500.00	3,369.34	3,444.98	3,435.36	18.77	15.32	175.47	8.50	-67.61	885.52	853.55	31.96	27.706		
3,600.00	3,464.51	3,542.19	3,532.28	19.34	15.75	175.46	1.25	-69.99	908.95	876.08	32.87	27.652		
3,700.00	3,559.68	3,639.41	3,629.19	19.91	16.18	175.46	-6.00	-72.37	932.38	898.60	33.78	27.600		
3,800.00	3,654.84	3,736.63	3,726.11	20.48	16.61	175.46	-13.24	-74.75	955.81	921.12	34.69	27.549		
3,900.00	3,750.01	3,833.84	3,823.03	21.05	17.04	175.46	-20.49	-77.13	979.24	943.64	35.61	27.501		
4,000.00	3,845.18	3,931.06	3,919.94	21.62	17.47	175.46	-27.74	-79.50	1,002.68	966.15	36.52	27.454		
4,100.00	3,940.35	4,028.27	4,016.86	22.19	17.90	175.46	-34.99	-81.88	1,026.11	988.67	37.44	27.408		
4,200.00	4,035.52	4,125.49	4,113.77	22.76	18.33	175.46	-42.23	-84.26	1,049.54	1,011.19	38.35	27.365		
4,300.00	4,130.69	4,222.70	4,210.69	23.33	18.76	175.46	-49.48	-86.64	1,072.97	1,033.70	39.27	27.322		
4,400.00	4,225.86	4,319.92	4,307.61	23.91	19.19	175.46	-56.73	-89.02	1,096.41	1,056.22	40.19	27.281		
4,500.00	4,321.03	4,417.14	4,404.52	24.48	19.63	175.46	-63.98	-91.39	1,119.84	1,078.73	41.11	27.242		
4,600.00	4,416.20	4,514.35	4,501.44	25.05	20.06	175.46	-71.23	-93.77	1,143.27	1,101.24	42.03	27.204		
4,700.00	4,511.37	4,611.57	4,598.36	25.62	20.49	175.46	-78.47	-96.15	1,166.70	1,123.76	42.95	27.167		
4,800.00	4,606.54	4,708.78	4,695.27	26.20	20.92	175.46	-85.72	-98.53	1,190.13	1,146.27	43.87	27.131		
4,900.00	4,701.71	4,806.00	4,792.19	26.77	21.36	175.45	-92.97	-100.90	1,213.57	1,168.78	44.79	27.096		
5,000.00	4,796.88	4,903.22	4,889.10	27.34	21.79	175.45	-100.22	-103.28	1,237.00	1,191.29	45.71	27.063		
5,100.00	4,892.05	5,000.43	4,986.02	27.92	22.22	175.45	-107.46	-105.66	1,260.43	1,213.80	46.63	27.030		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,102.35	5,082.94	28.49	22.68	175.45	-114.71	-108.04	1,283.86	1,236.29	47.57	26.987		
5,300.00	5,082.39	5,205.14	5,179.85	29.07	23.14	175.45	-121.96	-110.42	1,307.30	1,258.78	48.52	26.943		
5,400.00	5,177.56	5,307.92	5,276.77	29.64	23.60	175.45	-129.21	-112.79	1,330.73	1,281.26	49.47	26.901		
5,500.00	5,272.72	5,389.30	5,373.68	30.21	23.96	175.45	-136.45	-115.17	1,354.16	1,303.84	50.32	26.910		
5,600.00	5,367.89	5,486.51	5,470.60	30.79	24.40	175.45	-143.70	-117.55	1,377.59	1,326.35	51.25	26.882		
5,700.00	5,463.06	5,583.73	5,567.52	31.36	24.83	175.45	-150.95	-119.93	1,401.03	1,348.86	52.17	26.855		
5,800.00	5,558.23	5,680.94	5,664.43	31.94	25.27	175.45	-158.20	-122.31	1,424.46	1,371.36	53.09	26.829		
5,900.00	5,653.40	5,778.16	5,761.35	32.51	25.70	175.45	-165.45	-124.68	1,447.89	1,393.87	54.02	26.803		
6,000.00	5,748.57	5,875.38	5,858.27	33.09	26.14	175.45	-172.69	-127.06	1,471.32	1,416.38	54.94	26.778		
6,100.00	5,843.74	5,972.59	5,955.18	33.67	26.57	175.45	-179.94	-129.44	1,494.75	1,438.88	55.87	26.754		
6,200.00	5,938.91	6,069.81	6,052.10	34.24	27.01	175.45	-187.19	-131.82	1,518.19	1,461.39	56.80	26.730		
6,300.00	6,034.08	6,167.02	6,149.01	34.82	27.44	175.45	-194.44	-134.19	1,541.62	1,483.90	57.72	26.707		
6,400.00	6,129.25	6,264.24	6,245.93	35.39	27.88	175.45	-201.68	-136.57	1,565.05	1,506.40	58.65	26.685		
6,500.00	6,224.42	6,361.45	6,342.85	35.97	28.32	175.45	-208.93	-138.95	1,588.48	1,528.91	59.58	26.663		
6,600.00	6,319.59	6,458.67	6,439.76	36.54	28.75	175.45	-216.18	-141.33	1,611.92	1,551.41	60.50	26.642		
6,700.00	6,414.76	6,555.89	6,536.68	37.12	29.19	175.45	-223.43	-143.71	1,635.35	1,573.92	61.43	26.622		
6,800.00	6,509.91	6,653.31	6,633.79	37.70	29.63	167.61	-230.69	-146.18	1,658.78	1,596.42	62.36	26.601		
6,900.00	6,603.99	6,752.71	6,732.11	38.26	30.07	142.71	-238.12	-158.01	1,681.96	1,618.67	63.30	26.572		
7,000.00	6,694.76	6,852.80	6,828.03	38.78	30.50	126.28	-245.49	-185.28	1,704.33	1,640.11	64.22	26.540		
7,100.00	6,779.96	6,953.78	6,919.27	39.24	30.92	115.75	-252.64	-227.70	1,725.34	1,660.22	65.12	26.496		
7,200.00	6,857.50	7,055.77	7,003.46	39.65	31.31	108.69	-259.39	-284.67	1,744.46	1,678.43	66.02	26.422		
7,300.00	6,925.48	7,158.79	7,078.19	40.02	31.71	103.77	-265.53	-355.15	1,761.22	1,694.21	67.00	26.286		
7,400.00	6,982.21	7,262.81	7,141.15	40.33	32.20	100.28	-270.90	-437.63	1,775.20	1,707.05	68.15	26.050		
7,500.00	7,026.31	7,367.65	7,190.22	40.63	32.88	97.85	-275.31	-530.04	1,786.05	1,716.50	69.55	25.680		
7,600.00	7,056.68	7,473.07	7,223.64	40.91	33.78	96.28	-278.61	-629.84	1,793.51	1,722.22	71.29	25.158		
7,700.00	7,072.58	7,578.71	7,240.21	41.25	34.89	95.47	-280.69	-734.03	1,797.37	1,724.00	73.37	24.496		
7,800.00	7,074.86	7,681.38	7,241.79	41.69	36.15	95.33	-281.64	-836.65	1,797.88	1,722.14	75.73	23.739		
7,900.00	7,074.54	7,781.38	7,241.40	42.34	37.55	95.33	-282.42	-936.65	1,797.76	1,719.36	78.40	22.931		
8,000.00	7,074.21	7,881.38	7,241.01	43.27	39.11	95.32	-283.21	-1,036.64	1,797.64	1,716.26	81.37	22.091		
8,100.00	7,073.89	7,981.38	7,240.61	44.47	40.80	95.32	-283.99	-1,136.64	1,797.52	1,712.89	84.62	21.241		
8,200.00	7,073.57	8,081.38	7,240.22	45.91	42.63	95.32	-284.77	-1,236.64	1,797.40	1,709.27	88.12	20.396		
8,300.00	7,073.24	8,181.38	7,239.83	47.53	44.56	95.32	-285.55	-1,336.63	1,797.28	1,705.43	91.84	19.569		
8,400.00	7,072.92	8,281.38	7,239.43	49.31	46.59	95.32	-286.33	-1,436.63	1,797.15	1,701.40	95.76	18.768		
8,500.00	7,072.59	8,381.38	7,239.04	51.20	48.70	95.31	-287.12	-1,536.62	1,797.03	1,697.19	99.84	17.999		
8,600.00	7,072.27	8,481.38	7,238.65	53.19	50.89	95.31	-287.90	-1,636.62	1,796.91	1,692.84	104.07	17.266		
8,700.00	7,071.94	8,581.38	7,238.25	55.27	53.13	95.31	-288.68	-1,736.62	1,796.79	1,688.35	108.44	16.569		
8,800.00	7,071.62	8,681.38	7,237.86	57.43	55.44	95.31	-289.46	-1,836.61	1,796.67	1,683.74	112.93	15.910		
8,900.00	7,071.29	8,781.38	7,237.47	59.64	57.79	95.31	-290.25	-1,936.61	1,796.55	1,679.03	117.52	15.287		
9,000.00	7,070.97	8,881.38	7,237.07	61.92	60.19	95.31	-291.03	-2,036.61	1,796.43	1,674.23	122.20	14.700		
9,100.00	7,070.64	8,981.38	7,236.68	64.24	62.63	95.30	-291.81	-2,136.60	1,796.31	1,669.34	126.97	14.147		
9,200.00	7,070.32	9,081.38	7,236.29	66.61	65.10	95.30	-292.59	-2,236.60	1,796.19	1,664.38	131.81	13.627		
9,300.00	7,069.99	9,181.38	7,235.89	69.01	67.60	95.30	-293.37	-2,336.59	1,796.07	1,659.35	136.72	13.137		
9,400.00	7,069.67	9,281.38	7,235.50	71.45	70.13	95.30	-294.16	-2,436.59	1,795.95	1,654.27	141.68	12.676		
9,500.00	7,069.34	9,381.38	7,235.11	73.92	72.69	95.30	-294.94	-2,536.59	1,795.83	1,649.13	146.70	12.242		
9,600.00	7,069.02	9,481.38	7,234.71	76.42	75.26	95.29	-295.72	-2,636.58	1,795.71	1,643.95	151.76	11.832		
9,700.00	7,068.69	9,581.38	7,234.32	78.95	77.86	95.29	-296.50	-2,736.58	1,795.59	1,638.72	156.87	11.446		
9,800.00	7,068.37	9,681.38	7,233.93	81.49	80.47	95.29	-297.29	-2,836.57	1,795.47	1,633.45	162.02	11.082		
9,900.00	7,068.04	9,781.38	7,233.53	84.06	83.10	95.29	-298.07	-2,936.57	1,795.35	1,628.15	167.20	10.738		
10,000.00	7,067.72	9,881.38	7,233.14	86.65	85.75	95.29	-298.85	-3,036.57	1,795.23	1,622.81	172.42	10.412		
10,100.00	7,067.39	9,981.38	7,232.75	89.25	88.40	95.29	-299.63	-3,136.56	1,795.10	1,617.45	177.66	10.104		
10,200.00	7,067.07	10,081.38	7,232.35	91.87	91.07	95.28	-300.41	-3,236.56	1,794.98	1,612.05	182.93	9.812		
10,300.00	7,066.74	10,181.38	7,231.96	94.50	93.75	95.28	-301.20	-3,336.55	1,794.86	1,606.64	188.23	9.536		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	10,281.38	7,231.57	97.14	96.44	95.28	-301.98	-3,436.55	1,794.74	1,601.20	193.54	9.273		
10,500.00	7,066.09	10,381.38	7,231.17	99.80	99.14	95.28	-302.76	-3,536.55	1,794.62	1,595.74	198.88	9.023		
10,600.00	7,065.77	10,481.38	7,230.78	102.47	101.85	95.28	-303.54	-3,636.54	1,794.50	1,590.26	204.24	8.786		
10,700.00	7,065.44	10,581.38	7,230.39	105.15	104.57	95.27	-304.33	-3,736.54	1,794.38	1,584.76	209.62	8.560		
10,800.00	7,065.12	10,681.38	7,229.99	107.83	107.29	95.27	-305.11	-3,836.53	1,794.26	1,579.25	215.01	8.345		
10,900.00	7,064.79	10,781.38	7,229.60	110.53	110.03	95.27	-305.89	-3,936.53	1,794.14	1,573.72	220.42	8.140		
11,000.00	7,064.47	10,881.38	7,229.21	113.23	112.76	95.27	-306.67	-4,036.53	1,794.02	1,568.18	225.84	7.944		
11,100.00	7,064.14	10,981.38	7,228.82	115.95	115.51	95.27	-307.45	-4,136.52	1,793.90	1,562.62	231.28	7.757		
11,200.00	7,063.82	11,081.38	7,228.42	118.66	118.25	95.27	-308.24	-4,236.52	1,793.78	1,557.06	236.72	7.578		
11,300.00	7,063.49	11,181.38	7,228.03	121.39	121.01	95.26	-309.02	-4,336.51	1,793.66	1,551.48	242.18	7.406		
11,400.00	7,063.17	11,281.38	7,227.64	124.12	123.77	95.26	-309.80	-4,436.51	1,793.54	1,545.89	247.65	7.242		
11,500.00	7,062.84	11,381.38	7,227.24	126.86	126.53	95.26	-310.58	-4,536.51	1,793.42	1,540.29	253.13	7.085		
11,600.00	7,062.52	11,481.38	7,226.85	129.60	129.30	95.26	-311.37	-4,636.50	1,793.30	1,534.68	258.62	6.934		
11,700.00	7,062.19	11,581.38	7,226.46	132.35	132.07	95.26	-312.15	-4,736.50	1,793.18	1,529.06	264.11	6.789		
11,800.00	7,061.87	11,681.38	7,226.06	135.10	134.84	95.25	-312.93	-4,836.50	1,793.06	1,523.44	269.62	6.650		
11,900.00	7,061.54	11,781.38	7,225.67	137.85	137.62	95.25	-313.71	-4,936.49	1,792.94	1,517.80	275.13	6.517		
12,000.00	7,061.22	11,881.38	7,225.28	140.61	140.40	95.25	-314.49	-5,036.49	1,792.81	1,512.16	280.65	6.388		
12,100.00	7,060.89	11,981.38	7,224.88	143.38	143.19	95.25	-315.28	-5,136.48	1,792.69	1,506.51	286.18	6.264		
12,200.00	7,060.57	12,081.38	7,224.49	146.15	145.97	95.25	-316.06	-5,236.48	1,792.57	1,500.86	291.71	6.145		
12,300.00	7,060.24	12,181.38	7,224.10	148.92	148.76	95.25	-316.84	-5,336.48	1,792.45	1,495.20	297.25	6.030		
12,400.00	7,059.92	12,281.38	7,223.70	151.69	151.56	95.24	-317.62	-5,436.47	1,792.33	1,489.53	302.80	5.919		
12,500.00	7,059.59	12,381.38	7,223.31	154.47	154.35	95.24	-318.41	-5,536.47	1,792.21	1,483.86	308.35	5.812		
12,600.00	7,059.27	12,481.38	7,222.92	157.25	157.15	95.24	-319.19	-5,636.46	1,792.09	1,478.18	313.91	5.709		
12,700.00	7,058.94	12,581.38	7,222.52	160.03	159.95	95.24	-319.97	-5,736.46	1,791.97	1,472.50	319.47	5.609		
12,800.00	7,058.62	12,681.38	7,222.13	162.82	162.75	95.24	-320.75	-5,836.46	1,791.85	1,466.82	325.03	5.513		
12,900.00	7,058.29	12,781.38	7,221.74	165.61	165.55	95.23	-321.53	-5,936.45	1,791.73	1,461.13	330.60	5.420		
13,000.00	7,057.97	12,881.38	7,221.34	168.40	168.36	95.23	-322.32	-6,036.45	1,791.61	1,455.43	336.18	5.329		
13,100.00	7,057.64	12,981.38	7,220.95	171.19	171.16	95.23	-323.10	-6,136.44	1,791.49	1,449.73	341.76	5.242		
13,200.00	7,057.32	13,081.38	7,220.56	173.99	173.97	95.23	-323.88	-6,236.44	1,791.37	1,444.03	347.34	5.157		
13,300.00	7,057.00	13,181.38	7,220.16	176.78	176.78	95.23	-324.66	-6,336.44	1,791.25	1,438.32	352.92	5.075		
13,400.00	7,056.67	13,281.38	7,219.77	179.58	179.59	95.22	-325.45	-6,436.43	1,791.13	1,432.61	358.51	4.996		
13,500.00	7,056.35	13,381.38	7,219.38	182.38	182.41	95.22	-326.23	-6,536.43	1,791.01	1,426.90	364.11	4.919		
13,600.00	7,056.02	13,481.38	7,218.98	185.19	185.22	95.22	-327.01	-6,636.42	1,790.89	1,421.18	369.70	4.844		
13,700.00	7,055.70	13,581.38	7,218.59	187.99	188.04	95.22	-327.79	-6,736.42	1,790.77	1,415.47	375.30	4.772		
13,800.00	7,055.37	13,681.38	7,218.20	190.80	190.85	95.22	-328.57	-6,836.42	1,790.65	1,409.74	380.90	4.701		
13,900.00	7,055.05	13,781.38	7,217.80	193.60	193.67	95.22	-329.36	-6,936.41	1,790.53	1,404.02	386.51	4.633		
14,000.00	7,054.72	13,881.38	7,217.41	196.41	196.49	95.21	-330.14	-7,036.41	1,790.40	1,398.29	392.11	4.566		
14,100.00	7,054.40	13,981.38	7,217.02	199.22	199.31	95.21	-330.92	-7,136.41	1,790.28	1,392.56	397.72	4.501		
14,200.00	7,054.07	14,081.38	7,216.62	202.03	202.13	95.21	-331.70	-7,236.40	1,790.16	1,386.83	403.34	4.438		
14,300.00	7,053.75	14,181.38	7,216.23	204.85	204.96	95.21	-332.49	-7,336.40	1,790.04	1,381.09	408.95	4.377		
14,400.00	7,053.42	14,281.38	7,215.84	207.66	207.78	95.21	-333.27	-7,436.39	1,789.92	1,375.36	414.57	4.318		
14,500.00	7,053.10	14,381.38	7,215.44	210.48	210.60	95.20	-334.05	-7,536.39	1,789.80	1,369.62	420.18	4.260		
14,600.00	7,052.77	14,481.38	7,215.05	213.29	213.43	95.20	-334.83	-7,636.39	1,789.68	1,363.88	425.81	4.203		
14,700.00	7,052.45	14,581.38	7,214.66	216.11	216.26	95.20	-335.61	-7,736.38	1,789.56	1,358.13	431.43	4.148		
14,800.00	7,052.12	14,681.38	7,214.26	218.93	219.08	95.20	-336.40	-7,836.38	1,789.44	1,352.39	437.05	4.094		
14,900.00	7,051.80	14,781.38	7,213.87	221.75	221.91	95.20	-337.18	-7,936.37	1,789.32	1,346.64	442.68	4.042		
15,000.00	7,051.47	14,881.38	7,213.48	224.57	224.74	95.20	-337.96	-8,036.37	1,789.20	1,340.89	448.31	3.991		
15,100.00	7,051.15	14,981.38	7,213.08	227.39	227.57	95.19	-338.74	-8,136.37	1,789.08	1,335.14	453.94	3.941		
15,130.41	7,051.05	15,011.78	7,212.96	228.25	228.43	95.19	-338.98	-8,166.77	1,789.04	1,333.39	455.65	3.926 SF		
15,145.13	7,051.00	15,002.44	7,213.00	228.67	228.16	95.19	-338.91	-8,157.43	1,789.19	1,333.55	455.64	3.927		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	119.85	0.83	119.86					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	119.85	0.83	119.86	113.29	6.57	18.245		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	119.85	0.83	119.86	113.18	6.67	17.958 CC, ES		
300.00	299.98	299.98	299.98	3.44	3.44	176.07	119.85	0.83	121.60	114.71	6.88	17.661		
400.00	399.84	404.35	404.33	3.59	3.60	176.09	117.98	0.51	125.02	117.82	7.20	17.358		
500.00	499.45	508.86	508.67	3.79	3.81	175.95	112.35	-0.47	128.34	120.71	7.62	16.833		
600.00	598.70	613.48	612.86	4.03	4.06	175.65	102.97	-2.10	131.53	123.39	8.14	16.161		
700.00	697.47	718.22	716.74	4.31	4.34	175.21	89.83	-4.38	134.61	125.89	8.73	15.422		
800.00	795.62	817.55	815.07	4.64	4.64	174.83	76.01	-6.78	139.80	130.47	9.32	14.994		
900.00	893.06	917.17	913.68	5.00	4.98	174.59	62.12	-9.19	148.43	138.46	9.97	14.881		
1,000.00	989.64	1,016.43	1,011.95	5.40	5.33	174.50	48.28	-11.59	160.52	149.85	10.67	15.039		
1,100.00	1,085.27	1,115.21	1,109.74	5.83	5.70	174.52	34.51	-13.98	176.05	164.63	11.41	15.424		
1,200.00	1,180.44	1,213.75	1,207.28	6.29	6.08	174.60	20.78	-16.37	193.09	180.92	12.17	15.860		
1,300.00	1,275.61	1,312.28	1,304.83	6.76	6.47	174.67	7.04	-18.75	210.13	197.17	12.96	16.212		
1,400.00	1,370.78	1,410.82	1,402.37	7.26	6.88	174.73	-6.69	-21.14	227.18	213.41	13.77	16.498		
1,500.00	1,465.95	1,509.36	1,499.92	7.76	7.29	174.78	-20.43	-23.52	244.22	229.63	14.60	16.732		
1,600.00	1,561.12	1,607.89	1,597.46	8.27	7.70	174.83	-34.17	-25.90	261.27	245.83	15.44	16.924		
1,700.00	1,656.29	1,706.43	1,695.01	8.80	8.13	174.87	-47.90	-28.29	278.31	262.02	16.29	17.083		
1,800.00	1,751.46	1,804.97	1,792.55	9.32	8.55	174.90	-61.64	-30.67	295.36	278.20	17.16	17.215		
1,900.00	1,846.63	1,903.50	1,890.10	9.86	8.98	174.93	-75.37	-33.06	312.40	294.37	18.03	17.325		
2,000.00	1,941.80	2,002.04	1,987.64	10.40	9.42	174.96	-89.11	-35.44	329.45	310.53	18.91	17.418		
2,100.00	2,036.96	2,100.58	2,085.19	10.94	9.86	174.98	-102.84	-37.83	346.49	326.69	19.80	17.497		
2,200.00	2,132.13	2,200.89	2,182.73	11.49	10.31	175.01	-116.58	-40.21	363.54	342.83	20.71	17.557		
2,300.00	2,227.30	2,302.35	2,280.28	12.04	10.76	175.03	-130.32	-42.60	380.58	358.96	21.62	17.604		
2,400.00	2,322.47	2,403.82	2,377.83	12.59	11.22	175.05	-144.05	-44.98	397.63	375.09	22.54	17.643		
2,500.00	2,417.64	2,505.28	2,475.37	13.15	11.68	175.06	-157.79	-47.37	414.67	391.21	23.46	17.677		
2,600.00	2,512.81	2,606.74	2,572.92	13.70	12.14	175.08	-171.52	-49.75	431.72	407.33	24.38	17.704		
2,700.00	2,607.98	2,691.79	2,670.46	14.26	12.53	175.09	-185.26	-52.14	448.76	423.52	25.24	17.779		
2,800.00	2,703.15	2,809.67	2,768.01	14.82	13.07	175.11	-198.99	-54.52	465.81	439.56	26.25	17.748		
2,900.00	2,798.32	2,888.87	2,865.55	15.38	13.43	175.12	-212.73	-56.91	482.85	455.77	27.08	17.829		
3,000.00	2,893.49	2,987.40	2,963.10	15.95	13.89	175.13	-226.47	-59.29	499.90	471.89	28.01	17.850		
3,100.00	2,988.66	3,085.94	3,060.64	16.51	14.34	175.14	-240.20	-61.67	516.94	488.01	28.93	17.867		
3,200.00	3,083.83	3,184.48	3,158.19	17.07	14.79	175.15	-253.94	-64.06	533.99	504.13	29.86	17.883		
3,300.00	3,179.00	3,283.01	3,255.73	17.64	15.25	175.16	-267.67	-66.44	551.03	520.24	30.79	17.897		
3,400.00	3,274.17	3,381.55	3,353.28	18.21	15.71	175.17	-281.41	-68.83	568.08	536.36	31.72	17.909		
3,500.00	3,369.34	3,480.09	3,450.82	18.77	16.16	175.18	-295.14	-71.21	585.12	552.47	32.65	17.919		
3,600.00	3,464.51	3,578.62	3,548.37	19.34	16.62	175.19	-308.88	-73.60	602.17	568.58	33.59	17.928		
3,700.00	3,559.68	3,677.16	3,645.91	19.91	17.08	175.20	-322.62	-75.98	619.21	584.69	34.52	17.936		
3,800.00	3,654.84	3,775.70	3,743.46	20.48	17.54	175.21	-336.35	-78.37	636.26	600.80	35.46	17.943		
3,900.00	3,750.01	3,874.23	3,841.01	21.05	18.00	175.21	-350.09	-80.75	653.31	616.91	36.40	17.949		
4,000.00	3,845.18	3,972.77	3,938.55	21.62	18.46	175.22	-363.82	-83.14	670.35	633.01	37.34	17.955		
4,100.00	3,940.35	4,071.31	4,036.10	22.19	18.92	175.22	-377.56	-85.52	687.40	649.12	38.28	17.959		
4,200.00	4,035.52	4,169.84	4,133.64	22.76	19.38	175.23	-391.29	-87.91	704.44	665.23	39.22	17.963		
4,300.00	4,130.69	4,268.38	4,231.19	23.33	19.84	175.24	-405.03	-90.29	721.49	681.33	40.16	17.967		
4,400.00	4,225.86	4,366.92	4,328.73	23.91	20.30	175.24	-418.76	-92.68	738.53	697.43	41.10	17.970		
4,500.00	4,321.03	4,465.45	4,426.28	24.48	20.76	175.25	-432.50	-95.06	755.58	713.54	42.04	17.973		
4,600.00	4,416.20	4,563.99	4,523.82	25.05	21.22	175.25	-446.24	-97.44	772.62	729.64	42.98	17.975		
4,700.00	4,511.37	4,662.53	4,621.37	25.62	21.69	175.26	-459.97	-99.83	789.67	745.74	43.93	17.977		
4,800.00	4,606.54	4,761.06	4,718.91	26.20	22.15	175.26	-473.71	-102.21	806.71	761.84	44.87	17.978		
4,900.00	4,701.71	4,859.60	4,816.46	26.77	22.61	175.27	-487.44	-104.60	823.76	777.94	45.82	17.980		
5,000.00	4,796.88	4,958.13	4,914.00	27.34	23.07	175.27	-501.18	-106.98	840.80	794.04	46.76	17.981		
5,100.00	4,892.05	5,056.67	5,011.55	27.92	23.54	175.27	-514.91	-109.37	857.85	810.14	47.71	17.982		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,155.21	5,109.09	28.49	24.00	175.28	-528.65	-111.75	874.90	826.24	48.65	17.982		
5,300.00	5,082.39	5,253.74	5,206.64	29.07	24.46	175.28	-542.39	-114.14	891.94	842.34	49.60	17.983		
5,400.00	5,177.56	5,352.28	5,304.19	29.64	24.93	175.28	-556.12	-116.52	908.99	858.44	50.55	17.983		
5,500.00	5,272.72	5,450.82	5,401.73	30.21	25.39	175.29	-569.86	-118.91	926.03	874.54	51.49	17.984		
5,600.00	5,367.89	5,549.35	5,499.28	30.79	25.85	175.29	-583.59	-121.29	943.08	890.64	52.44	17.984		
5,700.00	5,463.06	5,647.89	5,596.82	31.36	26.32	175.29	-597.33	-123.68	960.12	906.73	53.39	17.984		
5,800.00	5,558.23	5,746.43	5,694.37	31.94	26.78	175.30	-611.06	-126.06	977.17	922.83	54.34	17.983		
5,900.00	5,653.40	5,844.96	5,791.91	32.51	27.25	175.30	-624.80	-128.45	994.21	938.93	55.29	17.983		
6,000.00	5,748.57	5,943.50	5,889.46	33.09	27.71	175.30	-638.54	-130.83	1,011.26	955.02	56.23	17.983		
6,100.00	5,843.74	6,042.04	5,987.00	33.67	28.18	175.31	-652.27	-133.21	1,028.30	971.12	57.18	17.982		
6,200.00	5,938.91	6,140.57	6,084.55	34.24	28.64	175.31	-666.01	-135.60	1,045.35	987.22	58.13	17.982		
6,300.00	6,034.08	6,239.11	6,182.09	34.82	29.10	175.31	-679.74	-137.98	1,062.40	1,003.31	59.08	17.981		
6,400.00	6,129.25	6,337.65	6,279.64	35.39	29.57	175.31	-693.48	-140.37	1,079.44	1,019.41	60.03	17.981		
6,500.00	6,224.42	6,436.18	6,377.18	35.97	30.03	175.32	-707.21	-142.75	1,096.49	1,035.50	60.98	17.980		
6,600.00	6,319.59	6,534.87	6,474.87	36.54	30.50	175.29	-720.97	-145.61	1,113.53	1,051.60	61.94	17.979		
6,700.00	6,414.76	6,632.60	6,570.59	37.12	30.95	174.72	-734.55	-159.19	1,130.59	1,067.71	62.88	17.979		
6,800.00	6,509.91	6,725.05	6,658.24	37.70	31.36	165.82	-747.10	-185.50	1,148.07	1,084.29	63.78	17.999		
6,900.00	6,603.99	6,813.25	6,737.49	38.26	31.73	140.11	-758.56	-222.29	1,166.00	1,101.38	64.62	18.044		
7,000.00	6,694.76	6,898.77	6,808.81	38.78	32.06	122.96	-768.99	-268.20	1,183.78	1,118.39	65.39	18.104		
7,100.00	6,779.96	6,982.15	6,871.86	39.24	32.36	111.81	-778.32	-321.87	1,200.82	1,134.72	66.10	18.166		
7,200.00	6,857.50	7,063.82	6,952.37	39.65	32.65	104.22	-786.50	-382.06	1,216.58	1,149.79	66.79	18.215		
7,300.00	6,925.48	7,144.16	6,972.10	40.02	32.94	98.85	-793.50	-447.67	1,230.57	1,163.05	67.52	18.225		
7,400.00	6,982.21	7,223.46	7,008.86	40.33	33.30	95.01	-799.28	-517.64	1,242.36	1,173.98	68.38	18.169		
7,500.00	7,026.31	7,301.99	7,036.49	40.63	33.78	92.33	-803.80	-590.96	1,251.60	1,182.16	69.43	18.026		
7,600.00	7,056.68	7,379.96	7,054.88	40.91	34.42	90.59	-807.04	-666.61	1,258.01	1,187.25	70.76	17.778		
7,700.00	7,072.58	7,457.57	7,063.96	41.25	35.20	89.70	-808.98	-743.61	1,261.42	1,189.04	72.38	17.429		
7,800.00	7,074.86	7,546.18	7,064.80	41.69	36.26	89.54	-809.87	-832.20	1,261.90	1,187.41	74.50	16.939		
7,900.00	7,074.54	7,646.18	7,064.41	42.34	37.61	89.54	-810.68	-932.19	1,261.76	1,184.62	77.14	16.356		
8,000.00	7,074.21	7,746.18	7,064.02	43.27	39.14	89.54	-811.49	-1,032.19	1,261.62	1,181.50	80.11	15.748		
8,100.00	7,073.89	7,846.18	7,063.62	44.47	40.81	89.53	-812.31	-1,132.18	1,261.47	1,178.11	83.36	15.132		
8,200.00	7,073.57	7,946.18	7,063.23	45.91	42.61	89.53	-813.12	-1,232.18	1,261.33	1,174.46	86.87	14.519		
8,300.00	7,073.24	8,046.18	7,062.84	47.53	44.53	89.53	-813.93	-1,332.18	1,261.18	1,170.58	90.61	13.920		
8,400.00	7,072.92	8,146.18	7,062.44	49.31	46.54	89.52	-814.74	-1,432.17	1,261.04	1,166.50	94.54	13.339		
8,500.00	7,072.59	8,246.18	7,062.05	51.20	48.64	89.52	-815.55	-1,532.17	1,260.90	1,162.26	98.64	12.783		
8,600.00	7,072.27	8,346.18	7,061.66	53.19	50.81	89.52	-816.37	-1,632.16	1,260.75	1,157.85	102.90	12.252		
8,700.00	7,071.94	8,446.18	7,061.26	55.27	53.05	89.51	-817.18	-1,732.16	1,260.61	1,153.31	107.30	11.749		
8,800.00	7,071.62	8,546.18	7,060.87	57.43	55.34	89.51	-817.99	-1,832.15	1,260.47	1,148.66	111.81	11.273		
8,900.00	7,071.29	8,646.18	7,060.48	59.64	57.69	89.51	-818.80	-1,932.15	1,260.32	1,143.89	116.43	10.825		
9,000.00	7,070.97	8,746.17	7,060.08	61.92	60.08	89.51	-819.61	-2,032.15	1,260.18	1,139.04	121.14	10.402		
9,100.00	7,070.64	8,846.17	7,059.69	64.24	62.51	89.50	-820.42	-2,132.14	1,260.04	1,134.10	125.94	10.005		
9,200.00	7,070.32	8,946.17	7,059.30	66.61	64.98	89.50	-821.24	-2,232.14	1,259.89	1,129.08	130.81	9.632		
9,300.00	7,069.99	9,046.17	7,058.90	69.01	67.48	89.50	-822.05	-2,332.13	1,259.75	1,124.00	135.74	9.280		
9,400.00	7,069.67	9,146.17	7,058.51	71.45	70.00	89.49	-822.86	-2,432.13	1,259.60	1,118.86	140.74	8.950		
9,500.00	7,069.34	9,246.17	7,058.12	73.92	72.55	89.49	-823.67	-2,532.13	1,259.46	1,113.67	145.79	8.639		
9,600.00	7,069.02	9,346.17	7,057.73	76.42	75.12	89.49	-824.48	-2,632.12	1,259.32	1,108.43	150.88	8.346		
9,700.00	7,068.69	9,446.17	7,057.33	78.95	77.71	89.48	-825.29	-2,732.12	1,259.17	1,103.15	156.02	8.071		
9,800.00	7,068.37	9,546.17	7,056.94	81.49	80.32	89.48	-826.11	-2,832.11	1,259.03	1,097.83	161.20	7.810		
9,900.00	7,068.04	9,646.17	7,056.55	84.06	82.95	89.48	-826.92	-2,932.11	1,258.89	1,092.47	166.41	7.565		
10,000.00	7,067.72	9,746.17	7,056.15	86.65	85.59	89.47	-827.73	-3,032.10	1,258.74	1,087.09	171.66	7.333		
10,100.00	7,067.39	9,846.17	7,055.76	89.25	88.24	89.47	-828.54	-3,132.10	1,258.60	1,081.67	176.93	7.114		
10,200.00	7,067.07	9,946.17	7,055.37	91.87	90.91	89.47	-829.35	-3,232.10	1,258.46	1,076.22	182.23	6.906		
10,300.00	7,066.74	10,046.17	7,054.97	94.50	93.59	89.46	-830.16	-3,332.09	1,258.31	1,070.76	187.56	6.709		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,146.17	7,054.58	97.14	96.28	89.46	-830.98	-3,432.09	1,258.17	1,065.27	192.90	6.522		
10,500.00	7,066.09	10,246.17	7,054.19	99.80	98.98	89.46	-831.79	-3,532.08	1,258.02	1,059.75	198.27	6.345		
10,600.00	7,065.77	10,346.17	7,053.79	102.47	101.68	89.45	-832.60	-3,632.08	1,257.88	1,054.22	203.66	6.176		
10,700.00	7,065.44	10,446.17	7,053.40	105.15	104.40	89.45	-833.41	-3,732.07	1,257.74	1,048.68	209.06	6.016		
10,800.00	7,065.12	10,546.17	7,053.01	107.83	107.12	89.45	-834.22	-3,832.07	1,257.59	1,043.11	214.48	5.863		
10,900.00	7,064.79	10,646.17	7,052.61	110.53	109.85	89.45	-835.03	-3,932.07	1,257.45	1,037.53	219.92	5.718		
11,000.00	7,064.47	10,746.17	7,052.22	113.23	112.59	89.44	-835.85	-4,032.06	1,257.31	1,031.94	225.37	5.579		
11,100.00	7,064.14	10,846.17	7,051.83	115.95	115.33	89.44	-836.66	-4,132.06	1,257.16	1,026.33	230.83	5.446		
11,200.00	7,063.82	10,946.17	7,051.43	118.66	118.07	89.44	-837.47	-4,232.05	1,257.02	1,020.72	236.30	5.320		
11,300.00	7,063.49	11,046.17	7,051.04	121.39	120.83	89.43	-838.28	-4,332.05	1,256.88	1,015.09	241.79	5.198		
11,400.00	7,063.17	11,146.17	7,050.65	124.12	123.58	89.43	-839.09	-4,432.05	1,256.73	1,009.45	247.28	5.082		
11,500.00	7,062.84	11,246.17	7,050.26	126.86	126.35	89.43	-839.91	-4,532.04	1,256.59	1,003.80	252.79	4.971		
11,600.00	7,062.52	11,346.17	7,049.86	129.60	129.11	89.42	-840.72	-4,632.04	1,256.45	998.14	258.30	4.864		
11,700.00	7,062.19	11,446.17	7,049.47	132.35	131.88	89.42	-841.53	-4,732.03	1,256.30	992.47	263.83	4.762		
11,800.00	7,061.87	11,546.17	7,049.08	135.10	134.65	89.42	-842.34	-4,832.03	1,256.16	986.80	269.36	4.664		
11,900.00	7,061.54	11,646.17	7,048.68	137.85	137.43	89.41	-843.15	-4,932.02	1,256.01	981.12	274.90	4.569		
12,000.00	7,061.22	11,746.17	7,048.29	140.61	140.21	89.41	-843.96	-5,032.02	1,255.87	975.43	280.44	4.478		
12,100.00	7,060.89	11,846.17	7,047.90	143.38	143.00	89.41	-844.78	-5,132.02	1,255.73	969.73	286.00	4.391		
12,200.00	7,060.57	11,946.17	7,047.50	146.15	145.78	89.40	-845.59	-5,232.01	1,255.58	964.03	291.56	4.306		
12,300.00	7,060.24	12,046.17	7,047.11	148.92	148.57	89.40	-846.40	-5,332.01	1,255.44	958.32	297.12	4.225		
12,400.00	7,059.92	12,146.17	7,046.72	151.69	151.36	89.40	-847.21	-5,432.00	1,255.30	952.61	302.69	4.147		
12,500.00	7,059.59	12,246.17	7,046.32	154.47	154.16	89.39	-848.02	-5,532.00	1,255.15	946.89	308.27	4.072		
12,600.00	7,059.27	12,346.17	7,045.93	157.25	156.95	89.39	-848.83	-5,632.00	1,255.01	941.16	313.85	3.999		
12,700.00	7,058.94	12,446.17	7,045.54	160.03	159.75	89.39	-849.65	-5,731.99	1,254.87	935.43	319.43	3.928		
12,800.00	7,058.62	12,546.17	7,045.14	162.82	162.55	89.38	-850.46	-5,831.99	1,254.72	929.70	325.02	3.860		
12,900.00	7,058.29	12,646.17	7,044.75	165.61	165.35	89.38	-851.27	-5,931.98	1,254.58	923.96	330.62	3.795		
13,000.00	7,057.97	12,746.17	7,044.36	168.40	168.16	89.38	-852.08	-6,031.98	1,254.44	918.22	336.22	3.731		
13,100.00	7,057.64	12,846.17	7,043.96	171.19	170.96	89.38	-852.89	-6,131.97	1,254.29	912.47	341.82	3.669		
13,200.00	7,057.32	12,946.17	7,043.57	173.99	173.77	89.37	-853.70	-6,231.97	1,254.15	906.72	347.43	3.610		
13,300.00	7,057.00	13,046.17	7,043.18	176.78	176.58	89.37	-854.52	-6,331.97	1,254.01	900.97	353.03	3.552		
13,400.00	7,056.67	13,146.17	7,042.79	179.58	179.39	89.37	-855.33	-6,431.96	1,253.86	895.21	358.65	3.496		
13,500.00	7,056.35	13,246.17	7,042.39	182.38	182.21	89.36	-856.14	-6,531.96	1,253.72	889.45	364.26	3.442		
13,600.00	7,056.02	13,346.17	7,042.00	185.19	185.02	89.36	-856.95	-6,631.95	1,253.57	883.69	369.88	3.389		
13,700.00	7,055.70	13,446.17	7,041.61	187.99	187.83	89.36	-857.76	-6,731.95	1,253.43	877.93	375.51	3.338		
13,800.00	7,055.37	13,546.17	7,041.21	190.80	190.65	89.35	-858.58	-6,831.94	1,253.29	872.16	381.13	3.288		
13,900.00	7,055.05	13,646.17	7,040.82	193.60	193.47	89.35	-859.39	-6,931.94	1,253.14	866.39	386.76	3.240		
14,000.00	7,054.72	13,746.17	7,040.43	196.41	196.29	89.35	-860.20	-7,031.94	1,253.00	860.61	392.39	3.193		
14,100.00	7,054.40	13,846.17	7,040.03	199.22	199.11	89.34	-861.01	-7,131.93	1,252.86	854.84	398.02	3.148		
14,200.00	7,054.07	13,946.17	7,039.64	202.03	201.93	89.34	-861.82	-7,231.93	1,252.71	849.06	403.66	3.103		
14,300.00	7,053.75	14,046.17	7,039.25	204.85	204.75	89.34	-862.63	-7,331.92	1,252.57	843.28	409.29	3.060		
14,400.00	7,053.42	14,146.17	7,038.85	207.66	207.57	89.33	-863.45	-7,431.92	1,252.43	837.50	414.93	3.018		
14,500.00	7,053.10	14,246.17	7,038.46	210.48	210.40	89.33	-864.26	-7,531.92	1,252.28	831.71	420.57	2.978		
14,600.00	7,052.77	14,346.17	7,038.07	213.29	213.22	89.33	-865.07	-7,631.91	1,252.14	825.92	426.22	2.938		
14,700.00	7,052.45	14,446.17	7,037.67	216.11	216.05	89.32	-865.88	-7,731.91	1,252.00	820.13	431.86	2.899		
14,800.00	7,052.12	14,546.17	7,037.28	218.93	218.88	89.32	-866.69	-7,831.90	1,251.85	814.34	437.51	2.861		
14,900.00	7,051.80	14,646.17	7,036.89	221.75	221.70	89.32	-867.50	-7,931.90	1,251.71	808.55	443.16	2.825		
15,000.00	7,051.47	14,746.17	7,036.49	224.57	224.53	89.31	-868.32	-8,031.89	1,251.57	802.76	448.81	2.789		
15,100.00	7,051.15	14,846.17	7,036.10	227.39	227.36	89.31	-869.13	-8,131.89	1,251.42	796.96	454.46	2.754		
15,132.68	7,051.04	14,878.85	7,035.97	228.32	228.28	89.31	-869.39	-8,164.57	1,251.38	795.07	456.31	2.742 SF		
15,145.13	7,051.00	14,871.88	7,036.00	228.67	228.09	89.31	-869.34	-8,157.60	1,251.51	795.27	456.24	2.743		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	200.00	1.67	200.01					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	200.00	1.67	200.01	193.44	6.57	30.445		
200.00	200.00	201.00	200.00	3.34	3.34	0.48	200.00	1.67	200.01	193.34	6.67	29.965 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	176.12	200.00	1.67	201.75	194.87	6.89	29.298		
400.00	399.84	400.84	399.84	3.59	3.60	176.21	200.00	1.67	206.97	199.78	7.20	28.758		
500.00	499.45	500.45	499.45	3.79	3.81	176.35	200.00	1.67	215.67	208.07	7.60	28.380		
600.00	598.70	601.36	600.36	4.03	4.05	176.53	199.93	1.65	227.76	219.68	8.08	28.185		
700.00	697.47	709.12	708.08	4.31	4.32	176.62	197.17	1.01	240.84	232.21	8.63	27.899		
800.00	795.62	817.43	816.16	4.64	4.62	176.55	190.43	-0.57	253.71	244.45	9.26	27.397		
900.00	893.06	923.73	921.92	5.00	4.95	176.36	180.06	-2.99	266.50	256.56	9.94	26.820		
1,000.00	989.64	1,022.56	1,020.14	5.40	5.27	176.19	169.39	-5.49	281.71	271.09	10.62	26.524		
1,100.00	1,085.27	1,120.80	1,117.77	5.83	5.62	176.08	158.78	-7.96	300.35	289.01	11.35	26.474		
1,200.00	1,180.44	1,218.75	1,215.12	6.29	5.97	176.03	148.21	-10.43	320.51	308.42	12.09	26.512		
1,300.00	1,275.61	1,316.69	1,312.46	6.76	6.34	175.98	137.63	-12.91	340.67	327.81	12.86	26.492		
1,400.00	1,370.78	1,414.64	1,409.80	7.26	6.72	175.94	127.06	-15.38	360.82	347.17	13.65	26.431		
1,500.00	1,465.95	1,512.59	1,507.15	7.76	7.11	175.90	116.49	-17.85	380.98	366.52	14.46	26.343		
1,600.00	1,561.12	1,610.54	1,604.49	8.27	7.50	175.86	105.91	-20.32	401.14	385.85	15.29	26.239		
1,700.00	1,656.29	1,708.48	1,701.83	8.80	7.91	175.83	95.34	-22.79	421.30	405.17	16.13	26.123		
1,800.00	1,751.46	1,806.43	1,799.18	9.32	8.31	175.80	84.76	-25.26	441.45	424.48	16.98	26.002		
1,900.00	1,846.63	1,904.38	1,896.52	9.86	8.72	175.77	74.19	-27.73	461.61	443.77	17.84	25.879		
2,000.00	1,941.80	2,002.32	1,993.86	10.40	9.14	175.75	63.62	-30.20	481.77	463.06	18.71	25.756		
2,100.00	2,036.96	2,100.27	2,091.21	10.94	9.56	175.73	53.04	-32.67	501.93	482.35	19.58	25.634		
2,200.00	2,132.13	2,201.78	2,188.55	11.49	10.00	175.71	42.47	-35.14	522.08	501.61	20.48	25.497		
2,300.00	2,227.30	2,303.83	2,285.89	12.04	10.44	175.69	31.89	-37.61	542.24	520.86	21.38	25.362		
2,400.00	2,322.47	2,405.89	2,383.24	12.59	10.88	175.67	21.32	-40.09	562.40	540.11	22.29	25.232		
2,500.00	2,417.64	2,507.94	2,480.58	13.15	11.33	175.65	10.74	-42.56	582.56	559.36	23.20	25.107		
2,600.00	2,512.81	2,609.99	2,577.92	13.70	11.78	175.64	0.17	-45.03	602.72	578.60	24.12	24.988		
2,700.00	2,607.98	2,687.95	2,675.27	14.26	12.12	175.62	-10.40	-47.50	622.87	597.94	24.94	24.977		
2,800.00	2,703.15	2,785.90	2,772.61	14.82	12.56	175.61	-20.98	-49.97	643.03	617.19	25.84	24.882		
2,900.00	2,798.32	2,883.85	2,869.95	15.38	12.99	175.60	-31.55	-52.44	663.19	636.44	26.75	24.791		
3,000.00	2,893.49	2,981.79	2,967.30	15.95	13.43	175.58	-42.13	-54.91	683.35	655.69	27.66	24.703		
3,100.00	2,988.66	3,079.74	3,064.64	16.51	13.86	175.57	-52.70	-57.38	703.51	674.93	28.58	24.619		
3,200.00	3,083.83	3,177.69	3,161.98	17.07	14.30	175.56	-63.27	-59.85	723.67	694.17	29.49	24.539		
3,300.00	3,179.00	3,275.64	3,259.33	17.64	14.74	175.55	-73.85	-62.32	743.82	713.42	30.41	24.462		
3,400.00	3,274.17	3,373.58	3,356.67	18.21	15.18	175.54	-84.42	-64.79	763.98	732.66	31.33	24.388		
3,500.00	3,369.34	3,471.53	3,454.01	18.77	15.62	175.53	-95.00	-67.27	784.14	751.89	32.25	24.317		
3,600.00	3,464.51	3,569.48	3,551.36	19.34	16.06	175.53	-105.57	-69.74	804.30	771.13	33.17	24.249		
3,700.00	3,559.68	3,667.42	3,648.70	19.91	16.50	175.52	-116.14	-72.21	824.46	790.37	34.09	24.184		
3,800.00	3,654.84	3,765.37	3,746.04	20.48	16.95	175.51	-126.72	-74.68	844.62	809.60	35.01	24.122		
3,900.00	3,750.01	3,863.32	3,843.39	21.05	17.39	175.50	-137.29	-77.15	864.77	828.83	35.94	24.062		
4,000.00	3,845.18	3,961.27	3,940.73	21.62	17.83	175.50	-147.87	-79.62	884.93	848.07	36.87	24.004		
4,100.00	3,940.35	4,059.21	4,038.07	22.19	18.28	175.49	-158.44	-82.09	905.09	867.30	37.79	23.949		
4,200.00	4,035.52	4,157.16	4,135.42	22.76	18.72	175.48	-169.01	-84.56	925.25	886.53	38.72	23.895		
4,300.00	4,130.69	4,255.11	4,232.76	23.33	19.17	175.48	-179.59	-87.03	945.41	905.76	39.65	23.844		
4,400.00	4,225.86	4,353.05	4,330.10	23.91	19.61	175.47	-190.16	-89.50	965.57	924.99	40.58	23.795		
4,500.00	4,321.03	4,451.00	4,427.45	24.48	20.06	175.46	-200.74	-91.97	985.72	944.21	41.51	23.747		
4,600.00	4,416.20	4,548.95	4,524.79	25.05	20.50	175.46	-211.31	-94.45	1,005.88	963.44	42.44	23.701		
4,700.00	4,511.37	4,646.89	4,622.13	25.62	20.95	175.45	-221.88	-96.92	1,026.04	982.67	43.37	23.657		
4,800.00	4,606.54	4,744.84	4,719.48	26.20	21.40	175.45	-232.46	-99.39	1,046.20	1,001.90	44.30	23.615		
4,900.00	4,701.71	4,842.79	4,816.82	26.77	21.84	175.44	-243.03	-101.86	1,066.36	1,021.12	45.24	23.573		
5,000.00	4,796.88	4,940.74	4,914.16	27.34	22.29	175.44	-253.61	-104.33	1,086.52	1,040.35	46.17	23.534		
5,100.00	4,892.05	5,038.68	5,011.51	27.92	22.74	175.43	-264.18	-106.80	1,106.67	1,059.57	47.10	23.495		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,136.63	5,108.85	28.49	23.18	175.43	-274.76	-109.27	1,126.83	1,078.80	48.04	23.458		
5,300.00	5,082.39	5,234.58	5,206.19	29.07	23.63	175.43	-285.33	-111.74	1,146.99	1,098.02	48.97	23.422		
5,400.00	5,177.56	5,332.52	5,303.53	29.64	24.08	175.42	-295.90	-114.21	1,167.15	1,117.24	49.91	23.387		
5,500.00	5,272.72	5,430.47	5,400.88	30.21	24.53	175.42	-306.48	-116.68	1,187.31	1,136.47	50.84	23.353		
5,600.00	5,367.89	5,528.42	5,498.22	30.79	24.98	175.41	-317.05	-119.15	1,207.47	1,155.69	51.78	23.321		
5,700.00	5,463.06	5,626.37	5,595.56	31.36	25.42	175.41	-327.63	-121.63	1,227.63	1,174.91	52.71	23.289		
5,800.00	5,558.23	5,724.31	5,692.91	31.94	25.87	175.41	-338.20	-124.10	1,247.78	1,194.13	53.65	23.258		
5,900.00	5,653.40	5,822.26	5,790.25	32.51	26.32	175.40	-348.77	-126.57	1,267.94	1,213.36	54.59	23.229		
6,000.00	5,748.57	5,920.21	5,887.59	33.09	26.77	175.40	-359.35	-129.04	1,288.10	1,232.58	55.52	23.200		
6,100.00	5,843.74	6,018.15	5,984.94	33.67	27.22	175.40	-369.92	-131.51	1,308.26	1,251.80	56.46	23.172		
6,200.00	5,938.91	6,116.10	6,082.28	34.24	27.67	175.39	-380.50	-133.98	1,328.42	1,271.02	57.40	23.144		
6,300.00	6,034.08	6,214.05	6,179.62	34.82	28.12	175.39	-391.07	-136.45	1,348.58	1,290.24	58.33	23.118		
6,400.00	6,129.25	6,312.00	6,276.97	35.39	28.57	175.39	-401.64	-138.92	1,368.73	1,309.46	59.27	23.092		
6,500.00	6,224.42	6,409.94	6,374.31	35.97	29.02	175.39	-412.22	-141.39	1,388.89	1,328.68	60.21	23.067		
6,600.00	6,319.59	6,507.89	6,471.65	36.54	29.47	175.38	-422.79	-143.86	1,409.05	1,347.90	61.15	23.043		
6,700.00	6,414.76	6,606.37	6,569.39	37.12	29.92	175.28	-433.43	-146.33	1,429.20	1,367.11	62.09	23.017		
6,800.00	6,509.91	6,702.80	6,663.44	37.70	30.35	166.89	-443.78	-166.96	1,449.38	1,386.36	63.02	22.999		
6,900.00	6,603.99	6,796.15	6,750.88	38.26	30.75	141.49	-453.51	-197.92	1,469.55	1,405.65	63.90	22.996		
7,000.00	6,694.76	6,887.42	6,831.11	38.78	31.12	124.60	-462.56	-240.30	1,489.19	1,424.45	64.74	23.003		
7,100.00	6,779.96	6,977.00	6,903.21	39.24	31.46	113.66	-470.81	-292.70	1,507.75	1,442.21	65.54	23.006		
7,200.00	6,857.50	7,065.23	6,963.38	39.65	31.78	106.26	-478.16	-353.76	1,524.74	1,458.40	66.34	22.983		
7,300.00	6,925.48	7,152.40	7,019.95	40.02	32.13	101.04	-484.53	-422.14	1,539.71	1,472.50	67.21	22.910		
7,400.00	6,982.21	7,238.75	7,063.37	40.33	32.57	97.31	-489.85	-496.50	1,552.24	1,484.02	68.22	22.753		
7,500.00	7,026.31	7,324.47	7,096.19	40.63	33.17	94.70	-494.06	-575.51	1,562.02	1,492.56	69.46	22.489		
7,600.00	7,056.68	7,409.73	7,118.08	40.91	33.94	93.02	-497.11	-657.79	1,568.78	1,497.82	70.96	22.108		
7,700.00	7,072.58	7,494.66	7,128.83	41.25	34.84	92.15	-498.97	-741.96	1,572.35	1,499.59	72.75	21.612		
7,800.00	7,074.86	7,587.18	7,129.78	41.69	35.97	92.00	-499.84	-834.45	1,572.86	1,497.90	74.96	20.983		
7,900.00	7,074.54	7,687.18	7,129.34	42.34	37.36	92.00	-500.61	-934.45	1,572.75	1,495.12	77.63	20.260		
8,000.00	7,074.21	7,787.18	7,128.91	43.27	38.92	91.99	-501.39	-1,034.44	1,572.64	1,492.03	80.61	19.509		
8,100.00	7,073.89	7,887.18	7,128.47	44.47	40.61	91.99	-502.17	-1,134.44	1,572.52	1,488.65	83.88	18.748		
8,200.00	7,073.57	7,987.18	7,128.04	45.91	42.44	91.99	-502.95	-1,234.43	1,572.41	1,485.02	87.39	17.992		
8,300.00	7,073.24	8,087.18	7,127.61	47.53	44.37	91.98	-503.72	-1,334.43	1,572.30	1,481.16	91.13	17.253		
8,400.00	7,072.92	8,187.18	7,127.17	49.31	46.40	91.98	-504.50	-1,434.43	1,572.18	1,477.11	95.07	16.537		
8,500.00	7,072.59	8,287.18	7,126.74	51.20	48.51	91.97	-505.28	-1,534.42	1,572.07	1,472.89	99.18	15.851		
8,600.00	7,072.27	8,387.18	7,126.30	53.19	50.70	91.97	-506.06	-1,634.42	1,571.95	1,468.52	103.44	15.197		
8,700.00	7,071.94	8,487.18	7,125.87	55.27	52.95	91.97	-506.83	-1,734.41	1,571.84	1,464.01	107.83	14.577		
8,800.00	7,071.62	8,587.18	7,125.44	57.43	55.26	91.96	-507.61	-1,834.41	1,571.73	1,459.38	112.34	13.990		
8,900.00	7,071.29	8,687.18	7,125.00	59.64	57.62	91.96	-508.39	-1,934.41	1,571.61	1,454.65	116.96	13.437		
9,000.00	7,070.97	8,787.18	7,124.57	61.92	60.02	91.95	-509.17	-2,034.40	1,571.50	1,449.83	121.67	12.916		
9,100.00	7,070.64	8,887.18	7,124.13	64.24	62.46	91.95	-509.94	-2,134.40	1,571.39	1,444.92	126.47	12.425		
9,200.00	7,070.32	8,987.18	7,123.70	66.61	64.93	91.95	-510.72	-2,234.39	1,571.27	1,439.94	131.33	11.964		
9,300.00	7,069.99	9,087.18	7,123.27	69.01	67.44	91.94	-511.50	-2,334.39	1,571.16	1,434.90	136.26	11.530		
9,400.00	7,069.67	9,187.18	7,122.83	71.45	69.97	91.94	-512.28	-2,434.39	1,571.05	1,429.79	141.26	11.122		
9,500.00	7,069.34	9,287.18	7,122.40	73.92	72.52	91.94	-513.05	-2,534.38	1,570.93	1,424.63	146.30	10.738		
9,600.00	7,069.02	9,387.18	7,121.96	76.42	75.10	91.93	-513.83	-2,634.38	1,570.82	1,419.43	151.39	10.376		
9,700.00	7,068.69	9,487.18	7,121.53	78.95	77.70	91.93	-514.61	-2,734.37	1,570.71	1,414.18	156.53	10.035		
9,800.00	7,068.37	9,587.18	7,121.10	81.49	80.31	91.92	-515.38	-2,834.37	1,570.59	1,408.89	161.70	9.713		
9,900.00	7,068.04	9,687.18	7,120.66	84.06	82.94	91.92	-516.16	-2,934.37	1,570.48	1,403.57	166.91	9.409		
10,000.00	7,067.72	9,787.18	7,120.23	86.65	85.59	91.92	-516.94	-3,034.36	1,570.37	1,398.22	172.15	9.129		
10,100.00	7,067.39	9,887.18	7,119.80	89.25	88.25	91.91	-517.72	-3,134.36	1,570.25	1,392.83	177.42	8.851		
10,200.00	7,067.07	9,987.18	7,119.36	91.87	90.92	91.91	-518.49	-3,234.35	1,570.14	1,387.42	182.71	8.593		
10,300.00	7,066.74	10,087.18	7,118.93	94.50	93.60	91.90	-519.27	-3,334.35	1,570.02	1,381.99	188.03	8.350		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	10,187.18	7,118.49	97.14	96.29	91.90	-520.05	-3,434.34	1,569.91	1,376.53	193.38	8.118		
10,500.00	7,066.09	10,287.18	7,118.06	99.80	98.99	91.90	-520.83	-3,534.34	1,569.80	1,371.06	198.74	7.899		
10,600.00	7,065.77	10,387.18	7,117.63	102.47	101.71	91.89	-521.60	-3,634.34	1,569.68	1,365.56	204.12	7.690		
10,700.00	7,065.44	10,487.18	7,117.19	105.15	104.42	91.89	-522.38	-3,734.33	1,569.57	1,360.05	209.52	7.491		
10,800.00	7,065.12	10,587.18	7,116.76	107.83	107.15	91.89	-523.16	-3,834.33	1,569.46	1,354.52	214.94	7.302		
10,900.00	7,064.79	10,687.18	7,116.32	110.53	109.88	91.88	-523.94	-3,934.32	1,569.34	1,348.97	220.37	7.121		
11,000.00	7,064.47	10,787.18	7,115.89	113.23	112.62	91.88	-524.71	-4,034.32	1,569.23	1,343.41	225.82	6.949		
11,100.00	7,064.14	10,887.18	7,115.46	115.95	115.36	91.87	-525.49	-4,134.32	1,569.12	1,337.84	231.28	6.785		
11,200.00	7,063.82	10,987.18	7,115.02	118.66	118.11	91.87	-526.27	-4,234.31	1,569.00	1,332.26	236.75	6.627		
11,300.00	7,063.49	11,087.18	7,114.59	121.39	120.87	91.87	-527.05	-4,334.31	1,568.89	1,326.66	242.23	6.477		
11,400.00	7,063.17	11,187.18	7,114.15	124.12	123.63	91.86	-527.82	-4,434.30	1,568.78	1,321.06	247.72	6.333		
11,500.00	7,062.84	11,287.18	7,113.72	126.86	126.39	91.86	-528.60	-4,534.30	1,568.66	1,315.44	253.22	6.195		
11,600.00	7,062.52	11,387.18	7,113.29	129.60	129.16	91.85	-529.38	-4,634.30	1,568.55	1,309.82	258.73	6.062		
11,700.00	7,062.19	11,487.18	7,112.85	132.35	131.93	91.85	-530.15	-4,734.29	1,568.44	1,304.19	264.25	5.935		
11,800.00	7,061.87	11,587.18	7,112.42	135.10	134.71	91.85	-530.93	-4,834.29	1,568.32	1,298.54	269.78	5.813		
11,900.00	7,061.54	11,687.18	7,111.98	137.85	137.48	91.84	-531.71	-4,934.28	1,568.21	1,292.90	275.32	5.696		
12,000.00	7,061.22	11,787.18	7,111.55	140.61	140.27	91.84	-532.49	-5,034.28	1,568.10	1,287.24	280.86	5.583		
12,100.00	7,060.89	11,887.18	7,111.12	143.38	143.05	91.84	-533.26	-5,134.28	1,567.98	1,281.58	286.41	5.475		
12,200.00	7,060.57	11,987.18	7,110.68	146.15	145.84	91.83	-534.04	-5,234.27	1,567.87	1,275.91	291.96	5.370		
12,300.00	7,060.24	12,087.18	7,110.25	148.92	148.63	91.83	-534.82	-5,334.27	1,567.76	1,270.23	297.52	5.269		
12,400.00	7,059.92	12,187.18	7,109.81	151.69	151.42	91.82	-535.60	-5,434.26	1,567.64	1,264.55	303.09	5.172		
12,500.00	7,059.59	12,287.18	7,109.38	154.47	154.22	91.82	-536.37	-5,534.26	1,567.53	1,258.87	308.66	5.078		
12,600.00	7,059.27	12,387.18	7,108.95	157.25	157.02	91.82	-537.15	-5,634.25	1,567.42	1,253.17	314.24	4.988		
12,700.00	7,058.94	12,487.18	7,108.51	160.03	159.82	91.81	-537.93	-5,734.25	1,567.30	1,247.48	319.83	4.901		
12,800.00	7,058.62	12,587.18	7,108.08	162.82	162.62	91.81	-538.71	-5,834.25	1,567.19	1,241.78	325.41	4.816		
12,900.00	7,058.29	12,687.18	7,107.65	165.61	165.42	91.80	-539.48	-5,934.24	1,567.08	1,236.07	331.00	4.734		
13,000.00	7,057.97	12,787.18	7,107.21	168.40	168.23	91.80	-540.26	-6,034.24	1,566.96	1,230.36	336.60	4.655		
13,100.00	7,057.64	12,887.18	7,106.78	171.19	171.03	91.80	-541.04	-6,134.23	1,566.85	1,224.65	342.20	4.579		
13,200.00	7,057.32	12,987.18	7,106.34	173.99	173.84	91.79	-541.82	-6,234.23	1,566.74	1,218.94	347.80	4.505		
13,300.00	7,057.00	13,087.18	7,105.91	176.78	176.65	91.79	-542.59	-6,334.23	1,566.62	1,213.22	353.41	4.433		
13,400.00	7,056.67	13,187.18	7,105.48	179.58	179.47	91.79	-543.37	-6,434.22	1,566.51	1,207.49	359.02	4.363		
13,500.00	7,056.35	13,287.18	7,105.04	182.38	182.28	91.78	-544.15	-6,534.22	1,566.40	1,201.76	364.63	4.296		
13,600.00	7,056.02	13,387.18	7,104.61	185.19	185.09	91.78	-544.92	-6,634.21	1,566.28	1,196.03	370.25	4.230		
13,700.00	7,055.70	13,487.18	7,104.17	187.99	187.91	91.77	-545.70	-6,734.21	1,566.17	1,190.30	375.87	4.167		
13,800.00	7,055.37	13,587.18	7,103.74	190.80	190.73	91.77	-546.48	-6,834.21	1,566.06	1,184.57	381.49	4.105		
13,900.00	7,055.05	13,687.17	7,103.31	193.60	193.55	91.77	-547.26	-6,934.20	1,565.95	1,178.83	387.12	4.045		
14,000.00	7,054.72	13,787.17	7,102.87	196.41	196.37	91.76	-548.03	-7,034.20	1,565.83	1,173.09	392.74	3.987		
14,100.00	7,054.40	13,887.17	7,102.44	199.22	199.19	91.76	-548.81	-7,134.19	1,565.72	1,167.34	398.37	3.930		
14,200.00	7,054.07	13,987.17	7,102.00	202.03	202.01	91.75	-549.59	-7,234.19	1,565.61	1,161.60	404.01	3.875		
14,300.00	7,053.75	14,087.17	7,101.57	204.85	204.83	91.75	-550.37	-7,334.19	1,565.49	1,155.85	409.64	3.822		
14,400.00	7,053.42	14,187.17	7,101.14	207.66	207.66	91.75	-551.14	-7,434.18	1,565.38	1,150.10	415.28	3.769		
14,500.00	7,053.10	14,287.17	7,100.70	210.48	210.48	91.74	-551.92	-7,534.18	1,565.27	1,144.35	420.92	3.719		
14,600.00	7,052.77	14,387.17	7,100.27	213.29	213.31	91.74	-552.70	-7,634.17	1,565.15	1,138.59	426.56	3.669		
14,700.00	7,052.45	14,487.17	7,099.83	216.11	216.13	91.74	-553.48	-7,734.17	1,565.04	1,132.84	432.20	3.621		
14,800.00	7,052.12	14,587.17	7,099.40	218.93	218.96	91.73	-554.25	-7,834.17	1,564.93	1,127.08	437.85	3.574		
14,900.00	7,051.80	14,687.17	7,098.97	221.75	221.79	91.73	-555.03	-7,934.16	1,564.81	1,121.32	443.49	3.528		
15,000.00	7,051.47	14,787.17	7,098.53	224.57	224.62	91.72	-555.81	-8,034.16	1,564.70	1,115.56	449.14	3.484		
15,100.00	7,051.15	14,887.17	7,098.10	227.39	227.45	91.72	-556.59	-8,134.15	1,564.59	1,109.79	454.79	3.440		
15,131.38	7,051.04	14,918.55	7,097.96	228.28	228.33	91.72	-556.83	-8,165.53	1,564.55	1,107.99	456.57	3.427 SF		
15,145.13	7,051.00	14,909.96	7,098.00	228.67	228.09	91.72	-556.76	-8,156.94	1,564.70	1,108.17	456.52	3.427		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	-179.40	-80.15	-0.83	80.16					
100.00	100.00	101.00	100.00	3.28	3.28	-179.40	-80.15	-0.83	80.16	73.59	6.57	12.201		
200.00	200.00	199.00	200.00	3.34	3.34	-179.40	-80.15	-0.83	80.16	73.48	6.67	12.011		
300.00	299.98	296.31	297.29	3.44	3.44	-3.82	-81.77	-0.92	80.08	73.19	6.88	11.631		
400.00	399.84	393.59	394.45	3.59	3.58	-3.91	-86.68	-1.19	79.91	72.70	7.20	11.095		
500.00	499.45	490.89	491.39	3.79	3.77	-4.05	-94.88	-1.64	79.65	72.03	7.62	10.452		
600.00	598.70	588.19	588.00	4.03	4.00	-4.25	-106.37	-2.27	79.30	71.18	8.12	9.762		
700.00	697.47	685.51	684.19	4.31	4.27	-4.51	-121.13	-3.08	78.86	70.17	8.70	9.069		
800.00	795.62	782.84	779.83	4.64	4.58	-4.83	-139.15	-4.06	78.34	69.01	9.33	8.398		
900.00	893.06	880.19	874.82	5.00	4.93	-5.21	-160.40	-5.23	77.74	67.73	10.01	7.769		
1,000.00	989.64	977.56	969.05	5.40	5.31	-5.66	-184.87	-6.57	77.05	66.32	10.73	7.180		
1,100.00	1,085.27	1,074.96	1,062.42	5.83	5.72	-6.17	-212.53	-8.08	76.29	64.80	11.49	6.639		
1,117.66	1,102.08	1,092.16	1,078.81	5.91	5.79	-6.26	-217.75	-8.37	76.23	64.61	11.63	6.557 CC, ES		
1,200.00	1,180.44	1,172.35	1,154.79	6.29	6.16	-6.59	-243.34	-9.77	77.38	65.11	12.28	6.303		
1,300.00	1,275.61	1,269.57	1,245.89	6.76	6.64	-6.76	-277.21	-11.62	81.86	68.78	13.08	6.257		
1,400.00	1,370.78	1,366.38	1,335.42	7.26	7.15	-6.70	-313.98	-13.64	89.71	75.80	13.90	6.453		
1,500.00	1,465.95	1,464.56	1,425.14	7.76	7.69	-6.50	-353.79	-15.82	100.31	85.56	14.75	6.799		
1,600.00	1,561.12	1,563.97	1,515.87	8.27	8.25	-6.33	-394.34	-18.04	111.19	95.55	15.64	7.108		
1,700.00	1,656.29	1,663.37	1,606.60	8.80	8.83	-6.19	-434.89	-20.26	122.07	105.51	16.56	7.373		
1,800.00	1,751.46	1,762.78	1,697.33	9.32	9.43	-6.06	-475.45	-22.48	132.95	115.47	17.49	7.603		
1,900.00	1,846.63	1,862.18	1,788.06	9.86	10.03	-5.96	-516.00	-24.70	143.83	125.40	18.43	7.804		
2,000.00	1,941.80	1,961.59	1,878.80	10.40	10.63	-5.87	-556.55	-26.92	154.72	135.33	19.39	7.979		
2,100.00	2,036.96	2,060.99	1,969.53	10.94	11.25	-5.80	-597.10	-29.14	165.60	145.24	20.36	8.133		
2,200.00	2,132.13	2,160.40	2,060.26	11.49	11.87	-5.73	-637.66	-31.36	176.48	155.14	21.34	8.270		
2,300.00	2,227.30	2,259.81	2,150.99	12.04	12.49	-5.67	-678.21	-33.58	187.37	165.04	22.33	8.391		
2,400.00	2,322.47	2,359.21	2,241.72	12.59	13.12	-5.62	-718.76	-35.80	198.25	174.92	23.33	8.499		
2,500.00	2,417.64	2,458.62	2,332.45	13.15	13.75	-5.57	-759.32	-38.02	209.13	184.81	24.33	8.596		
2,600.00	2,512.81	2,558.02	2,423.18	13.70	14.38	-5.53	-799.87	-40.24	220.02	194.68	25.34	8.684		
2,700.00	2,607.98	2,657.43	2,513.91	14.26	15.02	-5.49	-840.42	-42.46	230.90	204.55	26.35	8.763		
2,800.00	2,703.15	2,756.83	2,604.64	14.82	15.66	-5.46	-880.98	-44.68	241.79	214.42	27.37	8.835		
2,900.00	2,798.32	2,856.24	2,695.37	15.38	16.30	-5.42	-921.53	-46.90	252.67	224.28	28.39	8.900		
3,000.00	2,893.49	2,955.65	2,786.10	15.95	16.94	-5.39	-962.08	-49.12	263.56	234.14	29.41	8.960		
3,100.00	2,988.66	3,055.05	2,876.83	16.51	17.58	-5.37	-1,002.63	-51.34	274.44	244.00	30.44	9.015		
3,200.00	3,083.83	3,154.46	2,967.56	17.07	18.23	-5.34	-1,043.19	-53.56	285.32	253.85	31.47	9.065		
3,300.00	3,179.00	3,253.86	3,058.29	17.64	18.87	-5.32	-1,083.74	-55.78	296.21	263.70	32.51	9.112		
3,400.00	3,274.17	3,353.27	3,149.02	18.21	19.52	-5.30	-1,124.29	-58.00	307.09	273.55	33.55	9.155		
3,500.00	3,369.34	3,452.68	3,239.75	18.77	20.17	-5.28	-1,164.85	-60.22	317.98	283.39	34.58	9.194		
3,600.00	3,464.51	3,552.08	3,330.48	19.34	20.82	-5.26	-1,205.40	-62.44	328.86	293.24	35.62	9.231		
3,700.00	3,559.68	3,651.49	3,421.22	19.91	21.47	-5.24	-1,245.95	-64.66	339.75	303.08	36.67	9.266		
3,800.00	3,654.84	3,750.89	3,511.95	20.48	22.12	-5.22	-1,286.50	-66.88	350.63	312.92	37.71	9.298		
3,900.00	3,750.01	3,850.30	3,602.68	21.05	22.77	-5.21	-1,327.06	-69.10	361.52	322.76	38.76	9.328		
4,000.00	3,845.18	3,949.70	3,693.41	21.62	23.42	-5.19	-1,367.61	-71.32	372.40	332.60	39.80	9.356		
4,100.00	3,940.35	4,049.11	3,784.14	22.19	24.08	-5.18	-1,408.16	-73.55	383.29	342.43	40.85	9.382		
4,200.00	4,035.52	4,148.52	3,874.87	22.76	24.73	-5.17	-1,448.72	-75.77	394.17	352.27	41.90	9.407		
4,300.00	4,130.69	4,247.92	3,965.60	23.33	25.38	-5.16	-1,489.27	-77.99	405.06	362.10	42.95	9.430		
4,400.00	4,225.86	4,347.33	4,056.33	23.91	26.04	-5.14	-1,529.82	-80.21	415.94	371.94	44.01	9.452		
4,500.00	4,321.03	4,446.73	4,147.06	24.48	26.69	-5.13	-1,570.38	-82.43	426.83	381.77	45.06	9.473		
4,600.00	4,416.20	4,546.14	4,237.79	25.05	27.35	-5.12	-1,610.93	-84.65	437.71	391.60	46.11	9.492		
4,700.00	4,511.37	4,645.55	4,328.52	25.62	28.00	-5.11	-1,651.48	-86.87	448.60	401.43	47.17	9.511		
4,800.00	4,606.54	4,744.95	4,419.25	26.20	28.66	-5.10	-1,692.03	-89.09	459.48	411.26	48.22	9.529		
4,900.00	4,701.71	4,844.36	4,509.98	26.77	29.31	-5.09	-1,732.59	-91.31	470.37	421.09	49.28	9.545		
5,000.00	4,796.88	4,943.76	4,600.71	27.34	29.97	-5.08	-1,773.14	-93.53	481.25	430.92	50.33	9.561		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	5,043.17	4,691.44	27.92	30.63	-5.08	-1,813.69	-95.75	492.14	440.74	51.39	9.576		
5,200.00	4,987.22	5,142.57	4,782.17	28.49	31.28	-5.07	-1,854.25	-97.97	503.02	450.57	52.45	9.591		
5,300.00	5,082.39	5,241.98	4,872.91	29.07	31.94	-5.06	-1,894.80	-100.19	513.91	460.40	53.51	9.604		
5,400.00	5,177.56	5,341.39	4,963.64	29.64	32.60	-5.05	-1,935.35	-102.41	524.79	470.22	54.57	9.617		
5,500.00	5,272.72	5,440.79	5,054.37	30.21	33.26	-5.05	-1,975.91	-104.63	535.68	480.05	55.63	9.630		
5,600.00	5,367.89	5,540.20	5,145.10	30.79	33.91	-5.04	-2,016.46	-106.85	546.56	489.87	56.69	9.642		
5,700.00	5,463.06	5,639.60	5,235.83	31.36	34.57	-5.03	-2,057.01	-109.07	557.45	499.70	57.75	9.653		
5,800.00	5,558.23	5,739.01	5,326.56	31.94	35.23	-5.03	-2,097.56	-111.29	568.33	509.52	58.81	9.664		
5,900.00	5,653.40	5,838.41	5,417.29	32.51	35.89	-5.02	-2,138.12	-113.51	579.22	519.35	59.87	9.675		
6,000.00	5,748.57	5,937.82	5,508.02	33.09	36.55	-5.02	-2,178.67	-115.73	590.10	529.17	60.93	9.685		
6,100.00	5,843.74	6,037.23	5,598.75	33.67	37.21	-5.01	-2,219.22	-117.95	600.99	538.99	61.99	9.694		
6,200.00	5,938.91	6,136.63	5,689.48	34.24	37.86	-5.01	-2,259.78	-120.17	611.87	548.81	63.06	9.704		
6,300.00	6,034.08	6,236.04	5,780.21	34.82	38.52	-5.00	-2,300.33	-122.39	622.76	558.64	64.12	9.713		
6,400.00	6,129.25	6,335.44	5,870.94	35.39	39.18	-4.99	-2,340.88	-124.61	633.64	568.46	65.18	9.721		
6,500.00	6,224.42	6,434.85	5,961.67	35.97	39.84	-4.99	-2,381.43	-126.83	644.53	578.28	66.25	9.729		
6,600.00	6,319.59	6,534.26	6,052.40	36.54	40.50	-4.99	-2,421.99	-129.05	655.41	588.10	67.31	9.737		
6,700.00	6,414.76	6,633.66	6,143.13	37.12	41.16	-4.98	-2,462.54	-131.27	666.30	597.92	68.37	9.745		
6,800.00	6,509.91	6,733.06	6,233.86	37.70	41.82	-12.04	-2,503.09	-133.49	677.18	607.74	69.44	9.752		
6,900.00	6,603.99	6,831.64	6,323.84	38.26	42.47	-34.89	-2,543.31	-135.70	688.17	617.64	70.54	9.756		
7,000.00	6,694.76	6,927.14	6,411.00	38.78	43.11	-50.46	-2,582.27	-137.83	699.83	628.15	71.68	9.763		
7,100.00	6,779.96	7,017.21	6,493.21	39.24	43.70	-60.98	-2,619.01	-139.84	713.54	640.64	72.90	9.787		
7,200.00	6,857.50	7,100.37	6,568.43	39.65	44.26	-68.41	-2,652.63	-141.68	731.27	657.00	74.27	9.847		
7,300.00	6,925.48	7,202.39	6,661.79	40.02	44.93	-74.86	-2,694.41	-150.53	753.90	677.81	76.09	9.908		
7,400.00	6,982.21	7,327.84	6,772.06	40.33	45.68	-80.54	-2,743.95	-183.29	779.36	701.49	77.87	10.009		
7,500.00	7,026.31	7,482.63	6,896.58	40.63	46.46	-85.79	-2,800.18	-255.23	805.51	726.71	78.80	10.222		
7,600.00	7,056.68	7,679.69	7,025.92	40.91	47.23	-90.60	-2,859.09	-390.59	828.80	750.72	78.08	10.614		
7,700.00	7,072.58	7,926.19	7,124.82	41.25	47.90	-94.03	-2,905.09	-609.94	844.01	767.54	76.48	11.036		
7,800.00	7,074.86	8,135.70	7,144.80	41.69	48.36	-94.74	-2,915.74	-817.41	846.95	769.37	77.58	10.917		
7,900.00	7,074.54	8,235.70	7,144.26	42.34	48.65	-94.72	-2,916.32	-917.41	846.85	766.87	79.98	10.588		
8,000.00	7,074.21	8,335.70	7,143.72	43.27	49.06	-94.71	-2,916.91	-1,017.40	846.75	764.05	82.70	10.238		
8,100.00	7,073.89	8,435.70	7,143.18	44.47	49.63	-94.69	-2,917.50	-1,117.40	846.66	760.93	85.72	9.877		
8,200.00	7,073.57	8,535.70	7,142.64	45.91	50.43	-94.68	-2,918.09	-1,217.39	846.56	757.56	89.00	9.512		
8,300.00	7,073.24	8,635.70	7,142.10	47.53	51.49	-94.67	-2,918.68	-1,317.39	846.46	753.94	92.52	9.149		
8,400.00	7,072.92	8,735.70	7,141.56	49.31	52.80	-94.65	-2,919.26	-1,417.39	846.37	750.12	96.25	8.794		
8,500.00	7,072.59	8,835.70	7,141.01	51.20	54.33	-94.64	-2,919.85	-1,517.38	846.27	746.11	100.16	8.449		
8,600.00	7,072.27	8,935.70	7,140.47	53.19	56.03	-94.62	-2,920.44	-1,617.38	846.17	741.93	104.24	8.118		
8,700.00	7,071.94	9,035.70	7,139.93	55.27	57.88	-94.61	-2,921.03	-1,717.38	846.08	737.61	108.47	7.800		
8,800.00	7,071.62	9,135.70	7,139.39	57.43	59.85	-94.60	-2,921.62	-1,817.37	845.98	733.16	112.82	7.498		
8,900.00	7,071.29	9,235.70	7,138.85	59.64	61.90	-94.58	-2,922.20	-1,917.37	845.88	728.59	117.30	7.212		
9,000.00	7,070.97	9,335.70	7,138.31	61.92	64.04	-94.57	-2,922.79	-2,017.37	845.79	723.91	121.87	6.940		
9,100.00	7,070.64	9,435.70	7,137.77	64.24	66.24	-94.55	-2,923.38	-2,117.36	845.69	719.15	126.54	6.683		
9,200.00	7,070.32	9,535.69	7,137.23	66.61	68.50	-94.54	-2,923.97	-2,217.36	845.59	714.30	131.29	6.441		
9,300.00	7,069.99	9,635.69	7,136.69	69.01	70.80	-94.52	-2,924.55	-2,317.36	845.50	709.38	136.11	6.212		
9,400.00	7,069.67	9,735.69	7,136.14	71.45	73.16	-94.51	-2,925.14	-2,417.35	845.40	704.40	141.00	5.996		
9,500.00	7,069.34	9,835.69	7,135.60	73.92	75.55	-94.50	-2,925.73	-2,517.35	845.30	699.35	145.95	5.792		
9,600.00	7,069.02	9,935.69	7,135.06	76.42	77.97	-94.48	-2,926.32	-2,617.35	845.21	694.25	150.96	5.599		
9,700.00	7,068.69	10,035.69	7,134.52	78.95	80.43	-94.47	-2,926.91	-2,717.34	845.11	689.10	156.01	5.417		
9,800.00	7,068.37	10,135.69	7,133.98	81.49	82.91	-94.45	-2,927.49	-2,817.34	845.02	683.91	161.11	5.245		
9,900.00	7,068.04	10,235.69	7,133.44	84.06	85.42	-94.44	-2,928.08	-2,917.34	844.92	678.68	166.24	5.082		
10,000.00	7,067.72	10,335.69	7,132.90	86.65	87.95	-94.43	-2,928.67	-3,017.33	844.82	673.41	171.42	4.929		
10,100.00	7,067.39	10,435.69	7,132.36	89.25	90.50	-94.41	-2,929.26	-3,117.33	844.73	668.11	176.62	4.783		
10,200.00	7,067.07	10,535.69	7,131.82	91.87	93.07	-94.40	-2,929.85	-3,217.33	844.63	662.77	181.86	4.644		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,066.74	10,635.69	7,131.27	94.50	95.66	-94.38	-2,930.43	-3,317.32	844.54	657.41	187.12	4.513	
10,400.00	7,066.42	10,735.69	7,130.73	97.14	98.26	-94.37	-2,931.02	-3,417.32	844.44	652.03	192.41	4.389	
10,500.00	7,066.09	10,835.69	7,130.19	99.80	100.88	-94.35	-2,931.61	-3,517.32	844.34	646.62	197.72	4.270	
10,600.00	7,065.77	10,935.69	7,129.65	102.47	103.51	-94.34	-2,932.20	-3,617.31	844.25	641.19	203.06	4.158	
10,700.00	7,065.44	11,035.69	7,129.11	105.15	106.15	-94.33	-2,932.79	-3,717.31	844.15	635.74	208.41	4.050	
10,800.00	7,065.12	11,135.69	7,128.57	107.83	108.80	-94.31	-2,933.37	-3,817.31	844.06	630.27	213.79	3.948	
10,900.00	7,064.79	11,235.69	7,128.03	110.53	111.47	-94.30	-2,933.96	-3,917.30	843.96	624.78	219.18	3.851	
11,000.00	7,064.47	11,335.69	7,127.49	113.23	114.14	-94.28	-2,934.55	-4,017.30	843.87	619.28	224.58	3.757	
11,100.00	7,064.14	11,435.69	7,126.95	115.95	116.82	-94.27	-2,935.14	-4,117.29	843.77	613.76	230.01	3.668	
11,200.00	7,063.82	11,535.69	7,126.40	118.66	119.51	-94.25	-2,935.73	-4,217.29	843.68	608.23	235.44	3.583	
11,300.00	7,063.49	11,635.69	7,125.86	121.39	122.21	-94.24	-2,936.31	-4,317.29	843.58	602.69	240.89	3.502	
11,400.00	7,063.17	11,735.69	7,125.32	124.12	124.92	-94.23	-2,936.90	-4,417.28	843.48	597.13	246.35	3.424	
11,500.00	7,062.84	11,835.69	7,124.78	126.86	127.63	-94.21	-2,937.49	-4,517.28	843.39	591.57	251.82	3.349	
11,600.00	7,062.52	11,935.69	7,124.24	129.60	130.35	-94.20	-2,938.08	-4,617.28	843.29	585.99	257.30	3.277	
11,700.00	7,062.19	12,035.69	7,123.70	132.35	133.07	-94.18	-2,938.67	-4,717.27	843.20	580.40	262.80	3.209	
11,800.00	7,061.87	12,135.69	7,123.16	135.10	135.81	-94.17	-2,939.25	-4,817.27	843.10	574.81	268.30	3.142	
11,900.00	7,061.54	12,235.69	7,122.62	137.85	138.54	-94.15	-2,939.84	-4,917.27	843.01	569.20	273.81	3.079	
12,000.00	7,061.22	12,335.69	7,122.08	140.61	141.28	-94.14	-2,940.43	-5,017.26	842.91	563.59	279.33	3.018	
12,100.00	7,060.89	12,435.69	7,121.53	143.38	144.03	-94.13	-2,941.02	-5,117.26	842.82	557.96	284.85	2.959	
12,200.00	7,060.57	12,535.69	7,120.99	146.15	146.78	-94.11	-2,941.60	-5,217.26	842.72	552.34	290.39	2.902	
12,300.00	7,060.24	12,635.69	7,120.45	148.92	149.53	-94.10	-2,942.19	-5,317.25	842.63	546.70	295.93	2.847	
12,400.00	7,059.92	12,735.69	7,119.91	151.69	152.29	-94.08	-2,942.78	-5,417.25	842.53	541.06	301.48	2.795	
12,500.00	7,059.59	12,835.69	7,119.37	154.47	155.05	-94.07	-2,943.37	-5,517.25	842.44	535.41	307.03	2.744	
12,600.00	7,059.27	12,935.69	7,118.83	157.25	157.82	-94.05	-2,943.96	-5,617.24	842.35	529.76	312.59	2.695	
12,700.00	7,058.94	13,035.69	7,118.29	160.03	160.59	-94.04	-2,944.54	-5,717.24	842.25	524.10	318.16	2.647	
12,800.00	7,058.62	13,135.69	7,117.75	162.82	163.36	-94.03	-2,945.13	-5,817.24	842.16	518.43	323.73	2.601	
12,900.00	7,058.29	13,235.69	7,117.21	165.61	166.13	-94.01	-2,945.72	-5,917.23	842.06	512.76	329.30	2.557	
13,000.00	7,057.97	13,335.68	7,116.67	168.40	168.91	-94.00	-2,946.31	-6,017.23	841.97	507.09	334.88	2.514	
13,100.00	7,057.64	13,435.68	7,116.12	171.19	171.69	-93.98	-2,946.90	-6,117.23	841.87	501.41	340.47	2.473	
13,200.00	7,057.32	13,535.68	7,115.58	173.99	174.47	-93.97	-2,947.48	-6,217.22	841.78	495.72	346.06	2.432	
13,300.00	7,057.00	13,635.68	7,115.04	176.78	177.26	-93.95	-2,948.07	-6,317.22	841.68	490.03	351.65	2.394	
13,400.00	7,056.67	13,735.68	7,114.50	179.58	180.04	-93.94	-2,948.66	-6,417.22	841.59	484.34	357.25	2.356	
13,500.00	7,056.35	13,835.68	7,113.96	182.38	182.83	-93.93	-2,949.25	-6,517.21	841.50	478.65	362.85	2.319	
13,600.00	7,056.02	13,935.68	7,113.42	185.19	185.63	-93.91	-2,949.84	-6,617.21	841.40	472.95	368.45	2.284	
13,700.00	7,055.70	14,035.68	7,112.88	187.99	188.42	-93.90	-2,950.42	-6,717.20	841.31	467.25	374.06	2.249	
13,800.00	7,055.37	14,135.68	7,112.34	190.80	191.22	-93.88	-2,951.01	-6,817.20	841.21	461.54	379.67	2.216	
13,900.00	7,055.05	14,235.68	7,111.80	193.60	194.01	-93.87	-2,951.60	-6,917.20	841.12	455.83	385.29	2.183	
14,000.00	7,054.72	14,335.68	7,111.25	196.41	196.81	-93.85	-2,952.19	-7,017.19	841.03	450.12	390.91	2.151	
14,100.00	7,054.40	14,435.68	7,110.71	199.22	199.61	-93.84	-2,952.78	-7,117.19	840.93	444.40	396.53	2.121	
14,200.00	7,054.07	14,535.68	7,110.17	202.03	202.42	-93.83	-2,953.36	-7,217.19	840.84	438.69	402.15	2.091	
14,300.00	7,053.75	14,635.68	7,109.63	204.85	205.22	-93.81	-2,953.95	-7,317.18	840.74	432.97	407.78	2.062	
14,400.00	7,053.42	14,735.68	7,109.09	207.66	208.03	-93.80	-2,954.54	-7,417.18	840.65	427.24	413.41	2.033	
14,500.00	7,053.10	14,835.68	7,108.55	210.48	210.83	-93.78	-2,955.13	-7,517.18	840.56	421.52	419.04	2.006	
14,600.00	7,052.77	14,935.68	7,108.01	213.29	213.64	-93.77	-2,955.72	-7,617.17	840.46	415.79	424.67	1.979	
14,700.00	7,052.45	15,035.68	7,107.47	216.11	216.45	-93.75	-2,956.30	-7,717.17	840.37	410.06	430.31	1.953	
14,800.00	7,052.12	15,135.68	7,106.93	218.93	219.26	-93.74	-2,956.89	-7,817.17	840.28	404.33	435.95	1.927	
14,900.00	7,051.80	15,235.68	7,106.38	221.75	222.08	-93.73	-2,957.48	-7,917.16	840.18	398.59	441.59	1.903	
15,000.00	7,051.47	15,335.68	7,105.84	224.57	224.89	-93.71	-2,958.07	-8,017.16	840.09	392.86	447.23	1.878	
15,100.00	7,051.15	15,435.68	7,105.30	227.39	227.70	-93.70	-2,958.65	-8,117.16	840.00	387.12	452.88	1.855	
15,145.13	7,051.00	15,480.81	7,105.06	228.67	228.98	-93.69	-2,958.92	-8,162.28	839.95	384.53	455.42	1.844 SF	





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.47	339.89	2.78	339.90					
100.00	100.00	101.00	100.00	3.28	3.28	0.47	339.89	2.78	339.90	333.33	6.57	51.738		
200.00	200.00	201.00	200.00	3.34	3.34	0.47	339.89	2.78	339.90	333.23	6.67	50.922 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	176.10	339.89	2.78	341.64	334.75	6.89	49.612		
400.00	399.84	400.84	399.84	3.59	3.60	176.15	339.89	2.78	346.86	339.67	7.20	48.195		
500.00	499.45	500.45	499.45	3.79	3.81	176.23	339.89	2.78	355.56	347.96	7.60	46.787		
600.00	598.70	599.70	598.70	4.03	4.05	176.34	339.89	2.78	367.72	359.64	8.08	45.510		
700.00	697.47	698.47	697.47	4.31	4.28	176.40	341.18	2.47	384.78	376.18	8.60	44.741		
800.00	795.62	796.62	795.62	4.64	4.53	176.38	344.96	1.57	408.13	398.96	9.17	44.520		
900.00	893.06	894.06	893.06	5.00	4.80	176.29	351.05	0.11	437.59	427.83	9.76	44.816		
1,000.00	989.64	990.64	989.64	5.40	5.07	176.15	359.27	-1.86	472.98	462.60	10.38	45.572		
1,100.00	1,085.27	1,086.27	1,085.27	5.83	5.38	176.00	369.63	-4.34	512.73	501.68	11.06	46.370		
1,200.00	1,180.44	1,181.44	1,180.44	6.29	5.71	175.93	379.93	-6.81	553.90	542.17	11.73	47.211		
1,300.00	1,275.61	1,276.61	1,275.61	6.76	6.04	175.87	390.22	-9.27	595.07	582.63	12.44	47.851		
1,400.00	1,370.78	1,371.78	1,370.78	7.26	6.38	175.81	400.51	-11.74	636.23	623.07	13.16	48.344		
1,500.00	1,465.95	1,466.95	1,465.95	7.76	6.73	175.76	410.80	-14.20	677.40	663.50	13.90	48.721		
1,600.00	1,561.12	1,562.12	1,561.12	8.27	7.09	175.72	421.09	-16.67	718.57	703.91	14.66	49.008		
1,700.00	1,656.29	1,657.29	1,656.29	8.80	7.46	175.69	431.38	-19.14	759.74	744.30	15.43	49.225		
1,800.00	1,751.46	1,752.46	1,751.46	9.32	7.83	175.65	441.68	-21.60	800.91	784.69	16.22	49.386		
1,900.00	1,846.63	1,847.63	1,846.63	9.86	8.20	175.62	451.97	-24.07	842.07	825.06	17.01	49.504		
2,000.00	1,941.80	1,942.80	1,941.80	10.40	8.58	175.60	462.26	-26.53	883.24	865.43	17.81	49.588		
2,100.00	2,036.96	2,037.96	2,036.96	10.94	8.96	175.57	472.55	-29.00	924.41	905.79	18.62	49.646		
2,200.00	2,132.13	2,133.13	2,132.13	11.49	9.34	175.55	482.84	-31.46	965.58	946.15	19.44	49.682		
2,300.00	2,227.30	2,228.30	2,227.30	12.04	9.72	175.53	493.13	-33.93	1,006.75	986.49	20.26	49.701		
2,400.00	2,322.47	2,323.47	2,322.47	12.59	10.11	175.51	503.43	-36.39	1,047.92	1,026.84	21.08	49.708		
2,500.00	2,417.64	2,418.64	2,417.64	13.15	10.50	175.49	513.72	-38.86	1,089.09	1,067.18	21.91	49.703		
2,600.00	2,512.81	2,513.81	2,512.81	13.70	10.92	175.47	524.01	-41.32	1,130.26	1,107.49	22.77	49.633		
2,700.00	2,607.98	2,608.98	2,607.98	14.26	11.28	175.46	534.30	-43.79	1,171.43	1,147.84	23.58	49.672		
2,800.00	2,703.15	2,704.15	2,703.15	14.82	11.68	175.44	544.59	-46.25	1,212.60	1,188.17	24.42	49.648		
2,900.00	2,798.32	2,799.32	2,798.32	15.38	12.07	175.43	554.88	-48.72	1,253.77	1,228.50	25.27	49.619		
3,000.00	2,893.49	2,894.49	2,893.49	15.95	12.47	175.42	565.18	-51.18	1,294.94	1,268.82	26.11	49.588		
3,100.00	2,988.66	2,989.66	2,988.66	16.51	12.87	175.41	575.47	-53.65	1,336.11	1,309.14	26.96	49.555		
3,200.00	3,083.83	3,084.83	3,083.83	17.07	13.27	175.40	585.76	-56.11	1,377.28	1,349.46	27.81	49.519		
3,300.00	3,179.00	3,180.00	3,179.00	17.64	13.66	175.38	596.05	-58.58	1,418.45	1,389.78	28.67	49.483		
3,400.00	3,274.17	3,275.17	3,274.17	18.21	14.06	175.38	606.34	-61.04	1,459.62	1,430.10	29.52	49.446		
3,500.00	3,369.34	3,370.34	3,369.34	18.77	14.47	175.37	616.63	-63.51	1,500.79	1,470.41	30.38	49.408		
3,600.00	3,464.51	3,465.51	3,464.51	19.34	14.87	175.36	626.93	-65.97	1,541.96	1,510.72	31.23	49.370		
3,700.00	3,559.68	3,560.68	3,559.68	19.91	15.27	175.35	637.22	-68.44	1,583.13	1,551.03	32.10	49.323		
3,800.00	3,654.84	3,655.84	3,654.84	20.48	15.76	175.34	647.51	-70.90	1,624.30	1,591.26	33.04	49.168		
3,900.00	3,750.01	3,751.01	3,750.01	21.05	16.07	175.33	657.80	-73.37	1,665.47	1,631.65	33.81	49.255		
4,000.00	3,845.18	3,846.18	3,845.18	21.62	16.48	175.33	668.09	-75.83	1,706.64	1,671.96	34.68	49.218		
4,100.00	3,940.35	3,941.35	3,940.35	22.19	16.88	175.32	678.38	-78.30	1,747.81	1,712.27	35.54	49.180		
4,200.00	4,035.52	4,036.52	4,035.52	22.76	17.29	175.31	688.68	-80.77	1,788.98	1,752.57	36.40	49.144		
4,300.00	4,130.69	4,131.69	4,130.69	23.33	17.69	175.31	698.97	-83.23	1,830.15	1,792.88	37.27	49.107		
4,400.00	4,225.86	4,226.86	4,225.86	23.91	18.10	175.30	709.26	-85.70	1,871.32	1,833.18	38.13	49.072		
4,500.00	4,321.03	4,322.03	4,321.03	24.48	18.50	175.30	719.55	-88.16	1,912.49	1,873.49	39.00	49.037		
4,600.00	4,416.20	4,417.20	4,416.20	25.05	18.91	175.29	729.84	-90.63	1,953.66	1,913.79	39.87	49.002		
4,700.00	4,511.37	4,512.37	4,511.37	25.62	19.31	175.28	740.13	-93.09	1,994.83	1,954.09	40.74	48.969		
4,800.00	4,606.54	4,607.54	4,606.54	26.20	19.72	175.28	750.43	-95.56	2,036.00	1,994.39	41.61	48.935		
4,900.00	4,701.71	4,702.71	4,701.71	26.77	20.19	175.27	760.72	-98.02	2,077.17	2,034.63	42.54	48.831		
5,000.00	4,796.88	4,797.88	4,796.88	27.34	20.53	175.27	771.01	-100.49	2,118.34	2,074.99	43.35	48.871		
5,100.00	4,892.05	4,893.05	4,892.05	27.92	20.94	175.27	781.30	-102.95	2,159.51	2,115.29	44.22	48.840		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,766.33	4,738.64	28.49	21.35	175.26	791.59	-105.42	2,200.68	2,155.59	45.09	48.809		
5,300.00	5,082.39	4,857.46	4,829.16	29.07	21.75	175.26	801.88	-107.88	2,241.85	2,195.89	45.96	48.779		
5,400.00	5,177.56	4,948.59	4,919.67	29.64	22.16	175.25	812.18	-110.35	2,283.02	2,236.19	46.83	48.749		
5,500.00	5,272.72	5,039.72	5,010.19	30.21	22.57	175.25	822.47	-112.81	2,324.19	2,276.49	47.70	48.720		
5,600.00	5,367.89	5,130.85	5,100.70	30.79	22.98	175.25	832.76	-115.28	2,365.36	2,316.78	48.58	48.692		
5,700.00	5,463.06	5,221.98	5,191.22	31.36	23.39	175.24	843.05	-117.74	2,406.53	2,357.08	49.45	48.664		
5,800.00	5,558.23	5,313.12	5,281.73	31.94	23.79	175.24	853.34	-120.21	2,447.70	2,397.38	50.33	48.637		
5,900.00	5,653.40	5,404.25	5,372.25	32.51	24.20	175.24	863.63	-122.67	2,488.87	2,437.67	51.20	48.610		
6,000.00	5,748.57	5,504.62	5,462.76	33.09	24.65	175.23	873.93	-125.14	2,530.04	2,477.93	52.12	48.546		
6,100.00	5,843.74	5,586.51	5,553.28	33.67	25.02	175.23	884.22	-127.60	2,571.21	2,518.26	52.95	48.559		
6,200.00	5,938.91	5,677.64	5,643.79	34.24	25.43	175.23	894.51	-130.07	2,612.38	2,558.56	53.83	48.534		
6,300.00	6,034.08	5,768.78	5,734.31	34.82	25.84	175.22	904.80	-132.53	2,653.55	2,598.85	54.70	48.509		
6,400.00	6,129.25	5,859.91	5,824.82	35.39	26.25	175.22	915.09	-135.00	2,694.72	2,639.14	55.58	48.485		
6,500.00	6,224.42	5,951.04	5,915.34	35.97	26.66	175.22	925.38	-137.47	2,735.89	2,679.44	56.46	48.461		
6,600.00	6,319.59	6,042.17	6,005.85	36.54	27.07	175.22	935.68	-139.93	2,777.06	2,719.73	57.33	48.438		
6,700.00	6,414.76	6,133.30	6,096.37	37.12	27.48	175.21	945.97	-142.40	2,818.23	2,760.02	58.21	48.415		
6,800.00	6,509.91	6,224.43	6,186.88	37.70	27.89	166.86	956.26	-144.86	2,859.40	2,800.31	59.09	48.392		
6,900.00	6,603.99	6,314.84	6,276.68	38.26	28.29	140.25	966.47	-147.31	2,900.22	2,840.26	59.96	48.371		
7,000.00	6,694.76	6,405.54	6,366.73	38.78	28.70	122.45	976.70	-150.61	2,939.92	2,879.10	60.82	48.339		
7,100.00	6,779.96	6,504.75	6,464.01	39.24	29.15	110.80	987.67	-166.07	2,977.58	2,915.84	61.75	48.223		
7,200.00	6,857.50	6,611.21	6,564.38	39.65	29.61	102.83	998.87	-169.34	3,012.28	2,949.54	62.74	48.014		
7,300.00	6,925.48	6,726.67	6,665.37	40.02	30.12	97.20	1,009.99	-253.86	3,043.11	2,979.28	63.83	47.672		
7,400.00	6,982.21	6,852.61	6,762.41	40.33	30.72	93.22	1,020.48	-333.12	3,069.22	3,004.10	65.12	47.133		
7,500.00	7,026.31	6,989.67	6,848.19	40.63	31.54	90.49	1,029.51	-439.30	3,089.77	3,023.04	66.73	46.305		
7,600.00	7,056.68	7,136.81	6,912.91	40.91	32.72	88.76	1,035.95	-570.92	3,104.05	3,035.23	68.81	45.107		
7,700.00	7,072.58	7,290.71	6,946.69	41.25	34.35	87.86	1,038.74	-720.66	3,111.48	3,040.02	71.46	43.544		
7,800.00	7,074.86	7,414.73	6,949.83	41.69	35.91	87.70	1,038.23	-844.56	3,112.52	3,038.40	74.12	41.994		
7,900.00	7,074.54	7,514.73	6,949.53	42.34	37.35	87.70	1,037.49	-944.56	3,112.45	3,035.63	76.81	40.520		
8,000.00	7,074.21	7,614.73	6,949.23	43.27	38.95	87.70	1,036.75	-1,044.56	3,112.37	3,032.55	79.82	38.990		
8,100.00	7,073.89	7,714.73	6,948.94	44.47	40.68	87.70	1,036.02	-1,144.55	3,112.30	3,029.18	83.12	37.443		
8,200.00	7,073.57	7,814.73	6,948.64	45.91	42.54	87.70	1,035.28	-1,244.55	3,112.23	3,025.56	86.67	35.910		
8,300.00	7,073.24	7,914.73	6,948.34	47.53	44.50	87.70	1,034.54	-1,344.55	3,112.16	3,021.72	90.44	34.413		
8,400.00	7,072.92	8,014.73	6,948.04	49.31	46.55	87.70	1,033.80	-1,444.55	3,112.09	3,017.69	94.40	32.967		
8,500.00	7,072.59	8,114.73	6,947.74	51.20	48.69	87.70	1,033.06	-1,544.54	3,112.02	3,013.48	98.54	31.582		
8,600.00	7,072.27	8,214.73	6,947.44	53.19	50.89	87.70	1,032.33	-1,644.54	3,111.95	3,009.12	102.82	30.265		
8,700.00	7,071.94	8,314.73	6,947.15	55.27	53.16	87.70	1,031.59	-1,744.54	3,111.88	3,004.63	107.24	29.017		
8,800.00	7,071.62	8,414.73	6,946.85	57.43	55.49	87.70	1,030.85	-1,844.53	3,111.80	3,000.02	111.78	27.839		
8,900.00	7,071.29	8,514.73	6,946.55	59.64	57.86	87.70	1,030.11	-1,944.53	3,111.73	2,995.31	116.42	26.729		
9,000.00	7,070.97	8,614.73	6,946.25	61.92	60.27	87.70	1,029.38	-2,044.53	3,111.66	2,990.51	121.15	25.684		
9,100.00	7,070.64	8,714.73	6,945.95	64.24	62.72	87.70	1,028.64	-2,144.52	3,111.59	2,985.62	125.97	24.702		
9,200.00	7,070.32	8,814.73	6,945.65	66.61	65.21	87.70	1,027.90	-2,244.52	3,111.52	2,980.67	130.85	23.779		
9,300.00	7,069.99	8,914.73	6,945.36	69.01	67.72	87.70	1,027.16	-2,344.52	3,111.45	2,975.65	135.80	22.912		
9,400.00	7,069.67	9,014.73	6,945.06	71.45	70.26	87.70	1,026.43	-2,444.51	3,111.38	2,970.57	140.81	22.096		
9,500.00	7,069.34	9,114.73	6,944.76	73.92	72.82	87.71	1,025.69	-2,544.51	3,111.30	2,965.44	145.87	21.329		
9,600.00	7,069.02	9,214.73	6,944.46	76.42	75.41	87.71	1,024.95	-2,644.51	3,111.23	2,960.26	150.98	20.608		
9,700.00	7,068.69	9,314.73	6,944.16	78.95	78.01	87.71	1,024.21	-2,744.50	3,111.16	2,955.04	156.12	19.927		
9,800.00	7,068.37	9,414.73	6,943.86	81.49	80.63	87.71	1,023.47	-2,844.50	3,111.09	2,949.78	161.31	19.286		
9,900.00	7,068.04	9,514.73	6,943.56	84.06	83.27	87.71	1,022.74	-2,944.50	3,111.02	2,944.49	166.53	18.681		
10,000.00	7,067.72	9,614.73	6,943.27	86.65	85.92	87.71	1,022.00	-3,044.49	3,110.95	2,939.16	171.78	18.110		
10,100.00	7,067.39	9,714.73	6,942.97	89.25	88.58	87.71	1,021.26	-3,144.49	3,110.88	2,933.81	177.07	17.569		
10,200.00	7,067.07	9,814.73	6,942.67	91.87	91.26	87.71	1,020.52	-3,244.49	3,110.81	2,928.43	182.37	17.057		
10,300.00	7,066.74	9,914.73	6,942.37	94.50	93.95	87.71	1,019.79	-3,344.48	3,110.73	2,923.03	187.70	16.573		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,014.73	6,942.07	97.14	96.64	87.71	1,019.05	-3,444.48	3,110.66	2,917.61	193.06	16.113		
10,500.00	7,066.09	10,114.73	6,941.77	99.80	99.35	87.71	1,018.31	-3,544.48	3,110.59	2,912.16	198.43	15.676		
10,600.00	7,065.77	10,214.73	6,941.48	102.47	102.06	87.71	1,017.57	-3,644.48	3,110.52	2,906.70	203.82	15.261		
10,700.00	7,065.44	10,314.73	6,941.18	105.15	104.78	87.71	1,016.83	-3,744.47	3,110.45	2,901.22	209.23	14.866		
10,800.00	7,065.12	10,414.73	6,940.88	107.83	107.51	87.71	1,016.10	-3,844.47	3,110.38	2,895.72	214.65	14.490		
10,900.00	7,064.79	10,514.73	6,940.58	110.53	110.25	87.71	1,015.36	-3,944.47	3,110.31	2,890.21	220.09	14.132		
11,000.00	7,064.47	10,614.73	6,940.28	113.23	112.99	87.71	1,014.62	-4,044.46	3,110.24	2,884.69	225.55	13.790		
11,100.00	7,064.14	10,714.73	6,939.98	115.95	115.73	87.71	1,013.88	-4,144.46	3,110.16	2,879.15	231.01	13.463		
11,200.00	7,063.82	10,814.73	6,939.69	118.66	118.49	87.71	1,013.15	-4,244.46	3,110.09	2,873.60	236.49	13.151		
11,300.00	7,063.49	10,914.73	6,939.39	121.39	121.24	87.71	1,012.41	-4,344.45	3,110.02	2,868.05	241.98	12.853		
11,400.00	7,063.17	11,014.73	6,939.09	124.12	124.01	87.71	1,011.67	-4,444.45	3,109.95	2,862.48	247.47	12.567		
11,500.00	7,062.84	11,114.73	6,938.79	126.86	126.77	87.71	1,010.93	-4,544.45	3,109.88	2,856.90	252.98	12.293		
11,600.00	7,062.52	11,214.73	6,938.49	129.60	129.54	87.71	1,010.19	-4,644.44	3,109.81	2,851.31	258.50	12.030		
11,700.00	7,062.19	11,314.73	6,938.19	132.35	132.31	87.71	1,009.46	-4,744.44	3,109.74	2,845.71	264.02	11.778		
11,800.00	7,061.87	11,414.73	6,937.90	135.10	135.09	87.72	1,008.72	-4,844.44	3,109.67	2,840.11	269.56	11.536		
11,900.00	7,061.54	11,514.73	6,937.60	137.85	137.87	87.72	1,007.98	-4,944.43	3,109.59	2,834.50	275.10	11.304		
12,000.00	7,061.22	11,614.73	6,937.30	140.61	140.66	87.72	1,007.24	-5,044.43	3,109.52	2,828.88	280.64	11.080		
12,100.00	7,060.89	11,714.73	6,937.00	143.38	143.44	87.72	1,006.51	-5,144.43	3,109.45	2,823.25	286.20	10.865		
12,200.00	7,060.57	11,814.73	6,936.70	146.15	146.23	87.72	1,005.77	-5,244.42	3,109.38	2,817.62	291.76	10.657		
12,300.00	7,060.24	11,914.73	6,936.40	148.92	149.02	87.72	1,005.03	-5,344.42	3,109.31	2,811.99	297.32	10.458		
12,400.00	7,059.92	12,014.73	6,936.11	151.69	151.82	87.72	1,004.29	-5,444.42	3,109.24	2,806.34	302.89	10.265		
12,500.00	7,059.59	12,114.73	6,935.81	154.47	154.62	87.72	1,003.55	-5,544.41	3,109.17	2,800.69	308.47	10.079		
12,600.00	7,059.27	12,214.73	6,935.51	157.25	157.41	87.72	1,002.82	-5,644.41	3,109.09	2,795.04	314.05	9.900		
12,700.00	7,058.94	12,314.73	6,935.21	160.03	160.22	87.72	1,002.08	-5,744.41	3,109.02	2,789.38	319.64	9.727		
12,800.00	7,058.62	12,414.73	6,934.91	162.82	163.02	87.72	1,001.34	-5,844.40	3,108.95	2,783.72	325.23	9.559		
12,900.00	7,058.29	12,514.73	6,934.61	165.61	165.82	87.72	1,000.60	-5,944.40	3,108.88	2,778.06	330.82	9.397		
13,000.00	7,057.97	12,614.73	6,934.32	168.40	168.63	87.72	999.87	-6,044.40	3,108.81	2,772.39	336.42	9.241		
13,100.00	7,057.64	12,714.73	6,934.02	171.19	171.44	87.72	999.13	-6,144.40	3,108.74	2,766.71	342.03	9.089		
13,200.00	7,057.32	12,814.73	6,933.72	173.99	174.25	87.72	998.39	-6,244.39	3,108.67	2,761.04	347.63	8.942		
13,300.00	7,057.00	12,914.73	6,933.42	176.78	177.06	87.72	997.65	-6,344.39	3,108.60	2,755.35	353.24	8.800		
13,400.00	7,056.67	13,014.73	6,933.12	179.58	179.87	87.72	996.91	-6,444.39	3,108.52	2,749.67	358.85	8.662		
13,500.00	7,056.35	13,114.73	6,932.82	182.38	182.69	87.72	996.18	-6,544.38	3,108.45	2,743.98	364.47	8.529		
13,600.00	7,056.02	13,214.73	6,932.53	185.19	185.50	87.72	995.44	-6,644.38	3,108.38	2,738.29	370.09	8.399		
13,700.00	7,055.70	13,314.73	6,932.23	187.99	188.32	87.72	994.70	-6,744.38	3,108.31	2,732.60	375.71	8.273		
13,800.00	7,055.37	13,414.73	6,931.93	190.80	191.14	87.72	993.96	-6,844.37	3,108.24	2,726.90	381.34	8.151		
13,900.00	7,055.05	13,514.73	6,931.63	193.60	193.96	87.72	993.23	-6,944.37	3,108.17	2,721.20	386.96	8.032		
14,000.00	7,054.72	13,614.73	6,931.33	196.41	196.78	87.72	992.49	-7,044.37	3,108.10	2,715.50	392.59	7.917		
14,100.00	7,054.40	13,714.73	6,931.03	199.22	199.60	87.73	991.75	-7,144.36	3,108.03	2,709.80	398.23	7.805		
14,200.00	7,054.07	13,814.73	6,930.73	202.03	202.42	87.73	991.01	-7,244.36	3,107.95	2,704.09	403.86	7.696		
14,300.00	7,053.75	13,914.73	6,930.44	204.85	205.25	87.73	990.27	-7,344.36	3,107.88	2,698.39	409.50	7.590		
14,400.00	7,053.42	14,014.73	6,930.14	207.66	208.07	87.73	989.54	-7,444.35	3,107.81	2,692.68	415.14	7.486		
14,500.00	7,053.10	14,114.73	6,929.84	210.48	210.90	87.73	988.80	-7,544.35	3,107.74	2,686.96	420.78	7.386		
14,600.00	7,052.77	14,214.73	6,929.54	213.29	213.72	87.73	988.06	-7,644.35	3,107.67	2,681.25	426.42	7.288		
14,700.00	7,052.45	14,314.73	6,929.24	216.11	216.55	87.73	987.32	-7,744.34	3,107.60	2,675.53	432.06	7.192		
14,800.00	7,052.12	14,414.73	6,928.94	218.93	219.38	87.73	986.59	-7,844.34	3,107.53	2,669.82	437.71	7.100		
14,900.00	7,051.80	14,514.73	6,928.65	221.75	222.21	87.73	985.85	-7,944.34	3,107.46	2,664.10	443.36	7.009		
15,000.00	7,051.47	14,614.73	6,928.35	224.57	225.04	87.73	985.11	-8,044.33	3,107.38	2,658.38	449.01	6.921		
15,100.00	7,051.15	14,714.73	6,928.05	227.39	227.87	87.73	984.37	-8,144.33	3,107.31	2,652.65	454.66	6.834		
15,119.58	7,051.08	14,734.31	6,927.99	227.95	228.42	87.73	984.23	-8,163.91	3,107.30	2,651.53	455.77	6.818		
15,145.13	7,051.00	14,732.12	6,928.00	228.67	228.36	87.73	984.24	-8,161.72	3,107.40	2,651.03	456.37	6.809 SF		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.44	359.93	2.78	359.94					
100.00	100.00	101.00	100.00	3.28	3.28	0.44	359.93	2.78	359.94	353.37	6.57	54.789		
200.00	200.00	201.00	200.00	3.34	3.34	0.44	359.93	2.78	359.94	353.27	6.67	53.925 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	176.07	359.93	2.78	361.69	354.80	6.89	52.523		
400.00	399.84	400.84	399.84	3.59	3.60	176.12	359.93	2.78	366.91	359.71	7.20	50.980		
500.00	499.45	500.45	499.45	3.79	3.81	176.20	359.93	2.78	375.60	368.00	7.60	49.425		
600.00	598.70	599.70	598.70	4.03	4.05	176.30	359.93	2.78	387.76	379.68	8.08	47.990		
700.00	697.47	698.47	697.47	4.31	4.28	176.37	361.22	2.57	404.84	396.24	8.60	47.082		
800.00	795.62	796.62	795.62	4.64	4.53	176.39	365.00	1.97	428.22	419.05	9.16	46.730		
900.00	893.06	894.06	893.06	5.00	4.79	176.37	371.08	0.99	457.74	447.98	9.76	46.908		
1,000.00	989.64	990.64	989.64	5.40	5.06	176.31	379.22	-0.33	493.21	482.84	10.37	47.567		
1,100.00	1,085.27	1,086.27	1,085.27	5.83	5.32	176.22	389.16	-1.93	534.39	523.40	10.99	48.615		
1,200.00	1,180.44	1,181.44	1,180.44	6.29	5.67	176.16	401.35	-3.89	579.23	567.56	11.67	49.642		
1,300.00	1,275.61	1,276.61	1,275.61	6.76	5.93	176.09	415.58	-6.18	624.66	612.37	12.28	50.855		
1,400.00	1,370.78	1,371.78	1,370.78	7.26	6.26	176.03	429.80	-8.47	670.08	657.09	12.99	51.597		
1,500.00	1,465.95	1,466.95	1,465.95	7.76	6.61	175.98	444.03	-10.76	715.50	701.79	13.71	52.195		
1,600.00	1,561.12	1,562.12	1,561.12	8.27	6.96	175.93	458.26	-13.06	760.93	746.48	14.45	52.673		
1,700.00	1,656.29	1,657.29	1,656.29	8.80	7.32	175.89	472.49	-15.35	806.35	791.15	15.20	53.054		
1,800.00	1,751.46	1,752.46	1,751.46	9.32	7.69	175.86	486.72	-17.64	851.77	835.81	15.96	53.359		
1,900.00	1,846.63	1,847.63	1,846.63	9.86	8.06	175.82	500.95	-19.93	897.20	880.46	16.74	53.602		
2,000.00	1,941.80	1,942.80	1,941.80	10.40	8.44	175.80	515.18	-22.22	942.62	925.10	17.52	53.795		
2,100.00	2,036.96	2,037.96	2,036.96	10.94	8.87	175.77	529.41	-24.52	988.05	969.68	18.37	53.782		
2,200.00	2,132.13	2,133.13	2,132.13	11.49	9.20	175.74	543.63	-26.81	1,033.47	1,014.36	19.11	54.068		
2,300.00	2,227.30	2,228.30	2,227.30	12.04	9.58	175.72	557.86	-29.10	1,078.90	1,058.98	19.92	54.162		
2,400.00	2,322.47	2,323.47	2,322.47	12.59	9.97	175.70	572.09	-31.39	1,124.32	1,103.59	20.73	54.235		
2,500.00	2,417.64	2,418.64	2,417.64	13.15	10.36	175.68	586.32	-33.68	1,169.75	1,148.20	21.55	54.290		
2,600.00	2,512.81	2,513.81	2,512.81	13.70	10.76	175.67	600.55	-35.97	1,215.18	1,192.81	22.37	54.331		
2,700.00	2,607.98	2,608.98	2,607.98	14.26	11.15	175.65	614.78	-38.27	1,260.60	1,237.41	23.19	54.359		
2,800.00	2,703.15	2,704.15	2,703.15	14.82	11.55	175.63	629.01	-40.56	1,306.03	1,282.01	24.02	54.378		
2,900.00	2,798.32	2,799.32	2,798.32	15.38	11.94	175.62	643.23	-42.85	1,351.45	1,326.61	24.85	54.389		
3,000.00	2,893.49	2,894.49	2,893.49	15.95	12.39	175.61	657.46	-45.14	1,396.88	1,371.15	25.72	54.302		
3,100.00	2,988.66	2,989.66	2,988.66	16.51	12.74	175.60	671.69	-47.43	1,442.31	1,415.79	26.52	54.392		
3,200.00	3,083.83	3,084.83	3,083.83	17.07	13.14	175.58	685.92	-49.73	1,487.73	1,460.38	27.35	54.387		
3,300.00	3,179.00	3,180.00	3,179.00	17.64	13.55	175.57	700.15	-52.02	1,533.16	1,504.96	28.19	54.377		
3,400.00	3,274.17	3,275.17	3,274.17	18.21	13.95	175.56	714.38	-54.31	1,578.58	1,549.55	29.04	54.365		
3,500.00	3,369.34	3,370.34	3,369.34	18.77	14.35	175.55	728.61	-56.60	1,624.01	1,594.13	29.88	54.350		
3,600.00	3,464.51	3,465.51	3,464.51	19.34	14.76	175.54	742.84	-58.89	1,669.44	1,638.71	30.73	54.332		
3,700.00	3,559.68	3,560.68	3,559.68	19.91	15.16	175.54	757.06	-61.18	1,714.86	1,683.29	31.57	54.314		
3,800.00	3,654.84	3,655.84	3,654.84	20.48	15.57	175.53	771.29	-63.48	1,760.29	1,727.87	32.42	54.294		
3,900.00	3,750.01	3,751.01	3,750.01	21.05	16.00	175.52	785.52	-65.77	1,805.71	1,772.41	33.30	54.226		
4,000.00	3,845.18	3,846.18	3,845.18	21.62	16.38	175.51	799.75	-68.06	1,851.14	1,817.02	34.12	54.250		
4,100.00	3,940.35	3,941.35	3,940.35	22.19	16.79	175.50	813.98	-70.35	1,896.57	1,861.59	34.97	54.228		
4,200.00	4,035.52	4,036.52	4,035.52	22.76	17.19	175.50	828.21	-72.64	1,941.99	1,906.17	35.83	54.204		
4,300.00	4,130.69	4,131.69	4,130.69	23.33	17.60	175.49	842.44	-74.94	1,987.42	1,950.74	36.68	54.181		
4,400.00	4,225.86	4,226.86	4,225.86	23.91	18.01	175.49	856.66	-77.23	2,032.85	1,995.31	37.54	54.157		
4,500.00	4,321.03	4,322.03	4,321.03	24.48	18.42	175.48	870.89	-79.52	2,078.27	2,039.88	38.39	54.133		
4,600.00	4,416.20	4,417.20	4,416.20	25.05	18.83	175.47	885.12	-81.81	2,123.70	2,084.45	39.25	54.109		
4,700.00	4,511.37	4,512.37	4,511.37	25.62	19.24	175.47	899.35	-84.10	2,169.13	2,129.02	40.11	54.085		
4,800.00	4,606.54	4,607.54	4,606.54	26.20	19.65	175.46	913.58	-86.39	2,214.55	2,173.59	40.96	54.061		
4,900.00	4,701.71	4,702.71	4,701.71	26.77	20.06	175.46	927.81	-88.69	2,259.98	2,218.16	41.82	54.037		
5,000.00	4,796.88	4,797.88	4,796.88	27.34	20.47	175.45	942.04	-90.98	2,305.41	2,262.72	42.68	54.013		
5,100.00	4,892.05	4,893.05	4,892.05	27.92	20.88	175.45	956.27	-93.27	2,350.83	2,307.29	43.54	53.989		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,654.99	4,604.66	28.49	21.29	175.45	970.49	-95.56	2,396.26	2,351.85	44.40	53.965		
5,300.00	5,082.39	4,744.08	4,692.57	29.07	21.70	175.44	984.72	-97.85	2,441.68	2,396.42	45.26	53.942		
5,400.00	5,177.56	4,833.16	4,780.49	29.64	22.12	175.44	998.95	-100.14	2,487.11	2,440.98	46.13	53.919		
5,500.00	5,272.72	4,922.25	4,868.40	30.21	22.53	175.43	1,013.18	-102.44	2,532.54	2,485.55	46.99	53.896		
5,600.00	5,367.89	5,011.34	4,956.31	30.79	22.94	175.43	1,027.41	-104.73	2,577.96	2,530.11	47.85	53.874		
5,700.00	5,463.06	5,100.42	5,044.23	31.36	23.35	175.43	1,041.64	-107.02	2,623.39	2,574.68	48.72	53.851		
5,800.00	5,558.23	5,189.51	5,132.14	31.94	23.76	175.42	1,055.87	-109.31	2,668.82	2,619.24	49.58	53.829		
5,900.00	5,653.40	5,278.60	5,220.05	32.51	24.18	175.42	1,070.10	-111.60	2,714.24	2,663.80	50.44	53.807		
6,000.00	5,748.57	5,367.68	5,307.97	33.09	24.59	175.42	1,084.32	-113.90	2,759.67	2,708.36	51.31	53.786		
6,100.00	5,843.74	5,456.77	5,395.88	33.67	25.00	175.41	1,098.55	-116.19	2,805.10	2,752.92	52.17	53.764		
6,200.00	5,938.91	5,545.85	5,483.79	34.24	25.41	175.41	1,112.78	-118.48	2,850.52	2,797.48	53.04	53.743		
6,300.00	6,034.08	5,634.94	5,571.70	34.82	25.83	175.41	1,127.01	-120.77	2,895.95	2,842.04	53.91	53.722		
6,400.00	6,129.25	5,724.03	5,659.62	35.39	26.24	175.40	1,141.24	-123.06	2,941.38	2,886.60	54.77	53.702		
6,500.00	6,224.42	5,813.11	5,747.53	35.97	26.65	175.40	1,155.47	-125.35	2,986.80	2,931.16	55.64	53.682		
6,600.00	6,319.59	5,902.20	5,835.44	36.54	27.07	175.40	1,169.70	-127.65	3,032.23	2,975.72	56.51	53.662		
6,700.00	6,414.76	6,008.71	5,923.36	37.12	27.56	175.39	1,183.92	-129.94	3,077.66	3,020.20	57.45	53.567		
6,800.00	6,509.91	6,080.37	6,011.26	37.70	27.89	166.90	1,198.15	-132.23	3,123.08	3,064.84	58.24	53.622		
6,900.00	6,603.99	6,168.74	6,098.47	38.26	28.30	139.75	1,212.27	-134.50	3,168.15	3,109.05	59.10	53.605		
7,000.00	6,694.76	6,254.37	6,182.97	38.78	28.70	121.43	1,225.94	-136.71	3,212.02	3,152.09	59.92	53.602		
7,100.00	6,779.96	6,335.16	6,262.70	39.24	29.08	109.34	1,238.85	-138.78	3,253.95	3,193.26	60.69	53.617		
7,200.00	6,857.50	6,409.11	6,335.67	39.65	29.42	100.98	1,250.66	-140.69	3,293.45	3,232.05	61.40	53.641		
7,300.00	6,925.48	6,474.41	6,400.11	40.02	29.72	94.93	1,261.09	-142.37	3,330.14	3,268.08	62.07	53.653		
7,400.00	6,982.21	6,529.44	6,454.42	40.33	29.98	90.38	1,269.88	-143.78	3,363.79	3,301.06	62.73	53.620		
7,500.00	7,026.31	6,572.85	6,497.26	40.63	30.18	86.87	1,276.81	-144.90	3,394.20	3,330.76	63.43	53.509		
7,600.00	7,056.68	6,645.55	6,568.93	40.91	30.52	84.83	1,288.36	-148.37	3,421.14	3,356.54	64.60	52.962		
7,700.00	7,072.58	7,643.40	7,139.77	41.25	37.25	91.12	1,357.76	-841.06	3,430.67	3,355.90	74.77	45.883		
7,800.00	7,074.86	7,743.30	7,139.34	41.69	38.62	91.08	1,354.30	-940.90	3,428.66	3,351.42	77.24	44.388		
7,900.00	7,074.54	7,843.26	7,138.91	42.34	40.14	91.08	1,350.84	-1,040.80	3,425.87	3,345.82	80.05	42.799		
8,000.00	7,074.21	7,943.22	7,138.47	43.27	41.81	91.08	1,347.38	-1,140.70	3,423.07	3,339.93	83.15	41.170		
8,100.00	7,073.89	8,043.18	7,138.04	44.47	43.60	91.08	1,343.92	-1,240.60	3,420.28	3,333.77	86.51	39.536		
8,200.00	7,073.57	8,143.14	7,137.61	45.91	45.49	91.08	1,340.46	-1,340.50	3,417.48	3,327.37	90.11	37.926		
8,300.00	7,073.24	8,243.10	7,137.17	47.53	47.48	91.08	1,337.00	-1,440.40	3,414.69	3,320.77	93.92	36.359		
8,400.00	7,072.92	8,343.07	7,136.74	49.31	49.56	91.08	1,333.55	-1,540.30	3,411.89	3,313.98	97.91	34.848		
8,500.00	7,072.59	8,443.03	7,136.30	51.20	51.71	91.08	1,330.09	-1,640.20	3,409.10	3,307.03	102.06	33.402		
8,600.00	7,072.27	8,542.99	7,135.87	53.19	53.92	91.08	1,326.63	-1,740.10	3,406.30	3,299.94	106.36	32.026		
8,700.00	7,071.94	8,642.95	7,135.44	55.27	56.19	91.07	1,323.17	-1,840.00	3,403.51	3,292.72	110.79	30.721		
8,800.00	7,071.62	8,742.91	7,135.00	57.43	58.51	91.07	1,319.71	-1,939.90	3,400.71	3,285.39	115.32	29.488		
8,900.00	7,071.29	8,842.87	7,134.57	59.64	60.88	91.07	1,316.25	-2,039.80	3,397.92	3,277.96	119.96	28.325		
9,000.00	7,070.97	8,942.83	7,134.14	61.92	63.28	91.07	1,312.79	-2,139.70	3,395.12	3,270.44	124.69	27.229		
9,100.00	7,070.64	9,042.79	7,133.70	64.24	65.73	91.07	1,309.33	-2,239.60	3,392.33	3,262.84	129.49	26.197		
9,200.00	7,070.32	9,142.75	7,133.27	66.61	68.20	91.07	1,305.87	-2,339.50	3,389.53	3,255.17	134.37	25.226		
9,300.00	7,069.99	9,242.71	7,132.84	69.01	70.70	91.07	1,302.41	-2,439.40	3,386.74	3,247.44	139.30	24.312		
9,400.00	7,069.67	9,342.67	7,132.40	71.45	73.22	91.07	1,298.96	-2,539.30	3,383.95	3,239.65	144.30	23.451		
9,500.00	7,069.34	9,442.64	7,131.97	73.92	75.77	91.07	1,295.50	-2,639.20	3,381.15	3,231.81	149.34	22.640		
9,600.00	7,069.02	9,542.60	7,131.53	76.42	78.34	91.07	1,292.04	-2,739.10	3,378.36	3,223.92	154.44	21.875		
9,700.00	7,068.69	9,642.56	7,131.10	78.95	80.93	91.07	1,288.58	-2,839.00	3,375.56	3,215.99	159.57	21.154		
9,800.00	7,068.37	9,742.52	7,130.67	81.49	83.54	91.06	1,285.12	-2,938.90	3,372.77	3,208.03	164.74	20.473		
9,900.00	7,068.04	9,842.48	7,130.23	84.06	86.16	91.06	1,281.66	-3,038.80	3,369.97	3,200.03	169.94	19.830		
10,000.00	7,067.72	9,942.44	7,129.80	86.65	88.79	91.06	1,278.20	-3,138.70	3,367.18	3,192.00	175.18	19.221		
10,100.00	7,067.39	10,042.40	7,129.37	89.25	91.44	91.06	1,274.74	-3,238.60	3,364.38	3,183.94	180.44	18.645		
10,200.00	7,067.07	10,142.36	7,128.93	91.87	94.10	91.06	1,271.28	-3,338.50	3,361.59	3,175.85	185.73	18.099		
10,300.00	7,066.74	10,242.32	7,128.50	94.50	96.77	91.06	1,267.82	-3,438.40	3,358.79	3,167.75	191.05	17.581		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,342.28	7,128.07	97.14	99.45	91.06	1,264.37	-3,538.30	3,356.00	3,159.61	196.38	17.089		
10,500.00	7,066.09	10,442.24	7,127.63	99.80	102.13	91.06	1,260.91	-3,638.20	3,353.20	3,151.46	201.74	16.621		
10,600.00	7,065.77	10,542.21	7,127.20	102.47	104.83	91.06	1,257.45	-3,738.10	3,350.41	3,143.29	207.11	16.177		
10,700.00	7,065.44	10,642.17	7,126.77	105.15	107.54	91.06	1,253.99	-3,838.00	3,347.61	3,135.11	212.51	15.753		
10,800.00	7,065.12	10,742.13	7,126.33	107.83	110.25	91.05	1,250.53	-3,937.90	3,344.82	3,126.91	217.91	15.349		
10,900.00	7,064.79	10,842.09	7,125.90	110.53	112.97	91.05	1,247.07	-4,037.80	3,342.02	3,118.69	223.34	14.964		
11,000.00	7,064.47	10,942.05	7,125.46	113.23	115.69	91.05	1,243.61	-4,137.70	3,339.23	3,110.46	228.77	14.596		
11,100.00	7,064.14	11,042.01	7,125.03	115.95	118.42	91.05	1,240.15	-4,237.60	3,336.43	3,102.21	234.22	14.245		
11,200.00	7,063.82	11,141.97	7,124.60	118.66	121.16	91.05	1,236.69	-4,337.50	3,333.64	3,093.96	239.68	13.909		
11,300.00	7,063.49	11,241.93	7,124.16	121.39	123.90	91.05	1,233.23	-4,437.40	3,330.85	3,085.69	245.15	13.587		
11,400.00	7,063.17	11,341.89	7,123.73	124.12	126.65	91.05	1,229.77	-4,537.30	3,328.05	3,077.41	250.64	13.278		
11,500.00	7,062.84	11,441.85	7,123.30	126.86	129.40	91.05	1,226.32	-4,637.20	3,325.26	3,069.13	256.13	12.983		
11,600.00	7,062.52	11,541.81	7,122.86	129.60	132.15	91.05	1,222.86	-4,737.10	3,322.46	3,060.83	261.63	12.699		
11,700.00	7,062.19	11,641.78	7,122.43	132.35	134.91	91.05	1,219.40	-4,837.00	3,319.67	3,052.53	267.14	12.427		
11,800.00	7,061.87	11,741.74	7,122.00	135.10	137.67	91.04	1,215.94	-4,936.90	3,316.87	3,044.22	272.66	12.165		
11,900.00	7,061.54	11,841.70	7,121.56	137.85	140.44	91.04	1,212.48	-5,036.80	3,314.08	3,035.90	278.18	11.913		
12,000.00	7,061.22	11,941.66	7,121.13	140.61	143.20	91.04	1,209.02	-5,136.70	3,311.28	3,027.57	283.71	11.671		
12,100.00	7,060.89	12,041.62	7,120.69	143.38	145.97	91.04	1,205.56	-5,236.60	3,308.49	3,019.24	289.25	11.438		
12,200.00	7,060.57	12,141.58	7,120.26	146.15	148.75	91.04	1,202.10	-5,336.50	3,305.69	3,010.90	294.80	11.213		
12,300.00	7,060.24	12,241.54	7,119.83	148.92	151.53	91.04	1,198.64	-5,436.40	3,302.90	3,002.55	300.35	10.997		
12,400.00	7,059.92	12,341.50	7,119.39	151.69	154.31	91.04	1,195.18	-5,536.30	3,300.10	2,994.20	305.90	10.788		
12,500.00	7,059.59	12,441.46	7,118.96	154.47	157.09	91.04	1,191.73	-5,636.20	3,297.31	2,985.84	311.47	10.586		
12,600.00	7,059.27	12,541.42	7,118.53	157.25	159.87	91.04	1,188.27	-5,736.10	3,294.51	2,977.48	317.03	10.392		
12,700.00	7,058.94	12,641.38	7,118.09	160.03	162.66	91.04	1,184.81	-5,836.00	3,291.72	2,969.11	322.61	10.204		
12,800.00	7,058.62	12,741.35	7,117.66	162.82	165.45	91.03	1,181.35	-5,935.90	3,288.92	2,960.74	328.18	10.022		
12,900.00	7,058.29	12,841.31	7,117.23	165.61	168.24	91.03	1,177.89	-6,035.80	3,286.13	2,952.37	333.76	9.846		
13,000.00	7,057.97	12,941.27	7,116.79	168.40	171.03	91.03	1,174.43	-6,135.70	3,283.33	2,943.99	339.35	9.675		
13,100.00	7,057.64	13,041.23	7,116.36	171.19	173.82	91.03	1,170.97	-6,235.60	3,280.54	2,935.60	344.94	9.511		
13,200.00	7,057.32	13,141.19	7,115.93	173.99	176.62	91.03	1,167.51	-6,335.50	3,277.75	2,927.22	350.53	9.351		
13,300.00	7,057.00	13,241.15	7,115.49	176.78	179.42	91.03	1,164.05	-6,435.40	3,274.95	2,918.83	356.12	9.196		
13,400.00	7,056.67	13,341.11	7,115.06	179.58	182.22	91.03	1,160.59	-6,535.30	3,272.16	2,910.43	361.72	9.046		
13,500.00	7,056.35	13,441.07	7,114.62	182.38	185.02	91.03	1,157.14	-6,635.20	3,269.36	2,902.03	367.33	8.900		
13,600.00	7,056.02	13,541.03	7,114.19	185.19	187.82	91.03	1,153.68	-6,735.10	3,266.57	2,893.63	372.93	8.759		
13,700.00	7,055.70	13,640.99	7,113.76	187.99	190.62	91.02	1,150.22	-6,835.00	3,263.77	2,885.23	378.54	8.622		
13,800.00	7,055.37	13,740.95	7,113.32	190.80	193.43	91.02	1,146.76	-6,934.90	3,260.98	2,876.82	384.15	8.489		
13,900.00	7,055.05	13,840.92	7,112.89	193.60	196.23	91.02	1,143.30	-7,034.80	3,258.18	2,868.42	389.77	8.359		
14,000.00	7,054.72	13,940.88	7,112.46	196.41	199.04	91.02	1,139.84	-7,134.70	3,255.39	2,860.00	395.38	8.233		
14,100.00	7,054.40	14,040.84	7,112.02	199.22	201.85	91.02	1,136.38	-7,234.60	3,252.59	2,851.59	401.00	8.111		
14,200.00	7,054.07	14,140.80	7,111.59	202.03	204.66	91.02	1,132.92	-7,334.50	3,249.80	2,843.17	406.62	7.992		
14,300.00	7,053.75	14,240.76	7,111.16	204.85	207.47	91.02	1,129.46	-7,434.40	3,247.00	2,834.76	412.25	7.876		
14,400.00	7,053.42	14,340.72	7,110.72	207.66	210.28	91.02	1,126.00	-7,534.30	3,244.21	2,826.34	417.87	7.764		
14,500.00	7,053.10	14,440.68	7,110.29	210.48	213.09	91.02	1,122.55	-7,634.20	3,241.41	2,817.91	423.50	7.654		
14,600.00	7,052.77	14,540.64	7,109.85	213.29	215.91	91.02	1,119.09	-7,734.10	3,238.62	2,809.49	429.13	7.547		
14,700.00	7,052.45	14,640.60	7,109.42	216.11	218.72	91.01	1,115.63	-7,834.00	3,235.82	2,801.06	434.76	7.443		
14,800.00	7,052.12	14,740.56	7,108.99	218.93	221.53	91.01	1,112.17	-7,933.91	3,233.03	2,792.63	440.40	7.341		
14,900.00	7,051.80	14,840.53	7,108.55	221.75	224.35	91.01	1,108.71	-8,033.81	3,230.24	2,784.20	446.03	7.242		
15,000.00	7,051.47	14,940.49	7,108.12	224.57	227.17	91.01	1,105.25	-8,133.71	3,227.44	2,775.77	451.67	7.146		
15,100.00	7,051.15	14,969.16	7,108.00	227.39	227.97	91.01	1,104.26	-8,162.36	3,225.43	2,770.17	455.27	7.085		
15,118.86	7,051.09	14,969.16	7,108.00	227.93	227.97	91.01	1,104.26	-8,162.36	3,225.38	2,769.62	455.76	7.077		
15,145.13	7,051.00	14,969.16	7,108.00	228.67	227.97	91.01	1,104.26	-8,162.36	3,225.49	2,769.08	456.41	7.067 SF		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.47	239.71	1.95	239.72					
100.00	100.00	101.00	100.00	3.28	3.28	0.47	239.71	1.95	239.72	233.15	6.57	36.489		
200.00	200.00	201.00	200.00	3.34	3.34	0.47	239.71	1.95	239.72	233.05	6.67	35.914	CC, ES	
300.00	299.98	300.98	299.98	3.44	3.45	176.10	239.71	1.95	241.46	234.58	6.89	35.064		
400.00	399.84	400.90	399.90	3.59	3.60	176.18	239.71	1.95	246.68	239.49	7.20	34.275		
500.00	499.45	508.05	507.02	3.79	3.81	176.03	238.11	0.69	253.88	246.27	7.61	33.365		
600.00	598.70	608.11	607.00	4.03	4.04	175.66	234.96	-1.79	262.89	254.81	8.08	32.544		
700.00	697.47	707.32	706.13	4.31	4.30	175.38	231.83	-4.25	275.37	266.75	8.61	31.967		
800.00	795.62	806.03	804.76	4.64	4.58	175.16	228.72	-6.70	291.29	282.08	9.21	31.636		
900.00	893.06	904.13	902.79	5.00	4.89	175.02	225.63	-9.14	310.64	300.79	9.85	31.541		
1,000.00	989.64	1,001.51	1,000.08	5.40	5.21	174.93	222.56	-11.55	333.39	322.86	10.53	31.663		
1,100.00	1,085.27	1,101.97	1,096.53	5.83	5.56	174.90	219.51	-13.95	359.50	348.24	11.26	31.923		
1,200.00	1,180.44	1,205.85	1,192.57	6.29	5.93	174.93	216.48	-16.34	387.09	375.08	12.02	32.209		
1,300.00	1,275.61	1,290.26	1,288.61	6.76	6.24	174.96	213.45	-18.72	414.69	401.96	12.73	32.579		
1,400.00	1,370.78	1,386.38	1,384.65	7.26	6.60	174.99	210.42	-21.11	442.29	428.79	13.50	32.756		
1,500.00	1,465.95	1,482.50	1,480.69	7.76	6.97	175.01	207.39	-23.49	469.88	455.59	14.29	32.874		
1,600.00	1,561.12	1,578.61	1,576.73	8.27	7.35	175.03	204.36	-25.88	497.48	482.38	15.10	32.947		
1,700.00	1,656.29	1,674.73	1,672.77	8.80	7.73	175.05	201.32	-28.26	525.08	509.16	15.92	32.988		
1,800.00	1,751.46	1,770.85	1,768.81	9.32	8.12	175.06	198.29	-30.65	552.68	535.93	16.75	33.004		
1,900.00	1,846.63	1,866.96	1,864.84	9.86	8.51	175.08	195.26	-33.03	580.27	562.69	17.58	33.001		
2,000.00	1,941.80	1,963.08	1,960.88	10.40	8.90	175.09	192.23	-35.42	607.87	589.44	18.43	32.985		
2,100.00	2,036.96	2,059.20	2,056.92	10.94	9.29	175.10	189.20	-37.80	635.47	616.19	19.28	32.959		
2,200.00	2,132.13	2,155.31	2,152.96	11.49	9.69	175.11	186.17	-40.19	663.06	642.92	20.14	32.925		
2,300.00	2,227.30	2,251.43	2,249.00	12.04	10.09	175.12	183.14	-42.57	690.66	669.66	21.00	32.886		
2,400.00	2,322.47	2,347.55	2,345.04	12.59	10.50	175.13	180.10	-44.96	718.26	696.39	21.87	32.843		
2,500.00	2,417.64	2,443.66	2,441.08	13.15	10.90	175.14	177.07	-47.35	745.85	723.11	22.74	32.797		
2,600.00	2,512.81	2,539.78	2,537.12	13.70	11.31	175.15	174.04	-49.73	773.45	749.83	23.62	32.750		
2,700.00	2,607.98	2,635.90	2,633.16	14.26	11.71	175.15	171.01	-52.12	801.05	776.55	24.50	32.702		
2,800.00	2,703.15	2,732.01	2,729.20	14.82	12.12	175.16	167.98	-54.50	828.64	803.27	25.38	32.654		
2,900.00	2,798.32	2,828.13	2,825.24	15.38	12.53	175.17	164.95	-56.89	856.24	829.98	26.26	32.606		
3,000.00	2,893.49	2,924.25	2,921.27	15.95	12.94	175.17	161.92	-59.27	883.84	856.69	27.15	32.558		
3,100.00	2,988.66	3,020.36	3,017.31	16.51	13.35	175.18	158.89	-61.66	911.44	883.40	28.04	32.511		
3,200.00	3,083.83	3,116.48	3,113.35	17.07	13.77	175.18	155.85	-64.04	939.03	910.11	28.93	32.464		
3,300.00	3,179.00	3,212.60	3,209.39	17.64	14.18	175.19	152.82	-66.43	966.63	936.81	29.82	32.418		
3,400.00	3,274.17	3,308.71	3,305.43	18.21	14.59	175.19	149.79	-68.81	994.23	963.52	30.71	32.374		
3,500.00	3,369.34	3,404.83	3,401.47	18.77	15.01	175.20	146.76	-71.20	1,021.82	990.22	31.61	32.330		
3,600.00	3,464.51	3,500.95	3,497.51	19.34	15.42	175.20	143.73	-73.58	1,049.42	1,016.92	32.50	32.287		
3,700.00	3,559.68	3,602.94	3,593.55	19.91	15.86	175.21	140.70	-75.97	1,077.02	1,043.59	33.43	32.221		
3,800.00	3,654.84	3,706.82	3,689.59	20.48	16.31	175.21	137.67	-78.36	1,104.62	1,070.26	34.36	32.150		
3,900.00	3,750.01	3,789.30	3,785.63	21.05	16.67	175.21	134.63	-80.74	1,132.21	1,097.01	35.20	32.166		
4,000.00	3,845.18	3,885.41	3,881.67	21.62	17.09	175.22	131.60	-83.13	1,159.81	1,123.71	36.10	32.128		
4,100.00	3,940.35	3,981.53	3,977.71	22.19	17.51	175.22	128.57	-85.51	1,187.41	1,150.41	37.00	32.091		
4,200.00	4,035.52	4,077.65	4,073.74	22.76	17.93	175.22	125.54	-87.90	1,215.00	1,177.10	37.90	32.055		
4,300.00	4,130.69	4,173.76	4,169.78	23.33	18.34	175.23	122.51	-90.28	1,242.60	1,203.79	38.81	32.020		
4,400.00	4,225.86	4,269.88	4,265.82	23.91	18.76	175.23	119.48	-92.67	1,270.20	1,230.49	39.71	31.986		
4,500.00	4,321.03	4,366.00	4,361.86	24.48	19.18	175.23	116.45	-95.05	1,297.80	1,257.18	40.62	31.953		
4,600.00	4,416.20	4,462.11	4,457.90	25.05	19.60	175.23	113.42	-97.44	1,325.39	1,283.87	41.52	31.920		
4,700.00	4,511.37	4,558.23	4,553.94	25.62	20.02	175.24	110.38	-99.82	1,352.99	1,310.56	42.43	31.889		
4,800.00	4,606.54	4,654.34	4,649.98	26.20	20.44	175.24	107.35	-102.21	1,380.59	1,337.25	43.33	31.859		
4,900.00	4,701.71	4,750.46	4,746.02	26.77	20.86	175.24	104.32	-104.60	1,408.18	1,363.94	44.24	31.829		
5,000.00	4,796.88	4,846.58	4,842.06	27.34	21.28	175.24	101.29	-106.98	1,435.78	1,390.63	45.15	31.801		
5,100.00	4,892.05	4,942.69	4,938.10	27.92	21.70	175.25	98.26	-109.37	1,463.38	1,417.32	46.06	31.773		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,038.81	5,034.14	28.49	22.12	175.25	95.23	-111.75	1,490.98	1,444.01	46.97	31.746		
5,300.00	5,082.39	5,134.93	5,130.18	29.07	22.54	175.25	92.20	-114.14	1,518.57	1,470.70	47.88	31.719		
5,400.00	5,177.56	5,231.04	5,226.21	29.64	22.96	175.25	89.17	-116.52	1,546.17	1,497.39	48.78	31.694		
5,500.00	5,272.72	5,327.16	5,322.25	30.21	23.39	175.25	86.13	-118.91	1,573.77	1,524.07	49.69	31.669		
5,600.00	5,367.89	5,423.28	5,418.29	30.79	23.81	175.26	83.10	-121.29	1,601.36	1,550.76	50.60	31.644		
5,700.00	5,463.06	5,519.39	5,514.33	31.36	24.23	175.26	80.07	-123.68	1,628.96	1,577.45	51.52	31.621		
5,800.00	5,558.23	5,615.51	5,610.37	31.94	24.65	175.26	77.04	-126.06	1,656.56	1,604.13	52.43	31.598		
5,900.00	5,653.40	5,711.63	5,706.41	32.51	25.07	175.26	74.01	-128.45	1,684.16	1,630.82	53.34	31.575		
6,000.00	5,748.57	5,807.74	5,802.45	33.09	25.50	175.26	70.98	-130.83	1,711.75	1,657.50	54.25	31.553		
6,100.00	5,843.74	5,903.86	5,898.49	33.67	25.92	175.26	67.95	-133.22	1,739.35	1,684.19	55.16	31.532		
6,200.00	5,938.91	6,000.02	5,994.53	34.24	26.34	175.27	64.91	-135.61	1,766.95	1,710.87	56.07	31.511		
6,300.00	6,034.08	6,103.91	6,090.57	34.82	26.80	175.27	61.88	-137.99	1,794.54	1,737.52	57.02	31.472		
6,400.00	6,129.25	6,207.79	6,186.61	35.39	27.25	175.27	58.85	-140.38	1,822.14	1,764.17	57.97	31.434		
6,500.00	6,224.42	6,288.33	6,282.64	35.97	27.61	175.27	55.82	-142.76	1,849.74	1,790.93	58.81	31.452		
6,600.00	6,319.59	6,384.44	6,378.68	36.54	28.03	175.27	52.79	-145.15	1,877.34	1,817.61	59.73	31.433		
6,700.00	6,414.76	6,480.88	6,475.00	37.12	28.45	175.24	49.74	-148.53	1,904.93	1,844.29	60.64	31.413		
6,800.00	6,509.91	6,576.27	6,569.11	37.70	28.87	166.91	46.70	-163.28	1,932.52	1,870.98	61.55	31.398		
6,900.00	6,603.99	6,669.33	6,657.79	38.26	29.28	141.07	43.74	-191.06	1,959.93	1,897.51	62.42	31.398		
7,000.00	6,694.76	6,760.94	6,740.22	38.78	29.66	123.76	40.91	-230.75	1,986.47	1,923.21	63.26	31.403		
7,100.00	6,779.96	6,851.52	6,815.29	39.24	30.05	112.44	38.24	-281.22	2,011.46	1,947.40	64.07	31.397		
7,200.00	6,857.50	6,941.39	6,881.96	39.65	30.45	104.70	35.78	-341.33	2,034.26	1,969.38	64.89	31.350		
7,300.00	6,925.48	7,030.83	6,939.26	40.02	30.94	99.19	33.56	-409.87	2,054.30	1,988.51	65.79	31.224		
7,400.00	6,982.21	7,120.01	6,986.28	40.33	31.53	95.24	31.62	-485.53	2,071.07	2,004.22	66.85	30.980		
7,500.00	7,026.31	7,209.04	7,022.23	40.63	32.25	92.47	29.99	-566.88	2,084.16	2,016.02	68.15	30.584		
7,600.00	7,056.68	7,297.97	7,046.47	40.91	33.11	90.67	28.71	-652.36	2,093.25	2,023.51	69.73	30.019		
7,700.00	7,072.58	7,386.80	7,058.57	41.25	34.11	89.75	27.79	-740.29	2,098.10	2,026.48	71.62	29.294		
7,800.00	7,074.86	7,481.04	7,059.78	41.69	35.31	89.59	27.17	-834.50	2,098.96	2,025.08	73.88	28.409		
7,900.00	7,074.54	7,581.04	7,059.35	42.34	36.74	89.59	26.57	-934.49	2,099.03	2,022.45	76.58	27.411		
8,000.00	7,074.21	7,681.04	7,058.92	43.27	38.34	89.58	25.98	-1,034.49	2,099.10	2,019.51	79.59	26.375		
8,100.00	7,073.89	7,781.04	7,058.48	44.47	40.07	89.58	25.38	-1,134.49	2,099.17	2,016.29	82.88	25.328		
8,200.00	7,073.57	7,881.04	7,058.05	45.91	41.93	89.58	24.78	-1,234.48	2,099.24	2,012.81	86.43	24.290		
8,300.00	7,073.24	7,981.04	7,057.61	47.53	43.89	89.57	24.18	-1,334.48	2,099.31	2,009.11	90.19	23.275		
8,400.00	7,072.92	8,081.04	7,057.18	49.31	45.95	89.57	23.58	-1,434.48	2,099.38	2,005.22	94.16	22.296		
8,500.00	7,072.59	8,181.04	7,056.75	51.20	48.09	89.57	22.98	-1,534.48	2,099.44	2,001.15	98.30	21.358		
8,600.00	7,072.27	8,281.04	7,056.31	53.19	50.31	89.56	22.38	-1,634.47	2,099.51	1,996.93	102.59	20.466		
8,700.00	7,071.94	8,381.04	7,055.88	55.27	52.58	89.56	21.78	-1,734.47	2,099.58	1,992.58	107.01	19.621		
8,800.00	7,071.62	8,481.04	7,055.44	57.43	54.91	89.56	21.19	-1,834.47	2,099.65	1,988.11	111.55	18.823		
8,900.00	7,071.29	8,581.04	7,055.01	59.64	57.29	89.56	20.59	-1,934.46	2,099.72	1,983.53	116.19	18.071		
9,000.00	7,070.97	8,681.04	7,054.58	61.92	59.71	89.55	19.99	-2,034.46	2,099.79	1,978.87	120.93	17.364		
9,100.00	7,070.64	8,781.04	7,054.14	64.24	62.17	89.55	19.39	-2,134.46	2,099.86	1,974.12	125.74	16.699		
9,200.00	7,070.32	8,881.04	7,053.71	66.61	64.66	89.55	18.79	-2,234.46	2,099.93	1,969.30	130.63	16.075		
9,300.00	7,069.99	8,981.04	7,053.27	69.01	67.18	89.54	18.19	-2,334.45	2,100.00	1,964.41	135.59	15.488		
9,400.00	7,069.67	9,081.04	7,052.84	71.45	69.72	89.54	17.59	-2,434.45	2,100.07	1,959.47	140.60	14.937		
9,500.00	7,069.34	9,181.04	7,052.41	73.92	72.29	89.54	16.99	-2,534.45	2,100.14	1,954.48	145.66	14.418		
9,600.00	7,069.02	9,281.04	7,051.97	76.42	74.88	89.53	16.40	-2,634.44	2,100.21	1,949.44	150.77	13.930		
9,700.00	7,068.69	9,381.04	7,051.54	78.95	77.49	89.53	15.80	-2,734.44	2,100.28	1,944.35	155.93	13.470		
9,800.00	7,068.37	9,481.04	7,051.10	81.49	80.12	89.53	15.20	-2,834.44	2,100.35	1,939.23	161.12	13.036		
9,900.00	7,068.04	9,581.04	7,050.67	84.06	82.76	89.53	14.60	-2,934.44	2,100.42	1,934.08	166.34	12.627		
10,000.00	7,067.72	9,681.04	7,050.24	86.65	85.42	89.52	14.00	-3,034.43	2,100.49	1,928.89	171.60	12.241		
10,100.00	7,067.39	9,781.04	7,049.80	89.25	88.09	89.52	13.40	-3,134.43	2,100.56	1,923.68	176.88	11.875		
10,200.00	7,067.07	9,881.04	7,049.37	91.87	90.77	89.52	12.80	-3,234.43	2,100.63	1,918.43	182.19	11.530		
10,300.00	7,066.74	9,981.04	7,048.93	94.50	93.46	89.51	12.20	-3,334.42	2,100.70	1,913.17	187.53	11.202		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,066.42	10,081.04	7,048.50	97.14	96.16	89.51	11.61	-3,434.42	2,100.77	1,907.88	192.88	10.891	
10,500.00	7,066.09	10,181.04	7,048.07	99.80	98.87	89.51	11.01	-3,534.42	2,100.84	1,902.58	198.26	10.596	
10,600.00	7,065.77	10,281.04	7,047.63	102.47	101.58	89.51	10.41	-3,634.42	2,100.91	1,897.25	203.66	10.316	
10,700.00	7,065.44	10,381.04	7,047.20	105.15	104.31	89.50	9.81	-3,734.41	2,100.98	1,891.91	209.07	10.049	
10,800.00	7,065.12	10,481.04	7,046.76	107.83	107.04	89.50	9.21	-3,834.41	2,101.05	1,886.55	214.50	9.795	
10,900.00	7,064.79	10,581.04	7,046.33	110.53	109.78	89.50	8.61	-3,934.41	2,101.12	1,881.18	219.94	9.553	
11,000.00	7,064.47	10,681.04	7,045.90	113.23	112.52	89.49	8.01	-4,034.41	2,101.18	1,875.79	225.40	9.322	
11,100.00	7,064.14	10,781.04	7,045.46	115.95	115.28	89.49	7.41	-4,134.40	2,101.25	1,870.39	230.86	9.102	
11,200.00	7,063.82	10,881.04	7,045.03	118.66	118.03	89.49	6.82	-4,234.40	2,101.32	1,864.98	236.35	8.891	
11,300.00	7,063.49	10,981.04	7,044.59	121.39	120.79	89.48	6.22	-4,334.40	2,101.39	1,859.56	241.84	8.689	
11,400.00	7,063.17	11,081.04	7,044.16	124.12	123.56	89.48	5.62	-4,434.39	2,101.46	1,854.12	247.34	8.496	
11,500.00	7,062.84	11,181.04	7,043.73	126.86	126.32	89.48	5.02	-4,534.39	2,101.53	1,848.68	252.85	8.311	
11,600.00	7,062.52	11,281.04	7,043.29	129.60	129.10	89.48	4.42	-4,634.39	2,101.60	1,843.23	258.37	8.134	
11,700.00	7,062.19	11,381.04	7,042.86	132.35	131.87	89.47	3.82	-4,734.39	2,101.67	1,837.77	263.90	7.964	
11,800.00	7,061.87	11,481.04	7,042.42	135.10	134.65	89.47	3.22	-4,834.38	2,101.74	1,832.31	269.44	7.801	
11,900.00	7,061.54	11,581.04	7,041.99	137.85	137.44	89.47	2.62	-4,934.38	2,101.81	1,826.83	274.98	7.644	
12,000.00	7,061.22	11,681.04	7,041.56	140.61	140.22	89.46	2.03	-5,034.38	2,101.88	1,821.35	280.53	7.493	
12,100.00	7,060.89	11,781.04	7,041.12	143.38	143.01	89.46	1.43	-5,134.37	2,101.95	1,815.86	286.09	7.347	
12,200.00	7,060.57	11,881.04	7,040.69	146.15	145.80	89.46	0.83	-5,234.37	2,102.02	1,810.37	291.65	7.207	
12,300.00	7,060.24	11,981.04	7,040.25	148.92	148.60	89.46	0.23	-5,334.37	2,102.09	1,804.87	297.22	7.072	
12,400.00	7,059.92	12,081.04	7,039.82	151.69	151.39	89.45	-0.37	-5,434.37	2,102.16	1,799.37	302.80	6.943	
12,500.00	7,059.59	12,181.04	7,039.39	154.47	154.19	89.45	-0.97	-5,534.36	2,102.23	1,793.86	308.38	6.817	
12,600.00	7,059.27	12,281.04	7,038.95	157.25	156.99	89.45	-1.57	-5,634.36	2,102.30	1,788.34	313.96	6.696	
12,700.00	7,058.94	12,381.04	7,038.52	160.03	159.80	89.44	-2.17	-5,734.36	2,102.37	1,782.82	319.55	6.579	
12,800.00	7,058.62	12,481.04	7,038.08	162.82	162.60	89.44	-2.76	-5,834.35	2,102.44	1,777.30	325.14	6.466	
12,900.00	7,058.29	12,581.04	7,037.65	165.61	165.41	89.44	-3.36	-5,934.35	2,102.51	1,771.77	330.74	6.357	
13,000.00	7,057.97	12,681.04	7,037.22	168.40	168.22	89.43	-3.96	-6,034.35	2,102.58	1,766.24	336.34	6.251	
13,100.00	7,057.64	12,781.04	7,036.78	171.19	171.03	89.43	-4.56	-6,134.35	2,102.65	1,760.70	341.95	6.149	
13,200.00	7,057.32	12,881.04	7,036.35	173.99	173.84	89.43	-5.16	-6,234.34	2,102.72	1,755.16	347.56	6.050	
13,300.00	7,057.00	12,981.04	7,035.91	176.78	176.65	89.43	-5.76	-6,334.34	2,102.79	1,749.62	353.17	5.954	
13,400.00	7,056.67	13,081.04	7,035.48	179.58	179.47	89.42	-6.36	-6,434.34	2,102.86	1,744.07	358.79	5.861	
13,500.00	7,056.35	13,181.04	7,035.05	182.38	182.28	89.42	-6.96	-6,534.33	2,102.93	1,738.52	364.41	5.771	
13,600.00	7,056.02	13,281.04	7,034.61	185.19	185.10	89.42	-7.55	-6,634.33	2,103.00	1,732.97	370.03	5.683	
13,700.00	7,055.70	13,381.04	7,034.18	187.99	187.92	89.41	-8.15	-6,734.33	2,103.07	1,727.41	375.66	5.598	
13,800.00	7,055.37	13,481.04	7,033.74	190.80	190.74	89.41	-8.75	-6,834.33	2,103.14	1,721.85	381.28	5.516	
13,900.00	7,055.05	13,581.04	7,033.31	193.60	193.56	89.41	-9.35	-6,934.32	2,103.21	1,716.29	386.91	5.436	
14,000.00	7,054.72	13,681.04	7,032.88	196.41	196.38	89.40	-9.95	-7,034.32	2,103.28	1,710.73	392.55	5.358	
14,100.00	7,054.40	13,781.04	7,032.44	199.22	199.21	89.40	-10.55	-7,134.32	2,103.35	1,705.16	398.18	5.282	
14,200.00	7,054.07	13,881.04	7,032.01	202.03	202.03	89.40	-11.15	-7,234.31	2,103.42	1,699.60	403.82	5.209	
14,300.00	7,053.75	13,981.04	7,031.57	204.85	204.86	89.40	-11.75	-7,334.31	2,103.49	1,694.03	409.46	5.137	
14,400.00	7,053.42	14,081.04	7,031.14	207.66	207.68	89.39	-12.34	-7,434.31	2,103.56	1,688.45	415.10	5.068	
14,500.00	7,053.10	14,181.04	7,030.71	210.48	210.51	89.39	-12.94	-7,534.31	2,103.63	1,682.88	420.75	5.000	
14,600.00	7,052.77	14,281.04	7,030.27	213.29	213.34	89.39	-13.54	-7,634.30	2,103.70	1,677.30	426.39	4.934	
14,700.00	7,052.45	14,381.04	7,029.84	216.11	216.17	89.38	-14.14	-7,734.30	2,103.77	1,671.73	432.04	4.869	
14,800.00	7,052.12	14,481.04	7,029.40	218.93	219.00	89.38	-14.74	-7,834.30	2,103.84	1,666.15	437.69	4.807	
14,900.00	7,051.80	14,581.04	7,028.97	221.75	221.83	89.38	-15.34	-7,934.30	2,103.91	1,660.56	443.34	4.746	
15,000.00	7,051.47	14,681.04	7,028.54	224.57	224.66	89.38	-15.94	-8,034.29	2,103.98	1,654.98	448.99	4.686	
15,100.00	7,051.15	14,781.04	7,028.10	227.39	227.49	89.37	-16.54	-8,134.29	2,104.05	1,649.40	454.65	4.628	
15,145.13	7,051.00	14,805.04	7,028.00	228.67	228.17	89.37	-16.68	-8,158.29	2,104.18	1,647.69	456.50	4.609 SF	





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.43	259.75	1.95	259.75					
100.00	100.00	101.00	100.00	3.28	3.28	0.43	259.75	1.95	259.75	253.18	6.57	39.538		
200.00	200.00	201.00	200.00	3.34	3.34	0.43	259.75	1.95	259.75	253.08	6.67	38.915 CC, ES		
300.00	299.98	300.98	299.98	3.44	3.45	176.07	259.75	1.95	261.49	254.61	6.89	37.973		
400.00	399.84	400.84	399.84	3.59	3.60	176.14	259.75	1.95	266.72	259.52	7.20	37.059		
500.00	499.45	500.45	499.45	3.79	3.81	176.25	259.75	1.95	275.41	267.81	7.60	36.241		
600.00	598.70	600.22	598.76	4.03	4.04	176.07	259.75	0.35	287.55	279.48	8.07	35.614		
700.00	697.47	701.46	697.50	4.31	4.30	175.78	259.75	-2.12	303.14	294.53	8.62	35.177		
800.00	795.62	803.29	795.63	4.64	4.60	175.55	259.75	-4.57	322.16	312.94	9.22	34.937		
900.00	893.06	905.85	893.04	5.00	4.92	175.39	259.75	-7.01	344.59	334.72	9.88	34.890		
1,000.00	989.64	1,009.24	989.62	5.40	5.26	175.29	259.75	-9.42	370.40	359.82	10.58	35.019		
1,100.00	1,085.27	1,086.41	1,085.24	5.83	5.53	175.23	259.75	-11.81	399.54	388.32	11.23	35.588		
1,200.00	1,180.44	1,181.61	1,180.41	6.29	5.87	175.23	259.75	-14.19	430.16	418.21	11.95	36.008		
1,300.00	1,275.61	1,276.81	1,275.58	6.76	6.22	175.24	259.75	-16.57	460.77	448.08	12.69	36.309		
1,400.00	1,370.78	1,372.01	1,370.75	7.26	6.58	175.25	259.75	-18.95	491.39	477.93	13.45	36.521		
1,500.00	1,465.95	1,467.21	1,465.92	7.76	6.94	175.25	259.75	-21.33	522.00	507.77	14.24	36.666		
1,600.00	1,561.12	1,562.40	1,561.09	8.27	7.31	175.26	259.75	-23.70	552.62	537.58	15.03	36.760		
1,700.00	1,656.29	1,657.60	1,656.26	8.80	7.68	175.26	259.75	-26.08	583.23	567.39	15.84	36.817		
1,800.00	1,751.46	1,752.80	1,751.42	9.32	8.06	175.26	259.75	-28.46	613.85	597.19	16.66	36.844		
1,900.00	1,846.63	1,848.00	1,846.59	9.86	8.45	175.27	259.75	-30.84	644.46	626.97	17.49	36.851		
2,000.00	1,941.80	1,943.20	1,941.76	10.40	8.83	175.27	259.75	-33.22	675.08	656.75	18.32	36.840		
2,100.00	2,036.96	2,038.40	2,036.93	10.94	9.22	175.27	259.75	-35.60	705.69	686.52	19.17	36.818		
2,200.00	2,132.13	2,133.59	2,132.10	11.49	9.61	175.28	259.75	-37.98	736.31	716.29	20.02	36.787		
2,300.00	2,227.30	2,228.79	2,227.27	12.04	10.01	175.28	259.75	-40.36	766.92	746.05	20.87	36.749		
2,400.00	2,322.47	2,323.99	2,322.44	12.59	10.40	175.28	259.75	-42.73	797.54	775.81	21.73	36.707		
2,500.00	2,417.64	2,419.19	2,417.60	13.15	10.80	175.28	259.75	-45.11	828.15	805.56	22.59	36.661		
2,600.00	2,512.81	2,514.39	2,512.77	13.70	11.20	175.28	259.75	-47.49	858.76	835.31	23.46	36.613		
2,700.00	2,607.98	2,609.59	2,607.94	14.26	11.60	175.28	259.75	-49.87	889.38	865.06	24.32	36.564		
2,800.00	2,703.15	2,704.78	2,703.11	14.82	12.00	175.29	259.75	-52.25	919.99	894.80	25.20	36.513		
2,900.00	2,798.32	2,800.02	2,798.28	15.38	12.41	175.29	259.75	-54.63	950.61	924.54	26.07	36.463		
3,000.00	2,893.49	2,904.82	2,893.45	15.95	12.85	175.29	259.75	-57.01	981.22	954.24	26.99	36.357		
3,100.00	2,988.66	3,009.62	2,988.62	16.51	13.30	175.29	259.75	-59.39	1,011.84	983.93	27.91	36.256		
3,200.00	3,083.83	3,085.58	3,083.79	17.07	13.62	175.29	259.75	-61.76	1,042.45	1,013.75	28.71	36.313		
3,300.00	3,179.00	3,180.78	3,178.95	17.64	14.03	175.29	259.75	-64.14	1,073.07	1,043.48	29.59	36.265		
3,400.00	3,274.17	3,275.97	3,274.12	18.21	14.43	175.29	259.75	-66.52	1,103.68	1,073.21	30.47	36.217		
3,500.00	3,369.34	3,371.17	3,369.29	18.77	14.84	175.30	259.75	-68.90	1,134.30	1,102.94	31.36	36.171		
3,600.00	3,464.51	3,466.37	3,464.46	19.34	15.25	175.30	259.75	-71.28	1,164.91	1,132.67	32.25	36.125		
3,700.00	3,559.68	3,561.57	3,559.63	19.91	15.66	175.30	259.75	-73.66	1,195.53	1,162.39	33.13	36.081		
3,800.00	3,654.84	3,656.77	3,654.80	20.48	16.07	175.30	259.75	-76.04	1,226.14	1,192.12	34.02	36.037		
3,900.00	3,750.01	3,751.97	3,749.97	21.05	16.48	175.30	259.75	-78.42	1,256.76	1,221.84	34.91	35.995		
4,000.00	3,845.18	3,847.16	3,845.13	21.62	16.89	175.30	259.75	-80.79	1,287.37	1,251.57	35.81	35.954		
4,100.00	3,940.35	3,942.36	3,940.30	22.19	17.30	175.30	259.75	-83.17	1,317.99	1,281.29	36.70	35.914		
4,200.00	4,035.52	4,037.56	4,035.47	22.76	17.71	175.30	259.75	-85.55	1,348.60	1,311.01	37.59	35.875		
4,300.00	4,130.69	4,132.76	4,130.64	23.33	18.13	175.30	259.75	-87.93	1,379.22	1,340.73	38.49	35.837		
4,400.00	4,225.86	4,227.96	4,225.81	23.91	18.54	175.30	259.75	-90.31	1,409.83	1,370.45	39.38	35.800		
4,500.00	4,321.03	4,323.16	4,320.98	24.48	18.95	175.30	259.75	-92.69	1,440.45	1,400.17	40.28	35.764		
4,600.00	4,416.20	4,418.36	4,416.15	25.05	19.36	175.30	259.75	-95.07	1,471.06	1,429.89	41.17	35.730		
4,700.00	4,511.37	4,513.55	4,511.32	25.62	19.78	175.30	259.75	-97.45	1,501.68	1,459.61	42.07	35.696		
4,800.00	4,606.54	4,608.75	4,606.48	26.20	20.19	175.30	259.75	-99.82	1,532.29	1,489.32	42.97	35.663		
4,900.00	4,701.71	4,703.95	4,701.65	26.77	20.60	175.31	259.75	-102.20	1,562.90	1,519.04	43.86	35.631		
5,000.00	4,796.88	4,800.85	4,796.82	27.34	21.02	175.31	259.75	-104.58	1,593.52	1,548.75	44.77	35.594		
5,100.00	4,892.05	4,905.65	4,891.99	27.92	21.48	175.31	259.75	-106.96	1,624.13	1,578.42	45.71	35.531		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,989.55	4,987.16	28.49	21.84	175.31	259.75	-109.34	1,654.75	1,608.19	46.56	35.540		
5,300.00	5,082.39	5,084.74	5,082.33	29.07	22.26	175.31	259.75	-111.72	1,685.36	1,637.90	47.46	35.511		
5,400.00	5,177.56	5,179.94	5,177.50	29.64	22.67	175.31	259.75	-114.10	1,715.98	1,667.62	48.36	35.483		
5,500.00	5,272.72	5,275.14	5,272.66	30.21	23.09	175.31	259.75	-116.48	1,746.59	1,697.33	49.26	35.456		
5,600.00	5,367.89	5,370.34	5,367.83	30.79	23.50	175.31	259.75	-118.85	1,777.21	1,727.05	50.16	35.429		
5,700.00	5,463.06	5,465.54	5,463.00	31.36	23.92	175.31	259.75	-121.23	1,807.82	1,756.76	51.06	35.403		
5,800.00	5,558.23	5,560.74	5,558.17	31.94	24.33	175.31	259.75	-123.61	1,838.44	1,786.47	51.97	35.378		
5,900.00	5,653.40	5,655.93	5,653.34	32.51	24.75	175.31	259.75	-125.99	1,869.05	1,816.18	52.87	35.353		
6,000.00	5,748.57	5,751.13	5,748.51	33.09	25.16	175.31	259.75	-128.37	1,899.67	1,845.90	53.77	35.329		
6,100.00	5,843.74	5,846.33	5,843.68	33.67	25.58	175.31	259.75	-130.75	1,930.28	1,875.61	54.67	35.306		
6,200.00	5,938.91	5,941.53	5,938.85	34.24	25.99	175.31	259.75	-133.13	1,960.90	1,905.32	55.58	35.283		
6,300.00	6,034.08	6,036.73	6,034.01	34.82	26.41	175.31	259.75	-135.51	1,991.51	1,935.03	56.48	35.261		
6,400.00	6,129.25	6,131.93	6,129.18	35.39	26.82	175.31	259.75	-137.88	2,022.13	1,964.74	57.38	35.239		
6,500.00	6,224.42	6,227.12	6,224.35	35.97	27.24	175.31	259.75	-140.26	2,052.74	1,994.45	58.29	35.218		
6,600.00	6,319.59	6,322.32	6,319.52	36.54	27.66	175.31	259.75	-142.64	2,083.36	2,024.17	59.19	35.197		
6,700.00	6,414.76	6,417.52	6,414.69	37.12	28.07	175.31	259.75	-145.02	2,113.97	2,053.88	60.10	35.177		
6,800.00	6,509.91	6,512.75	6,509.89	37.70	28.49	167.28	259.75	-147.40	2,144.58	2,083.58	61.00	35.157		
6,900.00	6,603.99	6,614.73	6,611.19	38.26	28.94	141.70	259.58	-158.18	2,174.79	2,112.83	61.97	35.096		
7,000.00	6,694.76	6,717.99	6,710.67	38.78	29.40	124.64	259.10	-185.41	2,203.77	2,140.83	62.93	35.019		
7,100.00	6,779.96	6,822.78	6,805.79	39.24	29.88	113.54	258.29	-229.10	2,230.78	2,166.89	63.89	34.917		
7,200.00	6,857.50	6,929.24	6,893.76	39.65	30.38	105.99	257.17	-288.82	2,255.17	2,190.31	64.87	34.766		
7,300.00	6,925.48	7,037.33	6,971.64	40.02	30.95	100.65	255.74	-363.58	2,276.32	2,210.39	65.93	34.527		
7,400.00	6,982.21	7,146.81	7,036.49	40.33	31.64	96.82	254.05	-451.60	2,293.68	2,226.51	67.17	34.148		
7,500.00	7,026.31	7,257.24	7,085.66	40.63	32.51	94.14	252.15	-550.30	2,306.83	2,238.14	68.69	33.582		
7,600.00	7,056.68	7,367.98	7,117.13	40.91	33.58	92.40	250.09	-656.31	2,315.42	2,244.87	70.56	32.816		
7,700.00	7,072.58	7,478.32	7,129.75	41.25	34.84	91.49	247.95	-765.77	2,319.26	2,246.50	72.75	31.878		
7,800.00	7,074.86	7,580.10	7,129.70	41.69	36.17	91.36	245.96	-867.53	2,318.75	2,243.58	75.17	30.847		
7,900.00	7,074.54	7,680.09	7,129.34	42.34	37.64	91.36	244.01	-967.50	2,317.46	2,239.57	77.90	29.750		
8,000.00	7,074.21	7,780.08	7,128.97	43.27	39.26	91.36	242.05	-1,067.47	2,316.18	2,235.24	80.94	28.616		
8,100.00	7,073.89	7,880.07	7,128.60	44.47	41.02	91.36	240.10	-1,167.44	2,314.89	2,230.63	84.26	27.474		
8,200.00	7,073.57	7,980.07	7,128.24	45.91	42.89	91.36	238.14	-1,267.41	2,313.60	2,225.78	87.82	26.344		
8,300.00	7,073.24	8,080.06	7,127.87	47.53	44.87	91.36	236.19	-1,367.39	2,312.31	2,220.71	91.60	25.243		
8,400.00	7,072.92	8,180.05	7,127.51	49.31	46.94	91.36	234.23	-1,467.36	2,311.02	2,215.44	95.58	24.180		
8,500.00	7,072.59	8,280.04	7,127.14	51.20	49.09	91.36	232.28	-1,567.33	2,309.73	2,210.02	99.72	23.163		
8,600.00	7,072.27	8,380.03	7,126.77	53.19	51.31	91.36	230.32	-1,667.30	2,308.44	2,204.44	104.01	22.195		
8,700.00	7,071.94	8,480.02	7,126.41	55.27	53.58	91.36	228.37	-1,767.27	2,307.15	2,198.73	108.43	21.279		
8,800.00	7,071.62	8,580.02	7,126.04	57.43	55.91	91.36	226.41	-1,867.25	2,305.87	2,192.90	112.96	20.413		
8,900.00	7,071.29	8,680.01	7,125.68	59.64	58.29	91.35	224.46	-1,967.22	2,304.58	2,186.98	117.60	19.597		
9,000.00	7,070.97	8,780.00	7,125.31	61.92	60.71	91.35	222.50	-2,067.19	2,303.29	2,180.96	122.33	18.829		
9,100.00	7,070.64	8,879.99	7,124.94	64.24	63.16	91.35	220.54	-2,167.16	2,302.00	2,174.86	127.14	18.106		
9,200.00	7,070.32	8,979.98	7,124.58	66.61	65.65	91.35	218.59	-2,267.13	2,300.71	2,168.69	132.02	17.427		
9,300.00	7,069.99	9,079.97	7,124.21	69.01	68.16	91.35	216.63	-2,367.10	2,299.42	2,162.46	136.96	16.789		
9,400.00	7,069.67	9,179.97	7,123.84	71.45	70.70	91.35	214.68	-2,467.08	2,298.13	2,156.17	141.97	16.188		
9,500.00	7,069.34	9,279.96	7,123.48	73.92	73.27	91.35	212.72	-2,567.05	2,296.84	2,149.82	147.02	15.623		
9,600.00	7,069.02	9,379.95	7,123.11	76.42	75.85	91.35	210.77	-2,667.02	2,295.56	2,143.44	152.12	15.090		
9,700.00	7,068.69	9,479.94	7,122.75	78.95	78.46	91.35	208.81	-2,766.99	2,294.27	2,137.00	157.26	14.589		
9,800.00	7,068.37	9,579.93	7,122.38	81.49	81.08	91.35	206.86	-2,866.96	2,292.98	2,130.54	162.44	14.116		
9,900.00	7,068.04	9,679.92	7,122.01	84.06	83.71	91.35	204.90	-2,966.94	2,291.69	2,124.03	167.66	13.669		
10,000.00	7,067.72	9,779.92	7,121.65	86.65	86.36	91.35	202.95	-3,066.91	2,290.40	2,117.50	172.90	13.247		
10,100.00	7,067.39	9,879.91	7,121.28	89.25	89.02	91.35	200.99	-3,166.88	2,289.11	2,110.93	178.18	12.847		
10,200.00	7,067.07	9,979.90	7,120.92	91.87	91.70	91.35	199.03	-3,266.85	2,287.82	2,104.34	183.48	12.469		
10,300.00	7,066.74	10,079.89	7,120.55	94.50	94.38	91.35	197.08	-3,366.82	2,286.53	2,097.73	188.80	12.111		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	10,179.88	7,120.18	97.14	97.08	91.35	195.12	-3,466.80	2,285.25	2,091.10	194.15	11.771		
10,500.00	7,066.09	10,279.88	7,119.82	99.80	99.78	91.35	193.17	-3,566.77	2,283.96	2,084.44	199.52	11.447		
10,600.00	7,065.77	10,379.87	7,119.45	102.47	102.49	91.35	191.21	-3,666.74	2,282.67	2,077.77	204.90	11.140		
10,700.00	7,065.44	10,479.86	7,119.08	105.15	105.21	91.35	189.26	-3,766.71	2,281.38	2,071.08	210.30	10.848		
10,800.00	7,065.12	10,579.85	7,118.72	107.83	107.94	91.35	187.30	-3,866.68	2,280.09	2,064.37	215.72	10.570		
10,900.00	7,064.79	10,679.84	7,118.35	110.53	110.67	91.35	185.35	-3,966.65	2,278.80	2,057.65	221.15	10.304		
11,000.00	7,064.47	10,779.83	7,117.99	113.23	113.41	91.35	183.39	-4,066.63	2,277.51	2,050.91	226.60	10.051		
11,100.00	7,064.14	10,879.83	7,117.62	115.95	116.15	91.35	181.44	-4,166.60	2,276.22	2,044.16	232.06	9.809		
11,200.00	7,063.82	10,979.82	7,117.25	118.66	118.90	91.35	179.48	-4,266.57	2,274.93	2,037.40	237.53	9.577		
11,300.00	7,063.49	11,079.81	7,116.89	121.39	121.65	91.35	177.53	-4,366.54	2,273.65	2,030.63	243.01	9.356		
11,400.00	7,063.17	11,179.80	7,116.52	124.12	124.41	91.35	175.57	-4,466.51	2,272.36	2,023.85	248.51	9.144		
11,500.00	7,062.84	11,279.79	7,116.16	126.86	127.17	91.35	173.61	-4,566.49	2,271.07	2,017.06	254.01	8.941		
11,600.00	7,062.52	11,379.78	7,115.79	129.60	129.94	91.35	171.66	-4,666.46	2,269.78	2,010.26	259.52	8.746		
11,700.00	7,062.19	11,479.78	7,115.42	132.35	132.71	91.35	169.70	-4,766.43	2,268.49	2,003.45	265.04	8.559		
11,800.00	7,061.87	11,579.77	7,115.06	135.10	135.48	91.35	167.75	-4,866.40	2,267.20	1,996.64	270.57	8.379		
11,900.00	7,061.54	11,679.76	7,114.69	137.85	138.26	91.35	165.79	-4,966.37	2,265.91	1,989.81	276.10	8.207		
12,000.00	7,061.22	11,779.75	7,114.32	140.61	141.04	91.35	163.84	-5,066.35	2,264.62	1,982.98	281.64	8.041		
12,100.00	7,060.89	11,879.74	7,113.96	143.38	143.82	91.35	161.88	-5,166.32	2,263.34	1,976.14	287.19	7.881		
12,200.00	7,060.57	11,979.73	7,113.59	146.15	146.61	91.35	159.93	-5,266.29	2,262.05	1,969.30	292.75	7.727		
12,300.00	7,060.24	12,079.73	7,113.23	148.92	149.40	91.35	157.97	-5,366.26	2,260.76	1,962.45	298.31	7.579		
12,400.00	7,059.92	12,179.72	7,112.86	151.69	152.19	91.35	156.02	-5,466.23	2,259.47	1,955.60	303.87	7.436		
12,500.00	7,059.59	12,279.71	7,112.49	154.47	154.98	91.34	154.06	-5,566.21	2,258.18	1,948.74	309.44	7.298		
12,600.00	7,059.27	12,379.70	7,112.13	157.25	157.77	91.34	152.11	-5,666.18	2,256.89	1,941.87	315.02	7.164		
12,700.00	7,058.94	12,479.69	7,111.76	160.03	160.57	91.34	150.15	-5,766.15	2,255.60	1,935.00	320.60	7.036		
12,800.00	7,058.62	12,579.68	7,111.40	162.82	163.37	91.34	148.19	-5,866.12	2,254.31	1,928.13	326.19	6.911		
12,900.00	7,058.29	12,679.68	7,111.03	165.61	166.17	91.34	146.24	-5,966.09	2,253.03	1,921.25	331.78	6.791		
13,000.00	7,057.97	12,779.67	7,110.66	168.40	168.97	91.34	144.28	-6,066.06	2,251.74	1,914.37	337.37	6.674		
13,100.00	7,057.64	12,879.66	7,110.30	171.19	171.78	91.34	142.33	-6,166.04	2,250.45	1,907.48	342.97	6.562		
13,200.00	7,057.32	12,979.65	7,109.93	173.99	174.59	91.34	140.37	-6,266.01	2,249.16	1,900.59	348.57	6.453		
13,300.00	7,057.00	13,079.64	7,109.56	176.78	177.39	91.34	138.42	-6,365.98	2,247.87	1,893.70	354.17	6.347		
13,400.00	7,056.67	13,179.63	7,109.20	179.58	180.20	91.34	136.46	-6,465.95	2,246.58	1,886.80	359.78	6.244		
13,500.00	7,056.35	13,279.63	7,108.83	182.38	183.01	91.34	134.51	-6,565.92	2,245.29	1,879.90	365.39	6.145		
13,600.00	7,056.02	13,379.62	7,108.47	185.19	185.82	91.34	132.55	-6,665.90	2,244.00	1,873.00	371.01	6.048		
13,700.00	7,055.70	13,479.61	7,108.10	187.99	188.64	91.34	130.60	-6,765.87	2,242.72	1,866.09	376.63	5.955		
13,800.00	7,055.37	13,579.60	7,107.73	190.80	191.45	91.34	128.64	-6,865.84	2,241.43	1,859.18	382.25	5.864		
13,900.00	7,055.05	13,679.59	7,107.37	193.60	194.27	91.34	126.69	-6,965.81	2,240.14	1,852.27	387.87	5.776		
14,000.00	7,054.72	13,779.58	7,107.00	196.41	197.08	91.34	124.73	-7,065.78	2,238.85	1,845.35	393.49	5.690		
14,100.00	7,054.40	13,879.58	7,106.64	199.22	199.90	91.34	122.77	-7,165.76	2,237.56	1,838.44	399.12	5.606		
14,200.00	7,054.07	13,979.57	7,106.27	202.03	202.72	91.34	120.82	-7,265.73	2,236.27	1,831.52	404.75	5.525		
14,300.00	7,053.75	14,079.56	7,105.90	204.85	205.54	91.34	118.86	-7,365.70	2,234.98	1,824.60	410.38	5.446		
14,400.00	7,053.42	14,179.55	7,105.54	207.66	208.36	91.34	116.91	-7,465.67	2,233.69	1,817.68	416.02	5.369		
14,500.00	7,053.10	14,279.54	7,105.17	210.48	211.18	91.34	114.95	-7,565.64	2,232.41	1,810.75	421.65	5.294		
14,600.00	7,052.77	14,379.53	7,104.80	213.29	214.00	91.34	113.00	-7,665.62	2,231.12	1,803.82	427.29	5.222		
14,700.00	7,052.45	14,479.53	7,104.44	216.11	216.83	91.34	111.04	-7,765.59	2,229.83	1,796.89	432.93	5.151		
14,800.00	7,052.12	14,579.52	7,104.07	218.93	219.65	91.34	109.09	-7,865.56	2,228.54	1,789.96	438.58	5.081		
14,900.00	7,051.80	14,679.51	7,103.71	221.75	222.47	91.34	107.13	-7,965.53	2,227.25	1,783.03	444.22	5.014		
15,000.00	7,051.47	14,779.50	7,103.34	224.57	225.30	91.34	105.18	-8,065.50	2,225.96	1,776.10	449.86	4.948		
15,100.00	7,051.15	14,879.49	7,102.97	227.39	228.13	91.34	103.22	-8,165.47	2,224.67	1,769.16	455.51	4.884		
15,121.39	7,051.08	14,872.41	7,103.00	228.00	227.93	91.34	103.36	-8,158.39	2,224.58	1,768.76	455.82	4.880		
15,145.13	7,051.00	14,872.41	7,103.00	228.67	227.93	91.34	103.36	-8,158.39	2,224.70	1,768.34	456.36	4.875 SF		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	60.00	3.28	3.28	-114.06	-4,015.92	-8,992.92	9,849.06					
100.00	100.00	40.00	100.00	3.28	3.35	-114.06	-4,015.92	-8,992.92	9,848.87	9,842.24	6.64	1,483.664		
200.00	200.00	140.00	200.00	3.34	4.54	-114.06	-4,015.92	-8,992.92	9,848.87	9,840.99	7.88	1,250.008		
300.00	299.98	239.98	299.98	3.44	7.40	61.57	-4,015.92	-8,992.92	9,848.04	9,837.20	10.84	908.624		
400.00	399.84	339.84	399.84	3.59	10.64	61.64	-4,015.92	-8,992.92	9,845.55	9,831.32	14.23	692.092		
500.00	499.45	439.45	499.45	3.79	13.99	61.76	-4,015.92	-8,992.92	9,841.41	9,823.63	17.77	553.718		
600.00	598.70	538.70	598.70	4.03	17.37	61.92	-4,015.92	-8,992.92	9,835.62	9,814.22	21.40	459.542		
700.00	697.47	637.47	697.47	4.31	20.77	62.14	-4,015.92	-8,992.92	9,828.21	9,803.13	25.08	391.840		
800.00	795.62	735.62	795.62	4.64	24.16	62.39	-4,015.92	-8,992.92	9,819.20	9,790.41	28.79	341.036		
900.00	893.06	833.06	893.06	5.00	27.53	62.70	-4,015.92	-8,992.92	9,808.62	9,776.10	32.52	301.607		
1,000.00	989.64	929.64	989.64	5.40	30.88	63.04	-4,015.92	-8,992.92	9,796.49	9,760.23	36.26	270.175		
1,100.00	1,085.27	1,025.27	1,085.27	5.83	34.20	63.42	-4,015.92	-8,992.92	9,782.85	9,742.85	40.00	244.560		
1,200.00	1,180.44	1,120.44	1,180.44	6.29	37.51	63.58	-4,015.92	-8,992.92	9,768.60	9,724.85	43.75	223.269		
1,300.00	1,275.61	1,215.61	1,275.61	6.76	40.82	63.73	-4,015.92	-8,992.92	9,754.43	9,706.91	47.52	205.254		
1,400.00	1,370.78	1,310.78	1,370.78	7.26	44.14	63.89	-4,015.92	-8,992.92	9,740.33	9,689.02	51.31	189.828		
1,500.00	1,465.95	1,405.95	1,465.95	7.76	47.45	64.04	-4,015.92	-8,992.92	9,726.31	9,671.20	55.11	176.481		
1,600.00	1,561.12	1,501.12	1,561.12	8.27	50.76	64.20	-4,015.92	-8,992.92	9,712.37	9,653.44	58.92	164.826		
1,700.00	1,656.29	1,603.71	1,656.29	8.80	54.34	64.36	-4,015.92	-8,992.92	9,698.50	9,635.50	63.01	153.932		
1,800.00	1,751.46	1,708.54	1,751.46	9.32	57.99	64.51	-4,015.92	-8,992.92	9,684.71	9,617.54	67.17	144.179		
1,900.00	1,846.63	1,803.37	1,846.63	9.86	60.71	64.67	-4,015.92	-8,992.92	9,671.00	9,600.59	70.41	137.349		
2,000.00	1,941.80	1,898.20	1,941.80	10.40	64.03	64.83	-4,015.92	-8,992.92	9,657.37	9,583.12	74.25	130.059		
2,100.00	2,036.96	1,993.04	2,036.96	10.94	67.35	64.99	-4,015.92	-8,992.92	9,643.81	9,565.71	78.10	123.480		
2,200.00	2,132.13	2,088.87	2,132.13	11.49	70.67	65.15	-4,015.92	-8,992.92	9,630.34	9,548.39	81.95	117.513		
2,300.00	2,227.30	2,183.70	2,227.30	12.04	73.99	65.31	-4,015.92	-8,992.92	9,616.94	9,531.14	85.81	112.078		
2,400.00	2,322.47	2,278.53	2,322.47	12.59	77.31	65.47	-4,015.92	-8,992.92	9,603.63	9,513.96	89.66	107.107		
2,500.00	2,417.64	2,373.36	2,417.64	13.15	80.63	65.63	-4,015.92	-8,992.92	9,590.39	9,496.86	93.52	102.544		
2,600.00	2,512.81	2,468.19	2,512.81	13.70	83.95	65.79	-4,015.92	-8,992.92	9,577.23	9,479.84	97.39	98.341		
2,700.00	2,607.98	2,563.02	2,607.98	14.26	87.27	65.95	-4,015.92	-8,992.92	9,564.15	9,462.90	101.25	94.457		
2,800.00	2,703.15	2,658.85	2,703.15	14.82	90.59	66.11	-4,015.92	-8,992.92	9,551.16	9,446.04	105.12	90.858		
2,900.00	2,798.32	2,753.68	2,798.32	15.38	93.91	66.27	-4,015.92	-8,992.92	9,538.24	9,429.25	108.99	87.513		
3,000.00	2,893.49	2,848.51	2,893.49	15.95	97.23	66.44	-4,015.92	-8,992.92	9,525.41	9,412.55	112.86	84.397		
3,100.00	2,988.66	2,943.34	2,988.66	16.51	100.55	66.60	-4,015.92	-8,992.92	9,512.66	9,395.92	116.74	81.488		
3,200.00	3,083.83	3,038.17	3,083.83	17.07	103.87	66.76	-4,015.92	-8,992.92	9,499.99	9,379.38	120.61	78.765		
3,300.00	3,179.00	3,133.00	3,179.00	17.64	107.19	66.92	-4,015.92	-8,992.92	9,487.40	9,362.91	124.49	76.211		
3,400.00	3,274.17	3,228.83	3,274.17	18.21	110.51	67.09	-4,015.92	-8,992.92	9,474.90	9,346.53	128.37	73.811		
3,500.00	3,369.34	3,323.66	3,369.34	18.77	113.83	67.25	-4,015.92	-8,992.92	9,462.48	9,330.23	132.25	71.553		
3,600.00	3,464.51	3,418.49	3,464.51	19.34	117.15	67.42	-4,015.92	-8,992.92	9,450.14	9,314.01	136.13	69.422		
3,700.00	3,559.68	3,513.32	3,559.68	19.91	120.50	67.58	-4,015.92	-8,992.92	9,437.89	9,297.86	140.03	67.399		
3,800.00	3,654.84	3,608.16	3,654.84	20.48	124.15	67.75	-4,015.92	-8,992.92	9,425.72	9,281.47	144.25	65.344		
3,900.00	3,750.01	3,703.99	3,750.01	21.05	127.81	67.91	-4,015.92	-8,992.92	9,413.63	9,265.16	148.47	63.405		
4,000.00	3,845.18	3,799.82	3,845.18	21.62	130.44	68.08	-4,015.92	-8,992.92	9,401.63	9,249.97	152.66	61.493		
4,100.00	3,940.35	3,894.65	3,940.35	22.19	133.76	68.25	-4,015.92	-8,992.92	9,389.71	9,234.17	156.84	59.600		
4,200.00	4,035.52	3,989.48	4,035.52	22.76	137.08	68.41	-4,015.92	-8,992.92	9,377.88	9,218.46	161.01	57.717		
4,300.00	4,130.69	4,074.31	4,130.69	23.33	140.40	68.58	-4,015.92	-8,992.92	9,366.14	9,202.83	165.17	55.844		
4,400.00	4,225.86	4,169.14	4,225.86	23.91	143.72	68.75	-4,015.92	-8,992.92	9,354.48	9,187.28	169.32	53.981		
4,500.00	4,321.03	4,264.97	4,321.03	24.48	147.04	68.92	-4,015.92	-8,992.92	9,342.91	9,171.82	173.46	52.128		
4,600.00	4,416.20	4,360.80	4,416.20	25.05	150.37	69.08	-4,015.92	-8,992.92	9,331.42	9,156.45	177.59	50.285		
4,700.00	4,511.37	4,455.63	4,511.37	25.62	153.69	69.25	-4,015.92	-8,992.92	9,320.03	9,141.16	181.71	48.452		
4,800.00	4,606.54	4,550.80	4,606.54	26.20	157.01	69.42	-4,015.92	-8,992.92	9,308.71	9,125.96	185.82	46.629		
4,900.00	4,701.71	4,645.29	4,701.71	26.77	160.33	69.59	-4,015.92	-8,992.92	9,297.49	9,110.84	189.93	44.816		
5,000.00	4,796.88	4,739.12	4,796.88	27.34	163.65	69.76	-4,015.92	-8,992.92	9,286.36	9,095.82	194.04	43.013		
5,100.00	4,892.05	4,835.95	4,892.05	27.92	166.97	69.93	-4,015.92	-8,992.92	9,275.31	9,080.88	198.15	41.220		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,927.22	4,987.22	28.49	170.30	70.10	-4,015.92	-8,992.92	9,264.35	9,066.03	198.32	46.714		
5,300.00	5,082.39	5,022.39	5,082.39	29.07	173.62	70.27	-4,015.92	-8,992.92	9,253.48	9,051.27	202.21	45.761		
5,400.00	5,177.56	5,117.56	5,177.56	29.64	176.94	70.45	-4,015.92	-8,992.92	9,242.70	9,036.59	206.11	44.844		
5,500.00	5,272.72	5,212.72	5,272.72	30.21	180.26	70.62	-4,015.92	-8,992.92	9,232.01	9,022.01	210.00	43.962		
5,600.00	5,367.89	5,307.89	5,367.89	30.79	183.58	70.79	-4,015.92	-8,992.92	9,221.41	9,007.51	213.90	43.112		
5,700.00	5,463.06	5,403.06	5,463.06	31.36	186.90	70.96	-4,015.92	-8,992.92	9,210.90	8,993.11	217.79	42.292		
5,800.00	5,558.23	5,501.77	5,558.23	31.94	190.35	71.14	-4,015.92	-8,992.92	9,200.48	8,978.67	221.81	41.479		
5,900.00	5,653.40	5,606.60	5,653.40	32.51	194.01	71.31	-4,015.92	-8,992.92	9,190.15	8,964.10	226.04	40.657		
6,000.00	5,748.57	5,688.57	5,748.57	33.09	196.87	71.48	-4,015.92	-8,992.92	9,179.91	8,950.43	229.48	40.003		
6,100.00	5,843.74	5,783.74	5,843.74	33.67	200.19	71.66	-4,015.92	-8,992.92	9,169.76	8,936.39	233.38	39.292		
6,200.00	5,938.91	5,878.91	5,938.91	34.24	203.51	71.83	-4,015.92	-8,992.92	9,159.71	8,922.43	237.27	38.604		
6,300.00	6,034.08	5,974.08	6,034.08	34.82	206.84	72.01	-4,015.92	-8,992.92	9,149.74	8,908.57	241.17	37.939		
6,400.00	6,129.25	6,069.25	6,129.25	35.39	210.16	72.18	-4,015.92	-8,992.92	9,139.87	8,894.80	245.07	37.295		
6,500.00	6,224.42	6,164.42	6,224.42	35.97	213.48	72.36	-4,015.92	-8,992.92	9,130.09	8,881.13	248.97	36.672		
6,600.00	6,319.59	6,259.59	6,319.59	36.54	216.80	72.53	-4,015.92	-8,992.92	9,120.41	8,867.54	252.86	36.068		
6,700.00	6,414.76	6,354.76	6,414.76	37.12	220.12	72.71	-4,015.92	-8,992.92	9,110.81	8,854.05	256.76	35.483		
6,800.00	6,509.91	6,449.91	6,509.91	37.70	223.45	65.55	-4,015.92	-8,992.92	9,100.78	8,840.11	260.66	34.914		
6,900.00	6,603.99	6,543.99	6,603.99	38.26	226.73	42.43	-4,015.92	-8,992.92	9,079.78	8,815.29	264.50	34.328		
7,000.00	6,694.76	6,634.76	6,694.76	38.78	229.90	27.31	-4,015.92	-8,992.92	9,044.20	8,776.04	268.16	33.727		
7,100.00	6,779.96	6,719.96	6,779.96	39.24	232.87	17.46	-4,015.92	-8,992.92	8,994.87	8,723.31	271.56	33.123		
7,200.00	6,857.50	6,802.50	6,857.50	39.65	235.75	10.22	-4,015.92	-8,992.92	8,932.98	8,658.17	274.80	32.507		
7,300.00	6,925.48	6,865.48	6,925.48	40.02	237.95	3.81	-4,015.92	-8,992.92	8,860.03	8,582.74	277.29	31.952		
7,400.00	6,982.21	6,922.21	6,982.21	40.33	239.93	-3.35	-4,015.92	-8,992.92	8,777.81	8,498.33	279.48	31.408		
7,500.00	7,026.31	6,966.31	7,026.31	40.63	241.47	-13.59	-4,015.92	-8,992.92	8,688.33	8,407.19	281.15	30.903		
7,600.00	7,056.68	7,003.32	7,056.68	40.91	242.76	-32.07	-4,015.92	-8,992.92	8,593.83	8,311.34	282.49	30.422		
7,700.00	7,072.58	7,012.58	7,072.58	41.25	243.09	-66.81	-4,015.92	-8,992.92	8,496.63	8,213.83	282.80	30.045		
7,800.00	7,074.86	7,014.86	7,074.86	41.69	243.17	-90.81	-4,015.92	-8,992.92	8,399.06	8,116.23	282.82	29.697		
7,900.00	7,074.54	7,014.54	7,074.54	42.34	243.15	-90.80	-4,015.92	-8,992.92	8,301.65	8,018.90	282.76	29.360		
8,000.00	7,074.21	7,014.21	7,074.21	43.27	243.14	-90.79	-4,015.92	-8,992.92	8,204.31	7,921.61	282.70	29.021		
8,100.00	7,073.89	7,013.89	7,073.89	44.47	243.13	-90.78	-4,015.92	-8,992.92	8,107.03	7,824.37	282.66	28.681		
8,200.00	7,073.57	7,013.57	7,073.57	45.91	243.12	-90.77	-4,015.92	-8,992.92	8,009.82	7,727.19	282.63	28.340		
8,300.00	7,073.24	7,013.24	7,073.24	47.53	243.11	-90.76	-4,015.92	-8,992.92	7,912.68	7,630.06	282.62	27.998		
8,400.00	7,072.92	7,012.92	7,072.92	49.31	243.10	-90.75	-4,015.92	-8,992.92	7,815.61	7,532.99	282.62	27.654		
8,500.00	7,072.59	7,012.59	7,072.59	51.20	243.09	-90.74	-4,015.92	-8,992.92	7,718.61	7,435.97	282.64	27.309		
8,600.00	7,072.27	7,012.27	7,072.27	53.19	243.08	-90.73	-4,015.92	-8,992.92	7,621.70	7,339.02	282.68	26.963		
8,700.00	7,071.94	7,011.94	7,071.94	55.27	243.06	-90.72	-4,015.92	-8,992.92	7,524.86	7,242.13	282.73	26.615		
8,800.00	7,071.62	7,011.62	7,071.62	57.43	243.05	-90.71	-4,015.92	-8,992.92	7,428.11	7,145.30	282.81	26.265		
8,900.00	7,071.29	7,011.29	7,071.29	59.64	243.04	-90.70	-4,015.92	-8,992.92	7,331.44	7,048.53	282.91	25.914		
9,000.00	7,070.97	7,010.97	7,070.97	61.92	243.03	-90.69	-4,015.92	-8,992.92	7,234.87	6,951.83	283.03	25.562		
9,100.00	7,070.64	7,010.64	7,070.64	64.24	243.02	-90.68	-4,015.92	-8,992.92	7,138.39	6,855.20	283.18	25.208		
9,200.00	7,070.32	7,010.32	7,070.32	66.61	243.01	-90.67	-4,015.92	-8,992.92	7,042.00	6,758.65	283.36	24.852		
9,300.00	7,069.99	7,009.99	7,069.99	69.01	243.00	-90.66	-4,015.92	-8,992.92	6,945.72	6,662.16	283.56	24.495		
9,400.00	7,069.67	7,009.67	7,069.67	71.45	242.98	-90.65	-4,015.92	-8,992.92	6,849.55	6,565.75	283.80	24.136		
9,500.00	7,069.34	7,009.34	7,069.34	73.92	242.97	-90.64	-4,015.92	-8,992.92	6,753.49	6,469.43	284.06	23.775		
9,600.00	7,069.02	7,009.02	7,069.02	76.42	242.96	-90.63	-4,015.92	-8,992.92	6,657.54	6,373.18	284.36	23.412		
9,700.00	7,068.69	7,008.69	7,068.69	78.95	242.95	-90.62	-4,015.92	-8,992.92	6,561.71	6,277.02	284.70	23.048		
9,800.00	7,068.37	7,008.37	7,068.37	81.49	242.94	-90.61	-4,015.92	-8,992.92	6,466.02	6,180.95	285.07	22.682		
9,900.00	7,068.04	7,008.04	7,068.04	84.06	242.93	-90.60	-4,015.92	-8,992.92	6,370.45	6,084.97	285.48	22.315		
10,000.00	7,067.72	7,007.72	7,067.72	86.65	242.92	-90.59	-4,015.92	-8,992.92	6,275.02	5,989.08	285.94	21.945		
10,100.00	7,067.39	7,007.39	7,067.39	89.25	242.91	-90.58	-4,015.92	-8,992.92	6,179.74	5,893.30	286.44	21.574		
10,200.00	7,067.07	7,007.07	7,067.07	91.87	242.89	-90.57	-4,015.92	-8,992.92	6,084.60	5,797.62	286.98	21.202		
10,300.00	7,066.74	7,006.74	7,066.74	94.50	242.88	-90.56	-4,015.92	-8,992.92	5,989.63	5,702.05	287.58	20.828		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,006.42	7,066.42	97.14	242.87	-90.55	-4,015.92	-8,992.92	5,894.82	5,606.60	288.22	20.452		
10,500.00	7,066.09	7,006.09	7,066.09	99.80	242.86	-90.54	-4,015.92	-8,992.92	5,800.19	5,511.26	288.92	20.075		
10,600.00	7,065.77	7,005.77	7,065.77	102.47	242.85	-90.53	-4,015.92	-8,992.92	5,705.74	5,416.06	289.68	19.697		
10,700.00	7,065.44	7,005.44	7,065.44	105.15	242.84	-90.52	-4,015.92	-8,992.92	5,611.48	5,320.98	290.49	19.317		
10,800.00	7,065.12	7,005.12	7,065.12	107.83	242.83	-90.51	-4,015.92	-8,992.92	5,517.42	5,226.05	291.37	18.936		
10,900.00	7,064.79	7,004.79	7,064.79	110.53	242.81	-90.50	-4,015.92	-8,992.92	5,423.58	5,131.27	292.31	18.554		
11,000.00	7,064.47	7,004.47	7,064.47	113.23	242.80	-90.49	-4,015.92	-8,992.92	5,329.96	5,036.64	293.32	18.171		
11,100.00	7,064.14	7,004.14	7,064.14	115.95	242.79	-90.48	-4,015.92	-8,992.92	5,236.57	4,942.17	294.40	17.787		
11,200.00	7,063.82	7,003.82	7,063.82	118.66	242.78	-90.47	-4,015.92	-8,992.92	5,143.44	4,847.89	295.55	17.403		
11,300.00	7,063.49	7,003.49	7,063.49	121.39	242.77	-90.46	-4,015.92	-8,992.92	5,050.57	4,753.78	296.78	17.018		
11,400.00	7,063.17	7,003.17	7,063.17	124.12	242.76	-90.45	-4,015.92	-8,992.92	4,957.97	4,659.88	298.09	16.632		
11,500.00	7,062.84	7,002.84	7,062.84	126.86	242.75	-90.44	-4,015.92	-8,992.92	4,865.67	4,566.18	299.49	16.247		
11,600.00	7,062.52	7,002.52	7,062.52	129.60	242.74	-90.43	-4,015.92	-8,992.92	4,773.68	4,472.71	300.97	15.861		
11,700.00	7,062.19	7,002.19	7,062.19	132.35	242.72	-90.42	-4,015.92	-8,992.92	4,682.01	4,379.47	302.54	15.476		
11,800.00	7,061.87	7,001.87	7,061.87	135.10	242.71	-90.41	-4,015.92	-8,992.92	4,590.70	4,286.49	304.21	15.091		
11,900.00	7,061.54	7,001.54	7,061.54	137.85	242.70	-90.40	-4,015.92	-8,992.92	4,499.75	4,193.78	305.97	14.706		
12,000.00	7,061.22	7,001.22	7,061.22	140.61	242.69	-90.39	-4,015.92	-8,992.92	4,409.20	4,101.35	307.85	14.323		
12,100.00	7,060.89	7,000.89	7,060.89	143.38	242.68	-90.38	-4,015.92	-8,992.92	4,319.06	4,009.23	309.83	13.940		
12,200.00	7,060.57	7,000.57	7,060.57	146.15	242.67	-90.37	-4,015.92	-8,992.92	4,229.36	3,917.44	311.92	13.559		
12,300.00	7,060.24	7,000.24	7,060.24	148.92	242.66	-90.36	-4,015.92	-8,992.92	4,140.14	3,826.01	314.13	13.180		
12,400.00	7,059.92	7,000.08	7,059.92	151.69	242.65	-90.35	-4,015.92	-8,992.92	4,051.42	3,734.95	316.48	12.802		
12,500.00	7,059.59	7,000.41	7,059.59	154.47	242.66	-90.34	-4,015.92	-8,992.92	3,963.24	3,644.27	318.97	12.425		
12,600.00	7,059.27	7,000.73	7,059.27	157.25	242.67	-90.33	-4,015.92	-8,992.92	3,875.63	3,554.04	321.59	12.051		
12,700.00	7,058.94	7,001.06	7,058.94	160.03	242.68	-90.32	-4,015.92	-8,992.92	3,788.64	3,464.28	324.36	11.680		
12,800.00	7,058.62	7,001.38	7,058.62	162.82	242.70	-90.31	-4,015.92	-8,992.92	3,702.30	3,375.02	327.28	11.312		
12,900.00	7,058.29	7,001.71	7,058.29	165.61	242.71	-90.30	-4,015.92	-8,992.92	3,616.67	3,286.32	330.35	10.948		
13,000.00	7,057.97	7,002.03	7,057.97	168.40	242.72	-90.29	-4,015.92	-8,992.92	3,531.79	3,198.21	333.58	10.587		
13,100.00	7,057.64	7,002.36	7,057.64	171.19	242.73	-90.28	-4,015.92	-8,992.92	3,447.72	3,110.74	336.99	10.231		
13,200.00	7,057.32	7,002.68	7,057.32	173.99	242.74	-90.27	-4,015.92	-8,992.92	3,364.53	3,023.96	340.57	9.879		
13,300.00	7,057.00	7,003.01	7,057.00	176.78	242.75	-90.26	-4,015.92	-8,992.92	3,282.27	2,937.94	344.33	9.532		
13,400.00	7,056.67	7,003.33	7,056.67	179.58	242.76	-90.25	-4,015.92	-8,992.92	3,201.02	2,852.73	348.29	9.191		
13,500.00	7,056.35	7,003.66	7,056.35	182.38	242.77	-90.24	-4,015.92	-8,992.92	3,120.87	2,768.42	352.45	8.855		
13,600.00	7,056.02	7,003.98	7,056.02	185.19	242.79	-90.23	-4,015.92	-8,992.92	3,041.88	2,685.08	356.81	8.525		
13,700.00	7,055.70	7,004.30	7,055.70	187.99	242.80	-90.22	-4,015.92	-8,992.92	2,964.17	2,602.79	361.38	8.202		
13,800.00	7,055.37	7,004.63	7,055.37	190.80	242.81	-90.22	-4,015.92	-8,992.92	2,887.83	2,521.66	366.17	7.887		
13,900.00	7,055.05	7,004.95	7,055.05	193.60	242.82	-90.21	-4,015.92	-8,992.92	2,812.97	2,441.79	371.18	7.578		
14,000.00	7,054.72	7,005.28	7,054.72	196.41	242.83	-90.20	-4,015.92	-8,992.92	2,739.72	2,363.30	376.42	7.278		
14,100.00	7,054.40	7,005.60	7,054.40	199.22	242.84	-90.19	-4,015.92	-8,992.92	2,668.20	2,286.32	381.88	6.987		
14,200.00	7,054.07	7,005.93	7,054.07	202.03	242.85	-90.18	-4,015.92	-8,992.92	2,598.57	2,211.00	387.57	6.705		
14,300.00	7,053.75	7,006.25	7,053.75	204.85	242.87	-90.17	-4,015.92	-8,992.92	2,530.97	2,137.49	393.48	6.432		
14,400.00	7,053.42	7,006.58	7,053.42	207.66	242.88	-90.16	-4,015.92	-8,992.92	2,465.57	2,065.98	399.60	6.170		
14,500.00	7,053.10	7,006.90	7,053.10	210.48	242.89	-90.15	-4,015.92	-8,992.92	2,402.56	1,996.65	405.92	5.919		
14,600.00	7,052.77	7,007.23	7,052.77	213.29	242.90	-90.14	-4,015.92	-8,992.92	2,342.13	1,929.71	412.42	5.679		
14,700.00	7,052.45	7,007.55	7,052.45	216.11	242.91	-90.13	-4,015.92	-8,992.92	2,284.47	1,865.39	419.08	5.451		
14,800.00	7,052.12	7,007.88	7,052.12	218.93	242.92	-90.12	-4,015.92	-8,992.92	2,229.81	1,803.95	425.86	5.236		
14,900.00	7,051.80	7,008.20	7,051.80	221.75	242.93	-90.11	-4,015.92	-8,992.92	2,178.37	1,745.64	432.73	5.034		
15,000.00	7,051.47	7,008.53	7,051.47	224.57	242.94	-90.10	-4,015.92	-8,992.92	2,130.39	1,690.75	439.64	4.846		
15,100.00	7,051.15	7,008.85	7,051.15	227.39	242.96	-90.09	-4,015.92	-8,992.92	2,086.10	1,639.57	446.53	4.672		
15,145.13	7,051.00	7,009.00	7,051.00	228.67	242.96	-90.08	-4,015.92	-8,992.92	2,067.38	1,617.77	449.62	4.598 CC, ES, SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	682.39	715.15	3.28	4.36	-106.76	-2,690.03	-8,933.73	9,357.31					
100.00	100.00	724.00	756.32	3.28	4.49	-106.79	-2,694.12	-8,929.33	9,349.98	9,342.23	7.75	1,206.779		
200.00	200.00	724.00	756.32	3.34	4.49	-106.79	-2,694.12	-8,929.33	9,343.49	9,335.70	7.79	1,199.641		
300.00	299.98	724.00	756.32	3.44	4.49	-106.79	-2,694.12	-8,929.33	9,337.44	9,329.56	7.88	1,184.599		
400.00	399.84	768.92	800.71	3.59	4.64	69.03	-2,699.50	-8,925.08	9,330.49	9,322.32	8.17	1,141.700		
500.00	499.45	818.00	849.05	3.79	4.81	69.14	-2,707.13	-8,921.37	9,323.93	9,315.40	8.53	1,092.604		
600.00	598.70	818.00	849.05	4.03	4.81	69.28	-2,707.13	-8,921.37	9,316.34	9,307.57	8.77	1,062.113		
700.00	697.47	818.00	849.05	4.31	4.81	69.43	-2,707.13	-8,921.37	9,308.59	9,299.54	9.05	1,028.342		
800.00	795.62	818.00	849.05	4.64	4.81	69.57	-2,707.13	-8,921.37	9,300.68	9,291.31	9.37	992.373		
900.00	893.06	818.00	849.05	5.00	4.81	69.73	-2,707.13	-8,921.37	9,292.63	9,282.90	9.73	955.102		
1,000.00	989.64	859.13	889.45	5.40	4.96	69.90	-2,714.48	-8,919.14	9,283.84	9,273.57	10.27	903.936		
1,100.00	1,085.27	912.00	941.33	5.83	5.15	70.09	-2,724.56	-8,917.66	9,275.51	9,264.62	10.89	851.453		
1,200.00	1,180.44	912.00	941.33	6.29	5.15	70.09	-2,724.56	-8,917.66	9,266.74	9,255.39	11.34	816.859		
1,300.00	1,275.61	912.00	941.33	6.76	5.15	70.09	-2,724.56	-8,917.66	9,259.03	9,247.22	11.81	783.724		
1,400.00	1,370.78	912.00	941.33	7.26	5.15	70.09	-2,724.56	-8,917.66	9,252.41	9,240.11	12.30	752.272		
1,500.00	1,465.95	912.00	941.33	7.76	5.15	70.09	-2,724.56	-8,917.66	9,246.85	9,234.06	12.80	722.596		
1,600.00	1,561.12	912.00	941.33	8.27	5.15	70.09	-2,724.56	-8,917.66	9,242.38	9,229.08	13.30	694.707		
1,700.00	1,656.29	961.83	990.19	8.80	5.33	70.12	-2,734.31	-8,917.84	9,238.05	9,224.04	14.01	659.405		
1,800.00	1,751.46	1,006.00	1,033.51	9.32	5.50	70.15	-2,742.81	-8,919.44	9,235.46	9,220.76	14.70	628.109		
1,900.00	1,846.63	1,006.00	1,033.51	9.86	5.50	70.15	-2,742.81	-8,919.44	9,233.22	9,217.99	15.23	606.286		
2,000.00	1,941.80	1,006.00	1,033.51	10.40	5.50	70.15	-2,742.81	-8,919.44	9,232.07	9,216.31	15.76	585.840		
2,056.92	1,995.96	1,006.00	1,033.51	10.71	5.50	70.15	-2,742.81	-8,919.44	9,231.89	9,215.83	16.06	574.781		
2,100.00	2,036.96	1,006.00	1,033.51	10.94	5.50	70.15	-2,742.81	-8,919.44	9,231.99	9,215.70	16.29	566.684		
2,200.00	2,132.13	1,006.00	1,033.51	11.49	5.50	70.15	-2,742.81	-8,919.44	9,233.00	9,216.17	16.83	548.731		
2,300.00	2,227.30	1,060.08	1,086.54	12.04	5.70	70.20	-2,752.76	-8,923.02	9,234.25	9,216.67	17.57	525.448		
2,400.00	2,322.47	1,101.00	1,126.68	12.59	5.85	70.23	-2,759.77	-8,926.81	9,236.88	9,218.61	18.27	505.440		
2,500.00	2,417.64	1,101.00	1,126.68	13.15	5.85	70.23	-2,759.77	-8,926.81	9,240.12	9,221.31	18.81	491.162		
2,600.00	2,512.81	1,101.00	1,126.68	13.70	5.85	70.23	-2,759.77	-8,926.81	9,244.44	9,225.09	19.35	477.734		
2,700.00	2,607.98	1,101.00	1,126.68	14.26	5.85	70.23	-2,759.77	-8,926.81	9,249.84	9,229.95	19.89	465.097		
2,800.00	2,703.15	1,152.36	1,176.90	14.82	6.05	70.28	-2,768.79	-8,932.65	9,255.55	9,234.91	20.64	448.502		
2,900.00	2,798.32	1,197.00	1,220.30	15.38	6.23	70.32	-2,777.40	-8,938.55	9,262.65	9,241.29	21.36	433.632		
3,000.00	2,893.49	1,197.00	1,220.30	15.95	6.23	70.32	-2,777.40	-8,938.55	9,270.25	9,248.35	21.90	423.389		
3,100.00	2,988.66	1,197.00	1,220.30	16.51	6.23	70.32	-2,777.40	-8,938.55	9,278.92	9,256.49	22.43	413.716		
3,200.00	3,083.83	1,197.00	1,220.30	17.07	6.23	70.32	-2,777.40	-8,938.55	9,288.66	9,265.70	22.96	404.575		
3,300.00	3,179.00	1,249.95	1,271.47	17.64	6.45	70.36	-2,788.46	-8,946.48	9,298.74	9,275.01	23.73	391.862		
3,400.00	3,274.17	1,292.00	1,311.86	18.21	6.64	70.39	-2,797.85	-8,953.44	9,310.06	9,285.61	24.45	380.733		
3,500.00	3,369.34	1,292.00	1,311.86	18.77	6.64	70.39	-2,797.85	-8,953.44	9,321.98	9,297.00	24.98	373.215		
3,600.00	3,464.51	1,292.00	1,311.86	19.34	6.64	70.39	-2,797.85	-8,953.44	9,334.96	9,309.46	25.50	366.092		
3,700.00	3,559.68	1,332.03	1,350.09	19.91	6.84	70.42	-2,807.29	-8,960.62	9,348.57	9,322.36	26.21	356.625		
3,800.00	3,654.84	1,387.00	1,402.23	20.48	7.12	70.45	-2,821.03	-8,971.33	9,363.43	9,336.41	27.02	346.571		
3,900.00	3,750.01	1,387.00	1,402.23	21.05	7.12	70.45	-2,821.03	-8,971.33	9,378.55	9,351.02	27.53	340.660		
4,000.00	3,845.18	1,415.11	1,428.76	21.62	7.28	70.47	-2,828.34	-8,977.05	9,394.66	9,366.46	28.20	333.163		
4,100.00	3,940.35	1,481.00	1,490.84	22.19	7.66	70.50	-2,845.96	-8,990.37	9,411.13	9,382.06	29.07	323.739		
4,200.00	4,035.52	1,531.81	1,538.52	22.76	7.98	70.52	-2,860.16	-9,000.69	9,428.04	9,398.16	29.88	315.492		
4,300.00	4,130.69	4,300.00	1,635.76	23.33	30.21	70.55	-2,891.54	-9,021.78	9,445.37	9,390.35	55.02	171.667		
4,400.00	4,225.86	1,745.32	1,736.96	23.91	9.49	70.57	-2,926.67	-9,042.73	9,462.23	9,429.95	32.28	293.174		
4,500.00	4,321.03	2,461.62	2,381.91	24.48	15.93	70.21	-3,220.50	-9,139.78	9,476.75	9,437.96	38.79	244.332		
4,600.00	4,416.20	2,513.00	2,428.24	25.05	16.42	70.18	-3,242.08	-9,145.16	9,487.82	9,448.05	39.77	238.571		
4,700.00	4,511.37	2,513.00	2,428.24	25.62	16.42	70.18	-3,242.08	-9,145.16	9,499.48	9,459.19	40.29	235.775		
4,800.00	4,606.54	2,567.79	2,477.63	26.20	16.94	70.15	-3,264.91	-9,151.51	9,511.80	9,470.50	41.30	230.319		
4,900.00	4,701.71	2,608.00	2,513.91	26.77	17.33	70.13	-3,281.51	-9,156.52	9,524.76	9,482.59	42.17	225.844		
5,000.00	4,796.88	2,657.39	2,558.43	27.34	17.80	70.11	-3,301.91	-9,162.95	9,538.29	9,495.15	43.13	221.143		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWDD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	2,703.00	2,599.44	27.92	18.24	70.08	-3,320.91	-9,169.07	9,552.33	9,508.28	44.05	216.835		
5,200.00	4,987.22	2,734.13	2,627.33	28.49	18.56	70.07	-3,334.04	-9,173.40	9,567.02	9,522.17	44.85	213.322		
5,300.00	5,082.39	2,763.20	2,653.25	29.07	18.85	70.05	-3,346.52	-9,177.59	9,582.42	9,536.80	45.62	210.052		
5,400.00	5,177.56	2,798.00	2,684.12	29.64	19.20	70.03	-3,361.71	-9,182.80	9,598.55	9,552.11	46.44	206.680		
5,500.00	5,272.72	3,082.00	2,935.59	30.21	22.12	69.84	-3,487.22	-9,223.27	9,614.62	9,564.94	49.69	193.509		
5,600.00	5,367.89	3,131.40	2,980.04	30.79	22.62	69.81	-3,507.60	-9,230.26	9,629.35	9,578.70	50.65	190.121		
5,700.00	5,463.06	3,426.51	3,243.38	31.36	25.62	69.63	-3,635.08	-9,268.71	9,643.84	9,589.86	53.98	178.653		
5,800.00	5,558.23	3,506.37	3,314.71	31.94	26.43	69.58	-3,669.75	-9,278.10	9,656.92	9,601.66	55.26	174.762		
5,900.00	5,653.40	3,550.00	3,353.63	32.51	26.88	69.55	-3,688.75	-9,283.36	9,670.39	9,614.21	56.18	172.123		
6,000.00	5,748.57	3,792.87	3,571.94	33.09	29.32	69.42	-3,790.86	-9,313.07	9,683.47	9,624.48	58.99	164.144		
6,100.00	5,843.74	3,831.00	3,606.48	33.67	29.69	69.40	-3,806.31	-9,317.78	9,696.16	9,636.31	59.85	162.002		
6,200.00	5,938.91	3,881.47	3,652.09	34.24	30.19	69.38	-3,826.94	-9,324.24	9,709.42	9,648.60	60.83	159.621		
6,300.00	6,034.08	3,925.00	3,691.33	34.82	30.62	69.35	-3,844.91	-9,329.93	9,723.15	9,661.41	61.74	157.497		
6,400.00	6,129.25	3,925.00	3,691.33	35.39	30.62	69.35	-3,844.91	-9,329.93	9,737.71	9,675.48	62.23	156.487		
6,500.00	6,224.42	3,974.31	3,735.38	35.97	31.14	69.33	-3,866.01	-9,336.64	9,752.72	9,689.51	63.20	154.308		
6,600.00	6,319.59	4,020.00	3,775.58	36.54	31.62	69.29	-3,886.70	-9,343.24	9,768.80	9,704.66	64.14	152.306		
6,700.00	6,414.76	4,020.00	3,775.58	37.12	31.62	69.29	-3,886.70	-9,343.24	9,785.40	9,720.79	64.61	151.445		
6,800.00	6,509.91	6,824.12	6,412.15	37.70	51.99	62.67	-4,641.36	-9,543.25	9,794.47	9,710.41	84.06	116.516		
6,900.00	6,603.99	6,880.34	6,468.36	38.26	52.15	39.37	-4,642.30	-9,543.67	9,773.35	9,688.51	84.84	115.204		
7,000.00	6,694.76	6,934.82	6,522.83	38.78	52.30	24.00	-4,643.36	-9,544.26	9,738.16	9,652.63	85.54	113.849		
7,100.00	6,779.96	6,986.29	6,574.28	39.24	52.45	13.82	-4,644.48	-9,544.98	9,689.71	9,603.56	86.15	112.472		
7,200.00	6,857.50	7,037.00	6,624.97	39.65	52.59	6.14	-4,645.71	-9,545.84	9,629.10	9,542.42	86.69	111.081		
7,300.00	6,925.48	7,104.82	6,692.75	40.02	52.78	-0.86	-4,647.34	-9,547.11	9,557.63	9,470.46	87.17	109.644		
7,400.00	6,982.21	7,166.95	6,754.86	40.33	52.96	-8.81	-4,648.67	-9,548.29	9,476.89	9,389.35	87.55	108.251		
7,500.00	7,026.31	7,215.76	6,803.65	40.63	53.10	-19.91	-4,649.61	-9,549.23	9,388.90	9,301.11	87.79	106.943		
7,600.00	7,056.68	7,250.08	6,837.96	40.91	53.20	-38.04	-4,650.21	-9,549.90	9,295.86	9,207.94	87.91	105.737		
7,700.00	7,072.58	7,269.08	6,856.95	41.25	53.26	-66.79	-4,650.52	-9,550.27	9,200.09	9,112.17	87.92	104.642		
7,800.00	7,074.86	7,273.61	6,861.49	41.69	53.27	-85.80	-4,650.59	-9,550.36	9,103.88	9,016.05	87.83	103.650		
7,900.00	7,074.54	7,275.37	6,863.25	42.34	53.27	-85.84	-4,650.62	-9,550.40	9,007.86	8,920.11	87.74	102.660		
8,000.00	7,074.21	7,277.14	6,865.01	43.27	53.28	-85.88	-4,650.65	-9,550.43	8,911.92	8,824.24	87.67	101.648		
8,100.00	7,073.89	7,278.90	6,866.78	44.47	53.28	-85.92	-4,650.68	-9,550.47	8,816.07	8,728.45	87.62	100.615		
8,200.00	7,073.57	7,280.67	6,868.54	45.91	53.29	-85.96	-4,650.70	-9,550.50	8,720.31	8,632.72	87.59	99.558		
8,300.00	7,073.24	7,282.44	6,870.31	47.53	53.29	-86.00	-4,650.73	-9,550.54	8,624.65	8,537.07	87.58	98.479		
8,400.00	7,072.92	7,284.21	6,872.08	49.31	53.30	-86.04	-4,650.76	-9,550.57	8,529.09	8,441.50	87.59	97.375		
8,500.00	7,072.59	7,285.99	6,873.86	51.20	53.30	-86.08	-4,650.79	-9,550.61	8,433.63	8,346.00	87.63	96.247		
8,600.00	7,072.27	7,287.76	6,875.63	53.19	53.31	-86.12	-4,650.81	-9,550.64	8,338.28	8,250.59	87.69	95.093		
8,700.00	7,071.94	7,289.54	6,877.41	55.27	53.31	-86.16	-4,650.84	-9,550.68	8,243.03	8,155.26	87.77	93.914		
8,800.00	7,071.62	7,291.32	6,879.19	57.43	53.32	-86.20	-4,650.87	-9,550.71	8,147.90	8,060.02	87.89	92.709		
8,900.00	7,071.29	7,293.10	6,880.97	59.64	53.33	-86.24	-4,650.89	-9,550.75	8,052.89	7,964.86	88.03	91.477		
9,000.00	7,070.97	7,294.88	6,882.75	61.92	53.33	-86.28	-4,650.92	-9,550.78	7,958.00	7,869.79	88.21	90.219		
9,100.00	7,070.64	7,296.67	6,884.54	64.24	53.34	-86.33	-4,650.95	-9,550.82	7,863.24	7,774.82	88.42	88.934		
9,200.00	7,070.32	7,298.46	6,886.32	66.61	53.34	-86.37	-4,650.97	-9,550.86	7,768.60	7,679.95	88.66	87.623		
9,300.00	7,069.99	7,300.24	6,888.11	69.01	53.35	-86.41	-4,651.00	-9,550.89	7,674.11	7,585.17	88.94	86.285		
9,400.00	7,069.67	7,302.04	6,889.90	71.45	53.35	-86.45	-4,651.03	-9,550.93	7,579.75	7,490.50	89.26	84.922		
9,500.00	7,069.34	7,303.83	6,891.69	73.92	53.36	-86.49	-4,651.05	-9,550.96	7,485.54	7,395.93	89.61	83.533		
9,600.00	7,069.02	7,305.62	6,893.49	76.42	53.36	-86.53	-4,651.08	-9,551.00	7,391.48	7,301.47	90.01	82.120		
9,700.00	7,068.69	7,307.42	6,895.28	78.95	53.37	-86.57	-4,651.11	-9,551.03	7,297.58	7,207.13	90.45	80.682		
9,800.00	7,068.37	7,309.22	6,897.08	81.49	53.37	-86.61	-4,651.13	-9,551.07	7,203.84	7,112.91	90.93	79.223		
9,900.00	7,068.04	7,311.02	6,898.88	84.06	53.38	-86.65	-4,651.16	-9,551.11	7,110.28	7,018.82	91.46	77.741		
10,000.00	7,067.72	7,312.82	6,900.69	86.65	53.38	-86.69	-4,651.18	-9,551.14	7,016.89	6,924.85	92.04	76.239		
10,100.00	7,067.39	7,314.63	6,902.49	89.25	53.39	-86.73	-4,651.21	-9,551.18	6,923.68	6,831.02	92.66	74.719		
10,200.00	7,067.07	7,316.43	6,904.30	91.87	53.39	-86.77	-4,651.23	-9,551.21	6,830.67	6,737.33	93.34	73.181		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,300.00	7,066.74	7,318.24	6,906.10	94.50	53.40	-86.81	-4,651.26	-9,551.25	6,737.85	6,643.78	94.07	71.627		
10,400.00	7,066.42	7,320.05	6,907.91	97.14	53.40	-86.86	-4,651.29	-9,551.29	6,645.25	6,550.40	94.85	70.060		
10,500.00	7,066.09	7,321.87	6,909.73	99.80	53.41	-86.90	-4,651.31	-9,551.32	6,552.86	6,457.17	95.69	68.481		
10,600.00	7,065.77	7,323.68	6,911.54	102.47	53.41	-86.94	-4,651.34	-9,551.36	6,460.69	6,364.11	96.58	66.892		
10,700.00	7,065.44	7,325.50	6,913.36	105.15	53.42	-86.98	-4,651.36	-9,551.40	6,368.77	6,271.23	97.54	65.295		
10,800.00	7,065.12	7,327.32	6,915.18	107.83	53.42	-87.02	-4,651.39	-9,551.43	6,277.09	6,178.53	98.55	63.693		
10,900.00	7,064.79	7,329.14	6,917.00	110.53	53.43	-87.06	-4,651.41	-9,551.47	6,185.66	6,086.03	99.63	62.087		
11,000.00	7,064.47	7,330.96	6,918.82	113.23	53.43	-87.10	-4,651.44	-9,551.51	6,094.51	5,993.74	100.77	60.480		
11,100.00	7,064.14	7,332.79	6,920.64	115.95	53.44	-87.14	-4,651.46	-9,551.54	6,003.63	5,901.66	101.97	58.874		
11,200.00	7,063.82	7,334.61	6,922.47	118.66	53.44	-87.19	-4,651.49	-9,551.58	5,913.05	5,809.81	103.25	57.271		
11,300.00	7,063.49	7,336.44	6,924.30	121.39	53.45	-87.23	-4,651.51	-9,551.62	5,822.78	5,718.19	104.59	55.673		
11,400.00	7,063.17	7,338.27	6,926.13	124.12	53.46	-87.27	-4,651.53	-9,551.65	5,732.83	5,626.83	106.00	54.082		
11,500.00	7,062.84	7,340.11	6,927.96	126.86	53.46	-87.31	-4,651.56	-9,551.69	5,643.22	5,535.73	107.49	52.501		
11,600.00	7,062.52	7,341.94	6,929.79	129.60	53.47	-87.35	-4,651.58	-9,551.73	5,553.96	5,444.91	109.05	50.931		
11,700.00	7,062.19	7,343.78	6,931.63	132.35	53.47	-87.39	-4,651.61	-9,551.76	5,465.08	5,354.39	110.69	49.374		
11,800.00	7,061.87	7,345.62	6,933.47	135.10	53.48	-87.43	-4,651.63	-9,551.80	5,376.58	5,264.18	112.40	47.832		
11,900.00	7,061.54	7,347.46	6,935.31	137.85	53.48	-87.48	-4,651.65	-9,551.84	5,288.49	5,174.29	114.20	46.308		
12,000.00	7,061.22	7,349.30	6,937.15	140.61	53.49	-87.52	-4,651.68	-9,551.87	5,200.84	5,084.75	116.09	44.801		
12,100.00	7,060.89	7,351.15	6,939.00	143.38	53.49	-87.56	-4,651.70	-9,551.91	5,113.63	4,995.58	118.06	43.316		
12,200.00	7,060.57	7,352.99	6,940.84	146.15	53.50	-87.60	-4,651.72	-9,551.95	5,026.91	4,906.79	120.11	41.851		
12,300.00	7,060.24	7,354.84	6,942.69	148.92	53.50	-87.64	-4,651.75	-9,551.99	4,940.68	4,818.42	122.26	40.410		
12,400.00	7,059.92	7,356.69	6,944.54	151.69	53.51	-87.69	-4,651.77	-9,552.02	4,854.98	4,730.47	124.51	38.994		
12,500.00	7,059.59	7,358.55	6,946.40	154.47	53.51	-87.73	-4,651.79	-9,552.06	4,769.84	4,642.99	126.85	37.603		
12,600.00	7,059.27	7,360.40	6,948.25	157.25	53.52	-87.77	-4,651.82	-9,552.10	4,685.28	4,555.99	129.29	36.239		
12,700.00	7,058.94	7,362.26	6,950.11	160.03	53.52	-87.81	-4,651.84	-9,552.14	4,601.34	4,469.51	131.83	34.903		
12,800.00	7,058.62	7,364.08	6,948.53	162.82	53.51	-87.78	-4,651.83	-9,552.12	4,518.07	4,383.60	134.47	33.598		
12,900.00	7,058.29	7,362.47	6,950.31	165.61	53.52	-87.82	-4,651.85	-9,552.15	4,435.48	4,298.24	137.23	32.321		
13,000.00	7,057.97	7,364.26	6,952.10	168.40	53.52	-87.86	-4,651.87	-9,552.19	4,353.61	4,213.51	140.10	31.074		
13,100.00	7,057.64	7,366.06	6,953.90	171.19	53.53	-87.90	-4,651.90	-9,552.23	4,272.52	4,129.43	143.09	29.859		
13,200.00	7,057.32	7,367.86	6,955.71	173.99	53.53	-87.94	-4,651.92	-9,552.27	4,192.24	4,046.05	146.19	28.676		
13,300.00	7,057.00	7,369.67	6,957.52	176.78	53.54	-87.98	-4,651.94	-9,552.30	4,112.83	3,963.41	149.42	27.525		
13,400.00	7,056.67	7,371.49	6,959.34	179.58	53.54	-88.02	-4,651.96	-9,552.34	4,034.33	3,881.56	152.77	26.408		
13,500.00	7,056.35	7,373.32	6,961.16	182.38	53.55	-88.06	-4,651.99	-9,552.38	3,956.80	3,800.55	156.25	25.324		
13,600.00	7,056.02	7,375.16	6,963.00	185.19	53.55	-88.10	-4,652.01	-9,552.42	3,880.30	3,720.44	159.86	24.273		
13,700.00	7,055.70	7,377.00	6,964.84	187.99	53.56	-88.15	-4,652.03	-9,552.46	3,804.89	3,641.29	163.60	23.257		
13,800.00	7,055.37	7,378.85	6,966.69	190.80	53.56	-88.19	-4,652.05	-9,552.50	3,730.63	3,563.15	167.48	22.275		
13,900.00	7,055.05	7,380.71	6,968.55	193.60	53.57	-88.23	-4,652.08	-9,552.54	3,657.60	3,486.11	171.49	21.328		
14,000.00	7,054.72	7,382.57	6,970.41	196.41	53.57	-88.27	-4,652.10	-9,552.58	3,585.87	3,410.22	175.65	20.415		
14,100.00	7,054.40	7,384.45	6,972.29	199.22	53.58	-88.32	-4,652.12	-9,552.62	3,515.52	3,335.58	179.94	19.537		
14,200.00	7,054.07	7,386.33	6,974.17	202.03	53.58	-88.36	-4,652.14	-9,552.66	3,446.63	3,262.26	184.37	18.694		
14,300.00	7,053.75	7,388.22	6,976.06	204.85	53.59	-88.40	-4,652.17	-9,552.70	3,379.30	3,190.36	188.94	17.885		
14,400.00	7,053.42	7,390.11	6,977.95	207.66	53.59	-88.44	-4,652.19	-9,552.74	3,313.62	3,119.97	193.65	17.111		
14,500.00	7,053.10	7,392.02	6,979.86	210.48	53.60	-88.49	-4,652.21	-9,552.78	3,249.69	3,051.19	198.49	16.372		
14,600.00	7,052.77	7,393.93	6,981.77	213.29	53.60	-88.53	-4,652.23	-9,552.82	3,187.61	2,984.14	203.47	15.666		
14,700.00	7,052.45	7,395.85	6,983.69	216.11	53.61	-88.57	-4,652.25	-9,552.86	3,127.49	2,918.93	208.57	14.995		
14,800.00	7,052.12	7,397.78	6,985.62	218.93	53.62	-88.62	-4,652.28	-9,552.90	3,069.46	2,855.68	213.78	14.358		
14,900.00	7,051.80	7,399.72	6,987.55	221.75	53.62	-88.66	-4,652.30	-9,552.95	3,013.63	2,794.52	219.11	13.754		
15,000.00	7,051.47	7,401.66	6,989.50	224.57	53.63	-88.71	-4,652.32	-9,552.99	2,960.12	2,735.59	224.53	13.184		
15,100.00	7,051.15	7,403.62	6,991.45	227.39	53.63	-88.75	-4,652.34	-9,553.03	2,909.06	2,679.03	230.03	12.646		
15,145.13	7,051.00	7,404.50	6,992.34	228.67	53.63	-88.77	-4,652.35	-9,553.05	2,886.86	2,654.32	232.54	12.414	CC, ES, SF	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-GYRO-NS													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	63.00	3.28	3.28	-128.74	-3,943.12	-4,914.70	6,301.30					
100.00	100.00	47.35	110.35	3.28	3.28	-128.74	-3,942.97	-4,914.77	6,300.96	6,294.39	6.57	959.573		
200.00	200.00	176.54	239.53	3.34	3.33	-128.72	-3,941.20	-4,915.54	6,300.57	6,293.90	6.66	945.327		
300.00	299.98	274.03	337.00	3.44	3.43	46.95	-3,939.32	-4,916.23	6,298.72	6,291.86	6.86	917.580		
400.00	399.84	371.89	434.84	3.59	3.57	47.05	-3,937.74	-4,916.79	6,294.59	6,287.44	7.16	879.384		
500.00	499.45	475.18	538.12	3.79	3.76	47.22	-3,936.29	-4,917.18	6,288.07	6,280.52	7.55	832.682		
600.00	598.70	591.96	654.89	4.03	4.03	47.46	-3,934.72	-4,917.34	6,279.05	6,270.99	8.06	778.928		
700.00	697.47	681.43	744.35	4.31	4.26	47.74	-3,933.57	-4,917.29	6,267.59	6,259.02	8.57	730.943		
800.00	795.62	780.47	843.39	4.64	4.54	48.08	-3,932.53	-4,917.19	6,253.94	6,244.76	9.17	681.847		
900.00	893.06	868.62	931.53	5.00	4.81	48.46	-3,931.61	-4,917.12	6,238.04	6,228.25	9.79	637.301		
1,000.00	989.64	958.24	1,021.15	5.40	5.10	48.91	-3,930.75	-4,917.17	6,220.07	6,209.61	10.45	595.045		
1,100.00	1,085.27	1,058.82	1,121.72	5.83	5.43	49.42	-3,929.78	-4,917.26	6,199.95	6,188.75	11.20	553.668		
1,200.00	1,180.44	1,151.60	1,214.50	6.29	5.76	49.63	-3,928.83	-4,917.27	6,178.83	6,166.89	11.94	517.383		
1,300.00	1,275.61	1,234.61	1,297.50	6.76	6.05	49.82	-3,928.00	-4,917.43	6,157.96	6,145.28	12.68	485.671		
1,400.00	1,370.78	1,317.44	1,380.33	7.26	6.35	50.01	-3,927.39	-4,917.63	6,137.36	6,123.93	13.44	456.779		
1,500.00	1,465.95	1,404.18	1,467.06	7.76	6.67	50.21	-3,927.00	-4,917.84	6,117.02	6,102.80	14.22	430.030		
1,600.00	1,561.12	1,511.26	1,574.14	8.27	7.08	50.46	-3,926.52	-4,918.04	6,096.73	6,081.63	15.10	403.681		
1,700.00	1,656.29	1,601.15	1,664.03	8.80	7.42	50.66	-3,926.22	-4,918.09	6,076.50	6,060.57	15.93	381.388		
1,800.00	1,751.46	1,702.14	1,765.03	9.32	7.81	50.90	-3,925.90	-4,918.10	6,056.33	6,039.52	16.82	360.174		
1,900.00	1,846.63	1,791.59	1,854.47	9.86	8.16	51.11	-3,925.60	-4,918.12	6,036.26	6,018.59	17.66	341.716		
2,000.00	1,941.80	1,866.36	1,929.25	10.40	8.46	51.28	-3,925.51	-4,918.21	6,016.47	5,998.00	18.47	325.799		
2,100.00	2,036.96	1,945.89	2,008.78	10.94	8.77	51.47	-3,925.58	-4,918.52	5,997.09	5,977.80	19.29	310.834		
2,200.00	2,132.13	2,033.31	2,096.19	11.49	9.12	51.68	-3,925.72	-4,919.02	5,977.99	5,957.83	20.16	296.583		
2,300.00	2,227.30	2,125.95	2,188.83	12.04	9.48	51.89	-3,925.98	-4,919.54	5,959.05	5,938.00	21.04	283.161		
2,400.00	2,322.47	2,218.59	2,281.47	12.59	9.86	52.12	-3,926.18	-4,920.14	5,940.23	5,918.29	21.94	270.761		
2,500.00	2,417.64	2,306.07	2,368.95	13.15	10.21	52.33	-3,926.34	-4,920.84	5,921.61	5,898.79	22.82	259.506		
2,600.00	2,512.81	2,403.84	2,466.72	13.70	10.61	52.57	-3,926.51	-4,921.68	5,903.13	5,879.39	23.74	248.633		
2,700.00	2,607.98	2,493.02	2,555.89	14.26	10.97	52.78	-3,926.68	-4,922.46	5,884.78	5,860.14	24.64	238.855		
2,800.00	2,703.15	2,580.67	2,643.53	14.82	11.33	53.00	-3,926.83	-4,923.37	5,866.63	5,841.10	25.53	229.789		
2,900.00	2,798.32	2,662.96	2,725.82	15.38	11.66	53.21	-3,926.89	-4,924.43	5,848.75	5,822.34	26.41	221.487		
3,000.00	2,893.49	2,747.49	2,810.34	15.95	12.01	53.42	-3,927.09	-4,925.66	5,831.19	5,803.89	27.29	213.638		
3,100.00	2,988.66	2,835.95	2,898.78	16.51	12.38	53.64	-3,927.43	-4,927.02	5,813.87	5,785.67	28.20	206.161		
3,200.00	3,083.83	2,925.17	2,988.00	17.07	12.75	53.86	-3,928.00	-4,928.35	5,796.75	5,767.64	29.11	199.117		
3,300.00	3,179.00	3,016.05	3,078.86	17.64	13.12	54.09	-3,928.62	-4,929.80	5,779.85	5,749.82	30.03	192.450		
3,400.00	3,274.17	3,160.69	3,223.49	18.21	13.72	54.46	-3,929.46	-4,931.79	5,762.90	5,731.74	31.16	184.938		
3,500.00	3,369.34	3,270.27	3,333.06	18.77	14.18	54.74	-3,929.70	-4,932.39	5,745.10	5,712.95	32.16	178.655		
3,600.00	3,464.51	3,373.46	3,436.25	19.34	14.61	55.01	-3,929.83	-4,933.06	5,727.49	5,694.36	33.13	172.871		
3,700.00	3,559.68	3,468.74	3,531.53	19.91	15.00	55.25	-3,929.88	-4,933.54	5,709.81	5,675.73	34.08	167.552		
3,800.00	3,654.84	3,548.21	3,611.00	20.48	15.34	55.46	-3,930.07	-4,933.98	5,692.38	5,657.42	34.97	162.795		
3,900.00	3,750.01	3,622.91	3,685.69	21.05	15.65	55.65	-3,930.23	-4,934.71	5,675.40	5,639.56	35.84	158.357		
4,000.00	3,845.18	3,700.01	3,762.78	21.62	15.97	55.86	-3,930.40	-4,935.79	5,658.87	5,622.14	36.72	154.098		
4,100.00	3,940.35	3,784.83	3,847.60	22.19	16.33	56.08	-3,930.64	-4,937.19	5,642.69	5,605.05	37.64	149.924		
4,200.00	4,035.52	3,873.47	3,936.22	22.76	16.70	56.32	-3,931.08	-4,938.68	5,626.77	5,588.20	38.57	145.893		
4,300.00	4,130.69	3,947.82	4,010.55	23.33	17.01	56.52	-3,931.70	-4,939.96	5,611.15	5,571.71	39.45	142.252		
4,400.00	4,225.86	4,017.42	4,080.14	23.91	17.31	56.70	-3,932.56	-4,941.39	5,596.10	5,555.80	40.31	138.842		
4,500.00	4,321.03	4,091.96	4,154.64	24.48	17.62	56.90	-3,933.83	-4,943.06	5,581.56	5,540.37	41.19	135.522		
4,600.00	4,416.20	4,163.15	4,225.80	25.05	17.92	57.08	-3,935.37	-4,944.80	5,567.52	5,525.46	42.05	132.390		
4,700.00	4,511.37	4,265.81	4,328.39	25.62	18.35	57.35	-3,937.84	-4,947.53	5,553.88	5,510.84	43.05	129.023		
4,800.00	4,606.54	4,381.50	4,444.03	26.20	18.84	57.66	-3,940.05	-4,950.37	5,539.95	5,495.86	44.09	125.652		
4,900.00	4,701.71	4,483.27	4,545.75	26.77	19.27	57.94	-3,941.47	-4,952.92	5,525.94	5,480.85	45.08	122.579		
5,000.00	4,796.88	4,626.75	4,689.19	27.34	19.88	58.33	-3,942.97	-4,956.04	5,511.62	5,465.38	46.23	119.217		
5,100.00	4,892.05	4,755.45	4,817.87	27.92	20.42	58.69	-3,943.81	-4,958.00	5,496.68	5,449.36	47.33	116.147		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,859.70	4,922.12	28.49	20.86	58.97	-3,944.49	-4,959.05	5,481.44	5,433.11	48.33	113.422		
5,300.00	5,082.39	4,956.60	5,019.01	29.07	21.27	59.24	-3,945.03	-4,960.08	5,466.32	5,417.02	49.30	110.869		
5,400.00	5,177.56	5,061.82	5,124.22	29.64	21.72	59.54	-3,945.30	-4,961.22	5,451.22	5,400.91	50.31	108.347		
5,500.00	5,272.72	5,158.84	5,221.24	30.21	22.13	59.82	-3,945.23	-4,962.27	5,436.10	5,384.81	51.29	105.984		
5,600.00	5,367.89	5,256.75	5,319.14	30.79	22.54	60.11	-3,944.78	-4,963.54	5,421.13	5,368.86	52.28	103.704		
5,700.00	5,463.06	5,345.02	5,407.40	31.36	22.92	60.37	-3,944.32	-4,964.65	5,406.25	5,353.03	53.22	101.575		
5,800.00	5,558.23	5,440.61	5,502.98	31.94	23.32	60.65	-3,944.14	-4,965.96	5,391.73	5,337.53	54.20	99.476		
5,900.00	5,653.40	5,543.21	5,605.57	32.51	23.76	60.96	-3,943.71	-4,967.11	5,377.03	5,321.82	55.21	97.401		
6,000.00	5,748.57	5,619.36	5,681.72	33.09	24.08	61.18	-3,943.80	-4,967.97	5,362.71	5,306.60	56.11	95.569		
6,100.00	5,843.74	5,698.79	5,761.14	33.67	24.42	61.42	-3,944.03	-4,969.09	5,348.83	5,291.80	57.03	93.783		
6,200.00	5,938.91	5,796.12	5,858.46	34.24	24.83	61.70	-3,944.42	-4,970.55	5,335.22	5,277.20	58.02	91.952		
6,300.00	6,034.08	5,870.23	5,932.55	34.82	25.15	61.92	-3,944.73	-4,971.79	5,321.90	5,262.97	58.92	90.317		
6,400.00	6,129.25	5,954.83	6,017.14	35.39	25.51	62.18	-3,944.87	-4,973.64	5,309.06	5,249.19	59.87	88.680		
6,500.00	6,224.42	6,059.49	6,121.78	35.97	25.95	62.50	-3,944.94	-4,975.99	5,296.38	5,235.50	60.89	86.988		
6,600.00	6,319.59	6,147.26	6,209.52	36.54	26.33	62.77	-3,945.12	-4,977.74	5,283.69	5,221.85	61.84	85.438		
6,700.00	6,414.76	6,222.76	6,284.99	37.12	26.65	63.00	-3,945.01	-4,979.68	5,271.50	5,208.75	62.75	84.004		
6,800.00	6,509.91	6,308.20	6,370.40	37.70	27.01	55.86	-3,945.28	-4,981.96	5,259.21	5,195.51	63.70	82.561		
6,900.00	6,603.99	6,406.32	6,468.49	38.26	27.43	32.47	-3,945.53	-4,984.64	5,236.66	5,172.00	64.67	80.980		
7,000.00	6,694.76	6,494.65	6,556.79	38.78	27.81	16.78	-3,945.56	-4,987.14	5,200.39	5,134.86	65.53	79.357		
7,100.00	6,779.96	6,582.10	6,644.20	39.24	28.18	6.02	-3,945.87	-4,989.52	5,151.23	5,084.91	66.32	77.671		
7,200.00	6,857.50	6,645.36	6,707.43	39.65	28.45	-2.60	-3,946.32	-4,991.22	5,090.42	5,023.48	66.95	76.039		
7,300.00	6,925.48	6,700.01	6,762.06	40.02	28.68	-10.94	-3,946.52	-4,992.99	5,019.63	4,952.18	67.46	74.414		
7,400.00	6,982.21	6,740.53	6,802.55	40.33	28.85	-20.55	-3,946.55	-4,994.51	4,940.53	4,872.70	67.83	72.839		
7,500.00	7,026.31	6,775.24	6,837.23	40.63	29.00	-33.22	-3,946.50	-4,995.94	4,855.02	4,786.92	68.10	71.298		
7,600.00	7,056.68	6,800.01	6,861.98	40.91	29.11	-50.56	-3,946.43	-4,997.05	4,765.19	4,696.94	68.25	69.821		
7,700.00	7,072.58	6,815.28	6,877.23	41.25	29.17	-71.91	-3,946.38	-4,997.76	4,673.29	4,604.99	68.31	68.416		
7,800.00	7,074.86	6,820.34	6,882.28	41.69	29.19	-84.46	-3,946.36	-4,998.00	4,581.54	4,513.24	68.29	67.085		
7,900.00	7,074.54	6,823.55	6,885.49	42.34	29.21	-84.56	-3,946.36	-4,998.15	4,490.28	4,421.97	68.31	65.735		
8,000.00	7,074.21	6,826.79	6,888.73	43.27	29.22	-84.66	-3,946.35	-4,998.30	4,399.41	4,331.04	68.37	64.346		
8,100.00	7,073.89	6,830.06	6,891.99	44.47	29.24	-84.76	-3,946.34	-4,998.46	4,308.94	4,240.45	68.49	62.915		
8,200.00	7,073.57	6,833.36	6,895.29	45.91	29.25	-84.86	-3,946.34	-4,998.62	4,218.89	4,150.22	68.66	61.442		
8,300.00	7,073.24	6,836.70	6,898.62	47.53	29.26	-84.97	-3,946.33	-4,998.78	4,129.30	4,060.39	68.91	59.925		
8,400.00	7,072.92	6,840.06	6,901.98	49.31	29.28	-85.07	-3,946.33	-4,998.94	4,040.19	3,970.96	69.22	58.363		
8,500.00	7,072.59	6,843.46	6,905.37	51.20	29.29	-85.18	-3,946.32	-4,999.10	3,951.60	3,881.97	69.62	56.757		
8,600.00	7,072.27	6,846.89	6,908.80	53.19	29.31	-85.28	-3,946.32	-4,999.27	3,863.56	3,793.45	70.11	55.106		
8,700.00	7,071.94	6,850.35	6,912.26	55.27	29.32	-85.39	-3,946.31	-4,999.44	3,776.11	3,705.42	70.70	53.412		
8,800.00	7,071.62	6,853.85	6,915.75	57.43	29.34	-85.49	-3,946.31	-4,999.61	3,689.30	3,617.91	71.39	51.679		
8,900.00	7,071.29	6,857.38	6,919.28	59.64	29.35	-85.60	-3,946.31	-4,999.79	3,603.17	3,530.97	72.20	49.909		
9,000.00	7,070.97	6,860.94	6,922.84	61.92	29.37	-85.71	-3,946.31	-4,999.96	3,517.76	3,444.64	73.12	48.107		
9,100.00	7,070.64	6,864.54	6,926.43	64.24	29.38	-85.82	-3,946.31	-5,000.14	3,433.14	3,358.96	74.19	46.278		
9,200.00	7,070.32	6,868.18	6,930.06	66.61	29.40	-85.94	-3,946.31	-5,000.33	3,349.37	3,273.98	75.39	44.429		
9,300.00	7,069.99	6,871.85	6,933.73	69.01	29.41	-86.05	-3,946.31	-5,000.51	3,266.50	3,189.76	76.74	42.567		
9,400.00	7,069.67	6,875.56	6,937.43	71.45	29.43	-86.16	-3,946.31	-5,000.70	3,184.60	3,106.36	78.25	40.700		
9,500.00	7,069.34	6,879.30	6,941.18	73.92	29.45	-86.28	-3,946.32	-5,000.89	3,103.77	3,023.85	79.92	38.837		
9,600.00	7,069.02	6,883.09	6,944.95	76.42	29.46	-86.40	-3,946.32	-5,001.08	3,024.07	2,942.31	81.76	36.985		
9,700.00	7,068.69	6,886.91	6,948.77	78.95	29.48	-86.51	-3,946.33	-5,001.28	2,945.61	2,861.82	83.79	35.154		
9,800.00	7,068.37	6,890.77	6,952.63	81.49	29.50	-86.63	-3,946.33	-5,001.48	2,868.48	2,782.48	86.00	33.353		
9,900.00	7,068.04	6,894.67	6,956.52	84.06	29.51	-86.75	-3,946.34	-5,001.68	2,792.80	2,704.39	88.41	31.589		
10,000.00	7,067.72	6,900.01	6,961.86	86.65	29.53	-86.92	-3,946.35	-5,001.96	2,718.67	2,627.66	91.01	29.871		
10,100.00	7,067.39	6,900.01	6,961.86	89.25	29.53	-86.92	-3,946.35	-5,001.96	2,646.25	2,552.44	93.82	28.207		
10,200.00	7,067.07	6,906.01	6,967.85	91.87	29.56	-87.10	-3,946.36	-5,002.27	2,575.67	2,478.84	96.83	26.601		
10,300.00	7,066.74	6,909.73	6,971.56	94.50	29.58	-87.22	-3,946.37	-5,002.47	2,507.08	2,407.03	100.04	25.060		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	6,913.51	6,975.34	97.14	29.59	-87.34	-3,946.39	-5,002.67	2,440.65	2,337.19	103.46	23.589		
10,500.00	7,066.09	6,917.35	6,979.17	99.80	29.61	-87.46	-3,946.40	-5,002.88	2,376.57	2,269.48	107.09	22.193		
10,600.00	7,065.77	6,921.26	6,983.07	102.47	29.63	-87.58	-3,946.41	-5,003.09	2,315.02	2,204.12	110.90	20.874		
10,700.00	7,065.44	6,925.44	6,987.04	105.15	29.64	-87.70	-3,946.43	-5,003.31	2,256.23	2,141.32	114.91	19.635		
10,800.00	7,065.12	6,929.28	6,991.08	107.83	29.66	-87.82	-3,946.45	-5,003.53	2,200.39	2,081.31	119.08	18.478		
10,900.00	7,064.79	6,933.39	6,995.18	110.53	29.68	-87.95	-3,946.47	-5,003.76	2,147.76	2,024.35	123.40	17.404		
11,000.00	7,064.47	6,937.57	6,999.36	113.23	29.69	-88.08	-3,946.49	-5,003.99	2,098.56	1,970.70	127.86	16.413		
11,100.00	7,064.14	6,941.82	7,003.60	115.95	29.71	-88.21	-3,946.51	-5,004.24	2,053.05	1,920.64	132.41	15.505		
11,200.00	7,063.82	6,946.15	7,007.93	118.66	29.73	-88.35	-3,946.54	-5,004.48	2,011.47	1,874.45	137.02	14.680		
11,300.00	7,063.49	6,950.56	7,012.33	121.39	29.75	-88.48	-3,946.56	-5,004.74	1,974.07	1,832.42	141.65	13.936		
11,400.00	7,063.17	6,955.05	7,016.80	124.12	29.77	-88.62	-3,946.59	-5,005.00	1,941.10	1,794.85	146.25	13.272		
11,500.00	7,062.84	6,959.61	7,021.36	126.86	29.79	-88.76	-3,946.62	-5,005.26	1,912.78	1,762.01	150.78	12.686		
11,600.00	7,062.52	6,964.26	7,026.01	129.60	29.81	-88.91	-3,946.66	-5,005.54	1,889.32	1,734.16	155.16	12.176		
11,700.00	7,062.19	6,969.00	7,030.73	132.35	29.83	-89.05	-3,946.69	-5,005.82	1,870.91	1,711.54	159.36	11.740		
11,800.00	7,061.87	6,973.82	7,035.55	135.10	29.85	-89.20	-3,946.73	-5,006.11	1,857.68	1,694.36	163.32	11.374		
11,900.00	7,061.54	6,978.74	7,040.45	137.85	29.87	-89.36	-3,946.77	-5,006.40	1,849.77	1,682.78	166.99	11.077		
11,997.21	7,061.23	6,983.60	7,045.31	140.54	29.89	-89.51	-3,946.82	-5,006.70	1,847.22	1,676.99	170.23	10.851 CC		
12,000.00	7,061.22	6,983.74	7,045.45	140.61	29.89	-89.51	-3,946.82	-5,006.71	1,847.22	1,676.90	170.32	10.846		
12,100.00	7,060.89	6,988.85	7,050.54	143.38	29.91	-89.67	-3,946.86	-5,007.02	1,850.07	1,676.79	173.28	10.677 ES		
12,200.00	7,060.57	6,994.05	7,055.74	146.15	29.94	-89.83	-3,946.91	-5,007.35	1,858.28	1,682.44	175.84	10.568		
12,300.00	7,060.24	6,999.35	7,061.03	148.92	29.96	-89.99	-3,946.97	-5,007.68	1,871.80	1,693.79	178.00	10.515 SF		
12,400.00	7,059.92	7,004.80	7,066.46	151.69	29.98	-90.16	-3,947.02	-5,008.02	1,890.49	1,710.74	179.75	10.517		
12,500.00	7,059.59	7,010.26	7,071.91	154.47	30.01	-90.33	-3,947.08	-5,008.37	1,914.22	1,733.11	181.10	10.570		
12,600.00	7,059.27	7,015.72	7,077.37	157.25	30.03	-90.50	-3,947.14	-5,008.71	1,942.79	1,760.72	182.07	10.671		
12,700.00	7,058.94	7,021.19	7,082.83	160.03	30.05	-90.67	-3,947.21	-5,009.06	1,976.00	1,793.33	182.68	10.817		
12,800.00	7,058.62	7,026.67	7,088.29	162.82	30.08	-90.84	-3,947.27	-5,009.41	2,013.62	1,830.67	182.95	11.006		
12,900.00	7,058.29	7,032.15	7,093.76	165.61	30.10	-91.01	-3,947.34	-5,009.75	2,055.40	1,872.47	182.94	11.236		
13,000.00	7,057.97	7,037.64	7,099.23	168.40	30.12	-91.18	-3,947.40	-5,010.10	2,101.10	1,918.45	182.65	11.503		
13,100.00	7,057.64	7,043.13	7,104.71	171.19	30.15	-91.35	-3,947.47	-5,010.45	2,150.47	1,968.32	182.15	11.806		
13,200.00	7,057.32	7,048.62	7,110.20	173.99	30.17	-91.52	-3,947.54	-5,010.79	2,203.25	2,021.80	181.45	12.143		
13,300.00	7,057.00	7,054.13	7,115.69	176.78	30.19	-91.69	-3,947.61	-5,011.14	2,259.22	2,078.63	180.59	12.510		
13,400.00	7,056.67	7,059.63	7,121.18	179.58	30.22	-91.86	-3,947.69	-5,011.49	2,318.14	2,138.54	179.60	12.907		
13,500.00	7,056.35	7,065.14	7,126.68	182.38	30.24	-92.03	-3,947.76	-5,011.84	2,379.78	2,201.28	178.50	13.332		
13,600.00	7,056.02	7,070.66	7,132.19	185.19	30.26	-92.20	-3,947.84	-5,012.19	2,443.96	2,266.63	177.33	13.782		
13,700.00	7,055.70	7,076.18	7,137.70	187.99	30.29	-92.37	-3,947.92	-5,012.54	2,510.46	2,334.37	176.09	14.257		
13,800.00	7,055.37	7,081.71	7,143.21	190.80	30.31	-92.54	-3,948.00	-5,012.89	2,579.11	2,404.30	174.81	14.754		
13,900.00	7,055.05	7,087.24	7,148.73	193.60	30.33	-92.71	-3,948.08	-5,013.24	2,649.75	2,476.25	173.50	15.272		
14,000.00	7,054.72	7,092.78	7,154.26	196.41	30.36	-92.88	-3,948.17	-5,013.59	2,722.21	2,550.03	172.18	15.810		
14,100.00	7,054.40	7,098.32	7,159.79	199.22	30.38	-93.05	-3,948.25	-5,013.95	2,796.37	2,625.51	170.85	16.367		
14,200.00	7,054.07	7,104.20	7,165.66	202.03	30.41	-93.23	-3,948.35	-5,014.32	2,872.07	2,702.54	169.53	16.941		
14,300.00	7,053.75	7,110.24	7,171.68	204.85	30.43	-93.42	-3,948.44	-5,014.70	2,949.22	2,780.99	168.22	17.532		
14,400.00	7,053.42	7,116.28	7,177.71	207.66	30.46	-93.61	-3,948.54	-5,015.09	3,027.69	2,860.76	166.93	18.137		
14,500.00	7,053.10	7,122.32	7,183.73	210.48	30.48	-93.79	-3,948.63	-5,015.47	3,107.38	2,941.72	165.66	18.757		
14,600.00	7,052.77	7,128.35	7,189.76	213.29	30.51	-93.98	-3,948.73	-5,015.85	3,188.21	3,023.79	164.42	19.391		
14,700.00	7,052.45	7,134.39	7,195.78	216.11	30.54	-94.16	-3,948.82	-5,016.24	3,270.09	3,106.88	163.20	20.037		
14,800.00	7,052.12	7,140.42	7,201.80	218.93	30.56	-94.35	-3,948.92	-5,016.62	3,352.93	3,190.92	162.01	20.695		
14,900.00	7,051.80	7,146.46	7,207.82	221.75	30.59	-94.53	-3,949.01	-5,017.00	3,436.69	3,275.83	160.86	21.365		
15,000.00	7,051.47	7,152.49	7,213.85	224.57	30.61	-94.72	-3,949.11	-5,017.39	3,521.27	3,361.54	159.73	22.045		
15,100.00	7,051.15	7,158.53	7,219.87	227.39	30.64	-94.90	-3,949.20	-5,017.77	3,606.64	3,448.00	158.64	22.734		
15,145.13	7,051.00	7,161.25	7,222.58	228.67	30.65	-94.99	-3,949.25	-5,017.94	3,645.41	3,487.24	158.16	23.049		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	72.00	3.28	3.28	-147.02	-5,073.41	-3,291.64	6,048.10					
100.00	100.00	89.57	136.57	3.28	3.28	-147.02	-5,073.26	-3,291.51	6,047.59	6,041.02	6.57	920.773		
200.00	200.00	191.63	238.62	3.34	3.33	-147.02	-5,072.50	-3,291.32	6,046.86	6,040.20	6.67	907.214		
300.00	299.98	263.27	310.26	3.44	3.39	28.62	-5,071.99	-3,291.54	6,044.91	6,038.08	6.83	884.651		
400.00	399.84	354.07	401.06	3.59	3.51	28.69	-5,071.90	-3,291.66	6,040.29	6,033.19	7.10	850.224		
500.00	499.45	1,491.69	1,525.08	3.79	7.60	30.33	-4,929.19	-3,322.87	6,019.00	6,007.70	11.30	532.616		
600.00	598.70	1,552.00	1,583.82	4.03	7.93	30.75	-4,915.65	-3,325.11	5,991.97	5,980.16	11.81	507.517		
700.00	697.47	1,631.34	1,661.09	4.31	8.36	31.26	-4,897.98	-3,328.39	5,962.52	5,950.07	12.45	478.973		
800.00	795.62	1,692.47	1,720.62	4.64	8.70	31.77	-4,884.37	-3,331.27	5,930.62	5,917.58	13.04	454.837		
900.00	893.06	1,806.26	1,831.48	5.00	9.34	32.50	-4,859.31	-3,336.79	5,896.34	5,882.41	13.93	423.316		
1,000.00	989.64	1,894.53	1,917.37	5.40	9.84	33.22	-4,839.42	-3,341.10	5,859.03	5,844.30	14.72	397.918		
1,100.00	1,085.27	1,981.12	2,001.62	5.83	10.35	33.98	-4,819.90	-3,345.33	5,819.17	5,803.62	15.55	374.317		
1,200.00	1,180.44	2,066.94	2,085.13	6.29	10.85	34.29	-4,800.56	-3,349.53	5,778.30	5,761.93	16.37	353.018		
1,300.00	1,275.61	2,152.76	2,168.64	6.76	11.36	34.61	-4,781.23	-3,353.72	5,737.59	5,720.38	17.21	333.312		
1,400.00	1,370.78	2,238.59	2,252.15	7.26	11.87	34.94	-4,761.89	-3,357.92	5,697.06	5,678.98	18.08	315.106		
1,500.00	1,465.95	2,324.41	2,335.66	7.76	12.38	35.26	-4,742.55	-3,362.11	5,656.70	5,637.74	18.96	298.294		
1,600.00	1,561.12	2,410.23	2,419.17	8.27	12.90	35.60	-4,723.21	-3,366.30	5,616.53	5,596.66	19.86	282.767		
1,700.00	1,656.29	2,503.95	2,502.68	8.80	13.47	35.93	-4,703.87	-3,370.50	5,576.53	5,555.71	20.82	267.857		
1,800.00	1,751.46	2,581.87	2,586.18	9.32	13.94	36.27	-4,684.53	-3,374.69	5,536.72	5,515.02	21.70	255.133		
1,900.00	1,846.63	2,667.69	2,669.69	9.86	14.47	36.62	-4,665.19	-3,378.88	5,497.11	5,474.47	22.64	242.826		
2,000.00	1,941.80	2,753.51	2,753.20	10.40	14.99	36.97	-4,645.85	-3,383.08	5,457.68	5,434.10	23.59	231.405		
2,100.00	2,036.96	2,839.33	2,836.71	10.94	15.52	37.32	-4,626.51	-3,387.27	5,418.46	5,393.92	24.54	220.788		
2,200.00	2,132.13	2,925.15	2,920.22	11.49	16.05	37.68	-4,607.18	-3,391.46	5,379.44	5,353.94	25.51	210.902		
2,300.00	2,227.30	3,010.98	3,003.73	12.04	16.58	38.04	-4,587.84	-3,395.66	5,340.63	5,314.15	26.48	201.683		
2,400.00	2,322.47	3,096.80	3,087.24	12.59	17.11	38.41	-4,568.50	-3,399.85	5,302.04	5,274.58	27.46	193.071		
2,500.00	2,417.64	3,182.62	3,170.74	13.15	17.64	38.78	-4,549.16	-3,404.05	5,263.66	5,235.21	28.45	185.012		
2,600.00	2,512.81	3,268.44	3,254.25	13.70	18.17	39.16	-4,529.82	-3,408.24	5,225.50	5,196.05	29.45	177.459		
2,700.00	2,607.98	3,354.26	3,337.76	14.26	18.71	39.54	-4,510.48	-3,412.43	5,187.57	5,157.12	30.45	170.370		
2,800.00	2,703.15	3,440.08	3,421.27	14.82	19.24	39.93	-4,491.14	-3,416.63	5,149.87	5,118.41	31.46	163.706		
2,900.00	2,798.32	3,525.90	3,504.78	15.38	19.78	40.32	-4,471.80	-3,420.82	5,112.41	5,079.94	32.47	157.433		
3,000.00	2,893.49	3,611.72	3,588.29	15.95	20.32	40.71	-4,452.47	-3,425.01	5,075.19	5,041.70	33.50	151.520		
3,100.00	2,988.66	3,697.54	3,671.80	16.51	20.85	41.12	-4,433.13	-3,429.21	5,038.22	5,003.70	34.52	145.938		
3,200.00	3,083.83	3,783.36	3,755.30	17.07	21.39	41.52	-4,413.79	-3,433.40	5,001.51	4,965.95	35.56	140.662		
3,300.00	3,179.00	10,702.52	7,244.67	17.64	120.28	-11.97	-3,592.23	18.41	4,925.30	4,840.44	84.86	58.040		
3,400.00	3,274.17	10,693.36	7,244.74	18.21	119.99	-11.81	-3,592.24	14.29	4,829.59	4,744.27	85.32	56.607		
3,500.00	3,369.34	10,689.23	7,244.81	18.77	119.86	-11.64	-3,592.26	10.16	4,734.05	4,648.15	85.90	55.109		
3,600.00	3,464.51	10,685.11	7,244.89	19.34	119.73	-11.47	-3,592.27	6.04	4,638.70	4,552.18	86.52	53.613		
3,700.00	3,559.68	10,680.98	7,244.96	19.91	119.60	-11.31	-3,592.29	1.91	4,543.54	4,456.37	87.17	52.120		
3,800.00	3,654.84	10,676.86	7,245.03	20.48	119.47	-11.14	-3,592.30	-2.21	4,448.59	4,360.73	87.86	50.632		
3,900.00	3,750.01	10,672.73	7,245.10	21.05	119.34	-10.98	-3,592.31	-6.34	4,353.87	4,265.28	88.59	49.149		
4,000.00	3,845.18	10,668.61	7,245.18	21.62	119.20	-10.81	-3,592.33	-10.46	4,259.38	4,170.03	89.35	47.672		
4,100.00	3,940.35	10,664.48	7,245.25	22.19	119.07	-10.64	-3,592.34	-14.59	4,165.15	4,075.00	90.15	46.203		
4,200.00	4,035.52	10,660.36	7,245.32	22.76	118.94	-10.48	-3,592.35	-18.71	4,071.18	3,980.19	90.99	44.743		
4,300.00	4,130.69	10,656.23	7,245.39	23.33	118.81	-10.31	-3,592.37	-22.84	3,977.51	3,885.63	91.88	43.292		
4,400.00	4,225.86	10,652.11	7,245.47	23.91	118.68	-10.14	-3,592.38	-26.96	3,884.15	3,791.34	92.81	41.852		
4,500.00	4,321.03	10,656.06	7,245.54	24.48	118.81	-9.98	-3,592.40	-31.08	3,791.12	3,697.16	93.96	40.350		
4,600.00	4,416.20	10,643.86	7,245.61	25.05	118.42	-9.81	-3,592.41	-35.21	3,698.45	3,603.64	94.81	39.009		
4,700.00	4,511.37	10,639.73	7,245.68	25.62	118.29	-9.64	-3,592.42	-39.33	3,606.17	3,510.28	95.89	37.608		
4,800.00	4,606.54	10,635.61	7,245.76	26.20	118.16	-9.48	-3,592.44	-43.46	3,514.30	3,417.28	97.02	36.222		
4,900.00	4,701.71	10,631.48	7,245.83	26.77	118.03	-9.31	-3,592.45	-47.58	3,422.89	3,324.68	98.21	34.852		
5,000.00	4,796.88	10,627.36	7,245.90	27.34	117.90	-9.14	-3,592.46	-51.71	3,331.96	3,232.50	99.46	33.500		
5,100.00	4,892.05	10,623.23	7,245.97	27.92	117.77	-8.97	-3,592.48	-55.83	3,241.57	3,140.79	100.78	32.166		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	10,619.11	7,246.05	28.49	117.64	-8.81	-3,592.49	-59.96	3,151.75	3,049.59	102.16	30.852		
5,300.00	5,082.39	10,614.98	7,246.12	29.07	117.51	-8.64	-3,592.51	-64.08	3,062.55	2,958.94	103.60	29.560		
5,400.00	5,177.56	10,610.85	7,246.19	29.64	117.38	-8.47	-3,592.52	-68.20	2,974.03	2,868.91	105.13	28.290		
5,500.00	5,272.72	10,606.73	7,246.27	30.21	117.25	-8.30	-3,592.53	-72.33	2,886.26	2,779.54	106.72	27.044		
5,600.00	5,367.89	10,602.60	7,246.34	30.79	117.12	-8.14	-3,592.55	-76.45	2,799.31	2,690.91	108.40	25.824		
5,700.00	5,463.06	10,601.52	7,246.41	31.36	117.08	-7.97	-3,592.56	-80.58	2,713.25	2,603.01	110.23	24.614		
5,800.00	5,558.23	10,594.35	7,246.48	31.94	116.86	-7.80	-3,592.58	-84.70	2,628.16	2,516.16	112.00	23.465		
5,900.00	5,653.40	10,590.23	7,246.56	32.51	116.73	-7.63	-3,592.59	-88.83	2,544.16	2,430.23	113.93	22.331		
6,000.00	5,748.57	10,586.10	7,246.63	33.09	116.60	-7.46	-3,592.60	-92.95	2,461.35	2,345.39	115.95	21.228		
6,100.00	5,843.74	10,581.98	7,246.70	33.67	116.47	-7.30	-3,592.62	-97.08	2,379.84	2,261.79	118.06	20.158		
6,200.00	5,938.91	10,577.85	7,246.77	34.24	116.34	-7.13	-3,592.63	-101.20	2,299.80	2,179.54	120.25	19.125		
6,300.00	6,034.08	10,573.73	7,246.85	34.82	116.21	-6.96	-3,592.64	-105.32	2,221.36	2,098.82	122.53	18.128		
6,400.00	6,129.25	10,569.60	7,246.92	35.39	116.08	-6.79	-3,592.66	-109.45	2,144.71	2,019.81	124.89	17.172		
6,500.00	6,224.42	10,565.48	7,246.99	35.97	115.94	-6.62	-3,592.67	-113.57	2,070.04	1,942.72	127.32	16.258		
6,600.00	6,319.59	10,561.35	7,247.06	36.54	115.81	-6.45	-3,592.69	-117.70	1,997.58	1,867.77	129.81	15.388		
6,700.00	6,414.76	10,557.23	7,247.14	37.12	115.68	-6.29	-3,592.70	-121.82	1,927.58	1,795.24	132.34	14.565		
6,800.00	6,509.91	10,552.55	7,247.22	37.70	115.54	-15.48	-3,592.71	-126.50	1,860.33	1,725.46	134.87	13.793		
6,900.00	6,603.99	10,536.47	7,247.50	38.26	115.03	-45.04	-3,592.77	-142.57	1,796.84	1,659.83	137.01	13.115		
7,000.00	6,694.76	10,505.18	7,248.05	38.78	114.04	-64.65	-3,592.87	-173.87	1,738.72	1,600.21	138.51	12.553		
7,100.00	6,779.96	10,459.42	7,248.86	39.24	112.60	-77.04	-3,593.03	-219.61	1,687.21	1,547.90	139.31	12.111		
7,200.00	6,857.50	10,400.34	7,249.90	39.65	110.75	-84.92	-3,593.22	-278.68	1,643.10	1,503.71	139.39	11.788		
7,300.00	6,925.48	10,323.66	7,250.62	40.02	108.34	-89.81	-3,593.48	-355.36	1,606.63	1,468.06	138.57	11.594		
7,400.00	6,982.21	10,243.57	7,250.62	40.33	105.84	-92.99	-3,593.75	-435.45	1,577.79	1,440.32	137.47	11.478		
7,500.00	7,026.31	10,155.12	7,250.62	40.63	103.09	-94.90	-3,594.04	-523.90	1,556.48	1,420.54	135.93	11.450 SF		
7,600.00	7,056.68	10,060.50	7,250.62	40.91	100.15	-95.98	-3,594.36	-618.52	1,542.29	1,408.17	134.12	11.499		
7,700.00	7,072.58	9,962.03	7,250.62	41.25	97.11	-96.49	-3,594.69	-716.99	1,534.87	1,402.70	132.17	11.613 ES		
7,800.00	7,074.86	9,862.11	7,250.62	41.69	94.05	-96.58	-3,595.02	-816.91	1,533.44	1,403.27	130.18	11.780		
7,900.00	7,074.54	9,762.11	7,250.62	42.34	91.00	-96.60	-3,595.35	-916.90	1,533.15	1,404.80	128.35	11.945		
8,000.00	7,074.21	9,662.11	7,250.62	43.27	87.97	-96.61	-3,595.69	-1,016.90	1,532.85	1,406.15	126.70	12.098		
8,100.00	7,073.89	9,562.12	7,250.62	44.47	84.96	-96.62	-3,596.02	-1,116.90	1,532.56	1,407.34	125.22	12.239		
8,200.00	7,073.57	9,462.12	7,250.62	45.91	81.98	-96.64	-3,596.36	-1,216.90	1,532.27	1,408.37	123.90	12.367		
8,300.00	7,073.24	9,362.12	7,250.62	47.53	79.03	-96.65	-3,596.69	-1,316.90	1,531.97	1,409.25	122.72	12.484		
8,400.00	7,072.92	9,262.12	7,250.62	49.31	76.11	-96.66	-3,597.02	-1,416.90	1,531.68	1,410.01	121.67	12.589		
8,500.00	7,072.59	9,162.12	7,250.62	51.20	73.23	-96.68	-3,597.36	-1,516.89	1,531.39	1,410.64	120.74	12.683		
8,600.00	7,072.27	9,062.12	7,250.62	53.19	70.38	-96.69	-3,597.69	-1,616.89	1,531.09	1,411.16	119.93	12.766		
8,700.00	7,071.94	8,962.12	7,250.62	55.27	67.59	-96.70	-3,598.03	-1,716.89	1,530.80	1,411.56	119.24	12.838		
8,800.00	7,071.62	8,862.12	7,250.62	57.43	64.85	-96.72	-3,598.36	-1,816.89	1,530.51	1,411.86	118.65	12.899		
8,900.00	7,071.29	8,762.12	7,250.62	59.64	62.17	-96.73	-3,598.69	-1,916.89	1,530.21	1,412.04	118.17	12.950		
9,000.00	7,070.97	8,662.13	7,250.62	61.92	59.57	-96.74	-3,599.03	-2,016.89	1,529.92	1,412.12	117.79	12.988		
9,100.00	7,070.64	8,562.13	7,250.62	64.24	57.05	-96.76	-3,599.36	-2,116.88	1,529.63	1,412.09	117.53	13.014		
9,200.00	7,070.32	8,462.13	7,250.62	66.61	54.64	-96.77	-3,599.70	-2,216.88	1,529.33	1,411.94	117.39	13.028		
9,300.00	7,069.99	8,362.13	7,250.62	69.01	52.35	-96.79	-3,600.03	-2,316.88	1,529.04	1,411.67	117.37	13.027		
9,400.00	7,069.67	8,262.13	7,250.62	71.45	50.21	-96.80	-3,600.36	-2,416.88	1,528.75	1,411.26	117.49	13.012		
9,500.00	7,069.34	8,162.13	7,250.62	73.92	48.28	-96.81	-3,600.70	-2,516.88	1,528.45	1,410.70	117.75	12.980		
9,600.00	7,069.02	8,062.13	7,250.62	76.42	46.61	-96.83	-3,601.03	-2,616.88	1,528.16	1,409.99	118.18	12.931		
9,700.00	7,068.69	7,962.13	7,250.62	78.95	45.26	-96.84	-3,601.37	-2,716.87	1,527.87	1,409.09	118.78	12.863		
9,800.00	7,068.37	7,862.13	7,250.62	81.49	44.27	-96.85	-3,601.70	-2,816.87	1,527.58	1,407.99	119.59	12.773		
9,900.00	7,068.04	7,762.13	7,250.62	84.06	43.61	-96.87	-3,602.03	-2,916.87	1,527.28	1,406.66	120.62	12.662		
9,945.78	7,067.89	7,720.82	7,250.39	85.24	43.42	-96.86	-3,602.22	-2,958.18	1,527.18	1,405.91	121.27	12.593 CC		
10,000.00	7,067.72	7,677.88	7,247.85	86.65	43.26	-96.77	-3,602.96	-3,001.04	1,527.38	1,405.17	122.21	12.498		
10,100.00	7,067.39	7,600.00	7,236.09	89.25	43.03	-96.33	-3,605.94	-3,077.91	1,528.87	1,404.75	124.12	12.317		
10,200.00	7,067.07	7,526.61	7,216.72	91.87	42.86	-95.60	-3,610.66	-3,148.50	1,532.05	1,405.77	126.28	12.132		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
10,300.00	7,066.74	7,458.27	7,191.67	94.50	42.72	-94.66	-3,616.68	-3,211.76	1,537.35	1,408.76	128.59	11.955		
10,400.00	7,066.42	7,400.00	7,165.20	97.14	42.61	-93.66	-3,622.99	-3,263.27	1,545.28	1,414.27	131.01	11.795		
10,500.00	7,066.09	7,340.37	7,133.48	99.80	42.48	-92.48	-3,630.50	-3,313.17	1,556.33	1,422.95	133.38	11.668		
10,600.00	7,065.77	7,290.82	7,103.75	102.47	42.37	-91.37	-3,637.52	-3,352.17	1,570.94	1,435.27	135.67	11.579		
10,700.00	7,065.44	7,252.01	7,078.46	105.15	42.27	-90.44	-3,643.48	-3,380.98	1,589.48	1,451.68	137.80	11.534		
10,800.00	7,065.12	7,208.36	7,048.03	107.83	42.16	-89.33	-3,650.64	-3,411.43	1,612.14	1,472.42	139.72	11.538		
10,900.00	7,064.79	7,174.12	7,022.77	110.53	42.05	-88.41	-3,656.56	-3,433.78	1,639.11	1,497.69	141.42	11.590		
11,000.00	7,064.47	7,152.01	7,005.86	113.23	41.99	-87.80	-3,660.53	-3,447.45	1,670.45	1,527.59	142.86	11.693		
11,100.00	7,064.14	7,117.06	6,978.20	115.95	41.87	-86.81	-3,667.01	-3,467.82	1,706.00	1,561.93	144.07	11.841		
11,200.00	7,063.82	7,100.00	6,964.32	118.66	41.82	-86.31	-3,670.26	-3,477.18	1,745.81	1,600.79	145.02	12.038		
11,300.00	7,063.49	7,071.84	6,940.88	121.39	41.72	-85.48	-3,675.74	-3,491.79	1,789.60	1,643.83	145.77	12.277		
11,400.00	7,063.17	7,052.01	6,924.01	124.12	41.65	-84.89	-3,679.68	-3,501.43	1,837.26	1,690.96	146.30	12.558		
11,500.00	7,062.84	7,035.47	6,909.72	126.86	41.58	-84.39	-3,683.02	-3,509.06	1,888.56	1,741.92	146.64	12.879		
11,600.00	7,062.52	7,010.76	6,888.02	129.60	41.48	-83.64	-3,688.08	-3,519.74	1,943.33	1,796.51	146.82	13.236		
11,700.00	7,062.19	7,005.76	6,883.58	132.35	41.46	-83.49	-3,689.12	-3,521.80	2,001.16	1,854.32	146.84	13.629		
11,800.00	7,061.87	7,000.00	6,878.45	135.10	41.44	-83.31	-3,690.31	-3,524.12	2,062.05	1,915.33	146.72	14.054		
11,900.00	7,061.54	6,981.13	6,861.49	137.85	41.36	-82.74	-3,694.27	-3,531.40	2,125.59	1,979.06	146.53	14.506		
12,000.00	7,061.22	6,970.35	6,851.71	140.61	41.31	-82.40	-3,696.55	-3,535.32	2,191.70	2,045.47	146.23	14.988		
12,100.00	7,060.89	6,952.01	6,834.94	143.38	41.23	-81.84	-3,700.45	-3,541.60	2,260.20	2,114.32	145.88	15.493		
12,200.00	7,060.57	6,952.01	6,834.94	146.15	41.23	-81.84	-3,700.45	-3,541.60	2,330.72	2,185.29	145.43	16.026		
12,300.00	7,060.24	6,952.01	6,834.94	148.92	41.23	-81.84	-3,700.45	-3,541.60	2,403.34	2,258.41	144.93	16.583		
12,400.00	7,059.92	6,952.01	6,834.94	151.69	41.23	-81.84	-3,700.45	-3,541.60	2,477.86	2,333.47	144.39	17.161		
12,500.00	7,059.59	6,927.74	6,812.47	154.47	41.11	-81.08	-3,705.69	-3,549.15	2,553.64	2,409.73	143.90	17.746		
12,600.00	7,059.27	6,920.96	6,806.14	157.25	41.08	-80.87	-3,707.16	-3,551.10	2,631.18	2,487.84	143.34	18.356		
12,700.00	7,058.94	6,900.00	6,786.47	160.03	40.98	-80.22	-3,711.74	-3,556.69	2,710.30	2,567.49	142.80	18.979		
12,800.00	7,058.62	6,900.00	6,786.47	162.82	40.98	-80.22	-3,711.74	-3,556.69	2,790.41	2,648.21	142.21	19.622		
12,900.00	7,058.29	6,900.00	6,786.47	165.61	40.98	-80.22	-3,711.74	-3,556.69	2,871.78	2,730.17	141.61	20.280		
13,000.00	7,057.97	6,900.00	6,786.47	168.40	40.98	-80.22	-3,711.74	-3,556.69	2,954.29	2,813.28	141.01	20.951		
13,100.00	7,057.64	6,900.00	6,786.47	171.19	40.98	-80.22	-3,711.74	-3,556.69	3,037.85	2,897.43	140.41	21.635		
13,200.00	7,057.32	6,900.00	6,786.47	173.99	40.98	-80.22	-3,711.74	-3,556.69	3,122.37	2,982.55	139.82	22.331		
13,300.00	7,057.00	6,900.00	6,786.47	176.78	40.98	-80.22	-3,711.74	-3,556.69	3,207.79	3,068.55	139.24	23.038		
13,400.00	7,056.67	6,879.91	6,767.45	179.58	40.88	-79.60	-3,716.16	-3,561.42	3,293.68	3,154.95	138.74	23.740		
13,500.00	7,056.35	6,876.00	6,763.74	182.38	40.86	-79.48	-3,717.02	-3,562.27	3,380.53	3,242.34	138.19	24.463		
13,600.00	7,056.02	6,872.30	6,760.21	185.19	40.84	-79.36	-3,717.84	-3,563.06	3,468.06	3,330.41	137.66	25.193		
13,700.00	7,055.70	6,852.01	6,740.83	187.99	40.74	-78.74	-3,722.35	-3,566.97	3,556.47	3,419.29	137.18	25.925		
13,800.00	7,055.37	6,852.01	6,740.83	190.80	40.74	-78.74	-3,722.35	-3,566.97	3,645.15	3,508.48	136.66	26.672		
13,900.00	7,055.05	6,852.01	6,740.83	193.60	40.74	-78.74	-3,722.35	-3,566.97	3,734.39	3,598.23	136.16	27.426		
14,000.00	7,054.72	6,852.01	6,740.83	196.41	40.74	-78.74	-3,722.35	-3,566.97	3,824.17	3,688.50	135.67	28.187		
14,100.00	7,054.40	6,852.01	6,740.83	199.22	40.74	-78.74	-3,722.35	-3,566.97	3,914.45	3,779.25	135.19	28.954		
14,200.00	7,054.07	6,852.01	6,740.83	202.03	40.74	-78.74	-3,722.35	-3,566.97	4,005.18	3,870.45	134.73	29.727		
14,300.00	7,053.75	6,852.01	6,740.83	204.85	40.74	-78.74	-3,722.35	-3,566.97	4,096.35	3,962.07	134.28	30.505		
14,400.00	7,053.42	6,852.01	6,740.83	207.66	40.74	-78.74	-3,722.35	-3,566.97	4,187.92	4,054.07	133.85	31.288		
14,500.00	7,053.10	6,852.01	6,740.83	210.48	40.74	-78.74	-3,722.35	-3,566.97	4,279.87	4,146.44	133.43	32.076		
14,600.00	7,052.77	6,852.01	6,740.83	213.29	40.74	-78.74	-3,722.35	-3,566.97	4,372.17	4,239.15	133.02	32.869		
14,700.00	7,052.45	6,852.01	6,740.83	216.11	40.74	-78.74	-3,722.35	-3,566.97	4,464.81	4,332.18	132.62	33.665		
14,800.00	7,052.12	6,852.01	6,740.83	218.93	40.74	-78.74	-3,722.35	-3,566.97	4,557.75	4,425.51	132.24	34.466		
14,900.00	7,051.80	6,852.01	6,740.83	221.75	40.74	-78.74	-3,722.35	-3,566.97	4,650.99	4,519.12	131.87	35.269		
15,000.00	7,051.47	6,852.01	6,740.83	224.57	40.74	-78.74	-3,722.35	-3,566.97	4,744.50	4,612.99	131.51	36.077		
15,100.00	7,051.15	6,852.01	6,740.83	227.39	40.74	-78.74	-3,722.35	-3,566.97	4,838.27	4,707.11	131.16	36.887		
15,145.13	7,051.00	6,852.01	6,740.83	228.67	40.74	-78.74	-3,722.35	-3,566.97	4,880.67	4,749.66	131.01	37.254		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	72.00	3.28	3.28	-146.92	-5,053.37	-3,291.64	6,031.30					
100.00	100.00	1,180.60	1,212.25	3.28	6.63	-145.89	-4,902.70	-3,320.95	6,025.14	6,015.28	9.86	611.294		
200.00	200.00	1,275.48	1,303.65	3.34	7.18	-145.70	-4,877.96	-3,326.91	6,006.74	5,996.37	10.37	579.164		
300.00	299.98	1,406.95	1,430.38	3.44	7.97	30.37	-4,843.70	-3,334.06	5,986.44	5,975.29	11.15	536.810		
400.00	399.84	1,498.52	1,518.82	3.59	8.53	30.80	-4,820.36	-3,338.22	5,963.31	5,951.54	11.77	506.663		
500.00	499.45	1,587.57	1,604.89	3.79	9.08	31.28	-4,797.77	-3,341.72	5,937.15	5,924.73	12.42	477.978		
600.00	598.70	1,645.34	1,660.85	4.03	9.43	31.73	-4,783.55	-3,343.89	5,908.69	5,895.75	12.94	456.520		
700.00	697.47	1,802.18	1,812.58	4.31	10.41	32.50	-4,744.40	-3,350.25	5,877.48	5,863.43	14.05	418.195		
800.00	795.62	1,891.90	1,899.07	4.64	10.99	33.17	-4,720.91	-3,354.42	5,842.87	5,828.03	14.84	393.639		
900.00	893.06	1,980.03	1,984.03	5.00	11.57	33.90	-4,697.85	-3,358.51	5,805.68	5,790.02	15.66	370.830		
1,000.00	989.64	2,066.48	2,067.37	5.40	12.13	34.71	-4,675.22	-3,362.53	5,765.96	5,749.47	16.49	349.688		
1,100.00	1,085.27	2,151.15	2,148.99	5.83	12.69	35.54	-4,653.06	-3,366.46	5,723.81	5,706.46	17.35	329.979		
1,200.00	1,180.44	2,235.02	2,229.81	6.29	13.25	35.89	-4,631.11	-3,370.35	5,680.70	5,662.50	18.20	312.097		
1,300.00	1,275.61	2,318.83	2,310.64	6.76	13.81	36.24	-4,609.17	-3,374.24	5,637.79	5,618.71	19.08	295.475		
1,400.00	1,370.78	2,402.67	2,391.46	7.26	14.37	36.59	-4,587.23	-3,378.14	5,595.08	5,575.10	19.98	280.040		
1,500.00	1,465.95	2,486.51	2,472.29	7.76	14.93	36.95	-4,565.28	-3,382.03	5,552.58	5,531.69	20.90	265.718		
1,600.00	1,561.12	2,570.35	2,553.11	8.27	15.49	37.31	-4,543.34	-3,385.93	5,510.29	5,488.46	21.83	252.426		
1,700.00	1,656.29	2,654.20	2,633.94	8.80	16.05	37.68	-4,521.39	-3,389.82	5,468.22	5,445.44	22.78	240.084		
1,800.00	1,751.46	2,738.04	2,714.76	9.32	16.62	38.05	-4,499.45	-3,393.71	5,426.37	5,402.63	23.74	228.611		
1,900.00	1,846.63	2,821.88	2,795.59	9.86	17.19	38.43	-4,477.50	-3,397.61	5,384.74	5,360.04	24.71	217.936		
2,000.00	1,941.80	2,905.72	2,876.41	10.40	17.75	38.82	-4,455.56	-3,401.50	5,343.35	5,317.66	25.69	207.989		
2,100.00	2,036.96	2,989.56	2,957.24	10.94	18.32	39.20	-4,433.61	-3,405.39	5,302.19	5,275.51	26.68	198.708		
2,200.00	2,132.13	3,073.40	3,038.06	11.49	18.89	39.60	-4,411.67	-3,409.29	5,261.28	5,233.59	27.69	190.036		
2,300.00	2,227.30	3,157.24	3,118.89	12.04	19.46	40.00	-4,389.73	-3,413.18	5,220.61	5,191.92	28.70	181.921		
2,400.00	2,322.47	3,241.09	3,199.71	12.59	20.03	40.40	-4,367.78	-3,417.07	5,180.20	5,150.48	29.72	174.317		
2,500.00	2,417.64	3,324.93	3,280.54	13.15	20.60	40.81	-4,345.84	-3,420.97	5,140.05	5,109.30	30.75	167.181		
2,600.00	2,512.81	3,408.77	3,361.36	13.70	21.18	41.22	-4,323.89	-3,424.86	5,100.17	5,068.38	31.78	160.475		
2,700.00	2,607.98	3,492.61	3,442.19	14.26	21.75	41.64	-4,301.95	-3,428.76	5,060.55	5,027.73	32.83	154.164		
2,800.00	2,703.15	3,576.45	3,523.01	14.82	22.32	42.07	-4,280.00	-3,432.65	5,021.22	4,987.34	33.88	148.217		
2,900.00	2,798.32	3,660.29	3,603.84	15.38	22.90	42.50	-4,258.06	-3,436.54	4,982.17	4,947.24	34.94	142.607		
3,000.00	2,893.49	3,744.13	3,687.95	15.95	23.47	42.92	-4,236.11	-3,440.43	4,942.02	4,906.09	36.00	137.000		
3,100.00	2,988.66	3,827.97	3,771.06	16.51	24.04	43.34	-4,214.16	-3,444.32	4,901.87	4,865.94	37.06	131.393		
3,200.00	3,083.83	3,911.81	3,854.15	17.07	24.61	43.76	-4,192.21	-3,448.21	4,861.72	4,825.79	38.12	125.786		
3,300.00	3,179.00	3,995.65	3,936.30	17.64	25.18	44.18	-4,170.26	-3,452.10	4,821.57	4,785.64	39.18	120.179		
3,400.00	3,274.17	4,079.49	4,016.44	18.21	25.75	44.60	-4,148.31	-3,455.99	4,781.42	4,745.49	40.24	114.572		
3,500.00	3,369.34	4,163.33	4,098.59	18.77	26.32	45.02	-4,126.36	-3,459.88	4,741.27	4,705.34	41.30	108.965		
3,600.00	3,464.51	4,247.17	4,180.74	19.34	26.89	45.44	-4,104.41	-3,463.77	4,701.12	4,665.19	42.36	103.358		
3,700.00	3,559.68	4,331.01	4,262.89	19.91	27.46	45.86	-4,082.46	-3,467.66	4,660.97	4,625.04	43.42	97.751		
3,800.00	3,654.84	4,414.85	4,345.04	20.48	28.03	46.28	-4,060.51	-3,471.55	4,620.82	4,584.89	44.48	92.144		
3,900.00	3,750.01	4,498.69	4,426.19	21.05	28.60	46.70	-4,038.56	-3,475.44	4,580.67	4,544.74	45.54	86.537		
4,000.00	3,845.18	4,582.53	4,507.34	21.62	29.17	47.12	-4,016.61	-3,479.33	4,540.52	4,504.59	46.60	80.930		
4,100.00	3,940.35	4,666.37	4,592.49	22.19	29.74	47.54	-3,994.66	-3,483.22	4,500.37	4,464.44	47.66	75.323		
4,200.00	4,035.52	4,750.21	4,677.64	22.76	30.31	47.96	-3,972.71	-3,487.11	4,460.22	4,424.29	48.72	69.716		
4,300.00	4,130.69	4,834.05	4,762.79	23.33	30.88	48.38	-3,950.76	-3,490.99	4,420.07	4,384.14	49.78	64.109		
4,400.00	4,225.86	4,917.89	4,847.94	23.90	31.45	48.80	-3,928.81	-3,494.88	4,379.92	4,344.00	50.84	58.502		
4,500.00	4,321.03	5,001.73	4,933.09	24.47	32.02	49.22	-3,906.86	-3,498.77	4,339.77	4,303.85	51.90	52.895		
4,600.00	4,416.20	5,085.57	5,018.24	25.04	32.59	49.64	-3,884.91	-3,502.66	4,299.62	4,263.70	52.96	47.288		
4,700.00	4,511.37	5,169.41	5,103.39	25.61	33.16	50.06	-3,862.96	-3,506.55	4,259.47	4,223.55	54.02	41.681		
4,800.00	4,606.54	5,253.25	5,188.54	26.18	33.73	50.48	-3,840.99	-3,510.44	4,219.32	4,183.40	55.08	36.074		
4,900.00	4,701.71	5,337.09	5,273.69	26.75	34.30	50.90	-3,819.04	-3,514.33	4,179.17	4,143.25	56.14	30.467		
5,000.00	4,796.88	5,420.93	5,358.84	27.32	34.87	51.32	-3,797.09	-3,518.22	4,138.99	4,103.10	57.20	24.860		
5,100.00	4,892.05	5,504.77	5,443.99	27.89	35.44	51.74	-3,775.14	-3,522.11	4,098.84	4,062.95	58.26	19.253		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	10,432.13	7,076.90	28.49	116.23	-6.74	-3,329.17	-113.90	2,847.43	2,748.03	99.40	28.647		
5,300.00	5,082.39	10,440.09	7,076.90	29.07	116.48	-6.64	-3,329.17	-116.08	2,757.11	2,655.93	101.18	27.250		
5,400.00	5,177.56	10,427.78	7,076.90	29.64	116.09	-6.53	-3,329.16	-118.26	2,667.47	2,564.89	102.59	26.002		
5,500.00	5,272.72	10,425.60	7,076.90	30.21	116.02	-6.43	-3,329.15	-120.43	2,578.60	2,474.28	104.32	24.718		
5,600.00	5,367.89	10,423.42	7,076.90	30.79	115.95	-6.33	-3,329.15	-122.61	2,490.57	2,384.42	106.15	23.462		
5,700.00	5,463.06	10,421.24	7,076.89	31.36	115.88	-6.22	-3,329.14	-124.79	2,403.47	2,295.39	108.09	22.236		
5,800.00	5,558.23	10,419.06	7,076.89	31.94	115.81	-6.12	-3,329.14	-126.97	2,317.42	2,207.29	110.13	21.042		
5,900.00	5,653.40	10,416.88	7,076.89	32.51	115.75	-6.01	-3,329.13	-129.15	2,232.52	2,120.23	112.29	19.882		
6,000.00	5,748.57	10,414.70	7,076.89	33.09	115.68	-5.91	-3,329.13	-131.33	2,148.92	2,034.36	114.56	18.758		
6,100.00	5,843.74	10,412.52	7,076.88	33.67	115.61	-5.81	-3,329.12	-133.51	2,066.78	1,949.83	116.95	17.673		
6,200.00	5,938.91	10,410.35	7,076.88	34.24	115.54	-5.70	-3,329.12	-135.69	1,986.27	1,866.82	119.45	16.628		
6,300.00	6,034.08	10,408.17	7,076.88	34.82	115.47	-5.60	-3,329.11	-137.86	1,907.61	1,785.54	122.07	15.628		
6,400.00	6,129.25	10,405.99	7,076.88	35.39	115.40	-5.49	-3,329.11	-140.04	1,831.03	1,706.24	124.79	14.673		
6,500.00	6,224.42	10,403.81	7,076.88	35.97	115.34	-5.39	-3,329.10	-142.22	1,756.79	1,629.20	127.60	13.768		
6,600.00	6,319.59	10,401.63	7,076.87	36.54	115.27	-5.29	-3,329.10	-144.40	1,685.23	1,554.76	130.47	12.916		
6,700.00	6,414.76	10,400.55	7,076.87	37.12	115.23	-5.18	-3,329.09	-146.58	1,616.68	1,483.26	133.41	12.118		
6,800.00	6,509.91	10,403.28	7,076.87	37.70	115.32	-14.31	-3,329.08	-149.31	1,551.55	1,415.09	136.46	11.370		
6,900.00	6,603.99	10,382.57	7,076.85	38.26	114.67	-43.36	-3,329.05	-163.46	1,490.84	1,352.14	138.70	10.749		
7,000.00	6,694.76	10,353.12	7,076.83	38.78	113.74	-62.33	-3,328.98	-192.91	1,436.13	1,295.72	140.41	10.228		
7,100.00	6,779.96	10,309.11	7,076.78	39.24	112.36	-74.01	-3,328.87	-236.92	1,388.63	1,247.34	141.29	9.828		
7,200.00	6,857.50	10,251.61	7,076.72	39.65	110.57	-81.13	-3,328.72	-294.42	1,348.95	1,207.63	141.31	9.546		
7,300.00	6,925.48	10,182.03	7,076.66	40.02	108.40	-85.38	-3,328.55	-364.00	1,317.16	1,176.60	140.56	9.371		
7,400.00	6,982.21	10,102.11	7,076.58	40.33	105.91	-87.81	-3,328.35	-443.92	1,292.84	1,153.67	139.17	9.290		
7,500.00	7,026.31	10,013.79	7,076.49	40.63	103.17	-89.09	-3,328.14	-532.24	1,275.31	1,137.95	137.35	9.285 SF		
7,600.00	7,056.68	9,919.26	7,076.39	40.91	100.26	-89.71	-3,327.90	-626.77	1,263.74	1,128.43	135.32	9.339		
7,700.00	7,072.58	9,820.84	7,076.30	41.25	97.24	-89.99	-3,327.66	-725.19	1,257.48	1,124.25	133.23	9.438		
7,800.00	7,074.86	9,720.93	7,076.20	41.69	94.19	-90.06	-3,327.41	-825.10	1,255.72	1,124.51	131.21	9.570		
7,900.00	7,074.54	9,620.93	7,076.10	42.34	91.16	-90.07	-3,327.17	-925.09	1,254.81	1,125.43	129.38	9.699		
8,000.00	7,074.21	9,520.94	7,076.00	43.27	88.16	-90.08	-3,326.92	-1,025.09	1,253.90	1,126.17	127.72	9.817		
8,100.00	7,073.89	9,420.94	7,075.90	44.47	85.18	-90.09	-3,326.67	-1,125.08	1,252.98	1,126.75	126.23	9.926		
8,200.00	7,073.57	9,320.95	7,075.80	45.91	82.23	-90.10	-3,326.42	-1,225.08	1,252.07	1,127.18	124.89	10.026		
8,300.00	7,073.24	9,220.95	7,075.69	47.53	79.31	-90.11	-3,326.18	-1,325.08	1,251.15	1,127.47	123.69	10.115		
8,400.00	7,072.92	9,120.94	7,074.89	49.31	76.43	-90.09	-3,325.93	-1,425.08	1,250.24	1,127.62	122.62	10.196		
8,500.00	7,072.59	9,020.95	7,074.06	51.20	73.59	-90.07	-3,325.68	-1,525.07	1,249.32	1,127.65	121.67	10.268		
8,600.00	7,072.27	8,920.95	7,073.24	53.19	70.80	-90.05	-3,325.43	-1,625.07	1,248.41	1,127.56	120.84	10.331		
8,700.00	7,071.94	8,820.96	7,072.41	55.27	68.06	-90.02	-3,325.19	-1,725.06	1,247.49	1,127.37	120.12	10.385		
8,800.00	7,071.62	8,720.96	7,071.58	57.43	65.39	-90.00	-3,324.94	-1,825.05	1,246.58	1,127.06	119.51	10.430		
8,900.00	7,071.29	8,620.97	7,070.75	59.64	62.80	-89.98	-3,324.69	-1,925.04	1,245.66	1,126.65	119.01	10.467		
9,000.00	7,070.97	8,520.97	7,069.93	61.92	60.30	-89.95	-3,324.45	-2,025.03	1,244.75	1,126.12	118.62	10.493		
9,100.00	7,070.64	8,420.98	7,069.10	64.24	57.91	-89.93	-3,324.20	-2,125.02	1,243.83	1,125.49	118.35	10.510		
9,200.00	7,070.32	8,320.98	7,068.27	66.61	55.66	-89.91	-3,323.95	-2,225.01	1,242.92	1,124.73	118.19	10.516		
9,300.00	7,069.99	8,220.99	7,067.45	69.01	53.59	-89.88	-3,323.70	-2,325.00	1,242.01	1,123.85	118.16	10.511		
9,400.00	7,069.67	8,120.99	7,066.62	71.45	51.74	-89.86	-3,323.46	-2,424.99	1,241.09	1,122.82	118.27	10.494		
9,500.00	7,069.34	8,021.00	7,065.79	73.92	50.16	-89.84	-3,323.21	-2,524.98	1,240.18	1,121.65	118.53	10.463		
9,600.00	7,069.02	7,921.01	7,064.96	76.42	48.90	-89.81	-3,322.96	-2,624.97	1,239.27	1,120.30	118.96	10.417		
9,700.00	7,068.69	7,821.01	7,064.14	78.95	47.95	-89.79	-3,322.72	-2,724.96	1,238.35	1,118.77	119.58	10.356		
9,800.00	7,068.37	7,721.02	7,063.31	81.49	47.29	-89.77	-3,322.47	-2,824.96	1,237.44	1,117.03	120.41	10.277		
9,900.00	7,068.04	7,621.02	7,062.48	84.06	46.86	-89.74	-3,322.22	-2,924.95	1,236.53	1,115.06	121.47	10.180		
9,948.99	7,067.88	7,583.30	7,061.81	85.33	46.73	-89.72	-3,322.23	-2,962.66	1,236.23	1,113.89	122.34	10.105 CC		
10,000.00	7,067.72	7,550.00	7,059.60	86.65	46.64	-89.62	-3,322.67	-2,995.88	1,236.59	1,113.22	123.37	10.023 ES		
10,100.00	7,067.39	7,485.24	7,050.51	89.25	46.48	-89.21	-3,324.83	-3,059.93	1,239.45	1,114.02	125.44	9.881		
10,200.00	7,067.07	7,423.10	7,035.93	91.87	46.34	-88.55	-3,328.50	-3,120.21	1,245.34	1,117.81	127.53	9.765		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,364.34	7,017.00	94.50	46.22	-87.69	-3,333.38	-3,175.59	1,254.55	1,124.92	129.63	9.678		
10,400.00	7,066.42	7,309.62	6,995.00	97.14	46.10	-86.71	-3,339.11	-3,225.35	1,267.44	1,135.78	131.66	9.627		
10,500.00	7,066.09	7,259.24	6,971.18	99.80	45.99	-85.65	-3,345.36	-3,269.28	1,284.32	1,150.70	133.62	9.612		
10,600.00	7,065.77	7,213.28	6,946.58	102.47	45.89	-84.57	-3,351.86	-3,307.55	1,305.51	1,170.13	135.38	9.643		
10,700.00	7,065.44	7,171.59	6,922.02	105.15	45.78	-83.50	-3,358.36	-3,340.59	1,331.19	1,194.23	136.95	9.720		
10,800.00	7,065.12	7,135.01	6,898.79	107.83	45.68	-82.51	-3,364.53	-3,368.16	1,361.48	1,223.18	138.30	9.844		
10,900.00	7,064.79	7,100.00	6,875.16	110.53	45.57	-81.51	-3,370.82	-3,393.21	1,396.38	1,256.99	139.40	10.017		
11,000.00	7,064.47	7,069.27	6,853.36	113.23	45.48	-80.60	-3,376.64	-3,414.06	1,435.84	1,295.57	140.27	10.237		
11,100.00	7,064.14	7,041.61	6,832.93	115.95	45.39	-79.77	-3,382.10	-3,431.88	1,479.70	1,338.81	140.89	10.502		
11,200.00	7,063.82	7,016.62	6,813.84	118.66	45.30	-78.99	-3,387.21	-3,447.18	1,527.76	1,386.45	141.32	10.811		
11,300.00	7,063.49	7,000.00	6,800.83	121.39	45.24	-78.47	-3,390.69	-3,456.92	1,579.83	1,438.28	141.55	11.161		
11,400.00	7,063.17	6,973.46	6,779.56	124.12	45.14	-77.63	-3,396.39	-3,471.73	1,635.54	1,493.94	141.59	11.551		
11,500.00	7,062.84	6,950.00	6,760.27	126.86	45.05	-76.88	-3,401.56	-3,484.05	1,694.74	1,553.25	141.49	11.978		
11,600.00	7,062.52	6,935.01	6,747.73	129.60	44.98	-76.39	-3,404.93	-3,491.53	1,757.08	1,615.81	141.27	12.438		
11,700.00	7,062.19	6,922.17	6,736.85	132.35	44.93	-75.98	-3,407.85	-3,497.70	1,822.34	1,681.39	140.94	12.929		
11,800.00	7,061.87	6,900.00	6,717.80	135.10	44.83	-75.25	-3,412.97	-3,507.80	1,890.32	1,749.79	140.53	13.451		
11,900.00	7,061.54	6,900.00	6,717.80	137.85	44.83	-75.25	-3,412.97	-3,507.80	1,960.65	1,820.60	140.05	14.000		
12,000.00	7,061.22	6,882.64	6,702.64	140.61	44.75	-74.69	-3,417.05	-3,515.23	2,033.20	1,893.67	139.52	14.572		
12,100.00	7,060.89	6,871.45	6,692.78	143.38	44.70	-74.32	-3,419.70	-3,519.80	2,107.78	1,968.83	138.95	15.169		
12,200.00	7,060.57	6,850.00	6,673.66	146.15	44.60	-73.62	-3,424.85	-3,528.03	2,184.31	2,045.94	138.37	15.786		
12,300.00	7,060.24	6,850.00	6,673.66	148.92	44.60	-73.62	-3,424.85	-3,528.03	2,262.29	2,124.55	137.74	16.424		
12,400.00	7,059.92	6,842.51	6,666.91	151.69	44.57	-73.38	-3,426.67	-3,530.75	2,341.89	2,204.78	137.12	17.080		
12,500.00	7,059.59	6,835.01	6,660.14	154.47	44.53	-73.13	-3,428.49	-3,533.39	2,422.88	2,286.39	136.49	17.752		
12,600.00	7,059.27	6,835.01	6,660.14	157.25	44.53	-73.13	-3,428.49	-3,533.39	2,505.19	2,369.36	135.84	18.443		
12,700.00	7,058.94	6,819.05	6,645.62	160.03	44.45	-72.61	-3,432.41	-3,538.73	2,588.53	2,453.29	135.24	19.141		
12,800.00	7,058.62	6,800.00	6,628.13	162.82	44.35	-72.00	-3,437.13	-3,544.61	2,673.11	2,538.46	134.65	19.852		
12,900.00	7,058.29	6,800.00	6,628.13	165.61	44.35	-72.00	-3,437.13	-3,544.61	2,758.43	2,624.39	134.04	20.580		
13,000.00	7,057.97	6,800.00	6,628.13	168.40	44.35	-72.00	-3,437.13	-3,544.61	2,844.70	2,711.26	133.43	21.320		
13,100.00	7,057.64	6,800.00	6,628.13	171.19	44.35	-72.00	-3,437.13	-3,544.61	2,931.84	2,799.00	132.84	22.071		
13,200.00	7,057.32	6,800.00	6,628.13	173.99	44.35	-72.00	-3,437.13	-3,544.61	3,019.78	2,887.52	132.26	22.832		
13,300.00	7,057.00	6,800.00	6,628.13	176.78	44.35	-72.00	-3,437.13	-3,544.61	3,108.44	2,976.75	131.70	23.603		
13,400.00	7,056.67	6,778.69	6,608.36	179.58	44.24	-71.31	-3,442.46	-3,550.55	3,197.38	3,066.15	131.22	24.366		
13,500.00	7,056.35	6,774.11	6,604.10	182.38	44.21	-71.16	-3,443.61	-3,551.73	3,287.14	3,156.42	130.71	25.148		
13,600.00	7,056.02	6,750.56	6,582.01	185.19	44.08	-70.41	-3,449.57	-3,557.32	3,377.76	3,247.49	130.28	25.928		
13,700.00	7,055.70	6,750.56	6,582.01	187.99	44.08	-70.41	-3,449.57	-3,557.32	3,468.44	3,338.65	129.79	26.724		
13,800.00	7,055.37	6,750.56	6,582.01	190.80	44.08	-70.41	-3,449.57	-3,557.32	3,559.62	3,430.30	129.31	27.527		
13,900.00	7,055.05	6,750.56	6,582.01	193.60	44.08	-70.41	-3,449.57	-3,557.32	3,651.26	3,522.40	128.86	28.336		
14,000.00	7,054.72	6,750.56	6,582.01	196.41	44.08	-70.41	-3,449.57	-3,557.32	3,743.32	3,614.91	128.41	29.150		
14,100.00	7,054.40	6,750.56	6,582.01	199.22	44.08	-70.41	-3,449.57	-3,557.32	3,835.78	3,707.80	127.99	29.970		
14,200.00	7,054.07	6,750.56	6,582.01	202.03	44.08	-70.41	-3,449.57	-3,557.32	3,928.62	3,801.04	127.58	30.794		
14,300.00	7,053.75	6,750.56	6,582.01	204.85	44.08	-70.41	-3,449.57	-3,557.32	4,021.79	3,894.61	127.18	31.622		
14,400.00	7,053.42	6,741.63	6,573.59	207.66	44.03	-70.12	-3,451.85	-3,559.22	4,115.22	3,988.39	126.83	32.447		
14,500.00	7,053.10	6,735.01	6,567.33	210.48	44.00	-69.91	-3,453.54	-3,560.55	4,208.98	4,082.49	126.48	33.277		
14,600.00	7,052.77	6,735.01	6,567.33	213.29	44.00	-69.91	-3,453.54	-3,560.55	4,302.98	4,176.85	126.13	34.116		
14,700.00	7,052.45	6,735.01	6,567.33	216.11	44.00	-69.91	-3,453.54	-3,560.55	4,397.24	4,271.45	125.79	34.957		
14,800.00	7,052.12	6,735.01	6,567.33	218.93	44.00	-69.91	-3,453.54	-3,560.55	4,491.76	4,366.30	125.46	35.802		
14,900.00	7,051.80	6,735.01	6,567.33	221.75	44.00	-69.91	-3,453.54	-3,560.55	4,586.50	4,461.36	125.14	36.650		
15,000.00	7,051.47	6,735.01	6,567.33	224.57	44.00	-69.91	-3,453.54	-3,560.55	4,681.47	4,556.63	124.84	37.500		
15,100.00	7,051.15	6,735.01	6,567.33	227.39	44.00	-69.91	-3,453.54	-3,560.55	4,776.64	4,652.09	124.55	38.352		
15,145.13	7,051.00	6,735.01	6,567.33	228.67	44.00	-69.91	-3,453.54	-3,560.55	4,819.65	4,695.23	124.42	38.737		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	65.00	3.28	3.28	-123.33	-4,170.84	-6,342.96	7,591.66				
100.00	100.00	35.00	100.00	3.28	3.34	-123.33	-4,170.84	-6,342.96	7,591.38	7,584.76	6.62	1,146.539	
200.00	200.00	135.00	200.00	3.34	4.42	-123.33	-4,170.84	-6,342.96	7,591.38	7,583.62	7.76	978.258	
300.00	299.98	234.98	299.98	3.44	7.24	52.31	-4,170.84	-6,342.96	7,590.32	7,579.63	10.68	710.538	
400.00	399.84	334.84	399.84	3.59	10.47	52.39	-4,170.84	-6,342.96	7,587.12	7,573.06	14.06	539.607	
500.00	499.45	434.45	499.45	3.79	13.82	52.53	-4,170.84	-6,342.96	7,581.79	7,564.19	17.60	430.671	
600.00	598.70	533.70	598.70	4.03	17.20	52.72	-4,170.84	-6,342.96	7,574.36	7,553.13	21.23	356.734	
700.00	697.47	632.47	697.47	4.31	20.60	52.97	-4,170.84	-6,342.96	7,564.84	7,539.93	24.91	303.692	
800.00	795.62	730.62	795.62	4.64	23.99	53.27	-4,170.84	-6,342.96	7,553.25	7,524.63	28.62	263.944	
900.00	893.06	828.06	893.06	5.00	27.36	53.63	-4,170.84	-6,342.96	7,539.63	7,507.29	32.34	233.126	
1,000.00	989.64	924.64	989.64	5.40	30.71	54.04	-4,170.84	-6,342.96	7,524.01	7,487.93	36.07	208.571	
1,100.00	1,085.27	1,020.27	1,085.27	5.83	34.03	54.48	-4,170.84	-6,342.96	7,506.43	7,466.62	39.81	188.560	
1,200.00	1,180.44	1,115.44	1,180.44	6.29	37.34	54.67	-4,170.84	-6,342.96	7,488.05	7,444.50	43.55	171.947	
1,300.00	1,275.61	1,210.61	1,275.61	6.76	40.65	54.85	-4,170.84	-6,342.96	7,469.75	7,422.44	47.31	157.895	
1,400.00	1,370.78	1,305.78	1,370.78	7.26	43.96	55.04	-4,170.84	-6,342.96	7,451.53	7,400.45	51.08	145.867	
1,500.00	1,465.95	1,400.95	1,465.95	7.76	47.28	55.23	-4,170.84	-6,342.96	7,433.39	7,378.52	54.87	135.463	
1,600.00	1,561.12	1,503.88	1,561.12	8.27	50.86	55.42	-4,170.84	-6,342.96	7,415.34	7,356.40	58.94	125.801	
1,700.00	1,656.29	1,608.71	1,656.29	8.80	54.51	55.61	-4,170.84	-6,342.96	7,397.37	7,334.28	63.09	117.248	
1,800.00	1,751.46	1,686.46	1,751.46	9.32	57.22	55.80	-4,170.84	-6,342.96	7,379.48	7,313.18	66.30	111.300	
1,900.00	1,846.63	1,781.63	1,846.63	9.86	60.54	55.99	-4,170.84	-6,342.96	7,361.68	7,291.55	70.13	104.976	
2,000.00	1,941.80	1,876.80	1,941.80	10.40	63.86	56.18	-4,170.84	-6,342.96	7,343.96	7,270.00	73.96	99.299	
2,100.00	2,036.96	1,971.96	2,036.96	10.94	67.18	56.37	-4,170.84	-6,342.96	7,326.33	7,248.54	77.79	94.177	
2,200.00	2,132.13	2,067.13	2,132.13	11.49	70.49	56.57	-4,170.84	-6,342.96	7,308.79	7,227.15	81.63	89.532	
2,300.00	2,227.30	2,162.30	2,227.30	12.04	73.81	56.76	-4,170.84	-6,342.96	7,291.33	7,205.85	85.48	85.301	
2,400.00	2,322.47	2,257.47	2,322.47	12.59	77.13	56.96	-4,170.84	-6,342.96	7,273.96	7,184.63	89.33	81.432	
2,500.00	2,417.64	2,352.64	2,417.64	13.15	80.45	57.15	-4,170.84	-6,342.96	7,256.68	7,163.50	93.18	77.882	
2,600.00	2,512.81	2,447.81	2,512.81	13.70	83.77	57.35	-4,170.84	-6,342.96	7,239.48	7,142.46	97.03	74.611	
2,700.00	2,607.98	2,542.98	2,607.98	14.26	87.09	57.55	-4,170.84	-6,342.96	7,222.38	7,121.50	100.89	71.590	
2,800.00	2,703.15	2,638.15	2,703.15	14.82	90.41	57.75	-4,170.84	-6,342.96	7,205.37	7,100.62	104.74	68.790	
2,900.00	2,798.32	2,733.32	2,798.32	15.38	93.73	57.95	-4,170.84	-6,342.96	7,188.45	7,079.84	108.60	66.189	
3,000.00	2,893.49	2,828.49	2,893.49	15.95	97.05	58.15	-4,170.84	-6,342.96	7,171.62	7,059.15	112.47	63.766	
3,100.00	2,988.66	2,923.66	2,988.66	16.51	100.37	58.35	-4,170.84	-6,342.96	7,154.88	7,038.55	116.33	61.504	
3,200.00	3,083.83	3,018.83	3,083.83	17.07	103.69	58.55	-4,170.84	-6,342.96	7,138.23	7,018.03	120.20	59.387	
3,300.00	3,179.00	3,114.00	3,179.00	17.64	107.01	58.76	-4,170.84	-6,342.96	7,121.68	6,997.61	124.07	57.402	
3,400.00	3,274.17	3,209.17	3,274.17	18.21	110.34	58.96	-4,170.84	-6,342.96	7,105.22	6,977.29	127.94	55.538	
3,500.00	3,369.34	3,304.34	3,369.34	18.77	113.66	59.17	-4,170.84	-6,342.96	7,088.86	6,957.05	131.81	53.782	
3,600.00	3,464.51	3,400.49	3,464.51	19.34	117.01	59.37	-4,170.84	-6,342.96	7,072.59	6,936.88	135.71	52.114	
3,700.00	3,559.68	3,505.32	3,559.68	19.91	120.67	59.58	-4,170.84	-6,342.96	7,056.42	6,916.50	139.92	50.430	
3,800.00	3,654.84	3,589.84	3,654.84	20.48	123.62	59.79	-4,170.84	-6,342.96	7,040.35	6,896.92	143.43	49.087	
3,900.00	3,750.01	3,685.01	3,750.01	21.05	126.94	59.99	-4,170.84	-6,342.96	7,024.37	6,877.07	147.30	47.686	
4,000.00	3,845.18	3,780.18	3,845.18	21.62	130.26	60.20	-4,170.84	-6,342.96	7,008.49	6,857.31	151.18	46.358	
4,100.00	3,940.35	3,875.35	3,940.35	22.19	133.58	60.41	-4,170.84	-6,342.96	6,992.71	6,837.65	155.06	45.097	
4,200.00	4,035.52	3,970.52	4,035.52	22.76	136.90	60.63	-4,170.84	-6,342.96	6,977.03	6,818.09	158.94	43.898	
4,300.00	4,130.69	4,065.69	4,130.69	23.33	140.23	60.84	-4,170.84	-6,342.96	6,961.45	6,798.63	162.82	42.756	
4,400.00	4,225.86	4,160.86	4,225.86	23.91	143.55	61.05	-4,170.84	-6,342.96	6,945.97	6,779.27	166.70	41.668	
4,500.00	4,321.03	4,256.03	4,321.03	24.48	146.87	61.26	-4,170.84	-6,342.96	6,930.59	6,760.01	170.58	40.629	
4,600.00	4,416.20	4,351.20	4,416.20	25.05	150.19	61.48	-4,170.84	-6,342.96	6,915.31	6,740.85	174.47	39.637	
4,700.00	4,511.37	4,446.37	4,511.37	25.62	153.51	61.70	-4,170.84	-6,342.96	6,900.14	6,721.79	178.35	38.689	
4,800.00	4,606.54	4,541.54	4,606.54	26.20	156.83	61.91	-4,170.84	-6,342.96	6,885.07	6,702.83	182.23	37.781	
4,900.00	4,701.71	4,636.71	4,701.71	26.77	160.16	62.13	-4,170.84	-6,342.96	6,870.10	6,683.98	186.12	36.912	
5,000.00	4,796.88	4,731.88	4,796.88	27.34	163.48	62.35	-4,170.84	-6,342.96	6,855.24	6,665.23	190.01	36.079	
5,100.00	4,892.05	4,827.05	4,892.05	27.92	166.80	62.57	-4,170.84	-6,342.96	6,840.49	6,646.59	193.89	35.279	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,922.22	4,987.22	28.49	170.12	62.79	-4,170.84	-6,342.96	6,825.84	6,628.05	197.78	34.512		
5,300.00	5,082.39	5,017.39	5,082.39	29.07	173.44	63.01	-4,170.84	-6,342.96	6,811.29	6,609.62	201.67	33.774		
5,400.00	5,177.56	5,112.56	5,177.56	29.64	176.76	63.23	-4,170.84	-6,342.96	6,796.86	6,591.30	205.56	33.065		
5,500.00	5,272.72	5,207.72	5,272.72	30.21	180.09	63.45	-4,170.84	-6,342.96	6,782.53	6,573.08	209.45	32.382		
5,600.00	5,367.89	5,302.89	5,367.89	30.79	183.41	63.68	-4,170.84	-6,342.96	6,768.31	6,554.97	213.34	31.725		
5,700.00	5,463.06	5,401.94	5,463.06	31.36	186.87	63.90	-4,170.84	-6,342.96	6,754.21	6,536.83	217.37	31.072		
5,800.00	5,558.23	5,506.77	5,558.23	31.94	190.52	64.13	-4,170.84	-6,342.96	6,740.21	6,518.61	221.60	30.416		
5,900.00	5,653.40	5,588.40	5,653.40	32.51	193.37	64.35	-4,170.84	-6,342.96	6,726.32	6,501.30	225.02	29.892		
6,000.00	5,748.57	5,683.57	5,748.57	33.09	196.70	64.58	-4,170.84	-6,342.96	6,712.55	6,483.63	228.92	29.323		
6,100.00	5,843.74	5,778.74	5,843.74	33.67	200.02	64.81	-4,170.84	-6,342.96	6,698.88	6,466.07	232.81	28.774		
6,200.00	5,938.91	5,873.91	5,938.91	34.24	203.34	65.04	-4,170.84	-6,342.96	6,685.34	6,448.63	236.71	28.243		
6,300.00	6,034.08	5,969.08	6,034.08	34.82	206.66	65.26	-4,170.84	-6,342.96	6,671.90	6,431.30	240.60	27.730		
6,400.00	6,129.25	6,064.25	6,129.25	35.39	209.98	65.50	-4,170.84	-6,342.96	6,658.58	6,414.08	244.50	27.233		
6,500.00	6,224.42	6,159.42	6,224.42	35.97	213.31	65.73	-4,170.84	-6,342.96	6,645.37	6,396.97	248.40	26.753		
6,600.00	6,319.59	6,254.59	6,319.59	36.54	216.63	65.96	-4,170.84	-6,342.96	6,632.28	6,379.99	252.30	26.288		
6,700.00	6,414.76	6,349.76	6,414.76	37.12	219.95	66.19	-4,170.84	-6,342.96	6,619.31	6,363.11	256.19	25.837		
6,800.00	6,509.91	6,444.91	6,509.91	37.70	223.27	59.03	-4,170.84	-6,342.96	6,605.93	6,345.84	260.09	25.398		
6,900.00	6,603.99	6,538.99	6,603.99	38.26	226.55	35.64	-4,170.84	-6,342.96	6,582.03	6,318.11	263.92	24.939		
7,000.00	6,694.76	6,629.76	6,694.76	38.78	229.72	20.05	-4,170.84	-6,342.96	6,544.16	6,276.59	267.58	24.457		
7,100.00	6,779.96	6,714.96	6,779.96	39.24	232.70	9.47	-4,170.84	-6,342.96	6,493.20	6,222.24	270.97	23.963		
7,200.00	6,857.50	6,807.50	6,857.50	39.65	235.93	1.11	-4,170.84	-6,342.96	6,430.38	6,155.84	274.54	23.422		
7,300.00	6,925.48	6,860.48	6,925.48	40.02	237.78	-6.96	-4,170.84	-6,342.96	6,357.22	6,080.56	276.66	22.979		
7,400.00	6,982.21	6,917.21	6,982.21	40.33	239.76	-16.52	-4,170.84	-6,342.96	6,275.53	5,996.71	278.82	22.507		
7,500.00	7,026.31	6,961.31	7,026.31	40.63	241.30	-29.87	-4,170.84	-6,342.96	6,187.36	5,906.90	280.46	22.061		
7,600.00	7,056.68	7,008.32	7,056.68	40.91	242.94	-49.81	-4,170.84	-6,342.96	6,094.93	5,812.80	282.14	21.603		
7,700.00	7,072.58	7,007.58	7,072.58	41.25	242.91	-75.73	-4,170.84	-6,342.96	6,000.59	5,718.51	282.08	21.272		
7,800.00	7,074.86	7,009.86	7,074.86	41.69	242.99	-90.50	-4,170.84	-6,342.96	5,906.57	5,624.46	282.11	20.937		
7,900.00	7,074.54	7,009.54	7,074.54	42.34	242.98	-90.49	-4,170.84	-6,342.96	5,812.97	5,530.91	282.06	20.609		
8,000.00	7,074.21	7,009.21	7,074.21	43.27	242.97	-90.48	-4,170.84	-6,342.96	5,719.58	5,437.53	282.05	20.279		
8,100.00	7,073.89	7,008.89	7,073.89	44.47	242.96	-90.47	-4,170.84	-6,342.96	5,626.42	5,344.35	282.07	19.947		
8,200.00	7,073.57	7,008.57	7,073.57	45.91	242.95	-90.46	-4,170.84	-6,342.96	5,533.50	5,251.37	282.13	19.613		
8,300.00	7,073.24	7,008.24	7,073.24	47.53	242.93	-90.45	-4,170.84	-6,342.96	5,440.84	5,158.60	282.23	19.278		
8,400.00	7,072.92	7,007.92	7,072.92	49.31	242.92	-90.45	-4,170.84	-6,342.96	5,348.43	5,066.05	282.39	18.940		
8,500.00	7,072.59	7,007.59	7,072.59	51.20	242.91	-90.44	-4,170.84	-6,342.96	5,256.31	4,973.72	282.59	18.600		
8,600.00	7,072.27	7,007.27	7,072.27	53.19	242.90	-90.43	-4,170.84	-6,342.96	5,164.47	4,881.62	282.85	18.259		
8,700.00	7,071.94	7,006.94	7,071.94	55.27	242.89	-90.42	-4,170.84	-6,342.96	5,072.95	4,789.78	283.17	17.915		
8,800.00	7,071.62	7,006.62	7,071.62	57.43	242.88	-90.41	-4,170.84	-6,342.96	4,981.75	4,698.20	283.55	17.569		
8,900.00	7,071.29	7,006.29	7,071.29	59.64	242.87	-90.40	-4,170.84	-6,342.96	4,890.90	4,606.89	284.00	17.221		
9,000.00	7,070.97	7,005.97	7,070.97	61.92	242.86	-90.39	-4,170.84	-6,342.96	4,800.41	4,515.88	284.53	16.871		
9,100.00	7,070.64	7,005.64	7,070.64	64.24	242.84	-90.38	-4,170.84	-6,342.96	4,710.30	4,425.17	285.14	16.519		
9,200.00	7,070.32	7,005.32	7,070.32	66.61	242.83	-90.37	-4,170.84	-6,342.96	4,620.60	4,334.78	285.83	16.166		
9,300.00	7,069.99	7,004.99	7,069.99	69.01	242.82	-90.36	-4,170.84	-6,342.96	4,531.34	4,244.73	286.61	15.810		
9,400.00	7,069.67	7,004.67	7,069.67	71.45	242.81	-90.36	-4,170.84	-6,342.96	4,442.53	4,155.05	287.48	15.453		
9,500.00	7,069.34	7,004.34	7,069.34	73.92	242.80	-90.35	-4,170.84	-6,342.96	4,354.20	4,065.75	288.45	15.095		
9,600.00	7,069.02	7,004.02	7,069.02	76.42	242.79	-90.34	-4,170.84	-6,342.96	4,266.39	3,976.86	289.53	14.736		
9,700.00	7,068.69	7,003.69	7,068.69	78.95	242.78	-90.33	-4,170.84	-6,342.96	4,179.13	3,888.41	290.72	14.375		
9,800.00	7,068.37	7,003.37	7,068.37	81.49	242.76	-90.32	-4,170.84	-6,342.96	4,092.45	3,800.43	292.02	14.014		
9,900.00	7,068.04	7,003.04	7,068.04	84.06	242.75	-90.31	-4,170.84	-6,342.96	4,006.40	3,712.95	293.44	13.653		
10,000.00	7,067.72	7,002.72	7,067.72	86.65	242.74	-90.30	-4,170.84	-6,342.96	3,921.00	3,626.01	294.99	13.292		
10,100.00	7,067.39	7,002.39	7,067.39	89.25	242.73	-90.29	-4,170.84	-6,342.96	3,836.31	3,539.64	296.66	12.931		
10,200.00	7,067.07	7,002.07	7,067.07	91.87	242.72	-90.28	-4,170.84	-6,342.96	3,752.37	3,453.90	298.48	12.572		
10,300.00	7,066.74	7,001.74	7,066.74	94.50	242.71	-90.27	-4,170.84	-6,342.96	3,669.24	3,368.81	300.43	12.213		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,001.42	7,066.42	97.14	242.70	-90.26	-4,170.84	-6,342.96	3,586.97	3,284.45	302.52	11.857		
10,500.00	7,066.09	7,001.09	7,066.09	99.80	242.69	-90.26	-4,170.84	-6,342.96	3,505.62	3,200.85	304.77	11.503		
10,600.00	7,065.77	7,000.77	7,065.77	102.47	242.67	-90.25	-4,170.84	-6,342.96	3,425.26	3,118.09	307.17	11.151		
10,700.00	7,065.44	7,000.44	7,065.44	105.15	242.66	-90.24	-4,170.84	-6,342.96	3,345.96	3,036.23	309.73	10.803		
10,800.00	7,065.12	7,000.12	7,065.12	107.83	242.65	-90.23	-4,170.84	-6,342.96	3,267.79	2,955.34	312.45	10.459		
10,900.00	7,064.79	7,000.21	7,064.79	110.53	242.65	-90.22	-4,170.84	-6,342.96	3,190.84	2,875.49	315.35	10.118		
11,000.00	7,064.47	7,000.53	7,064.47	113.23	242.67	-90.21	-4,170.84	-6,342.96	3,115.21	2,796.77	318.44	9.783		
11,100.00	7,064.14	7,000.86	7,064.14	115.95	242.68	-90.20	-4,170.84	-6,342.96	3,040.98	2,719.28	321.70	9.453		
11,200.00	7,063.82	7,001.18	7,063.82	118.66	242.69	-90.19	-4,170.84	-6,342.96	2,968.26	2,643.13	325.13	9.129		
11,300.00	7,063.49	7,001.51	7,063.49	121.39	242.70	-90.18	-4,170.84	-6,342.96	2,897.17	2,568.42	328.75	8.813		
11,400.00	7,063.17	7,001.83	7,063.17	124.12	242.71	-90.17	-4,170.84	-6,342.96	2,827.83	2,495.29	332.54	8.504		
11,500.00	7,062.84	7,002.16	7,062.84	126.86	242.72	-90.17	-4,170.84	-6,342.96	2,760.37	2,423.86	336.52	8.203		
11,600.00	7,062.52	7,002.48	7,062.52	129.60	242.73	-90.16	-4,170.84	-6,342.96	2,694.94	2,354.27	340.66	7.911		
11,700.00	7,062.19	7,002.81	7,062.19	132.35	242.75	-90.15	-4,170.84	-6,342.96	2,631.67	2,286.69	344.98	7.628		
11,800.00	7,061.87	7,003.13	7,061.87	135.10	242.76	-90.14	-4,170.84	-6,342.96	2,570.75	2,221.29	349.46	7.356		
11,900.00	7,061.54	7,003.46	7,061.54	137.85	242.77	-90.13	-4,170.84	-6,342.96	2,512.32	2,158.23	354.09	7.095		
12,000.00	7,061.22	7,003.78	7,061.22	140.61	242.78	-90.12	-4,170.84	-6,342.96	2,456.58	2,097.72	358.86	6.846		
12,100.00	7,060.89	7,004.11	7,060.89	143.38	242.79	-90.11	-4,170.84	-6,342.96	2,403.71	2,039.96	363.74	6.608		
12,200.00	7,060.57	7,004.43	7,060.57	146.15	242.80	-90.10	-4,170.84	-6,342.96	2,353.90	1,985.17	368.73	6.384		
12,300.00	7,060.24	7,004.76	7,060.24	148.92	242.81	-90.09	-4,170.84	-6,342.96	2,307.35	1,933.57	373.78	6.173		
12,400.00	7,059.92	7,005.08	7,059.92	151.69	242.82	-90.08	-4,170.84	-6,342.96	2,264.26	1,885.39	378.87	5.976		
12,500.00	7,059.59	7,005.41	7,059.59	154.47	242.84	-90.08	-4,170.84	-6,342.96	2,224.84	1,840.88	383.96	5.794		
12,600.00	7,059.27	7,005.73	7,059.27	157.25	242.85	-90.07	-4,170.84	-6,342.96	2,189.28	1,800.26	389.01	5.628		
12,700.00	7,058.94	7,006.06	7,058.94	160.03	242.86	-90.06	-4,170.84	-6,342.96	2,157.77	1,763.79	393.98	5.477		
12,800.00	7,058.62	7,006.38	7,058.62	162.82	242.87	-90.05	-4,170.84	-6,342.96	2,130.49	1,731.67	398.82	5.342		
12,900.00	7,058.29	7,006.71	7,058.29	165.61	242.88	-90.04	-4,170.84	-6,342.96	2,107.61	1,704.13	403.48	5.224		
13,000.00	7,057.97	7,007.03	7,057.97	168.40	242.89	-90.03	-4,170.84	-6,342.96	2,089.26	1,681.35	407.91	5.122		
13,100.00	7,057.64	7,007.36	7,057.64	171.19	242.90	-90.02	-4,170.84	-6,342.96	2,075.58	1,663.51	412.07	5.037		
13,200.00	7,057.32	7,007.68	7,057.32	173.99	242.92	-90.01	-4,170.84	-6,342.96	2,066.66	1,650.75	415.91	4.969		
13,300.00	7,057.00	7,008.01	7,057.00	176.78	242.93	-90.00	-4,170.84	-6,342.96	2,062.55	1,643.14	419.40	4.918		
13,334.89	7,056.88	7,008.12	7,056.88	177.76	242.93	-90.00	-4,170.84	-6,342.96	2,062.25	1,641.72	420.53	4.904 CC		
13,400.00	7,056.67	7,008.33	7,056.67	179.58	242.94	-89.99	-4,170.84	-6,342.96	2,063.28	1,640.77	422.51	4.883 ES		
13,500.00	7,056.35	7,008.66	7,056.35	182.38	242.95	-89.99	-4,170.84	-6,342.96	2,068.85	1,643.64	425.21	4.865		
13,600.00	7,056.02	7,008.98	7,056.02	185.19	242.96	-89.98	-4,170.84	-6,342.96	2,079.22	1,651.73	427.49	4.864 SF		
13,700.00	7,055.70	7,009.30	7,055.70	187.99	242.97	-89.97	-4,170.84	-6,342.96	2,094.32	1,664.97	429.35	4.878		
13,800.00	7,055.37	7,009.63	7,055.37	190.80	242.98	-89.96	-4,170.84	-6,342.96	2,114.05	1,683.25	430.80	4.907		
13,900.00	7,055.05	7,009.95	7,055.05	193.60	242.99	-89.95	-4,170.84	-6,342.96	2,138.28	1,706.44	431.83	4.952		
14,000.00	7,054.72	6,989.72	7,054.72	196.41	242.29	-89.94	-4,170.84	-6,342.96	2,166.85	1,735.09	431.77	5.019		
14,100.00	7,054.40	6,989.40	7,054.40	199.22	242.28	-89.93	-4,170.84	-6,342.96	2,199.61	1,767.57	432.04	5.091		
14,200.00	7,054.07	6,989.07	7,054.07	202.03	242.27	-89.92	-4,170.84	-6,342.96	2,236.36	1,804.38	431.97	5.177		
14,300.00	7,053.75	6,988.75	7,053.75	204.85	242.25	-89.91	-4,170.84	-6,342.96	2,276.91	1,845.30	431.61	5.275		
14,400.00	7,053.42	6,988.42	7,053.42	207.66	242.24	-89.90	-4,170.84	-6,342.96	2,321.06	1,890.08	430.99	5.385		
14,500.00	7,053.10	6,988.10	7,053.10	210.48	242.23	-89.89	-4,170.84	-6,342.96	2,368.62	1,938.49	430.13	5.507		
14,600.00	7,052.77	6,987.77	7,052.77	213.29	242.22	-89.89	-4,170.84	-6,342.96	2,419.37	1,990.31	429.06	5.639		
14,700.00	7,052.45	6,987.45	7,052.45	216.11	242.21	-89.88	-4,170.84	-6,342.96	2,473.13	2,045.30	427.83	5.781		
14,800.00	7,052.12	6,987.12	7,052.12	218.93	242.20	-89.87	-4,170.84	-6,342.96	2,529.71	2,103.25	426.46	5.932		
14,900.00	7,051.80	6,986.80	7,051.80	221.75	242.19	-89.86	-4,170.84	-6,342.96	2,588.91	2,163.93	424.97	6.092		
15,000.00	7,051.47	6,986.47	7,051.47	224.57	242.17	-89.85	-4,170.84	-6,342.96	2,650.56	2,227.16	423.39	6.260		
15,100.00	7,051.15	6,986.15	7,051.15	227.39	242.16	-89.84	-4,170.84	-6,342.96	2,714.49	2,292.75	421.75	6.436		
15,145.13	7,051.00	6,986.00	7,051.00	228.67	242.16	-89.84	-4,170.84	-6,342.96	2,744.05	2,323.07	420.98	6.518		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	18.00	3.28	3.28	-67.53	2,628.19	-6,355.40	6,877.41					
100.00	100.00	82.00	100.00	3.28	3.58	-67.53	2,628.19	-6,355.40	6,877.39	6,870.52	6.86	1,002.037		
200.00	200.00	182.00	200.00	3.34	5.66	-67.53	2,628.19	-6,355.40	6,877.39	6,868.39	8.99	764.725		
300.00	299.98	281.98	299.98	3.44	8.74	108.08	2,628.19	-6,355.40	6,877.93	6,865.75	12.18	564.838		
400.00	399.84	381.84	399.84	3.59	12.04	108.09	2,628.19	-6,355.40	6,879.56	6,863.93	15.63	440.191		
500.00	499.45	481.45	499.45	3.79	15.42	108.11	2,628.19	-6,355.40	6,882.27	6,863.07	19.20	358.419		
600.00	598.70	580.70	598.70	4.03	18.81	108.13	2,628.19	-6,355.40	6,886.09	6,863.24	22.84	301.432		
700.00	697.47	679.47	697.47	4.31	22.22	108.16	2,628.19	-6,355.40	6,891.02	6,864.49	26.53	259.725		
800.00	795.62	777.62	795.62	4.64	25.61	108.19	2,628.19	-6,355.40	6,897.07	6,866.82	30.25	228.012		
900.00	893.06	875.06	893.06	5.00	28.99	108.23	2,628.19	-6,355.40	6,904.27	6,870.28	33.98	203.163		
1,000.00	989.64	971.64	989.64	5.40	32.34	108.27	2,628.19	-6,355.40	6,912.63	6,874.90	37.73	183.216		
1,100.00	1,085.27	1,067.27	1,085.27	5.83	35.66	108.32	2,628.19	-6,355.40	6,922.18	6,880.70	41.48	166.887		
1,200.00	1,180.44	1,162.44	1,180.44	6.29	38.97	108.55	2,628.19	-6,355.40	6,932.33	6,887.09	45.24	153.241		
1,300.00	1,275.61	1,257.61	1,275.61	6.76	42.29	108.78	2,628.19	-6,355.40	6,942.60	6,893.58	49.02	141.634		
1,400.00	1,370.78	1,352.78	1,370.78	7.26	45.60	109.01	2,628.19	-6,355.40	6,952.99	6,900.18	52.81	131.652		
1,500.00	1,465.95	1,447.95	1,465.95	7.76	48.91	109.24	2,628.19	-6,355.40	6,963.50	6,906.88	56.62	122.984		
1,600.00	1,561.12	1,543.12	1,561.12	8.27	52.23	109.47	2,628.19	-6,355.40	6,974.13	6,913.69	60.44	115.390		
1,700.00	1,656.29	1,638.29	1,656.29	8.80	55.54	109.69	2,628.19	-6,355.40	6,984.88	6,920.61	64.27	108.686		
1,800.00	1,751.46	1,733.46	1,751.46	9.32	58.86	109.92	2,628.19	-6,355.40	6,995.75	6,927.65	68.10	102.727		
1,900.00	1,846.63	1,828.63	1,846.63	9.86	62.18	110.15	2,628.19	-6,355.40	7,006.73	6,934.79	71.94	97.398		
2,000.00	1,941.80	1,923.80	1,941.80	10.40	65.50	110.37	2,628.19	-6,355.40	7,017.84	6,942.05	75.78	92.604		
2,100.00	2,036.96	2,018.96	2,036.96	10.94	68.81	110.60	2,628.19	-6,355.40	7,029.05	6,949.42	79.63	88.269		
2,200.00	2,132.13	2,114.13	2,132.13	11.49	72.13	110.82	2,628.19	-6,355.40	7,040.39	6,956.91	83.48	84.333		
2,300.00	2,227.30	2,209.30	2,227.30	12.04	75.45	111.04	2,628.19	-6,355.40	7,051.84	6,964.50	87.34	80.742		
2,400.00	2,322.47	2,304.47	2,322.47	12.59	78.77	111.27	2,628.19	-6,355.40	7,063.40	6,972.21	91.19	77.454		
2,500.00	2,417.64	2,400.36	2,417.64	13.15	82.12	111.49	2,628.19	-6,355.40	7,075.08	6,980.00	95.08	74.413		
2,600.00	2,512.81	2,505.19	2,512.81	13.70	85.77	111.71	2,628.19	-6,355.40	7,086.88	6,987.60	99.28	71.386		
2,700.00	2,607.98	2,589.98	2,607.98	14.26	88.73	111.93	2,628.19	-6,355.40	7,098.78	6,996.01	102.78	69.070		
2,800.00	2,703.15	2,685.15	2,703.15	14.82	92.05	112.15	2,628.19	-6,355.40	7,110.80	7,004.16	106.64	66.681		
2,900.00	2,798.32	2,780.32	2,798.32	15.38	95.37	112.37	2,628.19	-6,355.40	7,122.93	7,012.43	110.50	64.459		
3,000.00	2,893.49	2,875.49	2,893.49	15.95	98.69	112.59	2,628.19	-6,355.40	7,135.18	7,020.81	114.37	62.387		
3,100.00	2,988.66	2,970.66	2,988.66	16.51	102.01	112.81	2,628.19	-6,355.40	7,147.53	7,029.29	118.24	60.452		
3,200.00	3,083.83	3,065.83	3,083.83	17.07	105.33	113.02	2,628.19	-6,355.40	7,159.99	7,037.89	122.10	58.640		
3,300.00	3,179.00	3,161.00	3,179.00	17.64	108.65	113.24	2,628.19	-6,355.40	7,172.57	7,046.60	125.97	56.939		
3,400.00	3,274.17	3,256.17	3,274.17	18.21	111.98	113.46	2,628.19	-6,355.40	7,185.25	7,055.41	129.84	55.341		
3,500.00	3,369.34	3,351.34	3,369.34	18.77	115.30	113.67	2,628.19	-6,355.40	7,198.04	7,064.34	133.70	53.835		
3,600.00	3,464.51	3,446.51	3,464.51	19.34	118.62	113.89	2,628.19	-6,355.40	7,210.94	7,073.37	137.57	52.416		
3,700.00	3,559.68	3,541.68	3,559.68	19.91	121.94	114.10	2,628.19	-6,355.40	7,223.95	7,082.51	141.44	51.074		
3,800.00	3,654.84	3,636.84	3,654.84	20.48	125.26	114.31	2,628.19	-6,355.40	7,237.06	7,091.75	145.31	49.804		
3,900.00	3,750.01	3,732.01	3,750.01	21.05	128.58	114.52	2,628.19	-6,355.40	7,250.28	7,101.10	149.18	48.602		
4,000.00	3,845.18	3,827.18	3,845.18	21.62	131.90	114.74	2,628.19	-6,355.40	7,263.61	7,110.56	153.05	47.460		
4,100.00	3,940.35	3,922.35	3,940.35	22.19	135.22	114.95	2,628.19	-6,355.40	7,277.04	7,120.12	156.92	46.376		
4,200.00	4,035.52	4,017.52	4,035.52	22.76	138.55	115.16	2,628.19	-6,355.40	7,290.58	7,129.79	160.78	45.344		
4,300.00	4,130.69	4,112.69	4,130.69	23.33	141.87	115.37	2,628.19	-6,355.40	7,304.22	7,139.56	164.65	44.361		
4,400.00	4,225.86	4,207.86	4,225.86	23.91	145.19	115.58	2,628.19	-6,355.40	7,317.96	7,149.44	168.52	43.425		
4,500.00	4,321.03	4,303.03	4,321.03	24.48	148.51	115.78	2,628.19	-6,355.40	7,331.80	7,159.42	172.39	42.531		
4,600.00	4,416.20	4,401.80	4,416.20	25.05	151.96	115.99	2,628.19	-6,355.40	7,345.75	7,169.37	176.38	41.647		
4,700.00	4,511.37	4,506.63	4,511.37	25.62	155.62	116.20	2,628.19	-6,355.40	7,359.80	7,179.22	180.59	40.755		
4,800.00	4,606.54	4,588.54	4,606.54	26.20	158.47	116.40	2,628.19	-6,355.40	7,373.95	7,189.96	183.99	40.077		
4,900.00	4,701.71	4,683.71	4,701.71	26.77	161.80	116.61	2,628.19	-6,355.40	7,388.21	7,200.35	187.86	39.328		
5,000.00	4,796.88	4,778.88	4,796.88	27.34	165.12	116.81	2,628.19	-6,355.40	7,402.56	7,210.83	191.73	38.610		
5,100.00	4,892.05	4,874.05	4,892.05	27.92	168.44	117.02	2,628.19	-6,355.40	7,417.01	7,221.41	195.59	37.920		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,969.22	4,987.22	28.49	171.76	117.22	2,628.19	-6,355.40	7,431.56	7,232.10	199.46	37.258		
5,300.00	5,082.39	5,064.39	5,082.39	29.07	175.08	117.42	2,628.19	-6,355.40	7,446.20	7,242.88	203.33	36.622		
5,400.00	5,177.56	5,159.56	5,177.56	29.64	178.41	117.62	2,628.19	-6,355.40	7,460.95	7,253.76	207.19	36.010		
5,500.00	5,272.72	5,254.72	5,272.72	30.21	181.73	117.82	2,628.19	-6,355.40	7,475.79	7,264.73	211.06	35.420		
5,600.00	5,367.89	5,349.89	5,367.89	30.79	185.05	118.02	2,628.19	-6,355.40	7,490.73	7,275.81	214.92	34.853		
5,700.00	5,463.06	5,445.06	5,463.06	31.36	188.37	118.22	2,628.19	-6,355.40	7,505.77	7,286.98	218.79	34.306		
5,800.00	5,558.23	5,540.23	5,558.23	31.94	191.69	118.42	2,628.19	-6,355.40	7,520.90	7,298.24	222.65	33.778		
5,900.00	5,653.40	5,635.40	5,653.40	32.51	195.01	118.62	2,628.19	-6,355.40	7,536.12	7,309.60	226.52	33.269		
6,000.00	5,748.57	5,730.57	5,748.57	33.09	198.34	118.82	2,628.19	-6,355.40	7,551.44	7,321.06	230.38	32.778		
6,100.00	5,843.74	5,825.74	5,843.74	33.67	201.66	119.01	2,628.19	-6,355.40	7,566.85	7,332.61	234.25	32.303		
6,200.00	5,938.91	5,920.91	5,938.91	34.24	204.98	119.21	2,628.19	-6,355.40	7,582.36	7,344.25	238.11	31.844		
6,300.00	6,034.08	6,016.08	6,034.08	34.82	208.30	119.40	2,628.19	-6,355.40	7,597.96	7,355.98	241.97	31.400		
6,400.00	6,129.25	6,111.25	6,129.25	35.39	211.62	119.60	2,628.19	-6,355.40	7,613.65	7,367.81	245.83	30.971		
6,500.00	6,224.42	6,206.42	6,224.42	35.97	214.95	119.79	2,628.19	-6,355.40	7,629.43	7,379.73	249.70	30.555		
6,600.00	6,319.59	6,301.59	6,319.59	36.54	218.27	119.98	2,628.19	-6,355.40	7,645.30	7,391.74	253.56	30.152		
6,700.00	6,414.76	6,403.24	6,414.76	37.12	221.82	120.17	2,628.19	-6,355.40	7,661.26	7,403.61	257.65	29.736		
6,800.00	6,509.91	6,508.09	6,509.91	37.70	225.48	112.89	2,628.19	-6,355.40	7,676.86	7,415.02	261.84	29.318		
6,900.00	6,603.99	6,585.99	6,603.99	38.26	228.20	89.94	2,628.19	-6,355.40	7,683.20	7,418.09	265.11	28.982		
7,000.00	6,694.76	6,676.76	6,694.76	38.78	231.36	76.07	2,628.19	-6,355.40	7,676.82	7,408.03	268.79	28.561		
7,100.00	6,779.96	6,761.96	6,779.96	39.24	234.34	68.68	2,628.19	-6,355.40	7,658.02	7,385.77	272.25	28.129		
7,200.00	6,857.50	6,839.50	6,857.50	39.65	237.04	65.38	2,628.19	-6,355.40	7,627.38	7,351.97	275.41	27.695		
7,300.00	6,925.48	6,907.48	6,925.48	40.02	239.42	64.90	2,628.19	-6,355.40	7,585.78	7,307.56	278.22	27.265		
7,400.00	6,982.21	6,964.21	6,982.21	40.33	241.40	66.69	2,628.19	-6,355.40	7,534.36	7,253.70	280.66	26.845		
7,500.00	7,026.31	7,008.31	7,026.31	40.63	242.94	70.58	2,628.19	-6,355.40	7,474.47	7,191.77	282.70	26.440		
7,600.00	7,056.68	7,038.68	7,056.68	40.91	244.00	76.54	2,628.19	-6,355.40	7,407.61	7,123.30	284.31	26.055		
7,700.00	7,072.58	7,054.58	7,072.58	41.25	244.55	84.58	2,628.19	-6,355.40	7,335.46	7,049.99	285.48	25.695		
7,800.00	7,074.86	7,056.86	7,074.86	41.69	244.63	90.22	2,628.19	-6,355.40	7,259.99	6,973.76	286.22	25.365		
7,900.00	7,074.54	7,056.54	7,074.54	42.34	244.62	90.21	2,628.19	-6,355.40	7,184.50	6,897.54	286.96	25.036		
8,000.00	7,074.21	7,056.21	7,074.21	43.27	244.61	90.21	2,628.19	-6,355.40	7,109.62	6,821.83	287.79	24.704		
8,100.00	7,073.89	7,055.89	7,073.89	44.47	244.60	90.20	2,628.19	-6,355.40	7,035.36	6,746.65	288.72	24.368		
8,200.00	7,073.57	7,055.57	7,073.57	45.91	244.59	90.20	2,628.19	-6,355.40	6,961.75	6,672.02	289.73	24.028		
8,300.00	7,073.24	7,055.24	7,073.24	47.53	244.58	90.20	2,628.19	-6,355.40	6,888.80	6,597.96	290.84	23.686		
8,400.00	7,072.92	7,054.92	7,072.92	49.31	244.56	90.19	2,628.19	-6,355.40	6,816.54	6,524.49	292.04	23.341		
8,500.00	7,072.59	7,054.59	7,072.59	51.20	244.55	90.19	2,628.19	-6,355.40	6,744.98	6,451.65	293.34	22.994		
8,600.00	7,072.27	7,054.27	7,072.27	53.19	244.54	90.18	2,628.19	-6,355.40	6,674.16	6,379.44	294.72	22.646		
8,700.00	7,071.94	7,053.94	7,071.94	55.27	244.53	90.18	2,628.19	-6,355.40	6,604.09	6,307.90	296.19	22.297		
8,800.00	7,071.62	7,053.62	7,071.62	57.43	244.52	90.18	2,628.19	-6,355.40	6,534.80	6,237.06	297.75	21.947		
8,900.00	7,071.29	7,053.29	7,071.29	59.64	244.51	90.17	2,628.19	-6,355.40	6,466.32	6,166.93	299.39	21.598		
9,000.00	7,070.97	7,052.97	7,070.97	61.92	244.50	90.17	2,628.19	-6,355.40	6,398.66	6,097.54	301.12	21.250		
9,100.00	7,070.64	7,052.64	7,070.64	64.24	244.48	90.17	2,628.19	-6,355.40	6,331.87	6,028.94	302.93	20.902		
9,200.00	7,070.32	7,052.32	7,070.32	66.61	244.47	90.16	2,628.19	-6,355.40	6,265.95	5,961.13	304.82	20.556		
9,300.00	7,069.99	7,051.99	7,069.99	69.01	244.46	90.16	2,628.19	-6,355.40	6,200.95	5,894.16	306.79	20.212		
9,400.00	7,069.67	7,051.67	7,069.67	71.45	244.45	90.15	2,628.19	-6,355.40	6,136.89	5,828.05	308.84	19.871		
9,500.00	7,069.34	7,051.34	7,069.34	73.92	244.44	90.15	2,628.19	-6,355.40	6,073.80	5,762.83	310.96	19.532		
9,600.00	7,069.02	7,051.02	7,069.02	76.42	244.43	90.15	2,628.19	-6,355.40	6,011.71	5,698.55	313.16	19.197		
9,700.00	7,068.69	7,050.69	7,068.69	78.95	244.42	90.14	2,628.19	-6,355.40	5,950.65	5,635.22	315.43	18.865		
9,800.00	7,068.37	7,050.37	7,068.37	81.49	244.41	90.14	2,628.19	-6,355.40	5,890.66	5,572.89	317.77	18.537		
9,900.00	7,068.04	7,050.04	7,068.04	84.06	244.39	90.13	2,628.19	-6,355.40	5,831.77	5,511.59	320.18	18.214		
10,000.00	7,067.72	7,049.72	7,067.72	86.65	244.38	90.13	2,628.19	-6,355.40	5,774.00	5,451.35	322.65	17.896		
10,100.00	7,067.39	7,049.39	7,067.39	89.25	244.37	90.13	2,628.19	-6,355.40	5,717.41	5,392.22	325.19	17.582		
10,200.00	7,067.07	7,049.07	7,067.07	91.87	244.36	90.12	2,628.19	-6,355.40	5,662.01	5,334.22	327.79	17.273		
10,300.00	7,066.74	7,048.74	7,066.74	94.50	244.35	90.12	2,628.19	-6,355.40	5,607.85	5,277.40	330.45	16.971		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,048.42	7,066.42	97.14	244.34	90.11	2,628.19	-6,355.40	5,554.96	5,221.80	333.16	16.673	
10,500.00	7,066.09	7,048.09	7,066.09	99.80	244.33	90.11	2,628.19	-6,355.40	5,503.38	5,167.45	335.93	16.382	
10,600.00	7,065.77	7,047.77	7,065.77	102.47	244.31	90.11	2,628.19	-6,355.40	5,453.15	5,114.39	338.76	16.098	
10,700.00	7,065.44	7,047.44	7,065.44	105.15	244.30	90.10	2,628.19	-6,355.40	5,404.30	5,062.67	341.63	15.819	
10,800.00	7,065.12	7,047.12	7,065.12	107.83	244.29	90.10	2,628.19	-6,355.40	5,356.87	5,012.32	344.55	15.547	
10,900.00	7,064.79	7,046.79	7,064.79	110.53	244.28	90.09	2,628.19	-6,355.40	5,310.90	4,963.39	347.51	15.283	
11,000.00	7,064.47	7,046.47	7,064.47	113.23	244.27	90.09	2,628.19	-6,355.40	5,266.43	4,915.92	350.52	15.025	
11,100.00	7,064.14	7,046.14	7,064.14	115.95	244.26	90.09	2,628.19	-6,355.40	5,223.50	4,869.94	353.55	14.774	
11,200.00	7,063.82	7,045.82	7,063.82	118.66	244.25	90.08	2,628.19	-6,355.40	5,182.13	4,825.51	356.63	14.531	
11,300.00	7,063.49	7,045.49	7,063.49	121.39	244.24	90.08	2,628.19	-6,355.40	5,142.39	4,782.66	359.73	14.295	
11,400.00	7,063.17	7,045.17	7,063.17	124.12	244.22	90.07	2,628.19	-6,355.40	5,104.29	4,741.43	362.86	14.067	
11,500.00	7,062.84	7,044.84	7,062.84	126.86	244.21	90.07	2,628.19	-6,355.40	5,067.88	4,701.87	366.00	13.846	
11,600.00	7,062.52	7,044.52	7,062.52	129.60	244.20	90.07	2,628.19	-6,355.40	5,033.19	4,664.02	369.17	13.634	
11,700.00	7,062.19	7,044.19	7,062.19	132.35	244.19	90.06	2,628.19	-6,355.40	5,000.26	4,627.91	372.35	13.429	
11,800.00	7,061.87	7,043.87	7,061.87	135.10	244.18	90.06	2,628.19	-6,355.40	4,969.13	4,593.60	375.53	13.232	
11,900.00	7,061.54	7,043.54	7,061.54	137.85	244.17	90.06	2,628.19	-6,355.40	4,939.82	4,561.11	378.72	13.044	
12,000.00	7,061.22	7,043.22	7,061.22	140.61	244.16	90.05	2,628.19	-6,355.40	4,912.38	4,530.48	381.90	12.863	
12,100.00	7,060.89	7,042.89	7,060.89	143.38	244.14	90.05	2,628.19	-6,355.40	4,886.83	4,501.75	385.07	12.691	
12,200.00	7,060.57	7,042.57	7,060.57	146.15	244.13	90.04	2,628.19	-6,355.40	4,863.20	4,474.96	388.24	12.526	
12,300.00	7,060.24	7,042.24	7,060.24	148.92	244.12	90.04	2,628.19	-6,355.40	4,841.52	4,450.14	391.38	12.370	
12,400.00	7,059.92	7,041.92	7,059.92	151.69	244.11	90.04	2,628.19	-6,355.40	4,821.82	4,427.32	394.50	12.223	
12,500.00	7,059.59	7,041.59	7,059.59	154.47	244.10	90.03	2,628.19	-6,355.40	4,804.11	4,406.53	397.59	12.083	
12,600.00	7,059.27	7,041.27	7,059.27	157.25	244.09	90.03	2,628.19	-6,355.40	4,788.44	4,387.79	400.64	11.952	
12,700.00	7,058.94	7,040.94	7,058.94	160.03	244.08	90.02	2,628.19	-6,355.40	4,774.80	4,371.14	403.66	11.829	
12,800.00	7,058.62	7,040.62	7,058.62	162.82	244.07	90.02	2,628.19	-6,355.40	4,763.23	4,356.60	406.63	11.714	
12,900.00	7,058.29	7,040.29	7,058.29	165.61	244.05	90.02	2,628.19	-6,355.40	4,753.73	4,344.18	409.55	11.607	
13,000.00	7,057.97	7,039.97	7,057.97	168.40	244.04	90.01	2,628.19	-6,355.40	4,746.32	4,333.91	412.42	11.509	
13,100.00	7,057.64	7,039.64	7,057.64	171.19	244.03	90.01	2,628.19	-6,355.40	4,741.01	4,325.79	415.22	11.418	
13,200.00	7,057.32	7,039.32	7,057.32	173.99	244.02	90.00	2,628.19	-6,355.40	4,737.81	4,319.84	417.96	11.336	
13,300.00	7,057.00	7,039.00	7,057.00	176.78	244.01	90.00	2,628.19	-6,355.40	4,736.71	4,316.08	420.63	11.261	
13,301.94	7,056.99	7,038.99	7,056.99	176.84	244.01	90.00	2,628.19	-6,355.40	4,736.71	4,316.02	420.69	11.260 CC	
13,400.00	7,056.67	7,038.67	7,056.67	179.58	244.00	90.00	2,628.19	-6,355.40	4,737.72	4,314.49	423.23	11.194 ES	
13,500.00	7,056.35	7,038.35	7,056.35	182.38	243.99	89.99	2,628.19	-6,355.40	4,740.85	4,315.09	425.76	11.135	
13,600.00	7,056.02	7,038.02	7,056.02	185.19	243.97	89.99	2,628.19	-6,355.40	4,746.08	4,317.88	428.20	11.084	
13,700.00	7,055.70	7,037.70	7,055.70	187.99	243.96	89.98	2,628.19	-6,355.40	4,753.41	4,322.84	430.56	11.040	
13,800.00	7,055.37	7,037.37	7,055.37	190.80	243.95	89.98	2,628.19	-6,355.40	4,762.82	4,329.98	432.84	11.004	
13,900.00	7,055.05	7,037.05	7,055.05	193.60	243.94	89.98	2,628.19	-6,355.40	4,774.32	4,339.28	435.03	10.975	
14,000.00	7,054.72	7,036.72	7,054.72	196.41	243.93	89.97	2,628.19	-6,355.40	4,787.87	4,350.74	437.13	10.953	
14,100.00	7,054.40	7,036.40	7,054.40	199.22	243.92	89.97	2,628.19	-6,355.40	4,803.47	4,364.33	439.14	10.938	
14,200.00	7,054.07	7,036.07	7,054.07	202.03	243.91	89.96	2,628.19	-6,355.40	4,821.09	4,380.03	441.06	10.931	
14,300.00	7,053.75	7,035.75	7,053.75	204.85	243.89	89.96	2,628.19	-6,355.40	4,840.72	4,397.83	442.89	10.930 SF	
14,400.00	7,053.42	7,035.42	7,053.42	207.66	243.88	89.96	2,628.19	-6,355.40	4,862.32	4,417.69	444.62	10.936	
14,500.00	7,053.10	7,035.10	7,053.10	210.48	243.87	89.95	2,628.19	-6,355.40	4,885.87	4,439.61	446.27	10.948	
14,600.00	7,052.77	7,034.77	7,052.77	213.29	243.86	89.95	2,628.19	-6,355.40	4,911.35	4,463.53	447.82	10.967	
14,700.00	7,052.45	7,034.45	7,052.45	216.11	243.85	89.95	2,628.19	-6,355.40	4,938.72	4,489.44	449.28	10.993	
14,800.00	7,052.12	7,034.12	7,052.12	218.93	243.84	89.94	2,628.19	-6,355.40	4,967.96	4,517.31	450.65	11.024	
14,900.00	7,051.80	7,033.80	7,051.80	221.75	243.83	89.94	2,628.19	-6,355.40	4,999.02	4,547.09	451.93	11.062	
15,000.00	7,051.47	7,033.47	7,051.47	224.57	243.82	89.93	2,628.19	-6,355.40	5,031.88	4,578.76	453.12	11.105	
15,100.00	7,051.15	7,033.15	7,051.15	227.39	243.80	89.93	2,628.19	-6,355.40	5,066.50	4,612.27	454.23	11.154	
15,145.13	7,051.00	7,033.00	7,051.00	228.67	243.80	89.93	2,628.19	-6,355.40	5,082.69	4,627.99	454.70	11.178	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	15.00	3.28	3.28	-71.92	2,563.04	-7,851.66	8,259.41					
100.00	100.00	85.00	100.00	3.28	3.60	-71.92	2,563.04	-7,851.66	8,259.40	8,252.52	6.88	1,199.681		
200.00	200.00	185.00	200.00	3.34	5.74	-71.92	2,563.04	-7,851.66	8,259.40	8,250.32	9.08	909.733		
300.00	299.98	284.98	299.98	3.44	8.83	103.69	2,563.04	-7,851.66	8,259.81	8,247.54	12.27	672.956		
400.00	399.84	384.84	399.84	3.59	12.14	103.71	2,563.04	-7,851.66	8,261.06	8,245.33	15.73	525.205		
500.00	499.45	484.45	499.45	3.79	15.52	103.72	2,563.04	-7,851.66	8,263.13	8,243.83	19.30	428.056		
600.00	598.70	583.70	598.70	4.03	18.92	103.75	2,563.04	-7,851.66	8,266.04	8,243.10	22.95	360.216		
700.00	697.47	682.47	697.47	4.31	22.32	103.78	2,563.04	-7,851.66	8,269.81	8,243.17	26.64	310.480		
800.00	795.62	780.62	795.62	4.64	25.72	103.82	2,563.04	-7,851.66	8,274.44	8,244.09	30.35	272.605		
900.00	893.06	878.06	893.06	5.00	29.09	103.86	2,563.04	-7,851.66	8,279.95	8,245.86	34.09	242.887		
1,000.00	989.64	974.64	989.64	5.40	32.45	103.90	2,563.04	-7,851.66	8,286.37	8,248.53	37.84	219.002		
1,100.00	1,085.27	1,070.27	1,085.27	5.83	35.77	103.95	2,563.04	-7,851.66	8,293.70	8,252.12	41.59	199.425		
1,200.00	1,180.44	1,165.44	1,180.44	6.29	39.08	104.15	2,563.04	-7,851.66	8,301.51	8,256.16	45.35	183.048		
1,300.00	1,275.61	1,260.61	1,275.61	6.76	42.39	104.35	2,563.04	-7,851.66	8,309.43	8,260.29	49.14	169.114		
1,400.00	1,370.78	1,355.78	1,370.78	7.26	45.70	104.54	2,563.04	-7,851.66	8,317.45	8,264.52	52.93	157.127		
1,500.00	1,465.95	1,450.95	1,465.95	7.76	49.02	104.74	2,563.04	-7,851.66	8,325.58	8,268.83	56.75	146.714		
1,600.00	1,561.12	1,546.12	1,561.12	8.27	52.33	104.93	2,563.04	-7,851.66	8,333.81	8,273.24	60.57	137.591		
1,700.00	1,656.29	1,641.29	1,656.29	8.80	55.65	105.13	2,563.04	-7,851.66	8,342.15	8,277.75	64.40	129.534		
1,800.00	1,751.46	1,736.46	1,751.46	9.32	58.97	105.32	2,563.04	-7,851.66	8,350.59	8,282.35	68.24	122.372		
1,900.00	1,846.63	1,831.63	1,846.63	9.86	62.28	105.51	2,563.04	-7,851.66	8,359.13	8,287.05	72.08	115.964		
2,000.00	1,941.80	1,926.80	1,941.80	10.40	65.60	105.71	2,563.04	-7,851.66	8,367.78	8,291.85	75.93	110.200		
2,100.00	2,036.96	2,021.96	2,036.96	10.94	68.92	105.90	2,563.04	-7,851.66	8,376.54	8,296.75	79.79	104.987		
2,200.00	2,132.13	2,117.13	2,132.13	11.49	72.24	106.09	2,563.04	-7,851.66	8,385.39	8,301.75	83.64	100.252		
2,300.00	2,227.30	2,212.30	2,227.30	12.04	75.56	106.29	2,563.04	-7,851.66	8,394.35	8,306.85	87.50	95.932		
2,400.00	2,322.47	2,307.47	2,322.47	12.59	78.88	106.48	2,563.04	-7,851.66	8,403.41	8,312.05	91.37	91.976		
2,500.00	2,417.64	2,402.64	2,417.64	13.15	82.20	106.67	2,563.04	-7,851.66	8,412.58	8,317.35	95.23	88.339		
2,600.00	2,512.81	2,502.19	2,512.81	13.70	85.67	106.86	2,563.04	-7,851.66	8,421.85	8,322.60	99.25	84.855		
2,700.00	2,607.98	2,607.02	2,607.98	14.26	89.33	107.05	2,563.04	-7,851.66	8,431.21	8,327.76	103.45	81.497		
2,800.00	2,703.15	2,688.15	2,703.15	14.82	92.16	107.24	2,563.04	-7,851.66	8,440.68	8,333.85	106.83	79.007		
2,900.00	2,798.32	2,783.32	2,798.32	15.38	95.48	107.43	2,563.04	-7,851.66	8,450.25	8,339.55	110.70	76.331		
3,000.00	2,893.49	2,878.49	2,893.49	15.95	98.80	107.62	2,563.04	-7,851.66	8,459.92	8,345.35	114.58	73.836		
3,100.00	2,988.66	2,973.66	2,988.66	16.51	102.12	107.81	2,563.04	-7,851.66	8,469.70	8,351.25	118.45	71.505		
3,200.00	3,083.83	3,068.83	3,083.83	17.07	105.44	108.00	2,563.04	-7,851.66	8,479.57	8,357.24	122.32	69.321		
3,300.00	3,179.00	3,164.00	3,179.00	17.64	108.76	108.19	2,563.04	-7,851.66	8,489.54	8,363.34	126.20	67.272		
3,400.00	3,274.17	3,259.17	3,274.17	18.21	112.08	108.38	2,563.04	-7,851.66	8,499.61	8,369.54	130.07	65.346		
3,500.00	3,369.34	3,354.34	3,369.34	18.77	115.40	108.56	2,563.04	-7,851.66	8,509.78	8,375.83	133.95	63.531		
3,600.00	3,464.51	3,449.51	3,464.51	19.34	118.72	108.75	2,563.04	-7,851.66	8,520.04	8,382.22	137.82	61.819		
3,700.00	3,559.68	3,544.68	3,559.68	19.91	122.04	108.94	2,563.04	-7,851.66	8,530.41	8,388.71	141.70	60.202		
3,800.00	3,654.84	3,639.84	3,654.84	20.48	125.36	109.13	2,563.04	-7,851.66	8,540.87	8,395.30	145.57	58.670		
3,900.00	3,750.01	3,735.01	3,750.01	21.05	128.69	109.31	2,563.04	-7,851.66	8,551.43	8,401.98	149.45	57.219		
4,000.00	3,845.18	3,830.18	3,845.18	21.62	132.01	109.50	2,563.04	-7,851.66	8,562.09	8,408.77	153.33	55.842		
4,100.00	3,940.35	3,925.35	3,940.35	22.19	135.33	109.68	2,563.04	-7,851.66	8,572.85	8,415.64	157.20	54.534		
4,200.00	4,035.52	4,020.52	4,035.52	22.76	138.65	109.87	2,563.04	-7,851.66	8,583.70	8,422.62	161.08	53.289		
4,300.00	4,130.69	4,115.69	4,130.69	23.33	141.97	110.05	2,563.04	-7,851.66	8,594.64	8,429.69	164.96	52.103		
4,400.00	4,225.86	4,210.86	4,225.86	23.91	145.29	110.24	2,563.04	-7,851.66	8,605.69	8,436.86	168.83	50.972		
4,500.00	4,321.03	4,306.03	4,321.03	24.48	148.61	110.42	2,563.04	-7,851.66	8,616.83	8,444.12	172.71	49.892		
4,600.00	4,416.20	4,401.20	4,416.20	25.05	151.94	110.60	2,563.04	-7,851.66	8,628.06	8,451.47	176.59	48.860		
4,700.00	4,511.37	4,503.63	4,511.37	25.62	155.51	110.78	2,563.04	-7,851.66	8,639.39	8,458.67	180.72	47.807		
4,800.00	4,606.54	4,608.46	4,606.54	26.20	159.17	110.97	2,563.04	-7,851.66	8,650.81	8,465.88	184.93	46.779		
4,900.00	4,701.71	4,686.71	4,701.71	26.77	161.90	111.15	2,563.04	-7,851.66	8,662.32	8,474.11	188.21	46.024		
5,000.00	4,796.88	4,781.88	4,796.88	27.34	165.22	111.33	2,563.04	-7,851.66	8,673.93	8,481.84	192.09	45.155		
5,100.00	4,892.05	4,877.05	4,892.05	27.92	168.54	111.51	2,563.04	-7,851.66	8,685.63	8,489.67	195.97	44.322		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,987.22	4,972.22	4,987.22	28.49	171.87	111.69	2,563.04	-7,851.66	8,697.43	8,497.58	199.84	43.521		
5,300.00	5,082.39	5,067.39	5,082.39	29.07	175.19	111.87	2,563.04	-7,851.66	8,709.31	8,505.60	203.72	42.752		
5,400.00	5,177.56	5,162.56	5,177.56	29.64	178.51	112.05	2,563.04	-7,851.66	8,721.29	8,513.70	207.59	42.011		
5,500.00	5,272.72	5,257.72	5,272.72	30.21	181.83	112.23	2,563.04	-7,851.66	8,733.36	8,521.89	211.47	41.299		
5,600.00	5,367.89	5,352.89	5,367.89	30.79	185.15	112.41	2,563.04	-7,851.66	8,745.52	8,530.18	215.34	40.612		
5,700.00	5,463.06	5,448.06	5,463.06	31.36	188.48	112.59	2,563.04	-7,851.66	8,757.77	8,538.56	219.22	39.950		
5,800.00	5,558.23	5,543.23	5,558.23	31.94	191.80	112.76	2,563.04	-7,851.66	8,770.12	8,547.02	223.09	39.312		
5,900.00	5,653.40	5,638.40	5,653.40	32.51	195.12	112.94	2,563.04	-7,851.66	8,782.55	8,555.58	226.97	38.695		
6,000.00	5,748.57	5,733.57	5,748.57	33.09	198.44	113.12	2,563.04	-7,851.66	8,795.07	8,564.23	230.84	38.100		
6,100.00	5,843.74	5,828.74	5,843.74	33.67	201.76	113.29	2,563.04	-7,851.66	8,807.68	8,572.97	234.71	37.525		
6,200.00	5,938.91	5,923.91	5,938.91	34.24	205.08	113.47	2,563.04	-7,851.66	8,820.38	8,581.80	238.59	36.969		
6,300.00	6,034.08	6,019.08	6,034.08	34.82	208.41	113.64	2,563.04	-7,851.66	8,833.17	8,590.71	242.46	36.431		
6,400.00	6,129.25	6,114.25	6,129.25	35.39	211.73	113.82	2,563.04	-7,851.66	8,846.05	8,599.71	246.33	35.911		
6,500.00	6,224.42	6,209.42	6,224.42	35.97	215.05	113.99	2,563.04	-7,851.66	8,859.01	8,608.81	250.21	35.407		
6,600.00	6,319.59	6,304.59	6,319.59	36.54	218.37	114.17	2,563.04	-7,851.66	8,872.06	8,617.99	254.08	34.919		
6,700.00	6,414.76	6,400.24	6,414.76	37.12	221.71	114.34	2,563.04	-7,851.66	8,885.20	8,627.24	257.97	34.443		
6,800.00	6,509.91	6,505.09	6,509.91	37.70	225.37	107.10	2,563.04	-7,851.66	8,897.94	8,635.77	262.18	33.939		
6,900.00	6,603.99	6,588.99	6,603.99	38.26	228.30	84.33	2,563.04	-7,851.66	8,900.78	8,635.13	265.65	33.505		
7,000.00	6,694.76	6,679.76	6,694.76	38.78	231.47	70.56	2,563.04	-7,851.66	8,890.08	8,620.74	269.35	33.006		
7,100.00	6,779.96	6,764.96	6,779.96	39.24	234.44	63.24	2,563.04	-7,851.66	8,866.20	8,593.39	272.81	32.500		
7,200.00	6,857.50	6,842.50	6,857.50	39.65	237.15	59.98	2,563.04	-7,851.66	8,829.80	8,553.83	275.97	31.996		
7,300.00	6,925.48	6,910.48	6,925.48	40.02	239.52	59.60	2,563.04	-7,851.66	8,781.86	8,503.08	278.77	31.502		
7,400.00	6,982.21	6,967.21	6,982.21	40.33	241.50	61.64	2,563.04	-7,851.66	8,723.62	8,442.43	281.19	31.024		
7,500.00	7,026.31	7,011.31	7,026.31	40.63	243.04	66.07	2,563.04	-7,851.66	8,656.57	8,373.39	283.18	30.569		
7,600.00	7,056.68	7,041.68	7,056.68	40.91	244.10	73.14	2,563.04	-7,851.66	8,582.36	8,297.63	284.72	30.143		
7,700.00	7,072.58	7,057.58	7,072.58	41.25	244.66	83.09	2,563.04	-7,851.66	8,502.81	8,217.01	285.79	29.751		
7,800.00	7,074.86	7,059.86	7,074.86	41.69	244.74	90.28	2,563.04	-7,851.66	8,420.03	8,133.61	286.42	29.398		
7,900.00	7,074.54	7,059.54	7,074.54	42.34	244.73	90.27	2,563.04	-7,851.66	8,337.10	8,050.09	287.01	29.048		
8,000.00	7,074.21	7,059.21	7,074.21	43.27	244.71	90.27	2,563.04	-7,851.66	8,254.55	7,966.87	287.67	28.694		
8,100.00	7,073.89	7,058.89	7,073.89	44.47	244.70	90.27	2,563.04	-7,851.66	8,172.38	7,883.98	288.41	28.336		
8,200.00	7,073.57	7,058.57	7,073.57	45.91	244.69	90.26	2,563.04	-7,851.66	8,090.62	7,801.41	289.21	27.975		
8,300.00	7,073.24	7,058.24	7,073.24	47.53	244.68	90.26	2,563.04	-7,851.66	8,009.27	7,719.19	290.09	27.610		
8,400.00	7,072.92	7,057.92	7,072.92	49.31	244.67	90.25	2,563.04	-7,851.66	7,928.35	7,637.32	291.03	27.242		
8,500.00	7,072.59	7,057.59	7,072.59	51.20	244.66	90.25	2,563.04	-7,851.66	7,847.87	7,555.81	292.05	26.871		
8,600.00	7,072.27	7,057.27	7,072.27	53.19	244.65	90.25	2,563.04	-7,851.66	7,767.84	7,474.69	293.15	26.498		
8,700.00	7,071.94	7,056.94	7,071.94	55.27	244.63	90.24	2,563.04	-7,851.66	7,688.28	7,393.97	294.31	26.123		
8,800.00	7,071.62	7,056.62	7,071.62	57.43	244.62	90.24	2,563.04	-7,851.66	7,609.20	7,313.65	295.55	25.746		
8,900.00	7,071.29	7,056.29	7,071.29	59.64	244.61	90.23	2,563.04	-7,851.66	7,530.61	7,233.76	296.85	25.368		
9,000.00	7,070.97	7,055.97	7,070.97	61.92	244.60	90.23	2,563.04	-7,851.66	7,452.55	7,154.31	298.23	24.989		
9,100.00	7,070.64	7,055.64	7,070.64	64.24	244.59	90.23	2,563.04	-7,851.66	7,375.01	7,075.32	299.68	24.609		
9,200.00	7,070.32	7,055.32	7,070.32	66.61	244.58	90.22	2,563.04	-7,851.66	7,298.02	6,996.81	301.21	24.229		
9,300.00	7,069.99	7,054.99	7,069.99	69.01	244.57	90.22	2,563.04	-7,851.66	7,221.59	6,918.79	302.80	23.850		
9,400.00	7,069.67	7,054.67	7,069.67	71.45	244.56	90.21	2,563.04	-7,851.66	7,145.74	6,841.28	304.46	23.470		
9,500.00	7,069.34	7,054.34	7,069.34	73.92	244.54	90.21	2,563.04	-7,851.66	7,070.50	6,764.31	306.19	23.092		
9,600.00	7,069.02	7,054.02	7,069.02	76.42	244.53	90.21	2,563.04	-7,851.66	6,995.87	6,687.88	307.99	22.715		
9,700.00	7,068.69	7,053.69	7,068.69	78.95	244.52	90.20	2,563.04	-7,851.66	6,921.88	6,612.03	309.85	22.339		
9,800.00	7,068.37	7,053.37	7,068.37	81.49	244.51	90.20	2,563.04	-7,851.66	6,848.56	6,536.77	311.79	21.965		
9,900.00	7,068.04	7,053.04	7,068.04	84.06	244.50	90.19	2,563.04	-7,851.66	6,775.92	6,462.13	313.79	21.594		
10,000.00	7,067.72	7,052.72	7,067.72	86.65	244.49	90.19	2,563.04	-7,851.66	6,703.98	6,388.12	315.86	21.225		
10,100.00	7,067.39	7,052.39	7,067.39	89.25	244.48	90.19	2,563.04	-7,851.66	6,632.77	6,314.77	318.00	20.858		
10,200.00	7,067.07	7,052.07	7,067.07	91.87	244.46	90.18	2,563.04	-7,851.66	6,562.31	6,242.11	320.20	20.495		
10,300.00	7,066.74	7,051.74	7,066.74	94.50	244.45	90.18	2,563.04	-7,851.66	6,492.63	6,170.16	322.46	20.134		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	7,051.42	7,066.42	97.14	244.44	90.17	2,563.04	-7,851.66	6,423.75	6,098.95	324.80	19.778		
10,500.00	7,066.09	7,051.09	7,066.09	99.80	244.43	90.17	2,563.04	-7,851.66	6,355.69	6,028.50	327.19	19.425		
10,600.00	7,065.77	7,050.77	7,065.77	102.47	244.42	90.17	2,563.04	-7,851.66	6,288.49	5,958.84	329.65	19.076		
10,700.00	7,065.44	7,050.44	7,065.44	105.15	244.41	90.16	2,563.04	-7,851.66	6,222.17	5,889.99	332.17	18.732		
10,800.00	7,065.12	7,050.12	7,065.12	107.83	244.40	90.16	2,563.04	-7,851.66	6,156.76	5,822.00	334.76	18.392		
10,900.00	7,064.79	7,049.79	7,064.79	110.53	244.39	90.16	2,563.04	-7,851.66	6,092.28	5,754.88	337.41	18.056		
11,000.00	7,064.47	7,049.47	7,064.47	113.23	244.37	90.15	2,563.04	-7,851.66	6,028.78	5,688.67	340.12	17.726		
11,100.00	7,064.14	7,049.14	7,064.14	115.95	244.36	90.15	2,563.04	-7,851.66	5,966.28	5,623.40	342.88	17.400		
11,200.00	7,063.82	7,048.82	7,063.82	118.66	244.35	90.14	2,563.04	-7,851.66	5,904.81	5,559.10	345.71	17.080		
11,300.00	7,063.49	7,048.49	7,063.49	121.39	244.34	90.14	2,563.04	-7,851.66	5,844.41	5,495.81	348.59	16.766		
11,400.00	7,063.17	7,048.17	7,063.17	124.12	244.33	90.14	2,563.04	-7,851.66	5,785.10	5,433.56	351.54	16.457		
11,500.00	7,062.84	7,047.84	7,062.84	126.86	244.32	90.13	2,563.04	-7,851.66	5,726.92	5,372.39	354.53	16.153		
11,600.00	7,062.52	7,047.52	7,062.52	129.60	244.31	90.13	2,563.04	-7,851.66	5,669.92	5,312.33	357.58	15.856		
11,700.00	7,062.19	7,047.19	7,062.19	132.35	244.29	90.12	2,563.04	-7,851.66	5,614.11	5,253.43	360.68	15.565		
11,800.00	7,061.87	7,046.87	7,061.87	135.10	244.28	90.12	2,563.04	-7,851.66	5,559.54	5,195.71	363.83	15.281		
11,900.00	7,061.54	7,046.54	7,061.54	137.85	244.27	90.12	2,563.04	-7,851.66	5,506.25	5,139.22	367.03	15.002		
12,000.00	7,061.22	7,046.22	7,061.22	140.61	244.26	90.11	2,563.04	-7,851.66	5,454.27	5,084.00	370.27	14.730		
12,100.00	7,060.89	7,045.89	7,060.89	143.38	244.25	90.11	2,563.04	-7,851.66	5,403.64	5,030.08	373.56	14.465		
12,200.00	7,060.57	7,045.57	7,060.57	146.15	244.24	90.10	2,563.04	-7,851.66	5,354.40	4,977.52	376.88	14.207		
12,300.00	7,060.24	7,045.24	7,060.24	148.92	244.23	90.10	2,563.04	-7,851.66	5,306.59	4,926.35	380.25	13.956		
12,400.00	7,059.92	7,044.92	7,059.92	151.69	244.22	90.10	2,563.04	-7,851.66	5,260.25	4,876.61	383.64	13.711		
12,500.00	7,059.59	7,044.59	7,059.59	154.47	244.20	90.09	2,563.04	-7,851.66	5,215.41	4,828.34	387.07	13.474		
12,600.00	7,059.27	7,044.27	7,059.27	157.25	244.19	90.09	2,563.04	-7,851.66	5,172.12	4,781.60	390.52	13.244		
12,700.00	7,058.94	7,043.94	7,058.94	160.03	244.18	90.08	2,563.04	-7,851.66	5,130.41	4,736.42	393.99	13.022		
12,800.00	7,058.62	7,043.62	7,058.62	162.82	244.17	90.08	2,563.04	-7,851.66	5,090.32	4,692.84	397.48	12.807		
12,900.00	7,058.29	7,043.29	7,058.29	165.61	244.16	90.08	2,563.04	-7,851.66	5,051.89	4,650.91	400.98	12.599		
13,000.00	7,057.97	7,042.97	7,057.97	168.40	244.15	90.07	2,563.04	-7,851.66	5,015.17	4,610.67	404.49	12.399		
13,100.00	7,057.64	7,042.64	7,057.64	171.19	244.14	90.07	2,563.04	-7,851.66	4,980.18	4,572.17	408.01	12.206		
13,200.00	7,057.32	7,042.32	7,057.32	173.99	244.12	90.06	2,563.04	-7,851.66	4,946.97	4,535.45	411.52	12.021		
13,300.00	7,057.00	7,042.00	7,057.00	176.78	244.11	90.06	2,563.04	-7,851.66	4,915.56	4,500.54	415.03	11.844		
13,400.00	7,056.67	7,041.67	7,056.67	179.58	244.10	90.06	2,563.04	-7,851.66	4,886.00	4,467.49	418.52	11.675		
13,500.00	7,056.35	7,041.35	7,056.35	182.38	244.09	90.05	2,563.04	-7,851.66	4,858.32	4,436.33	421.99	11.513		
13,600.00	7,056.02	7,041.02	7,056.02	185.19	244.08	90.05	2,563.04	-7,851.66	4,832.56	4,407.12	425.44	11.359		
13,700.00	7,055.70	7,040.70	7,055.70	187.99	244.07	90.04	2,563.04	-7,851.66	4,808.73	4,379.87	428.86	11.213		
13,800.00	7,055.37	7,040.37	7,055.37	190.80	244.06	90.04	2,563.04	-7,851.66	4,786.87	4,354.64	432.24	11.075		
13,900.00	7,055.05	7,040.05	7,055.05	193.60	244.05	90.04	2,563.04	-7,851.66	4,767.02	4,331.44	435.58	10.944		
14,000.00	7,054.72	7,039.72	7,054.72	196.41	244.03	90.03	2,563.04	-7,851.66	4,749.18	4,310.31	438.87	10.821		
14,100.00	7,054.40	7,039.40	7,054.40	199.22	244.02	90.03	2,563.04	-7,851.66	4,733.39	4,291.29	442.10	10.707		
14,200.00	7,054.07	7,039.07	7,054.07	202.03	244.01	90.02	2,563.04	-7,851.66	4,719.67	4,274.39	445.27	10.599		
14,300.00	7,053.75	7,038.75	7,053.75	204.85	244.00	90.02	2,563.04	-7,851.66	4,708.03	4,259.65	448.38	10.500		
14,400.00	7,053.42	7,038.42	7,053.42	207.66	243.99	90.02	2,563.04	-7,851.66	4,698.49	4,247.07	451.42	10.408		
14,500.00	7,053.10	7,038.10	7,053.10	210.48	243.98	90.01	2,563.04	-7,851.66	4,691.07	4,236.69	454.38	10.324		
14,600.00	7,052.77	7,037.77	7,052.77	213.29	243.97	90.01	2,563.04	-7,851.66	4,685.77	4,228.51	457.25	10.248		
14,700.00	7,052.45	7,037.45	7,052.45	216.11	243.95	90.00	2,563.04	-7,851.66	4,682.59	4,222.55	460.05	10.179		
14,798.61	7,052.13	7,037.13	7,052.13	218.89	243.94	90.00	2,563.04	-7,851.66	4,681.55	4,218.85	462.71	10.118 CC		
14,800.00	7,052.12	7,037.12	7,052.12	218.93	243.94	90.00	2,563.04	-7,851.66	4,681.55	4,218.81	462.74	10.117		
14,900.00	7,051.80	7,036.80	7,051.80	221.75	243.93	90.00	2,563.04	-7,851.66	4,682.65	4,217.30	465.35	10.063 ES		
15,000.00	7,051.47	7,036.47	7,051.47	224.57	243.92	89.99	2,563.04	-7,851.66	4,685.88	4,218.03	467.85	10.016		
15,100.00	7,051.15	7,036.15	7,051.15	227.39	243.91	89.99	2,563.04	-7,851.66	4,691.25	4,220.99	470.26	9.976		
15,145.13	7,051.00	7,036.00	7,051.00	228.67	243.90	89.99	2,563.04	-7,851.66	4,694.36	4,223.05	471.31	9.960 SF		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-53.55	2,678.64	-3,627.12	4,509.00					
100.00	100.00	102.00	100.00	3.28	3.75	-53.55	2,678.64	-3,627.12	4,509.00	4,501.97	7.03	641.072		
200.00	200.00	202.00	200.00	3.34	6.24	-53.55	2,678.64	-3,627.12	4,509.00	4,499.43	9.58	470.901 CC		
300.00	299.98	301.98	299.98	3.44	9.39	122.06	2,678.64	-3,627.12	4,509.93	4,497.10	12.83	351.576		
400.00	399.84	401.84	399.84	3.59	12.71	122.07	2,678.64	-3,627.12	4,512.71	4,496.41	16.30	276.810		
500.00	499.45	501.45	499.45	3.79	16.10	122.09	2,678.64	-3,627.12	4,517.35	4,497.46	19.89	227.163		
600.00	598.70	600.70	598.70	4.03	19.50	122.10	2,678.64	-3,627.12	4,523.86	4,500.33	23.53	192.230		
700.00	697.47	700.53	697.47	4.31	22.95	122.13	2,678.64	-3,627.12	4,532.25	4,504.99	27.26	166.263		
800.00	795.62	802.38	795.62	4.64	26.47	122.15	2,678.64	-3,627.12	4,542.54	4,511.44	31.10	146.049		
900.00	893.06	904.94	893.06	5.00	30.03	122.18	2,678.64	-3,627.12	4,554.74	4,519.73	35.01	130.088		
1,000.00	989.64	1,008.36	989.64	5.40	33.62	122.21	2,678.64	-3,627.12	4,568.87	4,529.88	38.99	117.184		
1,100.00	1,085.27	1,087.27	1,085.27	5.83	36.36	122.25	2,678.64	-3,627.12	4,584.96	4,542.81	42.15	108.781		
1,200.00	1,180.44	1,182.44	1,180.44	6.29	39.67	122.56	2,678.64	-3,627.12	4,602.00	4,556.10	45.89	100.277		
1,300.00	1,275.61	1,277.61	1,275.61	6.76	42.98	122.87	2,678.64	-3,627.12	4,619.18	4,569.52	49.66	93.023		
1,400.00	1,370.78	1,372.78	1,370.78	7.26	46.29	123.18	2,678.64	-3,627.12	4,636.50	4,583.06	53.43	86.770		
1,500.00	1,465.95	1,467.95	1,465.95	7.76	49.61	123.49	2,678.64	-3,627.12	4,653.95	4,596.73	57.22	81.328		
1,600.00	1,561.12	1,563.12	1,561.12	8.27	52.92	123.79	2,678.64	-3,627.12	4,671.55	4,610.52	61.02	76.552		
1,700.00	1,656.29	1,658.29	1,656.29	8.80	56.24	124.09	2,678.64	-3,627.12	4,689.27	4,624.44	64.83	72.330		
1,800.00	1,751.46	1,753.46	1,751.46	9.32	59.56	124.39	2,678.64	-3,627.12	4,707.14	4,638.49	68.65	68.572		
1,900.00	1,846.63	1,848.63	1,846.63	9.86	62.88	124.69	2,678.64	-3,627.12	4,725.13	4,652.66	72.46	65.206		
2,000.00	1,941.80	1,943.80	1,941.80	10.40	66.19	124.98	2,678.64	-3,627.12	4,743.25	4,666.97	76.29	62.175		
2,100.00	2,036.96	2,038.96	2,036.96	10.94	69.51	125.28	2,678.64	-3,627.12	4,761.51	4,681.39	80.12	59.433		
2,200.00	2,132.13	2,134.13	2,132.13	11.49	72.83	125.57	2,678.64	-3,627.12	4,779.89	4,695.94	83.95	56.940		
2,300.00	2,227.30	2,229.30	2,227.30	12.04	76.15	125.86	2,678.64	-3,627.12	4,798.40	4,710.62	87.78	54.665		
2,400.00	2,322.47	2,324.47	2,322.47	12.59	79.47	126.14	2,678.64	-3,627.12	4,817.03	4,725.41	91.61	52.580		
2,500.00	2,417.64	2,419.64	2,417.64	13.15	82.79	126.43	2,678.64	-3,627.12	4,835.78	4,740.33	95.45	50.663		
2,600.00	2,512.81	2,514.81	2,512.81	13.70	86.11	126.71	2,678.64	-3,627.12	4,854.66	4,755.37	99.29	48.895		
2,700.00	2,607.98	2,609.98	2,607.98	14.26	89.43	126.99	2,678.64	-3,627.12	4,873.65	4,770.53	103.13	47.259		
2,800.00	2,703.15	2,705.15	2,703.15	14.82	92.75	127.27	2,678.64	-3,627.12	4,892.77	4,785.80	106.97	45.741		
2,900.00	2,798.32	2,800.32	2,798.32	15.38	96.07	127.55	2,678.64	-3,627.12	4,912.00	4,801.20	110.81	44.330		
3,000.00	2,893.49	2,904.51	2,893.49	15.95	99.71	127.82	2,678.64	-3,627.12	4,931.35	4,816.39	114.96	42.895		
3,100.00	2,988.66	3,009.34	2,988.66	16.51	103.36	128.09	2,678.64	-3,627.12	4,950.82	4,831.68	119.14	41.554		
3,200.00	3,083.83	3,085.83	3,083.83	17.07	106.03	128.36	2,678.64	-3,627.12	4,970.40	4,848.06	122.33	40.630		
3,300.00	3,179.00	3,181.00	3,179.00	17.64	109.35	128.63	2,678.64	-3,627.12	4,990.09	4,863.91	126.17	39.549		
3,400.00	3,274.17	3,276.17	3,274.17	18.21	112.67	128.90	2,678.64	-3,627.12	5,009.89	4,879.87	130.02	38.533		
3,500.00	3,369.34	3,371.34	3,369.34	18.77	115.99	129.16	2,678.64	-3,627.12	5,029.80	4,895.94	133.86	37.575		
3,600.00	3,464.51	3,466.51	3,464.51	19.34	119.32	129.42	2,678.64	-3,627.12	5,049.81	4,912.11	137.70	36.672		
3,700.00	3,559.68	3,561.68	3,559.68	19.91	122.64	129.68	2,678.64	-3,627.12	5,069.94	4,928.40	141.54	35.819		
3,800.00	3,654.84	3,656.84	3,654.84	20.48	125.96	129.94	2,678.64	-3,627.12	5,090.17	4,944.78	145.39	35.011		
3,900.00	3,750.01	3,752.01	3,750.01	21.05	129.28	130.20	2,678.64	-3,627.12	5,110.51	4,961.28	149.23	34.246		
4,000.00	3,845.18	3,847.18	3,845.18	21.62	132.60	130.45	2,678.64	-3,627.12	5,130.94	4,977.87	153.07	33.520		
4,100.00	3,940.35	3,942.35	3,940.35	22.19	135.92	130.71	2,678.64	-3,627.12	5,151.49	4,994.57	156.91	32.830		
4,200.00	4,035.52	4,037.52	4,035.52	22.76	139.24	130.96	2,678.64	-3,627.12	5,172.13	5,011.37	160.76	32.174		
4,300.00	4,130.69	4,132.69	4,130.69	23.33	142.56	131.21	2,678.64	-3,627.12	5,192.87	5,028.27	164.60	31.549		
4,400.00	4,225.86	4,227.86	4,225.86	23.91	145.89	131.45	2,678.64	-3,627.12	5,213.71	5,045.27	168.44	30.953		
4,500.00	4,321.03	4,323.03	4,321.03	24.48	149.21	131.70	2,678.64	-3,627.12	5,234.64	5,062.36	172.28	30.384		
4,600.00	4,416.20	4,418.20	4,416.20	25.05	152.53	131.94	2,678.64	-3,627.12	5,255.67	5,079.55	176.12	29.841		
4,700.00	4,511.37	4,513.37	4,511.37	25.62	155.85	132.18	2,678.64	-3,627.12	5,276.80	5,096.84	179.96	29.322		
4,800.00	4,606.54	4,608.54	4,606.54	26.20	159.17	132.42	2,678.64	-3,627.12	5,298.02	5,114.22	183.80	28.824		
4,900.00	4,701.71	4,703.71	4,701.71	26.77	162.49	132.66	2,678.64	-3,627.12	5,319.33	5,131.69	187.64	28.348		
5,000.00	4,796.88	4,801.12	4,796.88	27.34	165.89	132.90	2,678.64	-3,627.12	5,340.74	5,149.18	191.56	27.880		
5,100.00	4,892.05	4,905.95	4,892.05	27.92	169.55	133.13	2,678.64	-3,627.12	5,362.23	5,166.50	195.74	27.395		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,989.22	4,987.22	28.49	172.46	133.36	2,678.64	-3,627.12	5,383.82	5,184.66	199.16	27.032		
5,300.00	5,082.39	5,084.39	5,082.39	29.07	175.78	133.59	2,678.64	-3,627.12	5,405.49	5,202.49	203.00	26.628		
5,400.00	5,177.56	5,179.56	5,177.56	29.64	179.10	133.82	2,678.64	-3,627.12	5,427.25	5,220.41	206.84	26.239		
5,500.00	5,272.72	5,274.72	5,272.72	30.21	182.42	134.05	2,678.64	-3,627.12	5,449.10	5,238.42	210.68	25.865		
5,600.00	5,367.89	5,369.89	5,367.89	30.79	185.75	134.28	2,678.64	-3,627.12	5,471.03	5,256.51	214.51	25.504		
5,700.00	5,463.06	5,465.06	5,463.06	31.36	189.07	134.50	2,678.64	-3,627.12	5,493.04	5,274.69	218.35	25.157		
5,800.00	5,558.23	5,560.23	5,558.23	31.94	192.39	134.72	2,678.64	-3,627.12	5,515.14	5,292.95	222.19	24.822		
5,900.00	5,653.40	5,655.40	5,653.40	32.51	195.71	134.94	2,678.64	-3,627.12	5,537.32	5,311.30	226.02	24.499		
6,000.00	5,748.57	5,750.57	5,748.57	33.09	199.03	135.16	2,678.64	-3,627.12	5,559.58	5,329.72	229.86	24.187		
6,100.00	5,843.74	5,845.74	5,843.74	33.67	202.36	135.38	2,678.64	-3,627.12	5,581.92	5,348.23	233.70	23.885		
6,200.00	5,938.91	5,940.91	5,938.91	34.24	205.68	135.59	2,678.64	-3,627.12	5,604.34	5,366.81	237.53	23.594		
6,300.00	6,034.08	6,036.08	6,034.08	34.82	209.00	135.81	2,678.64	-3,627.12	5,626.84	5,385.48	241.37	23.312		
6,400.00	6,129.25	6,131.25	6,129.25	35.39	212.32	136.02	2,678.64	-3,627.12	5,649.42	5,404.22	245.20	23.040		
6,500.00	6,224.42	6,226.42	6,224.42	35.97	215.64	136.23	2,678.64	-3,627.12	5,672.07	5,423.04	249.04	22.776		
6,600.00	6,319.59	6,321.59	6,319.59	36.54	218.97	136.44	2,678.64	-3,627.12	5,694.80	5,441.93	252.87	22.521		
6,700.00	6,414.76	6,416.76	6,414.76	37.12	222.29	136.65	2,678.64	-3,627.12	5,717.60	5,460.90	256.70	22.273		
6,800.00	6,509.91	6,511.91	6,509.91	37.70	225.61	129.16	2,678.64	-3,627.12	5,740.14	5,479.60	260.54	22.032		
6,900.00	6,603.99	6,605.99	6,603.99	38.26	228.89	105.50	2,678.64	-3,627.12	5,755.67	5,491.33	264.33	21.774		
7,000.00	6,694.76	6,703.24	6,694.76	38.78	232.29	90.99	2,678.64	-3,627.12	5,761.45	5,493.23	268.22	21.480		
7,100.00	6,779.96	6,781.96	6,779.96	39.24	235.04	82.98	2,678.64	-3,627.12	5,757.58	5,486.15	271.43	21.212		
7,200.00	6,857.50	6,859.50	6,857.50	39.65	237.74	78.97	2,678.64	-3,627.12	5,744.43	5,469.85	274.58	20.921		
7,300.00	6,925.48	6,927.48	6,925.48	40.02	240.12	77.56	2,678.64	-3,627.12	5,722.61	5,445.21	277.40	20.629		
7,400.00	6,982.21	6,984.21	6,982.21	40.33	242.10	78.03	2,678.64	-3,627.12	5,692.92	5,413.05	279.87	20.341		
7,500.00	7,026.31	7,028.31	7,026.31	40.63	243.64	79.97	2,678.64	-3,627.12	5,656.35	5,374.35	281.99	20.058		
7,600.00	7,056.68	7,058.68	7,056.68	40.91	244.70	83.11	2,678.64	-3,627.12	5,613.96	5,330.22	283.75	19.785		
7,700.00	7,072.58	7,074.58	7,072.58	41.25	245.25	87.25	2,678.64	-3,627.12	5,566.92	5,281.80	285.12	19.525		
7,800.00	7,074.86	7,076.86	7,074.86	41.69	245.33	90.11	2,678.64	-3,627.12	5,516.74	5,230.61	286.13	19.281		
7,900.00	7,074.54	7,076.54	7,074.54	42.34	245.32	90.10	2,678.64	-3,627.12	5,467.15	5,179.96	287.19	19.037		
8,000.00	7,074.21	7,076.21	7,074.21	43.27	245.31	90.10	2,678.64	-3,627.12	5,418.95	5,130.56	288.39	18.790		
8,100.00	7,073.89	7,075.89	7,073.89	44.47	245.30	90.10	2,678.64	-3,627.12	5,372.18	5,082.46	289.73	18.542		
8,200.00	7,073.57	7,075.57	7,073.57	45.91	245.28	90.09	2,678.64	-3,627.12	5,326.88	5,035.69	291.20	18.293		
8,300.00	7,073.24	7,075.24	7,073.24	47.53	245.27	90.09	2,678.64	-3,627.12	5,283.09	4,990.30	292.79	18.044		
8,400.00	7,072.92	7,074.92	7,072.92	49.31	245.26	90.08	2,678.64	-3,627.12	5,240.84	4,946.34	294.49	17.796		
8,500.00	7,072.59	7,074.59	7,072.59	51.20	245.25	90.08	2,678.64	-3,627.12	5,200.16	4,903.85	296.31	17.550		
8,600.00	7,072.27	7,074.27	7,072.27	53.19	245.24	90.08	2,678.64	-3,627.12	5,161.11	4,862.88	298.23	17.306		
8,700.00	7,071.94	7,073.94	7,071.94	55.27	245.23	90.07	2,678.64	-3,627.12	5,123.70	4,823.46	300.24	17.065		
8,800.00	7,071.62	7,073.62	7,071.62	57.43	245.22	90.07	2,678.64	-3,627.12	5,087.99	4,785.65	302.34	16.829		
8,900.00	7,071.29	7,073.29	7,071.29	59.64	245.21	90.07	2,678.64	-3,627.12	5,054.01	4,749.49	304.52	16.597		
9,000.00	7,070.97	7,072.97	7,070.97	61.92	245.19	90.06	2,678.64	-3,627.12	5,021.79	4,715.02	306.77	16.370		
9,100.00	7,070.64	7,072.64	7,070.64	64.24	245.18	90.06	2,678.64	-3,627.12	4,991.36	4,682.28	309.08	16.149		
9,200.00	7,070.32	7,072.32	7,070.32	66.61	245.17	90.05	2,678.64	-3,627.12	4,962.76	4,651.31	311.45	15.934		
9,300.00	7,069.99	7,071.99	7,069.99	69.01	245.16	90.05	2,678.64	-3,627.12	4,936.02	4,622.15	313.88	15.726		
9,400.00	7,069.67	7,071.67	7,069.67	71.45	245.15	90.05	2,678.64	-3,627.12	4,911.18	4,594.83	316.34	15.525		
9,500.00	7,069.34	7,071.34	7,069.34	73.92	245.14	90.04	2,678.64	-3,627.12	4,888.25	4,569.40	318.85	15.331		
9,600.00	7,069.02	7,071.02	7,069.02	76.42	245.13	90.04	2,678.64	-3,627.12	4,867.27	4,545.88	321.39	15.145		
9,700.00	7,068.69	7,070.69	7,068.69	78.95	245.11	90.03	2,678.64	-3,627.12	4,848.26	4,524.32	323.95	14.966		
9,800.00	7,068.37	7,070.37	7,068.37	81.49	245.10	90.03	2,678.64	-3,627.12	4,831.25	4,504.72	326.53	14.796		
9,900.00	7,068.04	7,070.04	7,068.04	84.06	245.09	90.03	2,678.64	-3,627.12	4,816.25	4,487.13	329.12	14.634		
10,000.00	7,067.72	7,069.72	7,067.72	86.65	245.08	90.02	2,678.64	-3,627.12	4,803.29	4,471.58	331.72	14.480		
10,100.00	7,067.39	7,069.39	7,067.39	89.25	245.07	90.02	2,678.64	-3,627.12	4,792.38	4,458.07	334.32	14.335		
10,200.00	7,067.07	7,069.07	7,067.07	91.87	245.06	90.01	2,678.64	-3,627.12	4,783.54	4,446.63	336.91	14.198		
10,300.00	7,066.74	7,068.74	7,066.74	94.50	245.05	90.01	2,678.64	-3,627.12	4,776.78	4,437.28	339.50	14.070		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,068.42	7,066.42	97.14	245.04	90.01	2,678.64	-3,627.12	4,772.10	4,430.03	342.07	13.951		
10,500.00	7,066.09	7,068.09	7,066.09	99.80	245.02	90.00	2,678.64	-3,627.12	4,769.51	4,424.89	344.62	13.840		
10,573.37	7,065.85	7,067.85	7,065.85	101.76	245.02	90.00	2,678.64	-3,627.12	4,768.95	4,422.47	346.47	13.764		
10,600.00	7,065.77	7,067.77	7,065.77	102.47	245.01	90.00	2,678.64	-3,627.12	4,769.02	4,421.88	347.14	13.738		
10,700.00	7,065.44	7,067.44	7,065.44	105.15	245.00	90.00	2,678.64	-3,627.12	4,770.63	4,420.99	349.64	13.644 ES		
10,800.00	7,065.12	7,067.12	7,065.12	107.83	244.99	89.99	2,678.64	-3,627.12	4,774.33	4,422.23	352.10	13.560		
10,900.00	7,064.79	7,066.79	7,064.79	110.53	244.98	89.99	2,678.64	-3,627.12	4,780.12	4,425.60	354.52	13.483		
11,000.00	7,064.47	7,066.47	7,064.47	113.23	244.97	89.98	2,678.64	-3,627.12	4,787.99	4,431.09	356.91	13.415		
11,100.00	7,064.14	7,066.14	7,064.14	115.95	244.96	89.98	2,678.64	-3,627.12	4,797.94	4,438.69	359.24	13.356		
11,200.00	7,063.82	7,065.82	7,063.82	118.66	244.94	89.98	2,678.64	-3,627.12	4,809.94	4,448.41	361.53	13.304		
11,300.00	7,063.49	7,065.49	7,063.49	121.39	244.93	89.97	2,678.64	-3,627.12	4,823.99	4,460.22	363.77	13.261		
11,400.00	7,063.17	7,065.17	7,063.17	124.12	244.92	89.97	2,678.64	-3,627.12	4,840.06	4,474.11	365.95	13.226		
11,500.00	7,062.84	7,064.84	7,062.84	126.86	244.91	89.96	2,678.64	-3,627.12	4,858.14	4,490.06	368.08	13.199		
11,600.00	7,062.52	7,064.52	7,062.52	129.60	244.90	89.96	2,678.64	-3,627.12	4,878.20	4,508.05	370.15	13.179		
11,700.00	7,062.19	7,064.19	7,062.19	132.35	244.89	89.96	2,678.64	-3,627.12	4,900.22	4,528.06	372.15	13.167		
11,800.00	7,061.87	7,063.87	7,061.87	135.10	244.88	89.95	2,678.64	-3,627.12	4,924.17	4,550.07	374.10	13.163 SF		
11,900.00	7,061.54	7,063.54	7,061.54	137.85	244.87	89.95	2,678.64	-3,627.12	4,950.03	4,574.04	375.99	13.165		
12,000.00	7,061.22	7,063.22	7,061.22	140.61	244.85	89.94	2,678.64	-3,627.12	4,977.76	4,599.95	377.81	13.175		
12,100.00	7,060.89	7,062.89	7,060.89	143.38	244.84	89.94	2,678.64	-3,627.12	5,007.34	4,627.77	379.57	13.192		
12,200.00	7,060.57	7,062.57	7,060.57	146.15	244.83	89.94	2,678.64	-3,627.12	5,038.73	4,657.46	381.26	13.216		
12,300.00	7,060.24	7,062.24	7,060.24	148.92	244.82	89.93	2,678.64	-3,627.12	5,071.89	4,689.00	382.89	13.246		
12,400.00	7,059.92	7,061.92	7,059.92	151.69	244.81	89.93	2,678.64	-3,627.12	5,106.80	4,722.34	384.46	13.283		
12,500.00	7,059.59	7,061.59	7,059.59	154.47	244.80	89.92	2,678.64	-3,627.12	5,143.42	4,757.45	385.97	13.326		
12,600.00	7,059.27	7,061.27	7,059.27	157.25	244.79	89.92	2,678.64	-3,627.12	5,181.70	4,794.30	387.41	13.375		
12,700.00	7,058.94	7,060.94	7,058.94	160.03	244.77	89.92	2,678.64	-3,627.12	5,221.63	4,832.84	388.79	13.431		
12,800.00	7,058.62	7,060.62	7,058.62	162.82	244.76	89.91	2,678.64	-3,627.12	5,263.15	4,873.04	390.11	13.492		
12,900.00	7,058.29	7,060.29	7,058.29	165.61	244.75	89.91	2,678.64	-3,627.12	5,306.22	4,914.86	391.37	13.558		
13,000.00	7,057.97	7,059.97	7,057.97	168.40	244.74	89.91	2,678.64	-3,627.12	5,350.83	4,958.26	392.57	13.630		
13,100.00	7,057.64	7,059.64	7,057.64	171.19	244.73	89.90	2,678.64	-3,627.12	5,396.91	5,003.20	393.71	13.708		
13,200.00	7,057.32	7,059.32	7,057.32	173.99	244.72	89.90	2,678.64	-3,627.12	5,444.44	5,049.65	394.80	13.790		
13,300.00	7,057.00	7,059.00	7,057.00	176.78	244.71	89.89	2,678.64	-3,627.12	5,493.39	5,097.56	395.83	13.878		
13,400.00	7,056.67	7,058.67	7,056.67	179.58	244.70	89.89	2,678.64	-3,627.12	5,543.70	5,146.89	396.81	13.971		
13,500.00	7,056.35	7,058.35	7,056.35	182.38	244.68	89.89	2,678.64	-3,627.12	5,595.35	5,197.61	397.74	14.068		
13,600.00	7,056.02	7,058.02	7,056.02	185.19	244.67	89.88	2,678.64	-3,627.12	5,648.30	5,249.68	398.62	14.170		
13,700.00	7,055.70	7,057.70	7,055.70	187.99	244.66	89.88	2,678.64	-3,627.12	5,702.51	5,303.05	399.45	14.276		
13,800.00	7,055.37	7,057.37	7,055.37	190.80	244.65	89.87	2,678.64	-3,627.12	5,757.94	5,357.70	400.24	14.386		
13,900.00	7,055.05	7,057.05	7,055.05	193.60	244.64	89.87	2,678.64	-3,627.12	5,814.57	5,413.59	400.98	14.501		
14,000.00	7,054.72	7,056.72	7,054.72	196.41	244.63	89.87	2,678.64	-3,627.12	5,872.35	5,470.68	401.68	14.620		
14,100.00	7,054.40	7,056.40	7,054.40	199.22	244.62	89.86	2,678.64	-3,627.12	5,931.26	5,528.93	402.33	14.742		
14,200.00	7,054.07	7,056.07	7,054.07	202.03	244.60	89.86	2,678.64	-3,627.12	5,991.26	5,588.31	402.95	14.868		
14,300.00	7,053.75	7,055.75	7,053.75	204.85	244.59	89.85	2,678.64	-3,627.12	6,052.31	5,648.78	403.53	14.998		
14,400.00	7,053.42	7,055.42	7,053.42	207.66	244.58	89.85	2,678.64	-3,627.12	6,114.39	5,710.32	404.07	15.132		
14,500.00	7,053.10	7,055.10	7,053.10	210.48	244.57	89.85	2,678.64	-3,627.12	6,177.47	5,772.89	404.58	15.269		
14,600.00	7,052.77	7,054.77	7,052.77	213.29	244.56	89.84	2,678.64	-3,627.12	6,241.51	5,836.45	405.06	15.409		
14,700.00	7,052.45	7,054.45	7,052.45	216.11	244.55	89.84	2,678.64	-3,627.12	6,306.49	5,900.98	405.50	15.552		
14,800.00	7,052.12	7,054.12	7,052.12	218.93	244.54	89.84	2,678.64	-3,627.12	6,372.37	5,966.45	405.91	15.699		
14,900.00	7,051.80	7,053.80	7,051.80	221.75	244.53	89.83	2,678.64	-3,627.12	6,439.13	6,032.83	406.30	15.848		
15,000.00	7,051.47	7,053.47	7,051.47	224.57	244.51	89.83	2,678.64	-3,627.12	6,506.74	6,100.09	406.66	16.001		
15,100.00	7,051.15	7,053.15	7,051.15	227.39	244.50	89.82	2,678.64	-3,627.12	6,575.18	6,168.20	406.99	16.156		
15,145.13	7,051.00	7,053.00	7,051.00	228.67	244.50	89.82	2,678.64	-3,627.12	6,606.33	6,199.20	407.13	16.227		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	38.00	3.28	3.28	-61.31	2,649.70	-4,842.47	5,520.13				
100.00	100.00	62.00	100.00	3.28	3.45	-61.31	2,649.70	-4,842.47	5,520.00	5,513.26	6.74	819.156	
200.00	200.00	162.00	200.00	3.34	5.10	-61.31	2,649.70	-4,842.47	5,520.00	5,511.56	8.44	653.986	
300.00	299.98	261.98	299.98	3.44	8.09	114.30	2,649.70	-4,842.47	5,520.72	5,509.19	11.53	478.649	
400.00	399.84	361.84	399.84	3.59	11.37	114.31	2,649.70	-4,842.47	5,522.88	5,507.92	14.96	369.209	
500.00	499.45	461.45	499.45	3.79	14.73	114.33	2,649.70	-4,842.47	5,526.48	5,507.96	18.52	298.393	
600.00	598.70	560.70	598.70	4.03	18.13	114.35	2,649.70	-4,842.47	5,531.53	5,509.37	22.16	249.641	
700.00	697.47	659.47	697.47	4.31	21.53	114.38	2,649.70	-4,842.47	5,538.05	5,512.21	25.84	214.307	
800.00	795.62	757.62	795.62	4.64	24.92	114.41	2,649.70	-4,842.47	5,546.06	5,516.50	29.56	187.651	
900.00	893.06	855.06	893.06	5.00	28.30	114.44	2,649.70	-4,842.47	5,555.56	5,522.27	33.29	166.898	
1,000.00	989.64	951.64	989.64	5.40	31.65	114.48	2,649.70	-4,842.47	5,566.59	5,529.56	37.03	150.332	
1,100.00	1,085.27	1,047.27	1,085.27	5.83	34.97	114.52	2,649.70	-4,842.47	5,579.16	5,538.39	40.77	136.834	
1,200.00	1,180.44	1,142.44	1,180.44	6.29	38.28	114.80	2,649.70	-4,842.47	5,592.50	5,547.97	44.53	125.600	
1,300.00	1,275.61	1,237.61	1,275.61	6.76	41.59	115.07	2,649.70	-4,842.47	5,605.98	5,557.68	48.30	116.069	
1,400.00	1,370.78	1,332.78	1,370.78	7.26	44.90	115.34	2,649.70	-4,842.47	5,619.59	5,567.50	52.09	107.889	
1,500.00	1,465.95	1,427.95	1,465.95	7.76	48.22	115.61	2,649.70	-4,842.47	5,633.34	5,577.45	55.89	100.798	
1,600.00	1,561.12	1,523.12	1,561.12	8.27	51.53	115.88	2,649.70	-4,842.47	5,647.22	5,587.52	59.70	94.597	
1,700.00	1,656.29	1,618.29	1,656.29	8.80	54.85	116.15	2,649.70	-4,842.47	5,661.23	5,597.72	63.52	89.131	
1,800.00	1,751.46	1,713.46	1,751.46	9.32	58.16	116.42	2,649.70	-4,842.47	5,675.38	5,608.04	67.34	84.278	
1,900.00	1,846.63	1,808.63	1,846.63	9.86	61.48	116.69	2,649.70	-4,842.47	5,689.65	5,618.48	71.17	79.942	
2,000.00	1,941.80	1,903.80	1,941.80	10.40	64.80	116.95	2,649.70	-4,842.47	5,704.06	5,629.05	75.01	76.046	
2,100.00	2,036.96	2,001.04	2,036.96	10.94	68.19	117.22	2,649.70	-4,842.47	5,718.59	5,639.67	78.92	72.461	
2,200.00	2,132.13	2,105.87	2,132.13	11.49	71.85	117.48	2,649.70	-4,842.47	5,733.25	5,650.16	83.10	68.993	
2,300.00	2,227.30	2,189.30	2,227.30	12.04	74.76	117.74	2,649.70	-4,842.47	5,748.04	5,661.51	86.53	66.425	
2,400.00	2,322.47	2,284.47	2,322.47	12.59	78.07	118.00	2,649.70	-4,842.47	5,762.95	5,672.57	90.38	63.762	
2,500.00	2,417.64	2,379.64	2,417.64	13.15	81.39	118.26	2,649.70	-4,842.47	5,777.99	5,683.76	94.23	61.317	
2,600.00	2,512.81	2,474.81	2,512.81	13.70	84.71	118.52	2,649.70	-4,842.47	5,793.15	5,695.07	98.08	59.065	
2,700.00	2,607.98	2,569.98	2,607.98	14.26	88.03	118.77	2,649.70	-4,842.47	5,808.44	5,706.51	101.93	56.982	
2,800.00	2,703.15	2,665.15	2,703.15	14.82	91.35	119.03	2,649.70	-4,842.47	5,823.85	5,718.06	105.79	55.053	
2,900.00	2,798.32	2,760.32	2,798.32	15.38	94.67	119.28	2,649.70	-4,842.47	5,839.37	5,729.73	109.64	53.259	
3,000.00	2,893.49	2,855.49	2,893.49	15.95	97.99	119.53	2,649.70	-4,842.47	5,855.02	5,741.52	113.50	51.588	
3,100.00	2,988.66	2,950.66	2,988.66	16.51	101.32	119.79	2,649.70	-4,842.47	5,870.79	5,753.44	117.35	50.028	
3,200.00	3,083.83	3,045.83	3,083.83	17.07	104.64	120.04	2,649.70	-4,842.47	5,886.67	5,765.46	121.21	48.567	
3,300.00	3,179.00	3,141.00	3,179.00	17.64	107.96	120.28	2,649.70	-4,842.47	5,902.67	5,777.61	125.06	47.198	
3,400.00	3,274.17	3,236.17	3,274.17	18.21	111.28	120.53	2,649.70	-4,842.47	5,918.79	5,789.87	128.92	45.911	
3,500.00	3,369.34	3,331.34	3,369.34	18.77	114.60	120.78	2,649.70	-4,842.47	5,935.02	5,802.24	132.78	44.700	
3,600.00	3,464.51	3,426.51	3,464.51	19.34	117.92	121.02	2,649.70	-4,842.47	5,951.37	5,814.73	136.63	43.557	
3,700.00	3,559.68	3,521.68	3,559.68	19.91	121.24	121.27	2,649.70	-4,842.47	5,967.82	5,827.34	140.49	42.479	
3,800.00	3,654.84	3,616.84	3,654.84	20.48	124.56	121.51	2,649.70	-4,842.47	5,984.40	5,840.05	144.35	41.459	
3,900.00	3,750.01	3,712.01	3,750.01	21.05	127.88	121.75	2,649.70	-4,842.47	6,001.08	5,852.88	148.20	40.492	
4,000.00	3,845.18	3,807.18	3,845.18	21.62	131.20	121.99	2,649.70	-4,842.47	6,017.87	5,865.81	152.06	39.576	
4,100.00	3,940.35	3,902.35	3,940.35	22.19	134.53	122.23	2,649.70	-4,842.47	6,034.78	5,878.86	155.92	38.705	
4,200.00	4,035.52	4,002.48	4,035.52	22.76	138.02	122.47	2,649.70	-4,842.47	6,051.79	5,891.84	159.95	37.837	
4,300.00	4,130.69	4,107.31	4,130.69	23.33	141.68	122.70	2,649.70	-4,842.47	6,068.91	5,904.77	164.14	36.974	
4,400.00	4,225.86	4,187.86	4,225.86	23.91	144.49	122.94	2,649.70	-4,842.47	6,086.13	5,918.65	167.48	36.339	
4,500.00	4,321.03	4,283.03	4,321.03	24.48	147.81	123.17	2,649.70	-4,842.47	6,103.46	5,932.12	171.34	35.622	
4,600.00	4,416.20	4,378.20	4,416.20	25.05	151.13	123.40	2,649.70	-4,842.47	6,120.90	5,945.71	175.19	34.938	
4,700.00	4,511.37	4,473.37	4,511.37	25.62	154.45	123.64	2,649.70	-4,842.47	6,138.44	5,959.39	179.05	34.283	
4,800.00	4,606.54	4,568.54	4,606.54	26.20	157.78	123.87	2,649.70	-4,842.47	6,156.08	5,973.18	182.90	33.657	
4,900.00	4,701.71	4,663.71	4,701.71	26.77	161.10	124.09	2,649.70	-4,842.47	6,173.83	5,987.07	186.76	33.058	
5,000.00	4,796.88	4,758.88	4,796.88	27.34	164.42	124.32	2,649.70	-4,842.47	6,191.68	6,001.07	190.61	32.483	
5,100.00	4,892.05	4,854.05	4,892.05	27.92	167.74	124.55	2,649.70	-4,842.47	6,209.63	6,015.16	194.47	31.932	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,949.22	4,987.22	28.49	171.06	124.77	2,649.70	-4,842.47	6,227.67	6,029.35	198.32	31.402		
5,300.00	5,082.39	5,044.39	5,082.39	29.07	174.39	125.00	2,649.70	-4,842.47	6,245.82	6,043.65	202.17	30.893		
5,400.00	5,177.56	5,139.56	5,177.56	29.64	177.71	125.22	2,649.70	-4,842.47	6,264.07	6,058.04	206.03	30.404		
5,500.00	5,272.72	5,234.72	5,272.72	30.21	181.03	125.44	2,649.70	-4,842.47	6,282.41	6,072.53	209.88	29.934		
5,600.00	5,367.89	5,329.89	5,367.89	30.79	184.35	125.66	2,649.70	-4,842.47	6,300.84	6,087.11	213.73	29.480		
5,700.00	5,463.06	5,425.06	5,463.06	31.36	187.67	125.88	2,649.70	-4,842.47	6,319.38	6,101.80	217.58	29.044		
5,800.00	5,558.23	5,520.23	5,558.23	31.94	190.99	126.10	2,649.70	-4,842.47	6,338.01	6,116.57	221.43	28.623		
5,900.00	5,653.40	5,615.40	5,653.40	32.51	194.32	126.32	2,649.70	-4,842.47	6,356.73	6,131.44	225.28	28.217		
6,000.00	5,748.57	5,710.57	5,748.57	33.09	197.64	126.53	2,649.70	-4,842.47	6,375.54	6,146.41	229.13	27.825		
6,100.00	5,843.74	5,805.74	5,843.74	33.67	200.96	126.75	2,649.70	-4,842.47	6,394.45	6,161.47	232.98	27.446		
6,200.00	5,938.91	5,900.91	5,938.91	34.24	204.28	126.96	2,649.70	-4,842.47	6,413.45	6,176.61	236.83	27.080		
6,300.00	6,034.08	6,003.92	6,034.08	34.82	207.88	127.17	2,649.70	-4,842.47	6,432.53	6,191.58	240.95	26.696		
6,400.00	6,129.25	6,108.75	6,129.25	35.39	211.54	127.38	2,649.70	-4,842.47	6,451.71	6,206.57	245.14	26.319		
6,500.00	6,224.42	6,186.42	6,224.42	35.97	214.25	127.59	2,649.70	-4,842.47	6,470.98	6,222.60	248.38	26.053		
6,600.00	6,319.59	6,281.59	6,319.59	36.54	217.57	127.80	2,649.70	-4,842.47	6,490.33	6,238.11	252.22	25.732		
6,700.00	6,414.76	6,376.76	6,414.76	37.12	220.89	128.01	2,649.70	-4,842.47	6,509.77	6,253.70	256.07	25.422		
6,800.00	6,509.91	6,471.91	6,509.91	37.70	224.21	120.64	2,649.70	-4,842.47	6,528.90	6,268.98	259.92	25.119		
6,900.00	6,603.99	6,565.99	6,603.99	38.26	227.50	97.39	2,649.70	-4,842.47	6,539.76	6,276.03	263.73	24.797		
7,000.00	6,694.76	6,656.76	6,694.76	38.78	230.67	83.27	2,649.70	-4,842.47	6,539.22	6,271.82	267.40	24.454		
7,100.00	6,779.96	6,741.96	6,779.96	39.24	233.64	75.66	2,649.70	-4,842.47	6,527.47	6,256.62	270.85	24.100		
7,200.00	6,857.50	6,819.50	6,857.50	39.65	236.35	72.11	2,649.70	-4,842.47	6,505.00	6,231.00	274.01	23.740		
7,300.00	6,925.48	6,887.48	6,925.48	40.02	238.72	71.28	2,649.70	-4,842.47	6,472.57	6,195.74	276.83	23.381		
7,400.00	6,982.21	6,944.21	6,982.21	40.33	240.70	72.53	2,649.70	-4,842.47	6,431.15	6,151.86	279.29	23.027		
7,500.00	7,026.31	6,988.31	7,026.31	40.63	242.24	75.52	2,649.70	-4,842.47	6,381.91	6,100.54	281.37	22.681		
7,600.00	7,056.68	7,018.68	7,056.68	40.91	243.30	80.08	2,649.70	-4,842.47	6,326.18	6,043.12	283.06	22.349		
7,700.00	7,072.58	7,034.58	7,072.58	41.25	243.85	86.05	2,649.70	-4,842.47	6,265.38	5,981.04	284.34	22.035		
7,800.00	7,074.86	7,036.86	7,074.86	41.69	243.93	90.16	2,649.70	-4,842.47	6,201.27	5,916.04	285.23	21.741		
7,900.00	7,074.54	7,036.54	7,074.54	42.34	243.92	90.15	2,649.70	-4,842.47	6,137.43	5,851.28	286.15	21.449		
8,000.00	7,074.21	7,036.21	7,074.21	43.27	243.91	90.15	2,649.70	-4,842.47	6,074.56	5,787.38	287.18	21.153		
8,100.00	7,073.89	7,035.89	7,073.89	44.47	243.90	90.14	2,649.70	-4,842.47	6,012.69	5,724.36	288.33	20.854		
8,200.00	7,073.57	7,035.57	7,073.57	45.91	243.89	90.14	2,649.70	-4,842.47	5,951.87	5,662.27	289.60	20.552		
8,300.00	7,073.24	7,035.24	7,073.24	47.53	243.88	90.14	2,649.70	-4,842.47	5,892.11	5,601.13	290.98	20.249		
8,400.00	7,072.92	7,034.92	7,072.92	49.31	243.87	90.13	2,649.70	-4,842.47	5,833.45	5,540.98	292.47	19.945		
8,500.00	7,072.59	7,034.59	7,072.59	51.20	243.85	90.13	2,649.70	-4,842.47	5,775.93	5,481.86	294.07	19.641		
8,600.00	7,072.27	7,034.27	7,072.27	53.19	243.84	90.13	2,649.70	-4,842.47	5,719.58	5,423.81	295.78	19.338		
8,700.00	7,071.94	7,033.94	7,071.94	55.27	243.83	90.12	2,649.70	-4,842.47	5,664.44	5,366.86	297.58	19.035		
8,800.00	7,071.62	7,033.62	7,071.62	57.43	243.82	90.12	2,649.70	-4,842.47	5,610.53	5,311.06	299.48	18.735		
8,900.00	7,071.29	7,033.29	7,071.29	59.64	243.81	90.11	2,649.70	-4,842.47	5,557.90	5,256.44	301.46	18.436		
9,000.00	7,070.97	7,032.97	7,070.97	61.92	243.80	90.11	2,649.70	-4,842.47	5,506.59	5,203.05	303.54	18.141		
9,100.00	7,070.64	7,032.64	7,070.64	64.24	243.79	90.11	2,649.70	-4,842.47	5,456.63	5,150.93	305.70	17.850		
9,200.00	7,070.32	7,032.32	7,070.32	66.61	243.78	90.10	2,649.70	-4,842.47	5,408.05	5,100.12	307.93	17.562		
9,300.00	7,069.99	7,031.99	7,069.99	69.01	243.76	90.10	2,649.70	-4,842.47	5,360.90	5,050.66	310.24	17.280		
9,400.00	7,069.67	7,031.67	7,069.67	71.45	243.75	90.09	2,649.70	-4,842.47	5,315.21	5,002.59	312.62	17.002		
9,500.00	7,069.34	7,031.34	7,069.34	73.92	243.74	90.09	2,649.70	-4,842.47	5,271.02	4,955.96	315.06	16.730		
9,600.00	7,069.02	7,031.02	7,069.02	76.42	243.73	90.09	2,649.70	-4,842.47	5,228.37	4,910.80	317.57	16.464		
9,700.00	7,068.69	7,030.69	7,068.69	78.95	243.72	90.08	2,649.70	-4,842.47	5,187.30	4,867.17	320.13	16.204		
9,800.00	7,068.37	7,030.37	7,068.37	81.49	243.71	90.08	2,649.70	-4,842.47	5,147.85	4,825.11	322.74	15.950		
9,900.00	7,068.04	7,030.04	7,068.04	84.06	243.70	90.07	2,649.70	-4,842.47	5,110.05	4,784.64	325.40	15.704		
10,000.00	7,067.72	7,029.72	7,067.72	86.65	243.68	90.07	2,649.70	-4,842.47	5,073.93	4,745.83	328.11	15.464		
10,100.00	7,067.39	7,029.39	7,067.39	89.25	243.67	90.07	2,649.70	-4,842.47	5,039.55	4,708.70	330.85	15.232		
10,200.00	7,067.07	7,029.07	7,067.07	91.87	243.66	90.06	2,649.70	-4,842.47	5,006.92	4,673.30	333.62	15.008		
10,300.00	7,066.74	7,028.74	7,066.74	94.50	243.65	90.06	2,649.70	-4,842.47	4,976.09	4,639.67	336.42	14.791		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,028.42	7,066.42	97.14	243.64	90.05	2,649.70	-4,842.47	4,947.09	4,607.85	339.24	14.583		
10,500.00	7,066.09	7,028.09	7,066.09	99.80	243.63	90.05	2,649.70	-4,842.47	4,919.95	4,577.86	342.09	14.382		
10,600.00	7,065.77	7,027.77	7,065.77	102.47	243.62	90.05	2,649.70	-4,842.47	4,894.71	4,549.76	344.94	14.190		
10,700.00	7,065.44	7,027.44	7,065.44	105.15	243.61	90.04	2,649.70	-4,842.47	4,871.38	4,523.58	347.81	14.006		
10,800.00	7,065.12	7,027.12	7,065.12	107.83	243.59	90.04	2,649.70	-4,842.47	4,850.01	4,499.34	350.67	13.831		
10,900.00	7,064.79	7,026.79	7,064.79	110.53	243.58	90.03	2,649.70	-4,842.47	4,830.61	4,477.08	353.53	13.664		
11,000.00	7,064.47	7,026.47	7,064.47	113.23	243.57	90.03	2,649.70	-4,842.47	4,813.22	4,456.83	356.39	13.505		
11,100.00	7,064.14	7,026.14	7,064.14	115.95	243.56	90.03	2,649.70	-4,842.47	4,797.84	4,438.61	359.23	13.356		
11,200.00	7,063.82	7,025.82	7,063.82	118.66	243.55	90.02	2,649.70	-4,842.47	4,784.50	4,422.45	362.06	13.215		
11,300.00	7,063.49	7,025.49	7,063.49	121.39	243.54	90.02	2,649.70	-4,842.47	4,773.23	4,408.37	364.86	13.082		
11,400.00	7,063.17	7,025.17	7,063.17	124.12	243.53	90.02	2,649.70	-4,842.47	4,764.02	4,396.39	367.63	12.959		
11,500.00	7,062.84	7,024.84	7,062.84	126.86	243.51	90.01	2,649.70	-4,842.47	4,756.91	4,386.54	370.37	12.844		
11,600.00	7,062.52	7,024.52	7,062.52	129.60	243.50	90.01	2,649.70	-4,842.47	4,751.88	4,378.81	373.07	12.737		
11,700.00	7,062.19	7,024.19	7,062.19	132.35	243.49	90.00	2,649.70	-4,842.47	4,748.96	4,373.23	375.73	12.639		
11,788.89	7,061.90	7,023.90	7,061.90	134.79	243.48	90.00	2,649.70	-4,842.47	4,748.13	4,370.07	378.06	12.559 CC		
11,800.00	7,061.87	7,023.87	7,061.87	135.10	243.48	90.00	2,649.70	-4,842.47	4,748.14	4,369.79	378.35	12.550		
11,900.00	7,061.54	7,023.54	7,061.54	137.85	243.47	90.00	2,649.70	-4,842.47	4,749.43	4,368.52	380.91	12.469 ES		
12,000.00	7,061.22	7,023.22	7,061.22	140.61	243.46	89.99	2,649.70	-4,842.47	4,752.82	4,369.40	383.42	12.396		
12,100.00	7,060.89	7,022.89	7,060.89	143.38	243.45	89.99	2,649.70	-4,842.47	4,758.31	4,372.44	385.87	12.331		
12,200.00	7,060.57	7,022.57	7,060.57	146.15	243.43	89.98	2,649.70	-4,842.47	4,765.89	4,377.63	388.26	12.275		
12,300.00	7,060.24	7,022.24	7,060.24	148.92	243.42	89.98	2,649.70	-4,842.47	4,775.55	4,384.97	390.58	12.227		
12,400.00	7,059.92	7,021.92	7,059.92	151.69	243.41	89.98	2,649.70	-4,842.47	4,787.29	4,394.45	392.84	12.186		
12,500.00	7,059.59	7,021.59	7,059.59	154.47	243.40	89.97	2,649.70	-4,842.47	4,801.08	4,406.05	395.03	12.154		
12,600.00	7,059.27	7,021.27	7,059.27	157.25	243.39	89.97	2,649.70	-4,842.47	4,816.91	4,419.76	397.14	12.129		
12,700.00	7,058.94	7,020.94	7,058.94	160.03	243.38	89.96	2,649.70	-4,842.47	4,834.75	4,435.56	399.19	12.111		
12,800.00	7,058.62	7,020.62	7,058.62	162.82	243.37	89.96	2,649.70	-4,842.47	4,854.59	4,453.43	401.16	12.101		
12,900.00	7,058.29	7,020.29	7,058.29	165.61	243.36	89.96	2,649.70	-4,842.47	4,876.40	4,473.34	403.06	12.099 SF		
13,000.00	7,057.97	7,019.97	7,057.97	168.40	243.34	89.95	2,649.70	-4,842.47	4,900.15	4,495.27	404.88	12.103		
13,100.00	7,057.64	7,019.64	7,057.64	171.19	243.33	89.95	2,649.70	-4,842.47	4,925.82	4,519.20	406.62	12.114		
13,200.00	7,057.32	7,019.32	7,057.32	173.99	243.32	89.94	2,649.70	-4,842.47	4,953.37	4,545.09	408.29	12.132		
13,300.00	7,057.00	7,019.00	7,057.00	176.78	243.31	89.94	2,649.70	-4,842.47	4,982.78	4,572.90	409.88	12.157		
13,400.00	7,056.67	7,018.67	7,056.67	179.58	243.30	89.94	2,649.70	-4,842.47	5,014.01	4,602.62	411.40	12.188		
13,500.00	7,056.35	7,018.35	7,056.35	182.38	243.29	89.93	2,649.70	-4,842.47	5,047.03	4,634.20	412.84	12.225		
13,600.00	7,056.02	7,018.02	7,056.02	185.19	243.28	89.93	2,649.70	-4,842.47	5,081.81	4,667.60	414.21	12.269		
13,700.00	7,055.70	7,017.70	7,055.70	187.99	243.26	89.93	2,649.70	-4,842.47	5,118.30	4,702.80	415.50	12.318		
13,800.00	7,055.37	7,017.37	7,055.37	190.80	243.25	89.92	2,649.70	-4,842.47	5,156.47	4,739.75	416.72	12.374		
13,900.00	7,055.05	7,017.05	7,055.05	193.60	243.24	89.92	2,649.70	-4,842.47	5,196.29	4,778.41	417.88	12.435		
14,000.00	7,054.72	7,016.72	7,054.72	196.41	243.23	89.91	2,649.70	-4,842.47	5,237.71	4,818.75	418.96	12.502		
14,100.00	7,054.40	7,016.40	7,054.40	199.22	243.22	89.91	2,649.70	-4,842.47	5,280.71	4,860.72	419.98	12.574		
14,200.00	7,054.07	7,016.07	7,054.07	202.03	243.21	89.91	2,649.70	-4,842.47	5,325.23	4,904.29	420.94	12.651		
14,300.00	7,053.75	7,015.75	7,053.75	204.85	243.20	89.90	2,649.70	-4,842.47	5,371.25	4,949.41	421.83	12.733		
14,400.00	7,053.42	7,015.42	7,053.42	207.66	243.19	89.90	2,649.70	-4,842.47	5,418.72	4,996.05	422.66	12.820		
14,500.00	7,053.10	7,015.10	7,053.10	210.48	243.17	89.89	2,649.70	-4,842.47	5,467.61	5,044.17	423.44	12.912		
14,600.00	7,052.77	7,014.77	7,052.77	213.29	243.16	89.89	2,649.70	-4,842.47	5,517.87	5,093.72	424.15	13.009		
14,700.00	7,052.45	7,014.45	7,052.45	216.11	243.15	89.89	2,649.70	-4,842.47	5,569.48	5,144.67	424.82	13.110		
14,800.00	7,052.12	7,014.12	7,052.12	218.93	243.14	89.88	2,649.70	-4,842.47	5,622.40	5,196.97	425.43	13.216		
14,900.00	7,051.80	7,013.80	7,051.80	221.75	243.13	89.88	2,649.70	-4,842.47	5,676.58	5,250.59	425.99	13.326		
15,000.00	7,051.47	7,013.47	7,051.47	224.57	243.12	89.87	2,649.70	-4,842.47	5,732.00	5,305.50	426.50	13.440		
15,100.00	7,051.15	7,013.15	7,051.15	227.39	243.11	89.87	2,649.70	-4,842.47	5,788.61	5,361.64	426.97	13.557		
15,145.13	7,051.00	7,013.00	7,051.00	228.67	243.10	89.87	2,649.70	-4,842.47	5,814.54	5,387.37	427.17	13.612		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	65.00	3.28	3.28	-122.03	-3,971.93	-6,349.59	7,489.84				
100.00	100.00	35.00	100.00	3.28	3.34	-122.03	-3,971.93	-6,349.59	7,489.56	7,482.94	6.62	1,131.160	
200.00	200.00	135.00	200.00	3.34	4.42	-122.03	-3,971.93	-6,349.59	7,489.56	7,481.80	7.76	965.137	
300.00	299.98	234.98	299.98	3.44	7.24	53.61	-3,971.93	-6,349.59	7,488.52	7,477.84	10.68	701.011	
400.00	399.84	334.84	399.84	3.59	10.47	53.69	-3,971.93	-6,349.59	7,485.42	7,471.36	14.06	532.377	
500.00	499.45	434.45	499.45	3.79	13.82	53.83	-3,971.93	-6,349.59	7,480.25	7,462.65	17.60	424.906	
600.00	598.70	533.70	598.70	4.03	17.20	54.02	-3,971.93	-6,349.59	7,473.04	7,451.81	21.23	351.964	
700.00	697.47	632.47	697.47	4.31	20.60	54.27	-3,971.93	-6,349.59	7,463.80	7,438.89	24.91	299.635	
800.00	795.62	730.62	795.62	4.64	23.99	54.57	-3,971.93	-6,349.59	7,452.57	7,423.95	28.62	260.423	
900.00	893.06	828.06	893.06	5.00	27.36	54.93	-3,971.93	-6,349.59	7,439.36	7,407.02	32.34	230.019	
1,000.00	989.64	924.64	989.64	5.40	30.71	55.34	-3,971.93	-6,349.59	7,424.22	7,388.14	36.08	205.794	
1,100.00	1,085.27	1,020.27	1,085.27	5.83	34.03	55.79	-3,971.93	-6,349.59	7,407.19	7,367.37	39.81	186.054	
1,200.00	1,180.44	1,115.44	1,180.44	6.29	37.34	55.98	-3,971.93	-6,349.59	7,389.38	7,345.83	43.55	169.663	
1,300.00	1,275.61	1,210.61	1,275.61	6.76	40.65	56.17	-3,971.93	-6,349.59	7,371.66	7,324.34	47.31	155.800	
1,400.00	1,370.78	1,305.78	1,370.78	7.26	43.96	56.36	-3,971.93	-6,349.59	7,354.02	7,302.93	51.09	143.935	
1,500.00	1,465.95	1,400.95	1,465.95	7.76	47.28	56.55	-3,971.93	-6,349.59	7,336.47	7,281.59	54.88	133.672	
1,600.00	1,561.12	1,503.88	1,561.12	8.27	50.86	56.75	-3,971.93	-6,349.59	7,319.01	7,260.05	58.96	124.141	
1,700.00	1,656.29	1,608.71	1,656.29	8.80	54.51	56.94	-3,971.93	-6,349.59	7,301.63	7,238.53	63.11	115.704	
1,800.00	1,751.46	1,686.46	1,751.46	9.32	57.22	57.14	-3,971.93	-6,349.59	7,284.34	7,218.03	66.32	109.839	
1,900.00	1,846.63	1,781.63	1,846.63	9.86	60.54	57.34	-3,971.93	-6,349.59	7,267.14	7,197.00	70.15	103.601	
2,000.00	1,941.80	1,876.80	1,941.80	10.40	63.86	57.53	-3,971.93	-6,349.59	7,250.03	7,176.06	73.98	98.003	
2,100.00	2,036.96	1,971.96	2,036.96	10.94	67.18	57.73	-3,971.93	-6,349.59	7,233.01	7,155.20	77.82	92.951	
2,200.00	2,132.13	2,067.13	2,132.13	11.49	70.49	57.93	-3,971.93	-6,349.59	7,216.08	7,134.43	81.66	88.370	
2,300.00	2,227.30	2,162.30	2,227.30	12.04	73.81	58.13	-3,971.93	-6,349.59	7,199.24	7,113.74	85.50	84.198	
2,400.00	2,322.47	2,257.47	2,322.47	12.59	77.13	58.33	-3,971.93	-6,349.59	7,182.50	7,093.14	89.35	80.383	
2,500.00	2,417.64	2,352.64	2,417.64	13.15	80.45	58.53	-3,971.93	-6,349.59	7,165.84	7,072.64	93.21	76.882	
2,600.00	2,512.81	2,447.81	2,512.81	13.70	83.77	58.73	-3,971.93	-6,349.59	7,149.28	7,052.22	97.06	73.657	
2,700.00	2,607.98	2,542.98	2,607.98	14.26	87.09	58.94	-3,971.93	-6,349.59	7,132.81	7,031.89	100.92	70.678	
2,800.00	2,703.15	2,638.15	2,703.15	14.82	90.41	59.14	-3,971.93	-6,349.59	7,116.44	7,011.66	104.78	67.918	
2,900.00	2,798.32	2,733.32	2,798.32	15.38	93.73	59.35	-3,971.93	-6,349.59	7,100.16	6,991.52	108.64	65.353	
3,000.00	2,893.49	2,828.49	2,893.49	15.95	97.05	59.55	-3,971.93	-6,349.59	7,083.98	6,971.47	112.51	62.964	
3,100.00	2,988.66	2,923.66	2,988.66	16.51	100.37	59.76	-3,971.93	-6,349.59	7,067.89	6,951.52	116.37	60.734	
3,200.00	3,083.83	3,018.83	3,083.83	17.07	103.69	59.97	-3,971.93	-6,349.59	7,051.90	6,931.66	120.24	58.647	
3,300.00	3,179.00	3,114.00	3,179.00	17.64	107.01	60.18	-3,971.93	-6,349.59	7,036.01	6,911.90	124.11	56.691	
3,400.00	3,274.17	3,209.17	3,274.17	18.21	110.34	60.39	-3,971.93	-6,349.59	7,020.22	6,892.23	127.98	54.852	
3,500.00	3,369.34	3,304.34	3,369.34	18.77	113.66	60.60	-3,971.93	-6,349.59	7,004.52	6,872.67	131.86	53.122	
3,600.00	3,464.51	3,400.49	3,464.51	19.34	117.01	60.81	-3,971.93	-6,349.59	6,988.93	6,853.16	135.77	51.478	
3,700.00	3,559.68	3,505.32	3,559.68	19.91	120.67	61.02	-3,971.93	-6,349.59	6,973.43	6,833.46	139.98	49.818	
3,800.00	3,654.84	3,589.84	3,654.84	20.48	123.62	61.23	-3,971.93	-6,349.59	6,958.04	6,814.56	143.48	48.494	
3,900.00	3,750.01	3,685.01	3,750.01	21.05	126.94	61.45	-3,971.93	-6,349.59	6,942.75	6,795.39	147.36	47.114	
4,000.00	3,845.18	3,780.18	3,845.18	21.62	130.26	61.66	-3,971.93	-6,349.59	6,927.56	6,776.32	151.24	45.805	
4,100.00	3,940.35	3,875.35	3,940.35	22.19	133.58	61.88	-3,971.93	-6,349.59	6,912.47	6,757.35	155.12	44.562	
4,200.00	4,035.52	3,970.52	4,035.52	22.76	136.90	62.09	-3,971.93	-6,349.59	6,897.49	6,738.49	159.00	43.380	
4,300.00	4,130.69	4,065.69	4,130.69	23.33	140.23	62.31	-3,971.93	-6,349.59	6,882.61	6,719.73	162.88	42.255	
4,400.00	4,225.86	4,160.86	4,225.86	23.91	143.55	62.53	-3,971.93	-6,349.59	6,867.84	6,701.07	166.77	41.182	
4,500.00	4,321.03	4,256.03	4,321.03	24.48	146.87	62.75	-3,971.93	-6,349.59	6,853.17	6,682.52	170.65	40.159	
4,600.00	4,416.20	4,351.20	4,416.20	25.05	150.19	62.97	-3,971.93	-6,349.59	6,838.61	6,664.07	174.54	39.182	
4,700.00	4,511.37	4,446.37	4,511.37	25.62	153.51	63.19	-3,971.93	-6,349.59	6,824.16	6,645.73	178.42	38.247	
4,800.00	4,606.54	4,452.00	4,517.00	26.20	153.71	63.20	-3,971.93	-6,349.59	6,810.40	6,631.20	179.20	38.004	
4,900.00	4,701.71	4,452.00	4,517.00	26.77	153.71	63.20	-3,971.93	-6,349.59	6,798.08	6,618.33	179.76	37.818	
5,000.00	4,796.88	4,452.00	4,517.00	27.34	153.71	63.20	-3,971.93	-6,349.59	6,787.22	6,606.94	180.28	37.649	
5,100.00	4,892.05	4,452.00	4,517.00	27.92	153.71	63.20	-3,971.93	-6,349.59	6,777.81	6,597.05	180.76	37.496	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,452.00	4,517.00	28.49	153.71	63.20	-3,971.93	-6,349.59	6,769.87	6,588.65	181.21	37.359		
5,300.00	5,082.39	4,452.00	4,517.00	29.07	153.71	63.20	-3,971.93	-6,349.59	6,763.39	6,581.77	181.63	37.238		
5,400.00	5,177.56	4,452.00	4,517.00	29.64	153.71	63.20	-3,971.93	-6,349.59	6,758.39	6,576.39	182.00	37.133		
5,500.00	5,272.72	4,452.00	4,517.00	30.21	153.71	63.20	-3,971.93	-6,349.59	6,754.87	6,572.52	182.35	37.044		
5,600.00	5,367.89	4,452.00	4,517.00	30.79	153.71	63.20	-3,971.93	-6,349.59	6,752.82	6,570.17	182.65	36.971		
5,688.06	5,451.70	4,452.00	4,517.00	31.30	153.71	63.20	-3,971.93	-6,349.59	6,752.25	6,569.36	182.89	36.920		
5,700.00	5,463.06	4,452.00	4,517.00	31.36	153.71	63.20	-3,971.93	-6,349.59	6,752.26	6,569.34	182.92	36.914		
5,800.00	5,558.23	4,452.00	4,517.00	31.94	153.71	63.20	-3,971.93	-6,349.59	6,753.18	6,570.03	183.15	36.873		
5,900.00	5,653.40	4,452.00	4,517.00	32.51	153.71	63.20	-3,971.93	-6,349.59	6,755.58	6,572.23	183.34	36.847		
6,000.00	5,748.57	4,452.00	4,517.00	33.09	153.71	63.20	-3,971.93	-6,349.59	6,759.45	6,575.96	183.50	36.837		
6,100.00	5,843.74	4,452.00	4,517.00	33.67	153.71	63.20	-3,971.93	-6,349.59	6,764.80	6,581.19	183.61	36.843		
6,200.00	5,938.91	4,452.00	4,517.00	34.24	153.71	63.20	-3,971.93	-6,349.59	6,771.63	6,587.93	183.69	36.864		
6,300.00	6,034.08	4,452.00	4,517.00	34.82	153.71	63.20	-3,971.93	-6,349.59	6,779.92	6,596.18	183.74	36.900		
6,400.00	6,129.25	4,452.00	4,517.00	35.39	153.71	63.20	-3,971.93	-6,349.59	6,789.68	6,605.93	183.75	36.952		
6,500.00	6,224.42	4,452.00	4,517.00	35.97	153.71	63.20	-3,971.93	-6,349.59	6,800.89	6,617.18	183.72	37.019		
6,600.00	6,319.59	4,452.00	4,517.00	36.54	153.71	63.20	-3,971.93	-6,349.59	6,813.55	6,629.90	183.65	37.101		
6,700.00	6,414.76	4,452.00	4,517.00	37.12	153.71	63.20	-3,971.93	-6,349.59	6,827.66	6,644.11	183.55	37.198		
6,800.00	6,509.91	4,452.00	4,517.00	37.70	153.71	56.05	-3,971.93	-6,349.59	6,842.68	6,659.27	183.41	37.308		
6,900.00	6,603.99	4,452.00	4,517.00	38.26	153.71	33.40	-3,971.93	-6,349.59	6,848.57	6,665.37	183.20	37.382		
7,000.00	6,694.76	4,452.00	4,517.00	38.78	153.71	18.67	-3,971.93	-6,349.59	6,841.36	6,658.45	182.91	37.402		
7,100.00	6,779.96	4,452.00	4,517.00	39.24	153.71	9.24	-3,971.93	-6,349.59	6,821.19	6,638.64	182.55	37.365		
7,200.00	6,857.50	4,452.00	4,517.00	39.65	153.71	2.56	-3,971.93	-6,349.59	6,788.45	6,606.31	182.14	37.270		
7,300.00	6,925.48	4,452.00	4,517.00	40.02	153.71	-2.86	-3,971.93	-6,349.59	6,743.76	6,562.07	181.69	37.117		
7,400.00	6,982.21	4,452.00	4,517.00	40.33	153.71	-7.97	-3,971.93	-6,349.59	6,688.00	6,506.78	181.22	36.906		
7,500.00	7,026.31	4,452.00	4,517.00	40.63	153.71	-13.51	-3,971.93	-6,349.59	6,622.28	6,441.54	180.74	36.640		
7,600.00	7,056.68	4,452.00	4,517.00	40.91	153.71	-20.29	-3,971.93	-6,349.59	6,547.94	6,367.66	180.29	36.319		
7,700.00	7,072.58	4,452.00	4,517.00	41.25	153.71	-29.33	-3,971.93	-6,349.59	6,466.57	6,286.68	179.88	35.948		
7,800.00	7,074.86	4,452.00	4,517.00	41.69	153.71	-36.26	-3,971.93	-6,349.59	6,380.27	6,200.72	179.55	35.534		
7,900.00	7,074.54	4,452.00	4,517.00	42.34	153.71	-36.26	-3,971.93	-6,349.59	6,293.50	6,114.26	179.24	35.111		
8,000.00	7,074.21	4,452.00	4,517.00	43.27	153.71	-36.26	-3,971.93	-6,349.59	6,207.13	6,028.18	178.95	34.686		
8,100.00	7,073.89	4,452.00	4,517.00	44.47	153.71	-36.26	-3,971.93	-6,349.59	6,121.18	5,942.50	178.68	34.258		
8,200.00	7,073.57	4,452.00	4,517.00	45.91	153.71	-36.26	-3,971.93	-6,349.59	6,035.65	5,857.23	178.42	33.828		
8,300.00	7,073.24	4,452.00	4,517.00	47.53	153.71	-36.26	-3,971.93	-6,349.59	5,950.58	5,772.39	178.19	33.395		
8,400.00	7,072.92	4,452.00	4,517.00	49.31	153.71	-36.26	-3,971.93	-6,349.59	5,865.98	5,688.00	177.98	32.959		
8,500.00	7,072.59	4,452.00	4,517.00	51.20	153.71	-36.26	-3,971.93	-6,349.59	5,781.87	5,604.08	177.79	32.520		
8,600.00	7,072.27	4,452.00	4,517.00	53.19	153.71	-36.26	-3,971.93	-6,349.59	5,698.28	5,520.64	177.63	32.079		
8,700.00	7,071.94	4,452.00	4,517.00	55.27	153.71	-36.26	-3,971.93	-6,349.59	5,615.22	5,437.72	177.50	31.635		
8,800.00	7,071.62	4,452.00	4,517.00	57.43	153.71	-36.26	-3,971.93	-6,349.59	5,532.72	5,355.32	177.40	31.188		
8,900.00	7,071.29	4,452.00	4,517.00	59.64	153.71	-36.26	-3,971.93	-6,349.59	5,450.81	5,273.48	177.33	30.738		
9,000.00	7,070.97	4,452.00	4,517.00	61.92	153.71	-36.26	-3,971.93	-6,349.59	5,369.51	5,192.22	177.29	30.287		
9,100.00	7,070.64	4,452.00	4,517.00	64.24	153.71	-36.26	-3,971.93	-6,349.59	5,288.85	5,111.57	177.28	29.833		
9,200.00	7,070.32	4,452.00	4,517.00	66.61	153.71	-36.26	-3,971.93	-6,349.59	5,208.86	5,031.55	177.31	29.377		
9,300.00	7,069.99	4,452.00	4,517.00	69.01	153.71	-36.26	-3,971.93	-6,349.59	5,129.58	4,952.20	177.38	28.919		
9,400.00	7,069.67	4,452.00	4,517.00	71.45	153.71	-36.26	-3,971.93	-6,349.59	5,051.03	4,873.55	177.48	28.459		
9,500.00	7,069.34	4,452.00	4,517.00	73.92	153.71	-36.26	-3,971.93	-6,349.59	4,973.25	4,795.62	177.62	27.999		
9,600.00	7,069.02	4,452.00	4,517.00	76.42	153.71	-36.26	-3,971.93	-6,349.59	4,896.27	4,718.47	177.80	27.538		
9,700.00	7,068.69	4,452.00	4,517.00	78.95	153.71	-36.26	-3,971.93	-6,349.59	4,820.15	4,642.13	178.02	27.076		
9,800.00	7,068.37	4,452.00	4,517.00	81.49	153.71	-36.26	-3,971.93	-6,349.59	4,744.91	4,566.63	178.28	26.615		
9,900.00	7,068.04	4,452.00	4,517.00	84.06	153.71	-36.26	-3,971.93	-6,349.59	4,670.59	4,492.01	178.58	26.154		
10,000.00	7,067.72	4,452.00	4,517.00	86.65	153.71	-36.26	-3,971.93	-6,349.59	4,597.26	4,418.34	178.92	25.695		
10,100.00	7,067.39	4,452.00	4,517.00	89.25	153.71	-36.26	-3,971.93	-6,349.59	4,524.94	4,345.64	179.30	25.237		
10,200.00	7,067.07	4,452.00	4,517.00	91.87	153.71	-36.26	-3,971.93	-6,349.59	4,453.69	4,273.98	179.72	24.782		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	4,452.00	4,517.00	94.50	153.71	-36.26	-3,971.93	-6,349.59	4,383.57	4,203.40	180.18	24.329	
10,400.00	7,066.42	4,452.00	4,517.00	97.14	153.71	-36.26	-3,971.93	-6,349.59	4,314.63	4,133.95	180.67	23.881	
10,500.00	7,066.09	4,452.00	4,517.00	99.80	153.71	-36.26	-3,971.93	-6,349.59	4,246.92	4,065.71	181.21	23.436	
10,600.00	7,065.77	4,452.00	4,517.00	102.47	153.71	-36.26	-3,971.93	-6,349.59	4,180.51	3,998.72	181.79	22.997	
10,700.00	7,065.44	4,452.00	4,517.00	105.15	153.71	-36.26	-3,971.93	-6,349.59	4,115.45	3,933.05	182.40	22.562	
10,800.00	7,065.12	4,452.00	4,517.00	107.83	153.71	-36.26	-3,971.93	-6,349.59	4,051.82	3,868.77	183.05	22.134	
10,900.00	7,064.79	4,452.00	4,517.00	110.53	153.71	-36.26	-3,971.93	-6,349.59	3,989.68	3,805.94	183.74	21.713	
11,000.00	7,064.47	4,452.00	4,517.00	113.23	153.71	-36.26	-3,971.93	-6,349.59	3,929.11	3,744.64	184.47	21.300	
11,100.00	7,064.14	4,452.00	4,517.00	115.95	153.71	-36.26	-3,971.93	-6,349.59	3,870.17	3,684.94	185.23	20.894	
11,200.00	7,063.82	4,452.00	4,517.00	118.66	153.71	-36.26	-3,971.93	-6,349.59	3,812.94	3,626.92	186.02	20.497	
11,300.00	7,063.49	4,452.00	4,517.00	121.39	153.71	-36.26	-3,971.93	-6,349.59	3,757.50	3,570.65	186.85	20.109	
11,400.00	7,063.17	4,452.00	4,517.00	124.12	153.71	-36.26	-3,971.93	-6,349.59	3,703.93	3,516.22	187.72	19.731	
11,500.00	7,062.84	4,452.00	4,517.00	126.86	153.71	-36.26	-3,971.93	-6,349.59	3,652.32	3,463.70	188.62	19.364	
11,600.00	7,062.52	4,452.00	4,517.00	129.60	153.71	-36.26	-3,971.93	-6,349.59	3,602.74	3,413.19	189.55	19.007	
11,700.00	7,062.19	4,452.00	4,517.00	132.35	153.71	-36.26	-3,971.93	-6,349.59	3,555.29	3,364.77	190.52	18.661	
11,800.00	7,061.87	4,452.00	4,517.00	135.10	153.71	-36.26	-3,971.93	-6,349.59	3,510.04	3,318.51	191.53	18.326	
11,900.00	7,061.54	4,452.00	4,517.00	137.85	153.71	-36.26	-3,971.93	-6,349.59	3,467.09	3,274.51	192.58	18.004	
12,000.00	7,061.22	4,452.00	4,517.00	140.61	153.71	-36.26	-3,971.93	-6,349.59	3,426.52	3,232.85	193.66	17.693	
12,100.00	7,060.89	4,452.00	4,517.00	143.38	153.71	-36.26	-3,971.93	-6,349.59	3,388.41	3,193.62	194.79	17.395	
12,200.00	7,060.57	4,452.00	4,517.00	146.15	153.71	-36.26	-3,971.93	-6,349.59	3,352.85	3,156.89	195.97	17.109	
12,300.00	7,060.24	4,452.00	4,517.00	148.92	153.71	-36.26	-3,971.93	-6,349.59	3,319.93	3,122.74	197.19	16.836	
12,400.00	7,059.92	4,452.00	4,517.00	151.69	153.71	-36.26	-3,971.93	-6,349.59	3,289.72	3,091.25	198.47	16.575	
12,500.00	7,059.59	4,452.00	4,517.00	154.47	153.71	-36.26	-3,971.93	-6,349.59	3,262.30	3,062.49	199.81	16.327	
12,600.00	7,059.27	4,452.00	4,517.00	157.25	153.71	-36.26	-3,971.93	-6,349.59	3,237.73	3,036.52	201.20	16.092	
12,700.00	7,058.94	4,452.00	4,517.00	160.03	153.71	-36.26	-3,971.93	-6,349.59	3,216.08	3,013.42	202.67	15.869	
12,800.00	7,058.62	4,452.00	4,517.00	162.82	153.71	-36.26	-3,971.93	-6,349.59	3,197.42	2,993.22	204.20	15.658	
12,900.00	7,058.29	4,452.00	4,517.00	165.61	153.71	-36.26	-3,971.93	-6,349.59	3,181.80	2,975.99	205.81	15.460	
13,000.00	7,057.97	4,452.00	4,517.00	168.40	153.71	-36.26	-3,971.93	-6,349.59	3,169.25	2,961.76	207.49	15.275	
13,100.00	7,057.64	4,452.00	4,517.00	171.19	153.71	-36.26	-3,971.93	-6,349.59	3,159.82	2,950.58	209.24	15.101	
13,200.00	7,057.32	4,452.00	4,517.00	173.99	153.71	-36.26	-3,971.93	-6,349.59	3,153.53	2,942.46	211.07	14.941	
13,300.00	7,057.00	4,452.00	4,517.00	176.78	153.71	-36.26	-3,971.93	-6,349.59	3,150.41	2,937.44	212.97	14.793	
13,348.44	7,056.84	4,452.00	4,517.00	178.14	153.71	-36.26	-3,971.93	-6,349.59	3,150.04	2,936.12	213.91	14.726 CC	
13,400.00	7,056.67	4,452.00	4,517.00	179.58	153.71	-36.26	-3,971.93	-6,349.59	3,150.46	2,935.53	214.93	14.658 ES	
13,500.00	7,056.35	4,452.00	4,517.00	182.38	153.71	-36.26	-3,971.93	-6,349.59	3,153.68	2,936.72	216.96	14.536	
13,600.00	7,056.02	4,452.00	4,517.00	185.19	153.71	-36.26	-3,971.93	-6,349.59	3,160.06	2,941.03	219.03	14.427	
13,700.00	7,055.70	4,452.00	4,517.00	187.99	153.71	-36.26	-3,971.93	-6,349.59	3,169.59	2,948.45	221.15	14.333	
13,800.00	7,055.37	4,452.00	4,517.00	190.80	153.71	-36.26	-3,971.93	-6,349.59	3,182.24	2,958.95	223.29	14.252	
13,900.00	7,055.05	4,452.00	4,517.00	193.60	153.71	-36.26	-3,971.93	-6,349.59	3,197.96	2,972.51	225.45	14.185	
14,000.00	7,054.72	4,452.00	4,517.00	196.41	153.71	-36.26	-3,971.93	-6,349.59	3,216.72	2,989.11	227.61	14.133	
14,100.00	7,054.40	4,452.00	4,517.00	199.22	153.71	-36.26	-3,971.93	-6,349.59	3,238.45	3,008.69	229.76	14.095	
14,200.00	7,054.07	4,452.00	4,517.00	202.03	153.71	-36.26	-3,971.93	-6,349.59	3,263.11	3,031.22	231.89	14.072	
14,300.00	7,053.75	4,452.00	4,517.00	204.85	153.71	-36.26	-3,971.93	-6,349.59	3,290.62	3,056.64	233.98	14.064 SF	
14,400.00	7,053.42	4,452.00	4,517.00	207.66	153.71	-36.26	-3,971.93	-6,349.59	3,320.92	3,084.90	236.02	14.070	
14,500.00	7,053.10	4,452.00	4,517.00	210.48	153.71	-36.26	-3,971.93	-6,349.59	3,353.93	3,115.91	238.01	14.091	
14,600.00	7,052.77	4,452.00	4,517.00	213.29	153.71	-36.26	-3,971.93	-6,349.59	3,389.56	3,149.63	239.94	14.127	
14,700.00	7,052.45	4,452.00	4,517.00	216.11	153.71	-36.26	-3,971.93	-6,349.59	3,427.75	3,185.96	241.78	14.177	
14,800.00	7,052.12	4,452.00	4,517.00	218.93	153.71	-36.26	-3,971.93	-6,349.59	3,468.39	3,224.84	243.56	14.241	
14,900.00	7,051.80	4,452.00	4,517.00	221.75	153.71	-36.26	-3,971.93	-6,349.59	3,511.42	3,266.18	245.24	14.318	
15,000.00	7,051.47	4,452.00	4,517.00	224.57	153.71	-36.26	-3,971.93	-6,349.59	3,556.74	3,309.90	246.84	14.409	
15,100.00	7,051.15	4,452.00	4,517.00	227.39	153.71	-36.26	-3,971.93	-6,349.59	3,604.26	3,355.91	248.36	14.513	
15,145.13	7,051.00	4,452.00	4,517.00	228.67	153.71	-36.26	-3,971.93	-6,349.59	3,626.41	3,377.40	249.01	14.563	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	1,355.93	1,285.48	3.28	7.29	-106.14	-2,551.70	-8,815.52	9,266.99					
100.00	100.00	1,377.00	1,306.28	3.28	7.39	-106.13	-2,549.28	-8,813.22	9,253.47	9,243.33	10.15	911.976		
200.00	200.00	1,436.63	1,365.19	3.34	7.68	-106.10	-2,542.29	-8,807.13	9,240.48	9,230.04	10.44	885.258		
300.00	299.98	1,481.41	1,409.43	3.44	7.90	69.79	-2,536.69	-8,803.06	9,227.59	9,216.87	10.72	860.957		
400.00	399.84	1,660.00	1,585.91	3.59	8.77	70.21	-2,515.46	-8,785.88	9,213.13	9,201.48	11.65	790.923		
500.00	499.45	1,700.54	1,625.98	3.79	8.97	70.55	-2,511.08	-8,781.58	9,197.35	9,185.35	12.01	766.047		
600.00	598.70	1,755.00	1,679.96	4.03	9.23	70.92	-2,505.54	-8,776.96	9,181.83	9,169.36	12.47	736.183		
700.00	697.47	700.00	1,710.58	4.31	4.60	71.28	-2,502.27	-8,774.34	9,165.32	9,156.68	8.64	1,060.358		
800.00	795.62	1,988.59	1,910.93	4.64	10.39	71.98	-2,477.49	-8,756.43	9,147.01	9,132.89	14.11	648.121		
900.00	893.06	2,294.88	2,212.82	5.00	12.01	73.00	-2,436.57	-8,725.00	9,126.03	9,110.13	15.90	573.889		
1,000.00	989.64	1,000.00	2,401.98	5.40	5.28	73.88	-2,409.93	-8,702.67	9,103.31	9,092.76	10.54	863.560		
1,100.00	1,085.27	2,546.78	2,460.54	5.83	13.39	74.48	-2,401.91	-8,695.21	9,079.03	9,061.13	17.90	507.310		
1,200.00	1,180.44	2,572.09	2,485.46	6.29	13.53	74.54	-2,398.73	-8,692.19	9,055.13	9,036.68	18.46	490.618		
1,300.00	1,275.61	2,756.00	2,666.53	6.76	14.54	75.01	-2,375.47	-8,669.97	9,031.28	9,011.50	19.78	456.541		
1,400.00	1,370.78	2,792.00	2,701.94	7.26	14.74	75.10	-2,370.76	-8,665.52	9,007.29	8,986.86	20.43	440.802		
1,500.00	1,465.95	2,792.00	2,701.94	7.76	14.74	75.10	-2,370.76	-8,665.52	8,984.23	8,963.29	20.93	429.218		
1,600.00	1,561.12	2,829.32	2,738.72	8.27	14.93	75.19	-2,366.14	-8,661.25	8,961.79	8,940.17	21.61	414.654		
1,700.00	1,656.29	2,845.66	2,754.87	8.80	15.02	75.24	-2,364.26	-8,659.57	8,940.38	8,918.18	22.21	402.565		
1,800.00	1,751.46	2,887.00	2,795.81	9.32	15.23	75.34	-2,359.94	-8,655.83	8,920.08	8,897.15	22.93	389.053		
1,900.00	1,846.63	3,021.37	2,928.71	9.86	15.92	75.68	-2,344.58	-8,643.42	8,900.07	8,875.99	24.08	369.592		
2,000.00	1,941.80	3,097.52	3,003.95	10.40	16.33	75.87	-2,335.25	-8,636.25	8,879.73	8,854.75	24.98	355.466		
2,100.00	2,036.96	3,216.18	3,121.07	10.94	16.96	76.19	-2,320.04	-8,624.72	8,859.14	8,833.05	26.09	339.609		
2,200.00	2,132.13	3,316.68	3,220.36	11.49	17.49	76.44	-2,308.04	-8,614.92	8,838.93	8,811.82	27.11	326.045		
2,300.00	2,227.30	3,400.08	3,302.71	12.04	17.93	76.66	-2,297.85	-8,606.55	8,818.58	8,790.52	28.06	314.296		
2,400.00	2,322.47	3,463.13	3,365.01	12.59	18.26	76.83	-2,290.24	-8,600.46	8,798.74	8,769.82	28.92	304.265		
2,500.00	2,417.64	3,543.00	3,443.90	13.15	18.69	77.04	-2,280.52	-8,592.67	8,779.01	8,749.15	29.86	294.009		
2,600.00	2,512.81	4,109.00	3,999.00	13.70	21.92	78.63	-2,195.83	-8,526.71	8,756.80	8,723.65	33.15	264.163		
2,700.00	2,607.98	4,521.58	4,400.07	14.26	24.51	79.84	-2,126.61	-8,460.05	8,729.83	8,694.09	35.74	244.284		
2,800.00	2,703.15	4,546.65	4,424.42	14.82	24.67	79.91	-2,122.59	-8,455.67	8,703.19	8,666.73	36.46	238.694		
2,900.00	2,798.32	4,583.00	4,459.81	15.38	24.90	80.02	-2,116.92	-8,449.61	8,677.39	8,640.14	37.24	232.991		
3,000.00	2,893.49	4,583.00	4,459.81	15.95	24.90	80.02	-2,116.92	-8,449.61	8,652.40	8,614.54	37.86	228.563		
3,100.00	2,988.66	4,583.00	4,459.81	16.51	24.90	80.02	-2,116.92	-8,449.61	8,628.50	8,590.03	38.47	224.299		
3,200.00	3,083.83	4,624.15	4,500.03	17.07	25.14	80.14	-2,110.91	-8,443.31	8,605.16	8,565.89	39.27	219.119		
3,300.00	3,179.00	4,640.46	4,516.03	17.64	25.24	80.18	-2,108.70	-8,441.03	8,582.95	8,542.99	39.96	214.777		
3,400.00	3,274.17	4,678.00	4,552.95	18.21	25.46	80.28	-2,103.97	-8,436.25	8,561.82	8,521.07	40.75	210.097		
3,500.00	3,369.34	4,678.00	4,552.95	18.77	25.46	80.28	-2,103.97	-8,436.25	8,541.37	8,500.00	41.37	206.471		
3,600.00	3,464.51	4,706.11	4,580.68	19.34	25.61	80.36	-2,100.69	-8,432.95	8,521.93	8,479.82	42.11	202.378		
3,700.00	3,559.68	4,744.90	4,618.98	19.91	25.82	80.47	-2,096.40	-8,428.57	8,503.22	8,460.32	42.90	198.221		
3,800.00	3,654.84	4,772.00	4,645.77	20.48	25.96	80.54	-2,093.56	-8,425.63	8,485.26	8,441.62	43.63	194.460		
3,900.00	3,750.01	4,838.47	4,711.55	21.05	26.31	80.71	-2,087.00	-8,418.70	8,467.87	8,423.33	44.54	190.114		
4,000.00	3,845.18	4,867.00	4,739.81	21.62	26.45	80.79	-2,084.33	-8,415.83	8,451.16	8,405.88	45.28	186.634		
4,100.00	3,940.35	4,917.05	4,789.44	22.19	26.70	80.92	-2,079.84	-8,411.07	8,435.13	8,389.02	46.11	182.924		
4,200.00	4,035.52	4,961.00	4,833.06	22.76	26.92	81.03	-2,076.11	-8,407.27	8,419.93	8,373.01	46.92	179.462		
4,300.00	4,130.69	5,005.07	4,876.84	23.33	27.13	81.14	-2,072.55	-8,403.69	8,405.40	8,357.68	47.72	176.142		
4,400.00	4,225.86	5,056.00	4,927.46	23.91	27.37	81.27	-2,068.61	-8,399.69	8,391.42	8,342.87	48.55	172.838		
4,500.00	4,321.03	5,056.00	4,927.46	24.48	27.37	81.27	-2,068.61	-8,399.69	8,378.37	8,329.21	49.16	170.426		
4,600.00	4,416.20	5,112.58	4,983.75	25.05	27.63	81.42	-2,064.56	-8,395.77	8,365.83	8,315.82	50.01	167.283		
4,700.00	4,511.37	5,150.00	5,021.04	25.62	27.80	81.51	-2,062.13	-8,393.69	8,354.39	8,303.61	50.78	164.532		
4,800.00	4,606.54	5,192.69	5,063.60	26.20	27.99	81.61	-2,059.59	-8,391.55	8,343.69	8,292.14	51.56	161.827		
4,900.00	4,701.71	5,243.00	5,113.77	26.77	28.20	81.73	-2,056.90	-8,389.08	8,333.48	8,281.11	52.37	159.117		
5,000.00	4,796.88	5,284.71	5,155.39	27.34	28.38	81.83	-2,054.92	-8,387.25	8,323.96	8,270.82	53.14	156.629		
5,100.00	4,892.05	5,336.00	5,206.61	27.92	28.59	81.95	-2,052.80	-8,385.53	8,315.35	8,261.40	53.95	154.118		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	5,359.80	5,230.39	28.49	28.68	82.01	-2,051.96	-8,384.87	8,307.42	8,252.78	54.64	152.027		
5,300.00	5,082.39	5,430.00	5,300.54	29.07	28.95	82.17	-2,050.14	-8,383.13	8,300.15	8,244.63	55.52	149.499		
5,400.00	5,177.56	5,479.17	5,349.70	29.64	29.14	82.28	-2,049.14	-8,382.10	8,293.37	8,237.07	56.31	147.287		
5,500.00	5,272.72	5,539.08	5,409.58	30.21	29.36	82.41	-2,047.74	-8,381.08	8,287.13	8,229.99	57.14	145.037		
5,600.00	5,367.89	5,598.87	5,469.35	30.79	29.59	82.55	-2,046.14	-8,380.32	8,281.40	8,223.43	57.97	142.863		
5,700.00	5,463.06	5,658.54	5,528.98	31.36	29.81	82.69	-2,044.34	-8,379.83	8,276.20	8,217.40	58.80	140.762		
5,800.00	5,558.23	5,711.00	5,581.41	31.94	30.01	82.81	-2,042.59	-8,379.61	8,271.53	8,211.94	59.59	138.800		
5,900.00	5,653.40	5,786.70	5,657.06	32.51	30.29	82.99	-2,040.00	-8,379.58	8,267.32	8,206.83	60.49	136.679		
6,000.00	5,748.57	5,854.42	5,724.75	33.09	30.54	83.14	-2,037.79	-8,379.77	8,263.56	8,202.21	61.35	134.701		
6,100.00	5,843.74	5,922.21	5,792.50	33.67	30.80	83.30	-2,035.65	-8,380.18	8,260.23	8,198.02	62.21	132.787		
6,200.00	5,938.91	5,995.00	5,865.26	34.24	31.07	83.47	-2,033.46	-8,380.85	8,257.34	8,194.25	63.09	130.888		
6,300.00	6,034.08	6,094.60	5,964.81	34.82	31.43	83.70	-2,030.60	-8,381.86	8,254.69	8,190.61	64.08	128.824		
6,400.00	6,129.25	6,202.11	6,072.28	35.39	31.83	83.95	-2,027.67	-8,382.79	8,252.02	8,186.92	65.10	126.759		
6,500.00	6,224.42	6,309.73	6,179.86	35.97	32.23	84.19	-2,024.91	-8,383.53	8,249.34	8,183.21	66.12	124.757		
6,600.00	6,319.59	6,383.20	6,253.29	36.54	32.51	84.37	-2,022.58	-8,384.14	8,246.89	8,179.87	67.02	123.058		
6,700.00	6,414.76	6,464.01	6,334.04	37.12	32.82	84.56	-2,019.56	-8,384.93	8,244.71	8,176.77	67.94	121.359		
6,800.00	6,509.91	6,544.42	6,414.37	37.70	33.12	77.47	-2,016.02	-8,385.85	8,242.27	8,173.42	68.85	119.705		
6,900.00	6,603.99	6,655.89	6,525.68	38.26	33.57	54.89	-2,010.15	-8,387.15	8,228.57	8,158.66	69.91	117.694		
7,000.00	6,694.76	6,772.00	6,641.54	38.78	34.04	40.70	-2,002.76	-8,388.14	8,199.42	8,128.46	70.95	115.560		
7,100.00	6,779.96	6,879.89	6,749.13	39.24	34.48	32.30	-1,994.71	-8,388.73	8,155.55	8,083.65	71.90	113.433		
7,200.00	6,857.50	6,917.31	6,786.44	39.65	34.64	27.03	-1,991.82	-8,389.07	8,098.47	8,026.00	72.47	111.746		
7,300.00	6,925.48	6,964.04	6,833.03	40.02	34.83	23.76	-1,988.11	-8,389.53	8,029.52	7,956.49	73.03	109.955		
7,400.00	6,982.21	7,003.38	6,872.23	40.33	35.00	21.79	-1,984.94	-8,390.01	7,950.32	7,876.83	73.48	108.194		
7,500.00	7,026.31	7,034.36	6,903.10	40.63	35.13	20.83	-1,982.42	-8,390.45	7,862.70	7,788.86	73.84	106.490		
7,600.00	7,056.68	7,056.16	6,924.83	40.91	35.22	21.02	-1,980.62	-8,390.78	7,768.73	7,694.65	74.08	104.869		
7,700.00	7,072.58	7,068.18	6,936.81	41.25	35.27	24.60	-1,979.62	-8,390.98	7,670.64	7,596.42	74.22	103.354		
7,800.00	7,074.86	7,070.90	6,939.52	41.69	35.28	52.21	-1,979.40	-8,391.03	7,570.81	7,496.55	74.26	101.950		
7,900.00	7,074.54	7,071.84	6,940.45	42.34	35.28	52.45	-1,979.32	-8,391.04	7,470.84	7,396.55	74.29	100.570		
8,000.00	7,074.21	7,072.77	6,941.38	43.27	35.29	52.71	-1,979.24	-8,391.06	7,370.86	7,296.55	74.31	99.188		
8,100.00	7,073.89	7,073.72	6,942.32	44.47	35.29	52.96	-1,979.16	-8,391.07	7,270.90	7,196.56	74.34	97.806		
8,200.00	7,073.57	7,074.67	6,943.27	45.91	35.30	53.22	-1,979.08	-8,391.09	7,170.93	7,096.56	74.37	96.424		
8,300.00	7,073.24	7,075.63	6,944.23	47.53	35.30	53.48	-1,979.00	-8,391.11	7,070.96	6,996.56	74.40	95.040		
8,400.00	7,072.92	7,076.60	6,945.19	49.31	35.30	53.75	-1,978.92	-8,391.12	6,970.99	6,896.56	74.43	93.656		
8,500.00	7,072.59	7,077.57	6,946.16	51.20	35.31	54.01	-1,978.84	-8,391.14	6,871.02	6,796.56	74.47	92.272		
8,600.00	7,072.27	7,078.55	6,947.14	53.19	35.31	54.29	-1,978.76	-8,391.16	6,771.06	6,696.56	74.50	90.887		
8,700.00	7,071.94	7,079.54	6,948.13	55.27	35.32	54.56	-1,978.68	-8,391.17	6,671.09	6,596.55	74.54	89.501		
8,800.00	7,071.62	7,080.54	6,949.12	57.43	35.32	54.84	-1,978.59	-8,391.19	6,571.13	6,496.55	74.57	88.115		
8,900.00	7,071.29	7,081.54	6,950.12	59.64	35.32	55.13	-1,978.51	-8,391.21	6,471.16	6,396.55	74.61	86.728		
9,000.00	7,070.97	7,082.56	6,951.13	61.92	35.33	55.41	-1,978.42	-8,391.23	6,371.20	6,296.54	74.66	85.341		
9,100.00	7,070.64	7,083.58	6,952.15	64.24	35.33	55.70	-1,978.34	-8,391.24	6,271.24	6,196.54	74.70	83.954		
9,200.00	7,070.32	7,084.61	6,953.17	66.61	35.34	56.00	-1,978.25	-8,391.26	6,171.28	6,096.53	74.74	82.566		
9,300.00	7,069.99	7,085.64	6,954.21	69.01	35.34	56.30	-1,978.17	-8,391.28	6,071.32	5,996.53	74.79	81.178		
9,400.00	7,069.67	7,086.69	6,955.25	71.45	35.35	56.60	-1,978.08	-8,391.30	5,971.36	5,896.52	74.84	79.790		
9,500.00	7,069.34	7,087.74	6,956.30	73.92	35.35	56.91	-1,977.99	-8,391.32	5,871.40	5,796.51	74.89	78.402		
9,600.00	7,069.02	7,088.81	6,957.35	76.42	35.35	57.22	-1,977.90	-8,391.34	5,771.44	5,696.50	74.94	77.014		
9,700.00	7,068.69	7,089.88	6,958.42	78.95	35.36	57.54	-1,977.81	-8,391.36	5,671.49	5,596.49	74.99	75.626		
9,800.00	7,068.37	7,090.96	6,959.50	81.49	35.36	57.86	-1,977.72	-8,391.37	5,571.53	5,496.48	75.05	74.238		
9,900.00	7,068.04	7,092.04	6,960.58	84.06	35.37	58.19	-1,977.63	-8,391.39	5,471.58	5,396.47	75.11	72.850		
10,000.00	7,067.72	7,093.14	6,961.67	86.65	35.37	58.52	-1,977.54	-8,391.41	5,371.63	5,296.46	75.17	71.461		
10,100.00	7,067.39	7,094.25	6,962.78	89.25	35.38	58.85	-1,977.45	-8,391.43	5,271.68	5,196.45	75.23	70.073		
10,200.00	7,067.07	7,095.36	6,963.89	91.87	35.38	59.19	-1,977.35	-8,391.45	5,171.73	5,096.44	75.30	68.686		
10,300.00	7,066.74	7,096.49	6,965.01	94.50	35.39	59.54	-1,977.26	-8,391.47	5,071.79	4,996.43	75.36	67.298		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,097.62	6,966.14	97.14	35.39	59.89	-1,977.16	-8,391.49	4,971.84	4,896.41	75.43	65.911		
10,500.00	7,066.09	7,098.77	6,967.28	99.80	35.40	60.24	-1,977.07	-8,391.52	4,871.90	4,796.40	75.51	64.523		
10,600.00	7,065.77	7,099.92	6,968.43	102.47	35.40	60.60	-1,976.97	-8,391.54	4,771.96	4,696.38	75.58	63.137		
10,700.00	7,065.44	7,101.08	6,969.58	105.15	35.41	60.96	-1,976.87	-8,391.56	4,672.02	4,596.36	75.66	61.750		
10,800.00	7,065.12	7,102.25	6,970.75	107.83	35.41	61.33	-1,976.77	-8,391.58	4,572.09	4,496.35	75.74	60.364		
10,900.00	7,064.79	7,103.44	6,971.93	110.53	35.42	61.71	-1,976.67	-8,391.60	4,472.16	4,396.33	75.83	58.978		
11,000.00	7,064.47	7,104.63	6,973.12	113.23	35.42	62.09	-1,976.57	-8,391.62	4,372.23	4,296.31	75.92	57.593		
11,100.00	7,064.14	7,105.83	6,974.32	115.95	35.43	62.47	-1,976.47	-8,391.65	4,272.30	4,196.29	76.01	56.208		
11,200.00	7,063.82	7,107.04	6,975.53	118.66	35.43	62.86	-1,976.37	-8,391.67	4,172.37	4,096.27	76.10	54.824		
11,300.00	7,063.49	7,108.27	6,976.75	121.39	35.44	63.26	-1,976.27	-8,391.69	4,072.45	3,996.25	76.21	53.440		
11,400.00	7,063.17	7,109.50	6,977.97	124.12	35.44	63.66	-1,976.16	-8,391.71	3,972.53	3,896.22	76.31	52.057		
11,500.00	7,062.84	7,110.75	6,979.21	126.86	35.45	64.07	-1,976.06	-8,391.74	3,872.62	3,796.20	76.42	50.674		
11,600.00	7,062.52	7,112.00	6,980.47	129.60	35.45	64.49	-1,975.95	-8,391.76	3,772.71	3,696.17	76.54	49.292		
11,700.00	7,062.19	7,113.27	6,981.73	132.35	35.46	64.91	-1,975.85	-8,391.79	3,672.81	3,596.15	76.66	47.910		
11,800.00	7,061.87	7,114.55	6,983.00	135.10	35.46	65.33	-1,975.74	-8,391.81	3,572.90	3,496.12	76.79	46.529		
11,900.00	7,061.54	7,115.84	6,984.29	137.85	35.47	65.77	-1,975.63	-8,391.84	3,473.01	3,396.09	76.92	45.149		
12,000.00	7,061.22	7,117.14	6,985.58	140.61	35.47	66.20	-1,975.52	-8,391.86	3,373.12	3,296.05	77.07	43.769		
12,100.00	7,060.89	7,118.45	6,986.89	143.38	35.48	66.65	-1,975.41	-8,391.89	3,273.24	3,196.02	77.22	42.390		
12,200.00	7,060.57	7,119.78	6,988.21	146.15	35.48	67.10	-1,975.30	-8,391.91	3,173.36	3,095.98	77.38	41.011		
12,300.00	7,060.24	7,121.11	6,989.54	148.92	35.49	67.56	-1,975.18	-8,391.94	3,073.49	2,995.94	77.55	39.633		
12,400.00	7,059.92	7,122.46	6,990.88	151.69	35.50	68.02	-1,975.07	-8,391.96	2,973.63	2,895.89	77.73	38.255		
12,500.00	7,059.59	7,123.82	6,992.24	154.47	35.50	68.49	-1,974.95	-8,391.99	2,873.77	2,795.85	77.93	36.878		
12,600.00	7,059.27	7,125.19	6,993.61	157.25	35.51	68.97	-1,974.84	-8,392.02	2,773.93	2,695.79	78.14	35.501		
12,700.00	7,058.94	7,126.58	6,994.99	160.03	35.51	69.45	-1,974.72	-8,392.04	2,674.10	2,595.73	78.36	34.124		
12,800.00	7,058.62	7,127.98	6,996.38	162.82	35.52	69.94	-1,974.60	-8,392.07	2,574.28	2,495.67	78.61	32.748		
12,900.00	7,058.29	7,129.45	6,997.85	165.61	35.53	70.47	-1,974.48	-8,392.10	2,474.47	2,395.60	78.87	31.372		
13,000.00	7,057.97	7,131.10	6,999.50	168.40	35.53	71.05	-1,974.34	-8,392.13	2,374.68	2,295.51	79.17	29.996		
13,100.00	7,057.64	7,132.75	7,001.14	171.19	35.54	71.64	-1,974.20	-8,392.17	2,274.91	2,195.42	79.49	28.620		
13,200.00	7,057.32	7,134.40	7,002.78	173.99	35.55	72.23	-1,974.06	-8,392.20	2,175.15	2,095.31	79.84	27.244		
13,300.00	7,057.00	7,136.05	7,004.42	176.78	35.55	72.82	-1,973.92	-8,392.23	2,075.42	1,995.19	80.23	25.868		
13,400.00	7,056.67	7,137.70	7,006.06	179.58	35.56	73.42	-1,973.78	-8,392.26	1,975.71	1,895.05	80.67	24.492		
13,500.00	7,056.35	7,139.34	7,007.70	182.38	35.57	74.01	-1,973.64	-8,392.30	1,876.04	1,794.88	81.16	23.115		
13,600.00	7,056.02	7,140.99	7,009.34	185.19	35.57	74.61	-1,973.51	-8,392.33	1,776.40	1,694.68	81.72	21.739		
13,700.00	7,055.70	7,142.63	7,010.98	187.99	35.58	75.21	-1,973.37	-8,392.36	1,676.79	1,594.44	82.35	20.361		
13,800.00	7,055.37	7,144.27	7,012.61	190.80	35.59	75.82	-1,973.23	-8,392.40	1,577.24	1,494.16	83.09	18.983		
13,900.00	7,055.05	7,145.91	7,014.25	193.60	35.59	76.42	-1,973.10	-8,392.43	1,477.75	1,393.81	83.94	17.605		
14,000.00	7,054.72	7,147.55	7,015.88	196.41	35.60	77.03	-1,972.96	-8,392.46	1,378.33	1,293.38	84.95	16.226		
14,100.00	7,054.40	7,149.19	7,017.52	199.22	35.61	77.63	-1,972.83	-8,392.49	1,279.00	1,192.85	86.15	14.847		
14,200.00	7,054.07	7,150.83	7,019.15	202.03	35.61	78.24	-1,972.69	-8,392.53	1,179.77	1,092.18	87.60	13.468		
14,300.00	7,053.75	7,152.47	7,020.78	204.85	35.62	78.85	-1,972.56	-8,392.56	1,080.69	991.31	89.38	12.091		
14,400.00	7,053.42	7,154.10	7,022.41	207.66	35.63	79.46	-1,972.42	-8,392.59	981.79	890.19	91.60	10.718		
14,500.00	7,053.10	7,155.74	7,024.04	210.48	35.63	80.08	-1,972.29	-8,392.62	883.14	788.70	94.43	9.352		
14,600.00	7,052.77	7,157.37	7,025.67	213.29	35.64	80.69	-1,972.16	-8,392.65	784.82	686.70	98.13	7.998		
14,700.00	7,052.45	7,159.01	7,027.30	216.11	35.65	81.30	-1,972.03	-8,392.69	686.99	583.91	103.07	6.665		
14,800.00	7,052.12	7,160.64	7,028.92	218.93	35.65	81.92	-1,971.89	-8,392.72	589.88	479.96	109.92	5.367		
14,900.00	7,051.80	7,162.27	7,030.55	221.75	35.66	82.53	-1,971.76	-8,392.75	493.92	374.16	119.76	4.124		
15,000.00	7,051.47	7,163.90	7,032.17	224.57	35.67	83.15	-1,971.63	-8,392.78	399.93	265.35	134.58	2.972		
15,100.00	7,051.15	7,165.53	7,033.80	227.39	35.67	83.76	-1,971.50	-8,392.82	309.73	151.66	158.07	1.959		
15,145.13	7,051.00	7,166.27	7,034.53	228.67	35.67	84.04	-1,971.44	-8,392.83	271.28	98.17	173.10	1.567 CC, ES, SF		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	29.00	3.28	3.28	-81.06	1,437.78	-9,142.51	9,254.92					
100.00	100.00	71.00	100.00	3.28	3.51	-81.06	1,437.78	-9,142.51	9,254.88	9,248.09	6.79	1,362.808		
200.00	200.00	171.00	200.00	3.34	5.35	-81.06	1,437.78	-9,142.51	9,254.88	9,246.19	8.69	1,065.608		
300.00	299.98	270.98	299.98	3.44	8.38	94.56	1,437.78	-9,142.51	9,255.02	9,243.19	11.82	782.861		
400.00	399.84	370.84	399.84	3.59	11.67	94.58	1,437.78	-9,142.51	9,255.43	9,240.18	15.26	606.549		
500.00	499.45	470.45	499.45	3.79	15.04	94.62	1,437.78	-9,142.51	9,256.14	9,237.31	18.83	491.664		
600.00	598.70	569.70	598.70	4.03	18.44	94.68	1,437.78	-9,142.51	9,257.13	9,234.67	22.47	412.051		
700.00	697.47	668.47	697.47	4.31	21.84	94.75	1,437.78	-9,142.51	9,258.43	9,232.28	26.15	354.021		
800.00	795.62	766.62	795.62	4.64	25.23	94.83	1,437.78	-9,142.51	9,260.05	9,230.19	29.87	310.020		
900.00	893.06	864.06	893.06	5.00	28.61	94.92	1,437.78	-9,142.51	9,262.02	9,228.41	33.61	275.605		
1,000.00	989.64	960.64	989.64	5.40	31.96	95.03	1,437.78	-9,142.51	9,264.34	9,226.99	37.35	248.010		
1,100.00	1,085.27	1,056.27	1,085.27	5.83	35.28	95.15	1,437.78	-9,142.51	9,267.05	9,225.95	41.11	225.432		
1,200.00	1,180.44	1,151.44	1,180.44	6.29	38.59	95.33	1,437.78	-9,142.51	9,270.00	9,225.13	44.88	206.572		
1,300.00	1,275.61	1,246.61	1,275.61	6.76	41.90	95.51	1,437.78	-9,142.51	9,273.05	9,224.39	48.66	190.555		
1,400.00	1,370.78	1,341.78	1,370.78	7.26	45.22	95.69	1,437.78	-9,142.51	9,276.20	9,223.73	52.47	176.799		
1,500.00	1,465.95	1,436.95	1,465.95	7.76	48.53	95.87	1,437.78	-9,142.51	9,279.45	9,223.16	56.28	164.865		
1,600.00	1,561.12	1,532.12	1,561.12	8.27	51.84	96.05	1,437.78	-9,142.51	9,282.80	9,222.68	60.11	154.422		
1,700.00	1,656.29	1,627.29	1,656.29	8.80	55.16	96.23	1,437.78	-9,142.51	9,286.25	9,222.30	63.95	145.211		
1,800.00	1,751.46	1,722.46	1,751.46	9.32	58.48	96.41	1,437.78	-9,142.51	9,289.80	9,222.00	67.79	137.030		
1,900.00	1,846.63	1,817.63	1,846.63	9.86	61.80	96.59	1,437.78	-9,142.51	9,293.45	9,221.80	71.64	129.716		
2,000.00	1,941.80	1,912.80	1,941.80	10.40	65.11	96.77	1,437.78	-9,142.51	9,297.20	9,221.70	75.50	123.142		
2,100.00	2,036.96	2,007.96	2,036.96	10.94	68.43	96.95	1,437.78	-9,142.51	9,301.05	9,221.69	79.36	117.201		
2,200.00	2,132.13	2,103.13	2,132.13	11.49	71.75	97.13	1,437.78	-9,142.51	9,305.00	9,221.77	83.22	111.808		
2,300.00	2,227.30	2,201.70	2,227.30	12.04	75.19	97.31	1,437.78	-9,142.51	9,309.05	9,221.84	87.21	106.745		
2,400.00	2,322.47	2,306.53	2,322.47	12.59	78.84	97.48	1,437.78	-9,142.51	9,313.20	9,221.78	91.41	101.879		
2,500.00	2,417.64	2,388.64	2,417.64	13.15	81.71	97.66	1,437.78	-9,142.51	9,317.44	9,222.61	94.83	98.253		
2,600.00	2,512.81	2,483.81	2,512.81	13.70	85.03	97.84	1,437.78	-9,142.51	9,321.79	9,223.09	98.70	94.441		
2,700.00	2,607.98	2,578.98	2,607.98	14.26	88.35	98.02	1,437.78	-9,142.51	9,326.24	9,223.66	102.58	90.916		
2,800.00	2,703.15	2,674.15	2,703.15	14.82	91.67	98.20	1,437.78	-9,142.51	9,330.78	9,224.33	106.46	87.648		
2,900.00	2,798.32	2,769.32	2,798.32	15.38	94.99	98.37	1,437.78	-9,142.51	9,335.43	9,225.09	110.34	84.609		
3,000.00	2,893.49	2,864.49	2,893.49	15.95	98.31	98.55	1,437.78	-9,142.51	9,340.17	9,225.95	114.22	81.777		
3,100.00	2,988.66	2,959.66	2,988.66	16.51	101.63	98.73	1,437.78	-9,142.51	9,345.01	9,226.92	118.10	79.130		
3,200.00	3,083.83	3,054.83	3,083.83	17.07	104.95	98.91	1,437.78	-9,142.51	9,349.95	9,227.97	121.98	76.653		
3,300.00	3,179.00	3,150.00	3,179.00	17.64	108.27	99.08	1,437.78	-9,142.51	9,354.99	9,229.13	125.86	74.328		
3,400.00	3,274.17	3,245.17	3,274.17	18.21	111.59	99.26	1,437.78	-9,142.51	9,360.12	9,230.38	129.74	72.143		
3,500.00	3,369.34	3,340.34	3,369.34	18.77	114.91	99.44	1,437.78	-9,142.51	9,365.36	9,231.73	133.63	70.085		
3,600.00	3,464.51	3,435.51	3,464.51	19.34	118.23	99.61	1,437.78	-9,142.51	9,370.69	9,233.18	137.51	68.144		
3,700.00	3,559.68	3,530.68	3,559.68	19.91	121.55	99.79	1,437.78	-9,142.51	9,376.12	9,234.72	141.40	66.310		
3,800.00	3,654.84	3,625.84	3,654.84	20.48	124.88	99.97	1,437.78	-9,142.51	9,381.64	9,236.36	145.28	64.575		
3,900.00	3,750.01	3,721.01	3,750.01	21.05	128.20	100.14	1,437.78	-9,142.51	9,387.27	9,238.10	149.17	62.931		
4,000.00	3,845.18	3,816.18	3,845.18	21.62	131.52	100.32	1,437.78	-9,142.51	9,392.99	9,239.93	153.05	61.370		
4,100.00	3,940.35	3,911.35	3,940.35	22.19	134.84	100.49	1,437.78	-9,142.51	9,398.81	9,241.87	156.94	59.888		
4,200.00	4,035.52	4,006.52	4,035.52	22.76	138.16	100.67	1,437.78	-9,142.51	9,404.72	9,243.89	160.83	58.477		
4,300.00	4,130.69	4,101.69	4,130.69	23.33	141.48	100.84	1,437.78	-9,142.51	9,410.73	9,246.02	164.71	57.134		
4,400.00	4,225.86	4,203.14	4,225.86	23.91	145.02	101.02	1,437.78	-9,142.51	9,416.84	9,248.02	168.82	55.780		
4,500.00	4,321.03	4,307.97	4,321.03	24.48	148.68	101.19	1,437.78	-9,142.51	9,423.04	9,250.00	173.04	54.454		
4,600.00	4,416.20	4,387.20	4,416.20	25.05	151.45	101.37	1,437.78	-9,142.51	9,429.34	9,252.96	176.38	53.462		
4,700.00	4,511.37	4,482.37	4,511.37	25.62	154.77	101.54	1,437.78	-9,142.51	9,435.73	9,255.47	180.26	52.344		
4,800.00	4,606.54	4,577.54	4,606.54	26.20	158.09	101.72	1,437.78	-9,142.51	9,442.22	9,258.07	184.15	51.275		
4,900.00	4,701.71	4,672.71	4,701.71	26.77	161.41	101.89	1,437.78	-9,142.51	9,448.81	9,260.77	188.04	50.250		
5,000.00	4,796.88	4,767.88	4,796.88	27.34	164.73	102.06	1,437.78	-9,142.51	9,455.49	9,263.56	191.92	49.267		
5,100.00	4,892.05	4,863.05	4,892.05	27.92	168.06	102.24	1,437.78	-9,142.51	9,462.26	9,266.45	195.81	48.323		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,987.22	4,958.22	4,987.22	28.49	171.38	102.41	1,437.78	-9,142.51	9,469.13	9,269.43	199.70	47.417	
5,300.00	5,082.39	5,053.39	5,082.39	29.07	174.70	102.58	1,437.78	-9,142.51	9,476.10	9,272.51	203.59	46.546	
5,400.00	5,177.56	5,148.56	5,177.56	29.64	178.02	102.76	1,437.78	-9,142.51	9,483.16	9,275.68	207.47	45.708	
5,500.00	5,272.72	5,243.72	5,272.72	30.21	181.34	102.93	1,437.78	-9,142.51	9,490.31	9,278.95	211.36	44.901	
5,600.00	5,367.89	5,338.89	5,367.89	30.79	184.66	103.10	1,437.78	-9,142.51	9,497.56	9,282.31	215.25	44.124	
5,700.00	5,463.06	5,434.06	5,463.06	31.36	187.99	103.27	1,437.78	-9,142.51	9,504.90	9,285.76	219.13	43.375	
5,800.00	5,558.23	5,529.23	5,558.23	31.94	191.31	103.44	1,437.78	-9,142.51	9,512.33	9,289.31	223.02	42.652	
5,900.00	5,653.40	5,624.40	5,653.40	32.51	194.63	103.62	1,437.78	-9,142.51	9,519.86	9,292.95	226.91	41.955	
6,000.00	5,748.57	5,719.57	5,748.57	33.09	197.95	103.79	1,437.78	-9,142.51	9,527.48	9,296.68	230.79	41.282	
6,100.00	5,843.74	5,814.74	5,843.74	33.67	201.27	103.96	1,437.78	-9,142.51	9,535.19	9,300.51	234.68	40.631	
6,200.00	5,938.91	5,909.91	5,938.91	34.24	204.60	104.13	1,437.78	-9,142.51	9,543.00	9,304.43	238.56	40.002	
6,300.00	6,034.08	6,005.08	6,034.08	34.82	207.92	104.30	1,437.78	-9,142.51	9,550.89	9,308.44	242.45	39.393	
6,400.00	6,129.25	6,100.25	6,129.25	35.39	211.24	104.47	1,437.78	-9,142.51	9,558.88	9,312.55	246.34	38.804	
6,500.00	6,224.42	6,204.58	6,224.42	35.97	214.88	104.64	1,437.78	-9,142.51	9,566.96	9,316.42	250.54	38.185	
6,600.00	6,319.59	6,309.41	6,319.59	36.54	218.54	104.81	1,437.78	-9,142.51	9,575.14	9,320.37	254.76	37.584	
6,700.00	6,414.76	6,385.76	6,414.76	37.12	221.21	104.98	1,437.78	-9,142.51	9,583.40	9,325.41	257.99	37.146	
6,800.00	6,509.91	6,480.91	6,509.91	37.70	224.53	97.82	1,437.78	-9,142.51	9,591.24	9,329.36	261.88	36.625	
6,900.00	6,603.99	6,574.99	6,603.99	38.26	227.81	75.24	1,437.78	-9,142.51	9,588.38	9,322.66	265.72	36.085	
7,000.00	6,694.76	6,665.76	6,694.76	38.78	230.98	61.53	1,437.78	-9,142.51	9,571.00	9,301.59	269.41	35.525	
7,100.00	6,779.96	6,750.96	6,779.96	39.24	233.95	54.13	1,437.78	-9,142.51	9,539.57	9,266.70	272.87	34.960	
7,200.00	6,857.50	6,828.50	6,857.50	39.65	236.66	50.72	1,437.78	-9,142.51	9,494.91	9,218.90	276.02	34.400	
7,300.00	6,925.48	6,903.52	6,925.48	40.02	239.28	50.17	1,437.78	-9,142.51	9,438.16	9,159.11	279.04	33.823	
7,400.00	6,982.21	6,953.21	6,982.21	40.33	241.01	52.17	1,437.78	-9,142.51	9,370.72	9,089.55	281.16	33.328	
7,500.00	7,026.31	7,002.69	7,026.31	40.63	242.74	57.03	1,437.78	-9,142.51	9,294.26	9,010.99	283.26	32.811	
7,600.00	7,056.68	7,027.68	7,056.68	40.91	243.61	65.67	1,437.78	-9,142.51	9,210.65	8,926.15	284.50	32.375	
7,700.00	7,072.58	7,043.58	7,072.58	41.25	244.17	79.50	1,437.78	-9,142.51	9,121.93	8,836.52	285.41	31.960	
7,800.00	7,074.86	7,045.86	7,074.86	41.69	244.25	90.43	1,437.78	-9,142.51	9,030.36	8,744.52	285.85	31.592	
7,900.00	7,074.54	7,045.54	7,074.54	42.34	244.24	90.43	1,437.78	-9,142.51	8,938.57	8,652.36	286.22	31.230	
8,000.00	7,074.21	7,045.21	7,074.21	43.27	244.23	90.42	1,437.78	-9,142.51	8,846.96	8,560.34	286.62	30.866	
8,100.00	7,073.89	7,044.89	7,073.89	44.47	244.21	90.42	1,437.78	-9,142.51	8,755.53	8,468.46	287.07	30.499	
8,200.00	7,073.57	7,044.57	7,073.57	45.91	244.20	90.41	1,437.78	-9,142.51	8,664.29	8,376.73	287.56	30.130	
8,300.00	7,073.24	7,044.24	7,073.24	47.53	244.19	90.41	1,437.78	-9,142.51	8,573.25	8,285.15	288.10	29.758	
8,400.00	7,072.92	7,043.92	7,072.92	49.31	244.18	90.40	1,437.78	-9,142.51	8,482.41	8,193.73	288.67	29.384	
8,500.00	7,072.59	7,043.59	7,072.59	51.20	244.17	90.40	1,437.78	-9,142.51	8,391.77	8,102.48	289.30	29.008	
8,600.00	7,072.27	7,043.27	7,072.27	53.19	244.16	90.39	1,437.78	-9,142.51	8,301.35	8,011.39	289.96	28.629	
8,700.00	7,071.94	7,042.94	7,071.94	55.27	244.15	90.39	1,437.78	-9,142.51	8,211.16	7,920.48	290.68	28.248	
8,800.00	7,071.62	7,042.62	7,071.62	57.43	244.13	90.38	1,437.78	-9,142.51	8,121.19	7,829.75	291.44	27.866	
8,900.00	7,071.29	7,042.29	7,071.29	59.64	244.12	90.38	1,437.78	-9,142.51	8,031.46	7,739.21	292.25	27.482	
9,000.00	7,070.97	7,041.97	7,070.97	61.92	244.11	90.37	1,437.78	-9,142.51	7,941.98	7,648.87	293.11	27.096	
9,100.00	7,070.64	7,041.64	7,070.64	64.24	244.10	90.37	1,437.78	-9,142.51	7,852.75	7,558.73	294.02	26.708	
9,200.00	7,070.32	7,041.32	7,070.32	66.61	244.09	90.36	1,437.78	-9,142.51	7,763.78	7,468.80	294.98	26.320	
9,300.00	7,069.99	7,040.99	7,069.99	69.01	244.08	90.35	1,437.78	-9,142.51	7,675.08	7,379.09	295.99	25.930	
9,400.00	7,069.67	7,040.67	7,069.67	71.45	244.07	90.35	1,437.78	-9,142.51	7,586.66	7,289.61	297.06	25.540	
9,500.00	7,069.34	7,040.34	7,069.34	73.92	244.06	90.34	1,437.78	-9,142.51	7,498.54	7,200.37	298.17	25.148	
9,600.00	7,069.02	7,040.02	7,069.02	76.42	244.04	90.34	1,437.78	-9,142.51	7,410.72	7,111.37	299.35	24.756	
9,700.00	7,068.69	7,039.69	7,068.69	78.95	244.03	90.33	1,437.78	-9,142.51	7,323.21	7,022.63	300.58	24.364	
9,800.00	7,068.37	7,039.37	7,068.37	81.49	244.02	90.33	1,437.78	-9,142.51	7,236.02	6,934.16	301.86	23.971	
9,900.00	7,068.04	7,039.04	7,068.04	84.06	244.01	90.32	1,437.78	-9,142.51	7,149.17	6,845.96	303.20	23.579	
10,000.00	7,067.72	7,038.72	7,067.72	86.65	244.00	90.32	1,437.78	-9,142.51	7,062.66	6,758.06	304.60	23.186	
10,100.00	7,067.39	7,038.39	7,067.39	89.25	243.99	90.31	1,437.78	-9,142.51	6,976.52	6,670.46	306.06	22.795	
10,200.00	7,067.07	7,038.07	7,067.07	91.87	243.98	90.31	1,437.78	-9,142.51	6,890.75	6,583.17	307.58	22.403	
10,300.00	7,066.74	7,037.74	7,066.74	94.50	243.96	90.30	1,437.78	-9,142.51	6,805.37	6,496.22	309.16	22.013	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,066.42	7,037.42	7,066.42	97.14	243.95	90.30	1,437.78	-9,142.51	6,720.39	6,409.60	310.80	21.623		
10,500.00	7,066.09	7,037.09	7,066.09	99.80	243.94	90.29	1,437.78	-9,142.51	6,635.84	6,323.34	312.50	21.235		
10,600.00	7,065.77	7,036.77	7,065.77	102.47	243.93	90.29	1,437.78	-9,142.51	6,551.71	6,237.45	314.26	20.848		
10,700.00	7,065.44	7,036.44	7,065.44	105.15	243.92	90.28	1,437.78	-9,142.51	6,468.04	6,151.95	316.09	20.463		
10,800.00	7,065.12	7,036.12	7,065.12	107.83	243.91	90.28	1,437.78	-9,142.51	6,384.84	6,066.85	317.99	20.079		
10,900.00	7,064.79	7,035.79	7,064.79	110.53	243.90	90.27	1,437.78	-9,142.51	6,302.13	5,982.18	319.95	19.697		
11,000.00	7,064.47	7,035.47	7,064.47	113.23	243.89	90.27	1,437.78	-9,142.51	6,219.92	5,897.95	321.97	19.318		
11,100.00	7,064.14	7,035.14	7,064.14	115.95	243.87	90.26	1,437.78	-9,142.51	6,138.24	5,814.17	324.07	18.941		
11,200.00	7,063.82	7,034.82	7,063.82	118.66	243.86	90.26	1,437.78	-9,142.51	6,057.12	5,730.88	326.24	18.567		
11,300.00	7,063.49	7,034.49	7,063.49	121.39	243.85	90.25	1,437.78	-9,142.51	5,976.56	5,648.09	328.47	18.195		
11,400.00	7,063.17	7,034.17	7,063.17	124.12	243.84	90.25	1,437.78	-9,142.51	5,896.60	5,565.82	330.78	17.826		
11,500.00	7,062.84	7,033.84	7,062.84	126.86	243.83	90.24	1,437.78	-9,142.51	5,817.26	5,484.10	333.16	17.461		
11,600.00	7,062.52	7,033.52	7,062.52	129.60	243.82	90.23	1,437.78	-9,142.51	5,738.57	5,402.95	335.62	17.098		
11,700.00	7,062.19	7,033.19	7,062.19	132.35	243.81	90.23	1,437.78	-9,142.51	5,660.54	5,322.39	338.15	16.740		
11,800.00	7,061.87	7,032.87	7,061.87	135.10	243.79	90.22	1,437.78	-9,142.51	5,583.22	5,242.47	340.76	16.385		
11,900.00	7,061.54	7,032.54	7,061.54	137.85	243.78	90.22	1,437.78	-9,142.51	5,506.63	5,163.19	343.44	16.034		
12,000.00	7,061.22	7,032.22	7,061.22	140.61	243.77	90.21	1,437.78	-9,142.51	5,430.80	5,084.60	346.20	15.687		
12,100.00	7,060.89	7,031.89	7,060.89	143.38	243.76	90.21	1,437.78	-9,142.51	5,355.77	5,006.73	349.04	15.344		
12,200.00	7,060.57	7,031.57	7,060.57	146.15	243.75	90.20	1,437.78	-9,142.51	5,281.56	4,929.60	351.96	15.006		
12,300.00	7,060.24	7,031.24	7,060.24	148.92	243.74	90.20	1,437.78	-9,142.51	5,208.21	4,853.25	354.96	14.673		
12,400.00	7,059.92	7,030.92	7,059.92	151.69	243.73	90.19	1,437.78	-9,142.51	5,135.77	4,777.73	358.04	14.344		
12,500.00	7,059.59	7,030.59	7,059.59	154.47	243.72	90.19	1,437.78	-9,142.51	5,064.26	4,703.06	361.20	14.021		
12,600.00	7,059.27	7,030.27	7,059.27	157.25	243.70	90.18	1,437.78	-9,142.51	4,993.73	4,629.28	364.44	13.702		
12,700.00	7,058.94	7,029.94	7,058.94	160.03	243.69	90.18	1,437.78	-9,142.51	4,924.22	4,556.45	367.77	13.389		
12,800.00	7,058.62	7,029.62	7,058.62	162.82	243.68	90.17	1,437.78	-9,142.51	4,855.78	4,484.60	371.17	13.082		
12,900.00	7,058.29	7,029.29	7,058.29	165.61	243.67	90.17	1,437.78	-9,142.51	4,788.44	4,413.78	374.66	12.781		
13,000.00	7,057.97	7,028.97	7,057.97	168.40	243.66	90.16	1,437.78	-9,142.51	4,722.27	4,344.04	378.22	12.485		
13,100.00	7,057.64	7,028.64	7,057.64	171.19	243.65	90.16	1,437.78	-9,142.51	4,657.30	4,275.43	381.86	12.196		
13,200.00	7,057.32	7,028.32	7,057.32	173.99	243.64	90.15	1,437.78	-9,142.51	4,593.58	4,208.00	385.58	11.913		
13,300.00	7,057.00	7,028.00	7,057.00	176.78	243.62	90.15	1,437.78	-9,142.51	4,531.18	4,141.81	389.37	11.637		
13,400.00	7,056.67	7,027.67	7,056.67	179.58	243.61	90.14	1,437.78	-9,142.51	4,470.15	4,076.91	393.24	11.368		
13,500.00	7,056.35	7,027.35	7,056.35	182.38	243.60	90.14	1,437.78	-9,142.51	4,410.54	4,013.37	397.17	11.105		
13,600.00	7,056.02	7,027.02	7,056.02	185.19	243.59	90.13	1,437.78	-9,142.51	4,352.41	3,951.24	401.17	10.849		
13,700.00	7,055.70	7,026.70	7,055.70	187.99	243.58	90.13	1,437.78	-9,142.51	4,295.82	3,890.59	405.23	10.601		
13,800.00	7,055.37	7,026.37	7,055.37	190.80	243.57	90.12	1,437.78	-9,142.51	4,240.84	3,831.49	409.35	10.360		
13,900.00	7,055.05	7,026.05	7,055.05	193.60	243.56	90.11	1,437.78	-9,142.51	4,187.52	3,774.00	413.52	10.127		
14,000.00	7,054.72	7,025.72	7,054.72	196.41	243.54	90.11	1,437.78	-9,142.51	4,135.93	3,718.20	417.73	9.901		
14,100.00	7,054.40	7,025.40	7,054.40	199.22	243.53	90.10	1,437.78	-9,142.51	4,086.14	3,664.16	421.98	9.683		
14,200.00	7,054.07	7,025.07	7,054.07	202.03	243.52	90.10	1,437.78	-9,142.51	4,038.21	3,611.95	426.27	9.473		
14,300.00	7,053.75	7,024.75	7,053.75	204.85	243.51	90.09	1,437.78	-9,142.51	3,992.21	3,561.64	430.57	9.272		
14,400.00	7,053.42	7,024.42	7,053.42	207.66	243.50	90.09	1,437.78	-9,142.51	3,948.21	3,513.32	434.89	9.079		
14,500.00	7,053.10	7,024.10	7,053.10	210.48	243.49	90.08	1,437.78	-9,142.51	3,906.28	3,467.07	439.21	8.894		
14,600.00	7,052.77	7,023.77	7,052.77	213.29	243.48	90.08	1,437.78	-9,142.51	3,866.47	3,422.95	443.52	8.718		
14,700.00	7,052.45	7,023.45	7,052.45	216.11	243.47	90.07	1,437.78	-9,142.51	3,828.87	3,381.05	447.82	8.550		
14,800.00	7,052.12	7,023.12	7,052.12	218.93	243.45	90.07	1,437.78	-9,142.51	3,793.53	3,341.44	452.08	8.391		
14,900.00	7,051.80	7,022.80	7,051.80	221.75	243.44	90.06	1,437.78	-9,142.51	3,760.51	3,304.21	456.30	8.241		
15,000.00	7,051.47	7,022.47	7,051.47	224.57	243.43	90.06	1,437.78	-9,142.51	3,729.89	3,269.42	460.47	8.100		
15,100.00	7,051.15	7,022.15	7,051.15	227.39	243.42	90.05	1,437.78	-9,142.51	3,701.71	3,237.15	464.56	7.968		
15,145.13	7,051.00	7,022.00	7,051.00	228.67	243.42	90.05	1,437.78	-9,142.51	3,689.81	3,223.43	466.39	7.912 CC, ES, SF		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15.43	1.43	3.28	3.28	2.76	2,484.18	119.58	2,487.06					
100.00	100.00	126.60	112.60	3.28	3.30	2.75	2,483.90	119.20	2,486.79	2,480.21	6.58	377.854		
200.00	200.00	235.99	221.99	3.34	3.38	2.75	2,483.08	119.07	2,486.03	2,479.32	6.71	370.318		
225.54	225.54	261.69	247.69	3.36	3.40	178.36	2,482.86	119.08	2,485.92	2,479.16	6.76	367.604 CC, ES		
300.00	299.98	332.89	318.88	3.44	3.50	178.36	2,482.24	119.04	2,486.91	2,479.97	6.94	358.481		
400.00	399.84	422.69	408.68	3.59	3.65	178.35	2,481.76	118.50	2,491.58	2,484.34	7.24	344.114		
500.00	499.45	511.25	497.23	3.79	3.83	178.33	2,481.68	117.72	2,500.16	2,492.54	7.62	328.002		
600.00	598.70	601.80	587.78	4.03	4.04	178.31	2,481.96	116.85	2,512.60	2,504.52	8.08	311.033		
700.00	697.47	690.25	676.22	4.31	4.28	178.30	2,482.55	116.40	2,528.87	2,520.28	8.59	294.481		
800.00	795.62	810.09	796.06	4.64	4.62	178.30	2,483.11	116.45	2,548.41	2,539.17	9.24	275.842		
900.00	893.06	889.66	875.63	5.00	4.86	178.30	2,483.43	116.60	2,571.29	2,561.47	9.82	261.892		
1,000.00	989.64	1,006.56	992.54	5.40	5.24	178.32	2,483.83	116.93	2,597.51	2,586.96	10.56	246.087		
1,100.00	1,085.27	1,099.82	1,085.79	5.83	5.56	178.33	2,483.78	117.34	2,626.70	2,615.44	11.25	233.382		
1,200.00	1,180.44	1,188.46	1,174.43	6.29	5.87	178.36	2,483.83	118.01	2,657.49	2,645.54	11.94	222.495		
1,300.00	1,275.61	1,297.76	1,283.73	6.76	6.26	178.40	2,483.80	118.77	2,688.19	2,675.46	12.73	211.092		
1,400.00	1,370.78	1,385.13	1,371.09	7.26	6.58	178.42	2,483.65	118.93	2,718.73	2,705.27	13.46	201.974		
1,500.00	1,465.95	1,491.80	1,477.76	7.76	6.98	178.44	2,483.47	119.04	2,749.27	2,734.99	14.28	192.511		
1,600.00	1,561.12	1,596.94	1,582.90	8.27	7.38	178.47	2,482.81	119.30	2,779.38	2,764.27	15.11	183.923		
1,700.00	1,656.29	1,691.77	1,677.73	8.80	7.75	178.48	2,482.08	119.10	2,809.33	2,793.42	15.91	176.563		
1,800.00	1,751.46	1,793.43	1,779.38	9.32	8.14	178.48	2,481.24	118.40	2,839.21	2,822.46	16.75	169.492		
1,900.00	1,846.63	1,875.97	1,861.92	9.86	8.47	178.48	2,480.62	117.68	2,869.16	2,851.64	17.51	163.815		
2,000.00	1,941.80	1,980.71	1,966.65	10.40	8.88	178.48	2,480.05	116.85	2,899.31	2,880.92	18.39	157.696		
2,100.00	2,036.96	2,068.30	2,054.24	10.94	9.23	178.48	2,479.38	116.08	2,929.24	2,910.05	19.18	152.692		
2,200.00	2,132.13	2,153.57	2,139.50	11.49	9.57	178.47	2,479.10	114.96	2,959.55	2,939.58	19.98	148.156		
2,300.00	2,227.30	2,234.73	2,220.66	12.04	9.90	178.47	2,479.09	114.13	2,990.19	2,969.43	20.75	144.098		
2,400.00	2,322.47	2,309.72	2,295.64	12.59	10.20	178.47	2,479.55	113.55	3,021.42	2,999.93	21.50	140.548		
2,500.00	2,417.64	2,392.20	2,378.11	13.15	10.54	178.47	2,480.49	112.64	3,053.15	3,030.87	22.28	137.021		
2,600.00	2,512.81	2,470.13	2,456.02	13.70	10.85	178.45	2,481.77	111.47	3,085.33	3,062.29	23.05	133.877		
2,700.00	2,607.98	2,549.45	2,535.32	14.26	11.18	178.44	2,483.50	110.29	3,118.02	3,094.20	23.82	130.912		
2,800.00	2,703.15	2,648.06	2,633.88	14.82	11.59	178.43	2,485.99	108.73	3,151.03	3,126.34	24.69	127.612		
2,900.00	2,798.32	2,750.86	2,736.65	15.38	12.01	178.41	2,488.03	107.14	3,183.52	3,157.93	25.59	124.394		
3,000.00	2,893.49	2,847.83	2,833.57	15.95	12.41	178.39	2,490.07	105.31	3,216.13	3,189.66	26.46	121.526		
3,100.00	2,988.66	2,954.22	2,939.92	16.51	12.85	178.36	2,491.94	102.86	3,248.36	3,220.97	27.39	118.595		
3,200.00	3,083.83	3,042.41	3,028.08	17.07	13.22	178.34	2,493.36	101.04	3,280.50	3,252.28	28.22	116.247		
3,300.00	3,179.00	3,129.18	3,114.82	17.64	13.58	178.32	2,495.11	99.36	3,313.01	3,283.97	29.04	114.073		
3,400.00	3,274.17	3,225.63	3,211.24	18.21	13.98	178.31	2,496.90	97.76	3,345.38	3,315.46	29.92	111.811		
3,500.00	3,369.34	3,300.01	3,285.59	18.77	14.29	178.30	2,498.64	96.58	3,378.20	3,347.53	30.67	110.130		
3,600.00	3,464.51	3,367.77	3,353.31	19.34	14.57	178.29	2,500.70	95.62	3,411.67	3,380.28	31.39	108.687		
3,700.00	3,559.68	3,489.70	3,475.17	19.91	15.08	178.29	2,504.53	94.68	3,445.38	3,412.96	32.42	106.287		
3,800.00	3,654.84	3,574.35	3,559.80	20.48	15.44	178.30	2,506.67	94.48	3,478.46	3,445.23	33.23	104.680		
3,900.00	3,750.01	3,721.23	3,706.64	21.05	16.05	178.30	2,509.72	93.34	3,511.11	3,476.71	34.40	102.062		
4,000.00	3,845.18	3,808.07	3,793.46	21.62	16.42	178.30	2,510.96	92.53	3,543.11	3,507.88	35.23	100.565		
4,100.00	3,940.35	3,928.24	3,913.61	22.19	16.92	178.28	2,512.44	90.37	3,574.90	3,538.64	36.25	98.605		
4,200.00	4,035.52	4,046.67	4,032.00	22.76	17.42	178.24	2,512.95	87.37	3,605.86	3,568.59	37.27	96.752		
4,300.00	4,130.69	4,135.75	4,121.04	23.33	17.79	178.22	2,513.17	84.88	3,636.66	3,598.54	38.12	95.408		
4,400.00	4,225.86	4,215.96	4,201.23	23.91	18.13	178.20	2,513.65	83.11	3,667.82	3,628.91	38.91	94.256		
4,500.00	4,321.03	4,307.24	4,292.49	24.48	18.51	178.19	2,514.39	81.45	3,699.20	3,659.43	39.77	93.007		
4,600.00	4,416.20	4,380.14	4,365.38	25.05	18.82	178.18	2,515.23	80.50	3,730.92	3,690.40	40.53	92.064		
4,700.00	4,511.37	4,464.64	4,449.86	25.62	19.18	178.18	2,516.57	79.76	3,763.07	3,721.73	41.34	91.017		
4,800.00	4,606.54	4,543.14	4,528.35	26.20	19.51	178.18	2,518.01	78.79	3,795.47	3,753.34	42.13	90.094		
4,900.00	4,701.71	4,629.33	4,614.51	26.77	19.87	178.17	2,520.09	77.38	3,828.36	3,785.40	42.96	89.120		
5,000.00	4,796.88	4,756.36	4,741.49	27.34	20.41	178.15	2,522.47	75.05	3,860.72	3,816.68	44.04	87.671		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	4,884.04	4,869.12	27.92	20.95	178.12	2,523.97	72.07	3,892.44	3,847.32	45.12	86.271		
5,200.00	4,987.22	4,966.19	4,951.24	28.49	21.30	178.10	2,524.61	69.87	3,923.77	3,877.84	45.93	85.434		
5,300.00	5,082.39	5,066.12	5,051.12	29.07	21.72	178.07	2,525.73	67.04	3,955.41	3,908.56	46.84	84.437		
5,400.00	5,177.56	5,157.49	5,142.47	29.64	22.11	178.06	2,526.48	65.15	3,986.79	3,939.08	47.71	83.565		
5,500.00	5,272.72	5,240.21	5,225.18	30.21	22.46	178.05	2,527.40	64.12	4,018.48	3,969.96	48.52	82.821		
5,600.00	5,367.89	5,329.43	5,314.38	30.79	22.84	178.05	2,528.59	62.95	4,050.38	4,001.01	49.37	82.039		
5,700.00	5,463.06	5,424.38	5,409.32	31.36	23.24	178.05	2,529.86	62.35	4,082.31	4,032.05	50.26	81.227		
5,800.00	5,558.23	5,512.58	5,497.51	31.94	23.61	178.06	2,531.08	62.09	4,114.30	4,063.19	51.10	80.510		
5,900.00	5,653.40	5,586.36	5,571.28	32.51	23.92	178.07	2,532.35	62.13	4,146.63	4,094.77	51.86	79.963		
6,000.00	5,748.57	5,702.46	5,687.36	33.09	24.42	178.10	2,534.41	62.93	4,179.04	4,126.16	52.88	79.032		
6,100.00	5,843.74	5,837.88	5,822.77	33.67	24.99	178.13	2,535.63	63.73	4,210.59	4,156.57	54.02	77.946		
6,200.00	5,938.91	5,971.74	5,956.64	34.24	25.56	178.15	2,535.80	63.57	4,241.43	4,186.28	55.15	76.910		
6,300.00	6,034.08	6,090.00	6,074.89	34.82	26.06	178.16	2,534.93	63.06	4,271.39	4,215.21	56.18	76.033		
6,400.00	6,129.25	6,190.86	6,175.74	35.39	26.48	178.17	2,533.92	62.53	4,301.10	4,244.00	57.10	75.322		
6,500.00	6,224.42	6,278.56	6,263.44	35.97	26.85	178.17	2,533.06	61.99	4,330.83	4,272.88	57.95	74.736		
6,600.00	6,319.59	6,363.37	6,348.24	36.54	27.21	178.17	2,532.43	61.15	4,360.78	4,302.00	58.78	74.193		
6,700.00	6,414.76	6,437.62	6,422.48	37.12	27.53	178.17	2,532.12	60.15	4,391.02	4,331.48	59.54	73.752		
6,800.00	6,509.91	6,507.92	6,492.78	37.70	27.83	170.11	2,532.28	59.15	4,421.88	4,361.60	60.27	73.363		
6,900.00	6,603.99	6,630.51	6,615.36	38.26	28.35	144.52	2,532.37	57.66	4,452.88	4,391.55	61.34	72.599		
7,000.00	6,694.76	6,730.47	6,715.30	38.78	28.78	127.52	2,532.10	56.10	4,483.46	4,421.22	62.24	72.037		
7,100.00	6,779.96	6,822.23	6,807.05	39.24	29.17	116.52	2,531.68	54.62	4,513.29	4,450.22	63.07	71.559		
7,200.00	6,857.50	6,899.86	6,884.67	39.65	29.50	108.97	2,531.30	53.39	4,542.17	4,478.35	63.81	71.181		
7,300.00	6,925.48	6,965.43	6,950.23	40.02	29.78	103.48	2,531.00	52.53	4,569.88	4,505.39	64.50	70.852		
7,400.00	6,982.21	7,023.96	7,008.76	40.33	30.03	99.35	2,530.73	52.07	4,596.26	4,531.05	65.21	70.486		
7,500.00	7,026.31	7,074.89	7,059.68	40.63	30.24	96.16	2,530.42	51.85	4,621.02	4,555.04	65.98	70.037		
7,600.00	7,056.68	7,117.75	7,102.54	40.91	30.42	93.68	2,530.08	51.79	4,644.00	4,577.16	66.85	69.472		
7,700.00	7,072.58	7,151.24	7,136.03	41.25	30.57	91.79	2,529.69	51.75	4,664.94	4,597.13	67.82	68.787		
7,800.00	7,074.86	7,156.22	7,141.02	41.69	30.59	90.79	2,529.62	51.75	4,684.00	4,615.25	68.75	68.126		
7,900.00	7,074.54	7,155.74	7,140.54	42.34	30.58	90.78	2,529.63	51.75	4,704.34	4,634.53	69.80	67.393		
8,000.00	7,074.21	7,155.26	7,140.06	43.27	30.58	90.78	2,529.63	51.75	4,726.70	4,655.72	70.98	66.591		
8,100.00	7,073.89	7,154.78	7,139.57	44.47	30.58	90.77	2,529.64	51.75	4,751.07	4,678.80	72.27	65.744		
8,200.00	7,073.57	7,154.30	7,139.09	45.91	30.58	90.76	2,529.65	51.75	4,777.40	4,703.76	73.64	64.874		
8,300.00	7,073.24	7,153.82	7,138.62	47.53	30.58	90.76	2,529.65	51.75	4,805.67	4,730.58	75.09	63.997		
8,400.00	7,072.92	7,153.34	7,138.14	49.31	30.57	90.75	2,529.66	51.75	4,835.85	4,759.25	76.60	63.128		
8,500.00	7,072.59	7,152.87	7,137.66	51.20	30.57	90.75	2,529.67	51.75	4,867.89	4,789.73	78.16	62.278		
8,600.00	7,072.27	7,152.39	7,137.18	53.19	30.57	90.74	2,529.67	51.75	4,901.76	4,822.01	79.76	61.458		
8,700.00	7,071.94	7,151.91	7,136.71	55.27	30.57	90.73	2,529.68	51.75	4,937.43	4,856.05	81.38	60.672		
8,800.00	7,071.62	7,151.44	7,136.23	57.43	30.57	90.73	2,529.68	51.75	4,974.85	4,891.84	83.02	59.927		
8,900.00	7,071.29	7,150.96	7,135.76	59.64	30.56	90.72	2,529.69	51.75	5,013.99	4,929.33	84.66	59.225		
9,000.00	7,070.97	7,150.49	7,135.28	61.92	30.56	90.72	2,529.70	51.75	5,054.80	4,968.49	86.31	58.568		
9,100.00	7,070.64	7,150.01	7,134.81	64.24	30.56	90.71	2,529.70	51.76	5,097.25	5,009.30	87.95	57.957		
9,200.00	7,070.32	7,149.54	7,134.34	66.61	30.56	90.70	2,529.71	51.76	5,141.29	5,051.71	89.58	57.393		
9,300.00	7,069.99	7,149.07	7,133.86	69.01	30.56	90.70	2,529.72	51.76	5,186.89	5,095.69	91.20	56.875		
9,400.00	7,069.67	7,148.60	7,133.39	71.45	30.55	90.69	2,529.72	51.76	5,234.00	5,141.20	92.80	56.403		
9,500.00	7,069.34	7,148.13	7,132.92	73.92	30.55	90.69	2,529.73	51.76	5,282.58	5,188.20	94.38	55.974		
9,600.00	7,069.02	7,147.66	7,132.45	76.42	30.55	90.68	2,529.74	51.76	5,332.59	5,236.66	95.93	55.589		
9,700.00	7,068.69	7,147.19	7,131.98	78.95	30.55	90.68	2,529.74	51.76	5,384.00	5,286.54	97.46	55.244		
9,800.00	7,068.37	7,146.72	7,131.52	81.49	30.55	90.67	2,529.75	51.76	5,436.76	5,337.81	98.96	54.940		
9,900.00	7,068.04	7,146.25	7,131.05	84.06	30.54	90.66	2,529.75	51.76	5,490.84	5,390.41	100.43	54.673		
10,000.00	7,067.72	7,145.79	7,130.58	86.65	30.54	90.66	2,529.76	51.76	5,546.19	5,444.32	101.87	54.442		
10,100.00	7,067.39	7,145.32	7,130.12	89.25	30.54	90.65	2,529.77	51.76	5,602.78	5,499.50	103.28	54.247		
10,200.00	7,067.07	7,144.85	7,129.65	91.87	30.54	90.65	2,529.77	51.76	5,660.57	5,555.91	104.66	54.084		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,144.39	7,129.18	94.50	30.54	90.64	2,529.78	51.76	5,719.53	5,613.52	106.01	53.953		
10,400.00	7,066.42	7,143.93	7,128.72	97.14	30.53	90.63	2,529.78	51.76	5,779.62	5,672.29	107.32	53.852		
10,500.00	7,066.09	7,143.46	7,128.26	99.80	30.53	90.63	2,529.79	51.76	5,840.79	5,732.19	108.61	53.780		
10,600.00	7,065.77	7,143.00	7,127.79	102.47	30.53	90.62	2,529.80	51.76	5,903.03	5,793.18	109.86	53.734		
10,700.00	7,065.44	7,142.54	7,127.33	105.15	30.53	90.62	2,529.80	51.76	5,966.30	5,855.23	111.07	53.715 SF		
10,800.00	7,065.12	7,142.08	7,126.87	107.83	30.53	90.61	2,529.81	51.76	6,030.56	5,918.30	112.26	53.719		
10,900.00	7,064.79	7,141.62	7,126.41	110.53	30.52	90.61	2,529.81	51.76	6,095.78	5,982.37	113.42	53.747		
11,000.00	7,064.47	7,141.16	7,125.95	113.23	30.52	90.60	2,529.82	51.76	6,161.94	6,047.40	114.54	53.798		
11,100.00	7,064.14	7,140.70	7,125.49	115.95	30.52	90.59	2,529.83	51.76	6,229.00	6,113.37	115.63	53.869		
11,200.00	7,063.82	7,140.24	7,125.03	118.66	30.52	90.59	2,529.83	51.76	6,296.93	6,180.23	116.70	53.960		
11,300.00	7,063.49	7,139.78	7,124.57	121.39	30.52	90.58	2,529.84	51.76	6,365.71	6,247.98	117.73	54.070		
11,400.00	7,063.17	7,139.32	7,124.12	124.12	30.51	90.58	2,529.84	51.76	6,435.31	6,316.57	118.74	54.198		
11,500.00	7,062.84	7,138.87	7,123.66	126.86	30.51	90.57	2,529.85	51.76	6,505.70	6,385.98	119.71	54.343		
11,600.00	7,062.52	7,138.41	7,123.21	129.60	30.51	90.57	2,529.85	51.77	6,576.86	6,456.19	120.66	54.505		
11,700.00	7,062.19	7,137.95	7,122.75	132.35	30.51	90.56	2,529.86	51.77	6,648.76	6,527.17	121.59	54.682		
11,800.00	7,061.87	7,137.50	7,122.30	135.10	30.51	90.55	2,529.86	51.77	6,721.37	6,598.89	122.49	54.875		
11,900.00	7,061.54	7,137.05	7,121.84	137.85	30.51	90.55	2,529.87	51.77	6,794.69	6,671.33	123.36	55.081		
12,000.00	7,061.22	7,136.59	7,121.39	140.61	30.50	90.54	2,529.88	51.77	6,868.68	6,744.47	124.21	55.301		
12,100.00	7,060.89	7,136.14	7,120.94	143.38	30.50	90.54	2,529.88	51.77	6,943.32	6,818.29	125.03	55.533		
12,200.00	7,060.57	7,135.69	7,120.48	146.15	30.50	90.53	2,529.89	51.77	7,018.59	6,892.76	125.83	55.778		
12,300.00	7,060.24	7,135.24	7,120.03	148.92	30.50	90.53	2,529.89	51.77	7,094.47	6,967.86	126.61	56.034		
12,400.00	7,059.92	7,134.79	7,119.58	151.69	30.50	90.52	2,529.90	51.77	7,170.94	7,043.58	127.37	56.302		
12,500.00	7,059.59	7,134.34	7,119.13	154.47	30.49	90.52	2,529.90	51.77	7,247.99	7,119.89	128.10	56.581		
12,600.00	7,059.27	7,133.89	7,118.68	157.25	30.49	90.51	2,529.91	51.77	7,325.59	7,196.77	128.81	56.869		
12,700.00	7,058.94	7,133.44	7,118.24	160.03	30.49	90.50	2,529.91	51.77	7,403.73	7,274.22	129.51	57.167		
12,800.00	7,058.62	7,132.99	7,117.79	162.82	30.49	90.50	2,529.92	51.77	7,482.38	7,352.20	130.18	57.475		
12,900.00	7,058.29	7,132.54	7,117.34	165.61	30.49	90.49	2,529.92	51.77	7,561.55	7,430.70	130.84	57.792		
13,000.00	7,057.97	7,132.10	7,116.89	168.40	30.48	90.49	2,529.93	51.77	7,641.20	7,509.72	131.48	58.117		
13,100.00	7,057.64	7,131.65	7,116.45	171.19	30.48	90.48	2,529.93	51.77	7,721.32	7,589.22	132.10	58.450		
13,200.00	7,057.32	7,131.21	7,116.00	173.99	30.48	90.48	2,529.94	51.77	7,801.91	7,669.20	132.71	58.791		
13,300.00	7,057.00	7,130.76	7,115.56	176.78	30.48	90.47	2,529.94	51.77	7,882.93	7,749.64	133.29	59.140		
13,400.00	7,056.67	7,130.32	7,115.11	179.58	30.48	90.47	2,529.95	51.77	7,964.39	7,830.53	133.87	59.496		
13,500.00	7,056.35	7,129.87	7,114.67	182.38	30.47	90.46	2,529.95	51.77	8,046.27	7,911.85	134.42	59.858		
13,600.00	7,056.02	7,129.43	7,114.23	185.19	30.47	90.45	2,529.96	51.77	8,128.56	7,993.59	134.96	60.228		
13,700.00	7,055.70	7,128.99	7,113.79	187.99	30.47	90.45	2,529.96	51.77	8,211.23	8,075.74	135.49	60.604		
13,800.00	7,055.37	7,128.55	7,113.35	190.80	30.47	90.44	2,529.97	51.77	8,294.29	8,158.29	136.00	60.985		
13,900.00	7,055.05	7,128.11	7,112.90	193.60	30.47	90.44	2,529.97	51.78	8,377.72	8,241.21	136.50	61.373		
14,000.00	7,054.72	7,127.67	7,112.46	196.41	30.47	90.43	2,529.98	51.78	8,461.51	8,324.51	136.99	61.766		
14,100.00	7,054.40	7,127.23	7,112.03	199.22	30.46	90.43	2,529.98	51.78	8,545.64	8,408.18	137.47	62.165		
14,200.00	7,054.07	7,126.79	7,111.59	202.03	30.46	90.42	2,529.99	51.78	8,630.12	8,492.19	137.93	62.569		
14,300.00	7,053.75	7,126.35	7,111.15	204.85	30.46	90.42	2,529.99	51.78	8,714.92	8,576.54	138.38	62.978		
14,400.00	7,053.42	7,125.91	7,110.71	207.66	30.46	90.41	2,530.00	51.78	8,800.04	8,661.22	138.82	63.392		
14,500.00	7,053.10	7,125.48	7,110.27	210.48	30.46	90.40	2,530.00	51.78	8,885.47	8,746.23	139.25	63.810		
14,600.00	7,052.77	7,125.04	7,109.84	213.29	30.45	90.40	2,530.01	51.78	8,971.21	8,831.54	139.67	64.233		
14,700.00	7,052.45	7,124.61	7,109.40	216.11	30.45	90.39	2,530.01	51.78	9,057.23	8,917.16	140.07	64.660		
14,800.00	7,052.12	7,124.17	7,108.97	218.93	30.45	90.39	2,530.02	51.78	9,143.54	9,003.07	140.47	65.092		
14,900.00	7,051.80	7,123.74	7,108.53	221.75	30.45	90.38	2,530.02	51.78	9,230.13	9,089.27	140.86	65.527		
15,000.00	7,051.47	7,123.30	7,108.10	224.57	30.45	90.38	2,530.02	51.78	9,316.99	9,175.75	141.24	65.966		
15,100.00	7,051.15	7,122.87	7,107.67	227.39	30.45	90.37	2,530.03	51.78	9,404.10	9,262.49	141.61	66.409		
15,145.13	7,051.00	7,122.68	7,107.47	228.67	30.44	90.37	2,530.03	51.78	9,443.50	9,301.73	141.77	66.610		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	59.00	3.28	3.28	-165.15	-3,939.94	-1,044.31	4,076.42					
100.00	100.00	41.00	100.00	3.28	3.36	-165.15	-3,939.94	-1,044.31	4,075.99	4,069.35	6.64	613.679		
200.00	200.00	141.00	200.00	3.34	4.57	-165.15	-3,939.94	-1,044.31	4,075.99	4,068.09	7.90	515.735		
300.00	299.98	240.98	299.98	3.44	7.43	10.47	-3,939.94	-1,044.31	4,074.27	4,063.40	10.87	374.808		
400.00	399.84	340.84	399.84	3.59	10.67	10.50	-3,939.94	-1,044.31	4,069.13	4,054.87	14.26	285.314		
500.00	499.45	440.45	499.45	3.79	14.02	10.55	-3,939.94	-1,044.31	4,060.56	4,042.75	17.81	227.967		
600.00	598.70	539.70	598.70	4.03	17.41	10.63	-3,939.94	-1,044.31	4,048.58	4,027.13	21.44	188.819		
700.00	697.47	638.47	697.47	4.31	20.80	10.73	-3,939.94	-1,044.31	4,033.20	4,008.08	25.12	160.584		
800.00	795.62	736.62	795.62	4.64	24.19	10.85	-3,939.94	-1,044.31	4,014.44	3,985.63	28.81	139.320		
900.00	893.06	834.06	893.06	5.00	27.57	11.00	-3,939.94	-1,044.31	3,992.34	3,959.81	32.52	122.751		
1,000.00	989.64	930.64	989.64	5.40	30.92	11.17	-3,939.94	-1,044.31	3,966.91	3,930.67	36.23	109.483		
1,100.00	1,085.27	1,026.27	1,085.27	5.83	34.24	11.36	-3,939.94	-1,044.31	3,938.19	3,898.25	39.94	98.604		
1,200.00	1,180.44	1,121.44	1,180.44	6.29	37.55	11.45	-3,939.94	-1,044.31	3,908.04	3,864.41	43.63	89.571		
1,300.00	1,275.61	1,216.61	1,275.61	6.76	40.86	11.54	-3,939.94	-1,044.31	3,877.89	3,830.56	47.34	81.918		
1,400.00	1,370.78	1,311.78	1,370.78	7.26	44.17	11.63	-3,939.94	-1,044.31	3,847.76	3,796.70	51.06	75.355		
1,500.00	1,465.95	1,406.95	1,465.95	7.76	47.48	11.73	-3,939.94	-1,044.31	3,817.63	3,762.83	54.80	69.669		
1,600.00	1,561.12	1,502.12	1,561.12	8.27	50.80	11.82	-3,939.94	-1,044.31	3,787.51	3,728.97	58.54	64.699		
1,700.00	1,656.29	1,602.71	1,656.29	8.80	54.30	11.92	-3,939.94	-1,044.31	3,757.40	3,694.92	62.48	60.135		
1,800.00	1,751.46	1,707.54	1,751.46	9.32	57.96	12.01	-3,939.94	-1,044.31	3,727.31	3,660.73	66.58	55.983		
1,900.00	1,846.63	1,787.63	1,846.63	9.86	60.75	12.11	-3,939.94	-1,044.31	3,697.22	3,627.40	69.82	52.954		
2,000.00	1,941.80	1,882.80	1,941.80	10.40	64.07	12.21	-3,939.94	-1,044.31	3,667.14	3,593.55	73.59	49.832		
2,100.00	2,036.96	1,977.96	2,036.96	10.94	67.39	12.31	-3,939.94	-1,044.31	3,637.07	3,559.70	77.37	47.011		
2,200.00	2,132.13	2,073.13	2,132.13	11.49	70.70	12.42	-3,939.94	-1,044.31	3,607.01	3,525.87	81.15	44.451		
2,300.00	2,227.30	2,168.30	2,227.30	12.04	74.02	12.52	-3,939.94	-1,044.31	3,576.97	3,492.04	84.93	42.117		
2,400.00	2,322.47	2,263.47	2,322.47	12.59	77.34	12.63	-3,939.94	-1,044.31	3,546.93	3,458.22	88.71	39.981		
2,500.00	2,417.64	2,358.64	2,417.64	13.15	80.66	12.74	-3,939.94	-1,044.31	3,516.91	3,424.40	92.50	38.019		
2,600.00	2,512.81	2,453.81	2,512.81	13.70	83.98	12.85	-3,939.94	-1,044.31	3,486.90	3,390.60	96.29	36.211		
2,700.00	2,607.98	2,548.98	2,607.98	14.26	87.30	12.96	-3,939.94	-1,044.31	3,456.90	3,356.81	100.09	34.539		
2,800.00	2,703.15	2,644.15	2,703.15	14.82	90.62	13.08	-3,939.94	-1,044.31	3,426.91	3,323.03	103.88	32.988		
2,900.00	2,798.32	2,739.32	2,798.32	15.38	93.94	13.20	-3,939.94	-1,044.31	3,396.93	3,289.25	107.68	31.546		
3,000.00	2,893.49	2,834.49	2,893.49	15.95	97.26	13.31	-3,939.94	-1,044.31	3,366.97	3,255.49	111.48	30.203		
3,100.00	2,988.66	2,929.66	2,988.66	16.51	100.58	13.44	-3,939.94	-1,044.31	3,337.03	3,221.75	115.28	28.947		
3,200.00	3,083.83	3,024.83	3,083.83	17.07	103.90	13.56	-3,939.94	-1,044.31	3,307.09	3,188.01	119.08	27.772		
3,300.00	3,179.00	3,120.00	3,179.00	17.64	107.22	13.68	-3,939.94	-1,044.31	3,277.17	3,154.29	122.88	26.669		
3,400.00	3,274.17	3,215.17	3,274.17	18.21	110.54	13.81	-3,939.94	-1,044.31	3,247.27	3,120.58	126.69	25.632		
3,500.00	3,369.34	3,310.34	3,369.34	18.77	113.87	13.94	-3,939.94	-1,044.31	3,217.38	3,086.88	130.49	24.655		
3,600.00	3,464.51	3,405.51	3,464.51	19.34	117.19	14.08	-3,939.94	-1,044.31	3,187.50	3,053.20	134.30	23.734		
3,700.00	3,559.68	3,500.68	3,559.68	19.91	120.51	14.21	-3,939.94	-1,044.31	3,157.65	3,019.54	138.11	22.864		
3,800.00	3,654.84	3,604.16	3,654.84	20.48	124.12	14.35	-3,939.94	-1,044.31	3,127.80	2,985.60	142.21	21.995		
3,900.00	3,750.01	3,708.99	3,750.01	21.05	127.78	14.49	-3,939.94	-1,044.31	3,097.98	2,951.63	146.35	21.168		
4,000.00	3,845.18	3,786.18	3,845.18	21.62	130.47	14.63	-3,939.94	-1,044.31	3,068.17	2,918.64	149.54	20.518		
4,100.00	3,940.35	3,881.35	3,940.35	22.19	133.79	14.78	-3,939.94	-1,044.31	3,038.38	2,885.04	153.35	19.814		
4,200.00	4,035.52	3,976.52	4,035.52	22.76	137.11	14.93	-3,939.94	-1,044.31	3,008.61	2,851.45	157.16	19.144		
4,300.00	4,130.69	4,071.69	4,130.69	23.33	140.44	15.08	-3,939.94	-1,044.31	2,978.86	2,817.89	160.97	18.505		
4,400.00	4,225.86	4,166.86	4,225.86	23.91	143.76	15.23	-3,939.94	-1,044.31	2,949.13	2,784.34	164.79	17.897		
4,500.00	4,321.03	4,262.03	4,321.03	24.48	147.08	15.39	-3,939.94	-1,044.31	2,919.41	2,750.81	168.60	17.316		
4,600.00	4,416.20	4,357.20	4,416.20	25.05	150.40	15.55	-3,939.94	-1,044.31	2,889.72	2,717.31	172.41	16.760		
4,700.00	4,511.37	4,452.37	4,511.37	25.62	153.72	15.72	-3,939.94	-1,044.31	2,860.05	2,683.82	176.23	16.229		
4,800.00	4,606.54	4,547.54	4,606.54	26.20	157.04	15.88	-3,939.94	-1,044.31	2,830.40	2,650.35	180.05	15.720		
4,900.00	4,701.71	4,642.71	4,701.71	26.77	160.37	16.05	-3,939.94	-1,044.31	2,800.78	2,616.91	183.86	15.233		
5,000.00	4,796.88	4,737.88	4,796.88	27.34	163.69	16.23	-3,939.94	-1,044.31	2,771.17	2,583.49	187.68	14.765		
5,100.00	4,892.05	4,833.05	4,892.05	27.92	167.01	16.41	-3,939.94	-1,044.31	2,741.60	2,550.09	191.50	14.316		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,928.22	4,987.22	28.49	170.33	16.59	-3,939.94	-1,044.31	2,712.04	2,516.72	195.32	13.885		
5,300.00	5,082.39	5,023.39	5,082.39	29.07	173.65	16.78	-3,939.94	-1,044.31	2,682.52	2,483.37	199.14	13.470		
5,400.00	5,177.56	5,118.56	5,177.56	29.64	176.97	16.97	-3,939.94	-1,044.31	2,653.01	2,450.05	202.96	13.071		
5,500.00	5,272.72	5,213.72	5,272.72	30.21	180.30	17.16	-3,939.94	-1,044.31	2,623.54	2,416.76	206.79	12.687		
5,600.00	5,367.89	5,308.89	5,367.89	30.79	183.62	17.36	-3,939.94	-1,044.31	2,594.10	2,383.49	210.61	12.317		
5,700.00	5,463.06	5,404.06	5,463.06	31.36	186.94	17.57	-3,939.94	-1,044.31	2,564.68	2,350.25	214.43	11.960		
5,800.00	5,558.23	5,500.77	5,558.23	31.94	190.31	17.77	-3,939.94	-1,044.31	2,535.30	2,316.99	218.31	11.613		
5,900.00	5,653.40	5,605.60	5,653.40	32.51	193.97	17.99	-3,939.94	-1,044.31	2,505.95	2,283.47	222.47	11.264		
6,000.00	5,748.57	5,689.57	5,748.57	33.09	196.91	18.21	-3,939.94	-1,044.31	2,476.63	2,250.72	225.91	10.963		
6,100.00	5,843.74	5,784.74	5,843.74	33.67	200.23	18.43	-3,939.94	-1,044.31	2,447.34	2,217.60	229.74	10.653		
6,200.00	5,938.91	5,879.91	5,938.91	34.24	203.55	18.66	-3,939.94	-1,044.31	2,418.09	2,184.53	233.57	10.353		
6,300.00	6,034.08	5,975.08	6,034.08	34.82	206.87	18.89	-3,939.94	-1,044.31	2,388.88	2,151.48	237.39	10.063		
6,400.00	6,129.25	6,070.25	6,129.25	35.39	210.19	19.13	-3,939.94	-1,044.31	2,359.70	2,118.48	241.22	9.782		
6,500.00	6,224.42	6,165.42	6,224.42	35.97	213.51	19.38	-3,939.94	-1,044.31	2,330.56	2,085.51	245.06	9.510		
6,600.00	6,319.59	6,260.59	6,319.59	36.54	216.84	19.63	-3,939.94	-1,044.31	2,301.47	2,052.58	248.89	9.247		
6,700.00	6,414.76	6,355.76	6,414.76	37.12	220.16	19.89	-3,939.94	-1,044.31	2,272.41	2,019.69	252.72	8.992		
6,800.00	6,509.91	6,450.91	6,509.91	37.70	223.48	12.18	-3,939.94	-1,044.31	2,243.18	1,986.63	256.56	8.743		
6,900.00	6,603.99	6,544.99	6,603.99	38.26	226.76	-13.66	-3,939.94	-1,044.31	2,209.63	1,949.32	260.32	8.488		
7,000.00	6,694.76	6,635.76	6,694.76	38.78	229.93	-32.15	-3,939.94	-1,044.31	2,170.88	1,906.98	263.90	8.226		
7,100.00	6,779.96	6,720.96	6,779.96	39.24	232.91	-45.81	-3,939.94	-1,044.31	2,128.20	1,860.98	267.22	7.964		
7,200.00	6,857.50	6,801.50	6,857.50	39.65	235.72	-56.88	-3,939.94	-1,044.31	2,083.23	1,812.90	270.33	7.706		
7,300.00	6,925.48	6,866.48	6,925.48	40.02	237.99	-66.32	-3,939.94	-1,044.31	2,037.94	1,765.07	272.87	7.468		
7,400.00	6,982.21	6,923.21	6,982.21	40.33	239.97	-74.36	-3,939.94	-1,044.31	1,994.52	1,719.35	275.17	7.248		
7,500.00	7,026.31	6,967.31	7,026.31	40.63	241.51	-80.91	-3,939.94	-1,044.31	1,955.23	1,678.10	277.14	7.055		
7,600.00	7,056.68	7,002.32	7,056.68	40.91	242.73	-85.81	-3,939.94	-1,044.31	1,922.22	1,643.24	278.98	6.890		
7,700.00	7,072.58	7,013.58	7,072.58	41.25	243.12	-88.98	-3,939.94	-1,044.31	1,897.31	1,617.07	280.24	6.770		
7,800.00	7,074.86	7,015.86	7,074.86	41.69	243.20	-90.02	-3,939.94	-1,044.31	1,881.43	1,599.97	281.45	6.685		
7,900.00	7,074.54	7,015.54	7,074.54	42.34	243.19	-90.01	-3,939.94	-1,044.31	1,871.58	1,588.74	282.84	6.617		
8,000.00	7,074.21	7,015.21	7,074.21	43.27	243.18	-90.00	-3,939.94	-1,044.31	1,867.04	1,582.58	284.46	6.563		
8,034.78	7,074.10	7,015.10	7,074.10	43.67	243.17	-90.00	-3,939.94	-1,044.31	1,866.72	1,581.63	285.09	6.548 CC		
8,100.00	7,073.89	7,014.89	7,073.89	44.47	243.17	-89.99	-3,939.94	-1,044.31	1,867.86	1,581.59	286.27	6.525 ES		
8,200.00	7,073.57	7,014.57	7,073.57	45.91	243.16	-89.98	-3,939.94	-1,044.31	1,874.02	1,585.82	288.20	6.503		
8,300.00	7,073.24	7,014.24	7,073.24	47.53	243.14	-89.97	-3,939.94	-1,044.31	1,885.47	1,595.26	290.21	6.497 SF		
8,400.00	7,072.92	7,013.92	7,072.92	49.31	243.13	-89.96	-3,939.94	-1,044.31	1,902.11	1,609.86	292.26	6.508		
8,500.00	7,072.59	7,013.59	7,072.59	51.20	243.12	-89.95	-3,939.94	-1,044.31	1,923.82	1,629.52	294.29	6.537		
8,600.00	7,072.27	7,013.27	7,072.27	53.19	243.11	-89.94	-3,939.94	-1,044.31	1,950.41	1,654.12	296.29	6.583		
8,700.00	7,071.94	7,012.94	7,071.94	55.27	243.10	-89.93	-3,939.94	-1,044.31	1,981.70	1,683.49	298.22	6.645		
8,800.00	7,071.62	7,012.62	7,071.62	57.43	243.09	-89.92	-3,939.94	-1,044.31	2,017.47	1,717.42	300.05	6.724		
8,900.00	7,071.29	7,012.29	7,071.29	59.64	243.08	-89.91	-3,939.94	-1,044.31	2,057.48	1,755.69	301.79	6.818		
9,000.00	7,070.97	7,011.97	7,070.97	61.92	243.06	-89.90	-3,939.94	-1,044.31	2,101.49	1,798.08	303.41	6.926		
9,100.00	7,070.64	7,011.64	7,070.64	64.24	243.05	-89.89	-3,939.94	-1,044.31	2,149.26	1,844.34	304.92	7.049		
9,200.00	7,070.32	7,011.32	7,070.32	66.61	243.04	-89.88	-3,939.94	-1,044.31	2,200.54	1,894.23	306.31	7.184		
9,300.00	7,069.99	7,010.99	7,069.99	69.01	243.03	-89.87	-3,939.94	-1,044.31	2,255.08	1,947.50	307.59	7.332		
9,400.00	7,069.67	7,010.67	7,069.67	71.45	243.02	-89.86	-3,939.94	-1,044.31	2,312.67	2,003.92	308.75	7.490		
9,500.00	7,069.34	7,010.34	7,069.34	73.92	243.01	-89.85	-3,939.94	-1,044.31	2,373.08	2,063.26	309.81	7.660		
9,600.00	7,069.02	7,010.02	7,069.02	76.42	243.00	-89.84	-3,939.94	-1,044.31	2,436.09	2,125.31	310.77	7.839		
9,700.00	7,068.69	7,009.69	7,068.69	78.95	242.99	-89.83	-3,939.94	-1,044.31	2,501.51	2,189.87	311.64	8.027		
9,800.00	7,068.37	7,009.37	7,068.37	81.49	242.97	-89.82	-3,939.94	-1,044.31	2,569.16	2,256.73	312.43	8.223		
9,900.00	7,068.04	7,009.04	7,068.04	84.06	242.96	-89.81	-3,939.94	-1,044.31	2,638.87	2,325.73	313.14	8.427		
10,000.00	7,067.72	7,008.72	7,067.72	86.65	242.95	-89.80	-3,939.94	-1,044.31	2,710.48	2,396.70	313.78	8.638		
10,100.00	7,067.39	7,008.39	7,067.39	89.25	242.94	-89.79	-3,939.94	-1,044.31	2,783.83	2,469.48	314.35	8.856		
10,200.00	7,067.07	7,008.07	7,067.07	91.87	242.93	-89.78	-3,939.94	-1,044.31	2,858.80	2,543.94	314.87	9.079		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,007.74	7,066.74	94.50	242.92	-89.77	-3,939.94	-1,044.31	2,935.27	2,619.94	315.33	9.308		
10,400.00	7,066.42	7,007.42	7,066.42	97.14	242.91	-89.76	-3,939.94	-1,044.31	3,013.11	2,697.36	315.75	9.543		
10,500.00	7,066.09	7,007.09	7,066.09	99.80	242.89	-89.75	-3,939.94	-1,044.31	3,092.23	2,776.11	316.12	9.782		
10,600.00	7,065.77	7,006.77	7,065.77	102.47	242.88	-89.74	-3,939.94	-1,044.31	3,172.53	2,856.07	316.46	10.025		
10,700.00	7,065.44	7,006.44	7,065.44	105.15	242.87	-89.73	-3,939.94	-1,044.31	3,253.91	2,937.15	316.76	10.272		
10,800.00	7,065.12	7,006.12	7,065.12	107.83	242.86	-89.72	-3,939.94	-1,044.31	3,336.31	3,019.28	317.03	10.524		
10,900.00	7,064.79	7,005.79	7,064.79	110.53	242.85	-89.71	-3,939.94	-1,044.31	3,419.65	3,102.38	317.27	10.778		
11,000.00	7,064.47	7,005.47	7,064.47	113.23	242.84	-89.70	-3,939.94	-1,044.31	3,503.87	3,186.37	317.49	11.036		
11,100.00	7,064.14	7,005.14	7,064.14	115.95	242.83	-89.69	-3,939.94	-1,044.31	3,588.89	3,271.20	317.69	11.297		
11,200.00	7,063.82	7,004.82	7,063.82	118.66	242.82	-89.68	-3,939.94	-1,044.31	3,674.66	3,356.80	317.86	11.560		
11,300.00	7,063.49	7,004.49	7,063.49	121.39	242.80	-89.67	-3,939.94	-1,044.31	3,761.14	3,443.12	318.02	11.827		
11,400.00	7,063.17	7,004.17	7,063.17	124.12	242.79	-89.66	-3,939.94	-1,044.31	3,848.27	3,530.11	318.16	12.095		
11,500.00	7,062.84	7,003.84	7,062.84	126.86	242.78	-89.65	-3,939.94	-1,044.31	3,936.02	3,617.73	318.29	12.366		
11,600.00	7,062.52	7,003.52	7,062.52	129.60	242.77	-89.64	-3,939.94	-1,044.31	4,024.34	3,705.93	318.41	12.639		
11,700.00	7,062.19	7,003.19	7,062.19	132.35	242.76	-89.63	-3,939.94	-1,044.31	4,113.19	3,794.68	318.51	12.914		
11,800.00	7,061.87	7,002.87	7,061.87	135.10	242.75	-89.62	-3,939.94	-1,044.31	4,202.54	3,883.94	318.60	13.191		
11,900.00	7,061.54	7,002.54	7,061.54	137.85	242.74	-89.61	-3,939.94	-1,044.31	4,292.37	3,973.68	318.69	13.469		
12,000.00	7,061.22	7,002.22	7,061.22	140.61	242.72	-89.60	-3,939.94	-1,044.31	4,382.63	4,063.87	318.76	13.749		
12,100.00	7,060.89	7,001.89	7,060.89	143.38	242.71	-89.59	-3,939.94	-1,044.31	4,473.31	4,154.48	318.83	14.030		
12,200.00	7,060.57	7,001.57	7,060.57	146.15	242.70	-89.58	-3,939.94	-1,044.31	4,564.37	4,245.48	318.89	14.313		
12,300.00	7,060.24	7,001.24	7,060.24	148.92	242.69	-89.57	-3,939.94	-1,044.31	4,655.81	4,336.86	318.94	14.598		
12,400.00	7,059.92	7,000.92	7,059.92	151.69	242.68	-89.56	-3,939.94	-1,044.31	4,747.59	4,428.59	318.99	14.883		
12,500.00	7,059.59	7,000.59	7,059.59	154.47	242.67	-89.55	-3,939.94	-1,044.31	4,839.69	4,520.65	319.04	15.170		
12,600.00	7,059.27	7,000.27	7,059.27	157.25	242.66	-89.54	-3,939.94	-1,044.31	4,932.10	4,613.02	319.08	15.457		
12,700.00	7,058.94	7,000.06	7,058.94	160.03	242.65	-89.53	-3,939.94	-1,044.31	5,024.81	4,705.69	319.12	15.746		
12,800.00	7,058.62	7,000.38	7,058.62	162.82	242.66	-89.52	-3,939.94	-1,044.31	5,117.78	4,798.61	319.17	16.034		
12,900.00	7,058.29	7,000.71	7,058.29	165.61	242.67	-89.51	-3,939.94	-1,044.31	5,211.02	4,891.79	319.23	16.324		
13,000.00	7,057.97	7,001.03	7,057.97	168.40	242.68	-89.50	-3,939.94	-1,044.31	5,304.51	4,985.23	319.28	16.614		
13,100.00	7,057.64	7,001.36	7,057.64	171.19	242.69	-89.49	-3,939.94	-1,044.31	5,398.22	5,078.90	319.32	16.905		
13,200.00	7,057.32	7,001.68	7,057.32	173.99	242.71	-89.48	-3,939.94	-1,044.31	5,492.16	5,172.79	319.37	17.197		
13,300.00	7,057.00	7,002.01	7,057.00	176.78	242.72	-89.47	-3,939.94	-1,044.31	5,586.31	5,266.90	319.41	17.489		
13,400.00	7,056.67	7,002.33	7,056.67	179.58	242.73	-89.46	-3,939.94	-1,044.31	5,680.66	5,361.21	319.45	17.782		
13,500.00	7,056.35	7,002.66	7,056.35	182.38	242.74	-89.46	-3,939.94	-1,044.31	5,775.20	5,455.71	319.49	18.076		
13,600.00	7,056.02	7,002.98	7,056.02	185.19	242.75	-89.45	-3,939.94	-1,044.31	5,869.92	5,550.39	319.53	18.370		
13,700.00	7,055.70	7,003.30	7,055.70	187.99	242.76	-89.44	-3,939.94	-1,044.31	5,964.81	5,645.24	319.57	18.665		
13,800.00	7,055.37	7,003.63	7,055.37	190.80	242.77	-89.43	-3,939.94	-1,044.31	6,059.87	5,740.26	319.61	18.960		
13,900.00	7,055.05	7,003.95	7,055.05	193.60	242.79	-89.42	-3,939.94	-1,044.31	6,155.08	5,835.44	319.64	19.256		
14,000.00	7,054.72	7,004.28	7,054.72	196.41	242.80	-89.41	-3,939.94	-1,044.31	6,250.45	5,930.77	319.68	19.552		
14,100.00	7,054.40	7,004.60	7,054.40	199.22	242.81	-89.40	-3,939.94	-1,044.31	6,345.95	6,026.24	319.71	19.849		
14,200.00	7,054.07	7,004.93	7,054.07	202.03	242.82	-89.39	-3,939.94	-1,044.31	6,441.60	6,121.85	319.75	20.146		
14,300.00	7,053.75	7,005.25	7,053.75	204.85	242.83	-89.38	-3,939.94	-1,044.31	6,537.37	6,217.59	319.78	20.443		
14,400.00	7,053.42	7,005.58	7,053.42	207.66	242.84	-89.37	-3,939.94	-1,044.31	6,633.27	6,313.45	319.81	20.741		
14,500.00	7,053.10	7,005.90	7,053.10	210.48	242.85	-89.36	-3,939.94	-1,044.31	6,729.28	6,409.44	319.85	21.039		
14,600.00	7,052.77	7,006.23	7,052.77	213.29	242.86	-89.35	-3,939.94	-1,044.31	6,825.41	6,505.53	319.88	21.337		
14,700.00	7,052.45	7,006.55	7,052.45	216.11	242.88	-89.34	-3,939.94	-1,044.31	6,921.66	6,601.74	319.91	21.636		
14,800.00	7,052.12	7,006.88	7,052.12	218.93	242.89	-89.33	-3,939.94	-1,044.31	7,018.00	6,698.05	319.95	21.935		
14,900.00	7,051.80	7,007.20	7,051.80	221.75	242.90	-89.32	-3,939.94	-1,044.31	7,114.45	6,794.47	319.98	22.234		
15,000.00	7,051.47	7,007.53	7,051.47	224.57	242.91	-89.31	-3,939.94	-1,044.31	7,210.99	6,890.98	320.01	22.533		
15,100.00	7,051.15	7,007.85	7,051.15	227.39	242.92	-89.30	-3,939.94	-1,044.31	7,307.63	6,987.58	320.05	22.833		
15,145.13	7,051.00	7,008.00	7,051.00	228.67	242.93	-89.29	-3,939.94	-1,044.31	7,351.27	7,031.21	320.06	22.968		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	4.00	0.00	3.28	3.28	-38.65	1,450.69	-1,160.34	1,857.65					
100.00	100.00	104.00	100.00	3.28	3.78	-38.65	1,450.69	-1,160.34	1,857.65	1,850.58	7.07	262.832		
200.00	200.00	204.00	200.00	3.34	6.30	-38.65	1,450.69	-1,160.34	1,857.65	1,848.02	9.63	192.807 CC		
300.00	299.98	304.02	299.98	3.44	9.46	136.98	1,450.69	-1,160.34	1,858.93	1,846.03	12.89	144.162 ES		
400.00	399.84	404.16	399.84	3.59	12.79	137.03	1,450.69	-1,160.34	1,862.76	1,846.38	16.38	113.708		
500.00	499.45	504.55	499.45	3.79	16.20	137.13	1,450.69	-1,160.34	1,869.15	1,849.16	19.99	93.489		
600.00	598.70	605.30	598.70	4.03	19.66	137.26	1,450.69	-1,160.34	1,878.12	1,854.43	23.69	79.268		
700.00	697.47	706.53	697.47	4.31	23.15	137.42	1,450.69	-1,160.34	1,889.69	1,862.23	27.47	68.800		
800.00	795.62	808.38	795.62	4.64	26.68	137.61	1,450.69	-1,160.34	1,903.88	1,872.58	31.31	60.815		
900.00	893.06	889.06	893.06	5.00	29.47	137.83	1,450.69	-1,160.34	1,920.72	1,886.27	34.45	55.754		
1,000.00	989.64	985.64	989.64	5.40	32.83	138.07	1,450.69	-1,160.34	1,940.24	1,902.06	38.18	50.822		
1,100.00	1,085.27	1,081.27	1,085.27	5.83	36.15	138.35	1,450.69	-1,160.34	1,962.46	1,920.55	41.90	46.833		
1,200.00	1,180.44	1,176.44	1,180.44	6.29	39.46	138.93	1,450.69	-1,160.34	1,985.99	1,940.37	45.63	43.528		
1,300.00	1,275.61	1,271.61	1,275.61	6.76	42.77	139.49	1,450.69	-1,160.34	2,009.72	1,960.36	49.36	40.712		
1,400.00	1,370.78	1,366.78	1,370.78	7.26	46.09	140.04	1,450.69	-1,160.34	2,033.64	1,980.52	53.12	38.287		
1,500.00	1,465.95	1,461.95	1,465.95	7.76	49.40	140.58	1,450.69	-1,160.34	2,057.73	2,000.85	56.88	36.177		
1,600.00	1,561.12	1,557.12	1,561.12	8.27	52.72	141.10	1,450.69	-1,160.34	2,082.00	2,021.35	60.65	34.328		
1,700.00	1,656.29	1,652.29	1,656.29	8.80	56.03	141.62	1,450.69	-1,160.34	2,106.44	2,042.01	64.43	32.694		
1,800.00	1,751.46	1,747.46	1,751.46	9.32	59.35	142.12	1,450.69	-1,160.34	2,131.04	2,062.82	68.21	31.241		
1,900.00	1,846.63	1,842.63	1,846.63	9.86	62.67	142.62	1,450.69	-1,160.34	2,155.79	2,083.79	72.00	29.940		
2,000.00	1,941.80	1,937.80	1,941.80	10.40	65.98	143.10	1,450.69	-1,160.34	2,180.70	2,104.90	75.80	28.771		
2,100.00	2,036.96	2,032.96	2,036.96	10.94	69.30	143.57	1,450.69	-1,160.34	2,205.75	2,126.16	79.59	27.713		
2,200.00	2,132.13	2,128.13	2,132.13	11.49	72.62	144.03	1,450.69	-1,160.34	2,230.95	2,147.56	83.39	26.753		
2,300.00	2,227.30	2,223.30	2,227.30	12.04	75.94	144.48	1,450.69	-1,160.34	2,256.28	2,169.09	87.19	25.877		
2,400.00	2,322.47	2,318.47	2,322.47	12.59	79.26	144.92	1,450.69	-1,160.34	2,281.74	2,190.75	90.99	25.076		
2,500.00	2,417.64	2,413.64	2,417.64	13.15	82.58	145.35	1,450.69	-1,160.34	2,307.33	2,212.54	94.80	24.339		
2,600.00	2,512.81	2,508.81	2,512.81	13.70	85.90	145.77	1,450.69	-1,160.34	2,333.05	2,234.44	98.60	23.661		
2,700.00	2,607.98	2,603.98	2,607.98	14.26	89.22	146.19	1,450.69	-1,160.34	2,358.88	2,256.47	102.41	23.034		
2,800.00	2,703.15	2,700.85	2,703.15	14.82	92.60	146.59	1,450.69	-1,160.34	2,384.83	2,278.55	106.28	22.440		
2,900.00	2,798.32	2,805.68	2,798.32	15.38	96.26	146.99	1,450.69	-1,160.34	2,410.89	2,300.47	110.42	21.833		
3,000.00	2,893.49	2,889.49	2,893.49	15.95	99.18	147.38	1,450.69	-1,160.34	2,437.06	2,323.23	113.84	21.409		
3,100.00	2,988.66	2,984.66	2,988.66	16.51	102.50	147.76	1,450.69	-1,160.34	2,463.34	2,345.69	117.64	20.939		
3,200.00	3,083.83	3,079.83	3,083.83	17.07	105.82	148.13	1,450.69	-1,160.34	2,489.71	2,368.26	121.45	20.499		
3,300.00	3,179.00	3,175.00	3,179.00	17.64	109.14	148.49	1,450.69	-1,160.34	2,516.18	2,390.92	125.26	20.087		
3,400.00	3,274.17	3,270.17	3,274.17	18.21	112.46	148.85	1,450.69	-1,160.34	2,542.75	2,413.68	129.07	19.700		
3,500.00	3,369.34	3,365.34	3,369.34	18.77	115.79	149.20	1,450.69	-1,160.34	2,569.41	2,436.53	132.88	19.336		
3,600.00	3,464.51	3,460.51	3,464.51	19.34	119.11	149.54	1,450.69	-1,160.34	2,596.16	2,459.47	136.70	18.992		
3,700.00	3,559.68	3,555.68	3,559.68	19.91	122.43	149.88	1,450.69	-1,160.34	2,623.00	2,482.49	140.51	18.668		
3,800.00	3,654.84	3,650.84	3,654.84	20.48	125.75	150.21	1,450.69	-1,160.34	2,649.92	2,505.60	144.32	18.362		
3,900.00	3,750.01	3,746.01	3,750.01	21.05	129.07	150.53	1,450.69	-1,160.34	2,676.92	2,528.80	148.13	18.072		
4,000.00	3,845.18	3,841.18	3,845.18	21.62	132.39	150.85	1,450.69	-1,160.34	2,704.00	2,552.07	151.94	17.797		
4,100.00	3,940.35	3,936.35	3,940.35	22.19	135.71	151.16	1,450.69	-1,160.34	2,731.16	2,575.41	155.75	17.535		
4,200.00	4,035.52	4,031.52	4,035.52	22.76	139.03	151.46	1,450.69	-1,160.34	2,758.40	2,598.83	159.56	17.287		
4,300.00	4,130.69	4,126.69	4,130.69	23.33	142.36	151.76	1,450.69	-1,160.34	2,785.70	2,622.33	163.37	17.051		
4,400.00	4,225.86	4,221.86	4,225.86	23.91	145.68	152.05	1,450.69	-1,160.34	2,813.07	2,645.89	167.18	16.826		
4,500.00	4,321.03	4,317.03	4,321.03	24.48	149.00	152.34	1,450.69	-1,160.34	2,840.52	2,669.52	171.00	16.612		
4,600.00	4,416.20	4,412.20	4,416.20	25.05	152.32	152.62	1,450.69	-1,160.34	2,868.03	2,693.22	174.81	16.407		
4,700.00	4,511.37	4,507.37	4,511.37	25.62	155.64	152.90	1,450.69	-1,160.34	2,895.60	2,716.98	178.62	16.211		
4,800.00	4,606.54	4,602.54	4,606.54	26.20	158.96	153.17	1,450.69	-1,160.34	2,923.23	2,740.81	182.43	16.024		
4,900.00	4,701.71	4,702.29	4,701.71	26.77	162.44	153.44	1,450.69	-1,160.34	2,950.93	2,764.53	186.40	15.831		
5,000.00	4,796.88	4,807.12	4,796.88	27.34	166.10	153.70	1,450.69	-1,160.34	2,978.69	2,788.14	190.55	15.632		
5,100.00	4,892.05	4,888.05	4,892.05	27.92	169.93	153.95	1,450.69	-1,160.34	3,006.50	2,812.64	193.86	15.508		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,983.22	4,987.22	28.49	172.25	154.21	1,450.69	-1,160.34	3,034.37	2,836.69	197.67	15.350		
5,300.00	5,082.39	5,078.39	5,082.39	29.07	175.57	154.45	1,450.69	-1,160.34	3,062.29	2,860.80	201.48	15.199		
5,400.00	5,177.56	5,173.56	5,177.56	29.64	178.89	154.70	1,450.69	-1,160.34	3,090.27	2,884.97	205.30	15.053		
5,500.00	5,272.72	5,268.72	5,272.72	30.21	182.22	154.94	1,450.69	-1,160.34	3,118.29	2,909.18	209.11	14.912		
5,600.00	5,367.89	5,363.89	5,367.89	30.79	185.54	155.17	1,450.69	-1,160.34	3,146.37	2,933.45	212.92	14.777		
5,700.00	5,463.06	5,459.06	5,463.06	31.36	188.86	155.40	1,450.69	-1,160.34	3,174.49	2,957.76	216.73	14.647		
5,800.00	5,558.23	5,554.23	5,558.23	31.94	192.18	155.63	1,450.69	-1,160.34	3,202.67	2,982.13	220.54	14.522		
5,900.00	5,653.40	5,649.40	5,653.40	32.51	195.50	155.85	1,450.69	-1,160.34	3,230.89	3,006.53	224.35	14.401		
6,000.00	5,748.57	5,744.57	5,748.57	33.09	198.82	156.07	1,450.69	-1,160.34	3,259.15	3,030.99	228.16	14.284		
6,100.00	5,843.74	5,839.74	5,843.74	33.67	202.15	156.29	1,450.69	-1,160.34	3,287.46	3,055.48	231.97	14.172		
6,200.00	5,938.91	5,934.91	5,938.91	34.24	205.47	156.50	1,450.69	-1,160.34	3,315.81	3,080.02	235.78	14.063		
6,300.00	6,034.08	6,030.08	6,034.08	34.82	208.79	156.71	1,450.69	-1,160.34	3,344.20	3,104.60	239.60	13.958		
6,400.00	6,129.25	6,125.25	6,129.25	35.39	212.11	156.91	1,450.69	-1,160.34	3,372.63	3,129.23	243.41	13.856		
6,500.00	6,224.42	6,220.42	6,224.42	35.97	215.43	157.11	1,450.69	-1,160.34	3,401.10	3,153.89	247.22	13.758		
6,600.00	6,319.59	6,315.59	6,319.59	36.54	218.76	157.31	1,450.69	-1,160.34	3,429.61	3,178.59	251.03	13.662		
6,700.00	6,414.76	6,410.76	6,414.76	37.12	222.08	157.51	1,450.69	-1,160.34	3,458.16	3,203.32	254.84	13.570		
6,800.00	6,509.91	6,505.91	6,509.91	37.70	225.40	149.76	1,450.69	-1,160.34	3,486.58	3,227.93	258.65	13.480		
6,900.00	6,603.99	6,600.01	6,603.99	38.26	228.68	125.09	1,450.69	-1,160.34	3,511.53	3,249.11	262.42	13.381		
7,000.00	6,694.76	6,690.24	6,694.76	38.78	232.50	109.46	1,450.69	-1,160.34	3,531.47	3,264.78	266.69	13.242		
7,100.00	6,779.96	6,775.96	6,779.96	39.24	234.83	100.18	1,450.69	-1,160.34	3,546.34	3,276.90	269.45	13.162		
7,200.00	6,857.50	6,853.50	6,857.50	39.65	237.53	94.69	1,450.69	-1,160.34	3,556.31	3,283.75	272.56	13.048		
7,300.00	6,925.48	6,921.48	6,925.48	40.02	239.91	91.52	1,450.69	-1,160.34	3,561.74	3,286.39	275.35	12.936		
7,400.00	6,982.21	6,978.21	6,982.21	40.33	241.89	89.83	1,450.69	-1,160.34	3,563.09	3,285.29	277.80	12.826		
7,500.00	7,026.31	7,022.31	7,026.31	40.63	243.43	89.13	1,450.69	-1,160.34	3,560.92	3,281.01	279.91	12.722		
7,600.00	7,056.68	7,052.68	7,056.68	40.91	244.49	89.11	1,450.69	-1,160.34	3,555.74	3,274.06	281.68	12.623		
7,700.00	7,072.58	7,068.58	7,072.58	41.25	245.04	89.57	1,450.69	-1,160.34	3,548.05	3,264.95	283.10	12.533		
7,800.00	7,074.86	7,070.86	7,074.86	41.69	245.12	90.02	1,450.69	-1,160.34	3,538.59	3,254.42	284.18	12.452		
7,900.00	7,074.54	7,070.54	7,074.54	42.34	245.11	90.01	1,450.69	-1,160.34	3,531.10	3,245.78	285.33	12.376		
8,000.00	7,074.21	7,070.21	7,074.21	43.27	245.10	90.01	1,450.69	-1,160.34	3,526.43	3,239.81	286.62	12.304		
8,100.00	7,073.89	7,069.89	7,073.89	44.47	245.09	90.00	1,450.69	-1,160.34	3,524.59	3,236.55	288.04	12.237		
8,114.83	7,073.84	7,069.84	7,073.84	44.68	245.09	90.00	1,450.69	-1,160.34	3,524.56	3,236.30	288.27	12.227		
8,200.00	7,073.57	7,069.57	7,073.57	45.91	245.08	90.00	1,450.69	-1,160.34	3,525.59	3,236.02	289.56	12.175		
8,300.00	7,073.24	7,069.24	7,073.24	47.53	245.06	89.99	1,450.69	-1,160.34	3,529.42	3,238.24	291.18	12.121		
8,400.00	7,072.92	7,068.92	7,072.92	49.31	245.05	89.98	1,450.69	-1,160.34	3,536.08	3,243.21	292.87	12.074		
8,500.00	7,072.59	7,068.59	7,072.59	51.20	245.04	89.98	1,450.69	-1,160.34	3,545.54	3,250.92	294.62	12.034		
8,600.00	7,072.27	7,068.27	7,072.27	53.19	245.03	89.97	1,450.69	-1,160.34	3,557.80	3,261.39	296.41	12.003		
8,700.00	7,071.94	7,067.94	7,071.94	55.27	245.02	89.97	1,450.69	-1,160.34	3,572.81	3,274.59	298.22	11.980		
8,800.00	7,071.62	7,067.62	7,071.62	57.43	245.01	89.96	1,450.69	-1,160.34	3,590.54	3,290.49	300.05	11.966		
8,900.00	7,071.29	7,067.29	7,071.29	59.64	245.00	89.96	1,450.69	-1,160.34	3,610.96	3,309.08	301.88	11.962 SF		
9,000.00	7,070.97	7,066.97	7,070.97	61.92	244.98	89.95	1,450.69	-1,160.34	3,634.01	3,330.31	303.71	11.966		
9,100.00	7,070.64	7,066.64	7,070.64	64.24	244.97	89.95	1,450.69	-1,160.34	3,659.66	3,354.14	305.51	11.979		
9,200.00	7,070.32	7,066.32	7,070.32	66.61	244.96	89.94	1,450.69	-1,160.34	3,687.83	3,380.54	307.29	12.001		
9,300.00	7,069.99	7,065.99	7,069.99	69.01	244.95	89.94	1,450.69	-1,160.34	3,718.49	3,409.44	309.05	12.032		
9,400.00	7,069.67	7,065.67	7,069.67	71.45	244.94	89.93	1,450.69	-1,160.34	3,751.56	3,440.80	310.76	12.072		
9,500.00	7,069.34	7,065.34	7,069.34	73.92	244.93	89.93	1,450.69	-1,160.34	3,786.98	3,474.54	312.44	12.121		
9,600.00	7,069.02	7,065.02	7,069.02	76.42	244.92	89.92	1,450.69	-1,160.34	3,824.69	3,510.62	314.07	12.178		
9,700.00	7,068.69	7,064.69	7,068.69	78.95	244.91	89.92	1,450.69	-1,160.34	3,864.62	3,548.97	315.65	12.243		
9,800.00	7,068.37	7,064.37	7,068.37	81.49	244.89	89.91	1,450.69	-1,160.34	3,906.70	3,589.52	317.18	12.317		
9,900.00	7,068.04	7,064.04	7,068.04	84.06	244.88	89.91	1,450.69	-1,160.34	3,950.87	3,632.21	318.66	12.398		
10,000.00	7,067.72	7,063.72	7,067.72	86.65	244.87	89.90	1,450.69	-1,160.34	3,997.05	3,676.96	320.09	12.487		
10,100.00	7,067.39	7,063.39	7,067.39	89.25	244.86	89.90	1,450.69	-1,160.34	4,045.17	3,723.71	321.46	12.584		
10,200.00	7,067.07	7,063.07	7,067.07	91.87	244.85	89.89	1,450.69	-1,160.34	4,095.17	3,772.39	322.78	12.687		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,062.74	7,066.74	94.50	244.84	89.88	1,450.69	-1,160.34	4,146.98	3,822.93	324.05	12.797		
10,400.00	7,066.42	7,062.42	7,066.42	97.14	244.83	89.88	1,450.69	-1,160.34	4,200.54	3,875.27	325.27	12.914		
10,500.00	7,066.09	7,062.09	7,066.09	99.80	244.81	89.87	1,450.69	-1,160.34	4,255.76	3,929.33	326.43	13.037		
10,600.00	7,065.77	7,061.77	7,065.77	102.47	244.80	89.87	1,450.69	-1,160.34	4,312.60	3,985.06	327.54	13.166		
10,700.00	7,065.44	7,061.44	7,065.44	105.15	244.79	89.86	1,450.69	-1,160.34	4,370.99	4,042.39	328.61	13.302		
10,800.00	7,065.12	7,061.12	7,065.12	107.83	244.78	89.86	1,450.69	-1,160.34	4,430.87	4,101.25	329.62	13.442		
10,900.00	7,064.79	7,060.79	7,064.79	110.53	244.77	89.85	1,450.69	-1,160.34	4,492.18	4,161.58	330.59	13.588		
11,000.00	7,064.47	7,060.47	7,064.47	113.23	244.76	89.85	1,450.69	-1,160.34	4,554.85	4,223.33	331.52	13.739		
11,100.00	7,064.14	7,060.14	7,064.14	115.95	244.75	89.84	1,450.69	-1,160.34	4,618.84	4,286.44	332.40	13.896		
11,200.00	7,063.82	7,059.82	7,063.82	118.66	244.74	89.84	1,450.69	-1,160.34	4,684.09	4,350.86	333.24	14.056		
11,300.00	7,063.49	7,059.49	7,063.49	121.39	244.72	89.83	1,450.69	-1,160.34	4,750.55	4,416.52	334.04	14.222		
11,400.00	7,063.17	7,059.17	7,063.17	124.12	244.71	89.83	1,450.69	-1,160.34	4,818.17	4,483.38	334.80	14.391		
11,500.00	7,062.84	7,058.84	7,062.84	126.86	244.70	89.82	1,450.69	-1,160.34	4,886.90	4,551.38	335.52	14.565		
11,600.00	7,062.52	7,058.52	7,062.52	129.60	244.69	89.82	1,450.69	-1,160.34	4,956.70	4,620.49	336.21	14.743		
11,700.00	7,062.19	7,058.19	7,062.19	132.35	244.68	89.81	1,450.69	-1,160.34	5,027.51	4,690.65	336.86	14.925		
11,800.00	7,061.87	7,057.87	7,061.87	135.10	244.67	89.81	1,450.69	-1,160.34	5,099.30	4,761.82	337.48	15.110		
11,900.00	7,061.54	7,057.54	7,061.54	137.85	244.66	89.80	1,450.69	-1,160.34	5,172.03	4,833.96	338.08	15.298		
12,000.00	7,061.22	7,057.22	7,061.22	140.61	244.64	89.79	1,450.69	-1,160.34	5,245.66	4,907.02	338.64	15.490		
12,100.00	7,060.89	7,056.89	7,060.89	143.38	244.63	89.79	1,450.69	-1,160.34	5,320.15	4,980.97	339.18	15.686		
12,200.00	7,060.57	7,056.57	7,060.57	146.15	244.62	89.78	1,450.69	-1,160.34	5,395.46	5,055.78	339.69	15.884		
12,300.00	7,060.24	7,056.24	7,060.24	148.92	244.61	89.78	1,450.69	-1,160.34	5,471.57	5,131.40	340.17	16.085		
12,400.00	7,059.92	7,055.92	7,059.92	151.69	244.60	89.77	1,450.69	-1,160.34	5,548.43	5,207.80	340.63	16.289		
12,500.00	7,059.59	7,055.59	7,059.59	154.47	244.59	89.77	1,450.69	-1,160.34	5,626.02	5,284.95	341.07	16.495		
12,600.00	7,059.27	7,055.27	7,059.27	157.25	244.58	89.76	1,450.69	-1,160.34	5,704.31	5,362.82	341.49	16.704		
12,700.00	7,058.94	7,054.94	7,058.94	160.03	244.57	89.76	1,450.69	-1,160.34	5,783.26	5,441.38	341.88	16.916		
12,800.00	7,058.62	7,054.62	7,058.62	162.82	244.55	89.75	1,450.69	-1,160.34	5,862.86	5,520.60	342.26	17.130		
12,900.00	7,058.29	7,054.29	7,058.29	165.61	244.54	89.75	1,450.69	-1,160.34	5,943.08	5,600.46	342.62	17.346		
13,000.00	7,057.97	7,053.97	7,057.97	168.40	244.53	89.74	1,450.69	-1,160.34	6,023.89	5,680.92	342.96	17.564		
13,100.00	7,057.64	7,053.64	7,057.64	171.19	244.52	89.74	1,450.69	-1,160.34	6,105.26	5,761.97	343.29	17.785		
13,200.00	7,057.32	7,053.32	7,057.32	173.99	244.51	89.73	1,450.69	-1,160.34	6,187.18	5,843.58	343.60	18.007		
13,300.00	7,057.00	7,053.00	7,057.00	176.78	244.50	89.73	1,450.69	-1,160.34	6,269.63	5,925.73	343.90	18.231		
13,400.00	7,056.67	7,052.67	7,056.67	179.58	244.49	89.72	1,450.69	-1,160.34	6,352.58	6,008.40	344.18	18.457		
13,500.00	7,056.35	7,052.35	7,056.35	182.38	244.47	89.72	1,450.69	-1,160.34	6,436.02	6,091.57	344.45	18.685		
13,600.00	7,056.02	7,052.02	7,056.02	185.19	244.46	89.71	1,450.69	-1,160.34	6,519.92	6,175.21	344.71	18.914		
13,700.00	7,055.70	7,051.70	7,055.70	187.99	244.45	89.71	1,450.69	-1,160.34	6,604.27	6,259.32	344.95	19.145		
13,800.00	7,055.37	7,051.37	7,055.37	190.80	244.44	89.70	1,450.69	-1,160.34	6,689.05	6,343.86	345.19	19.378		
13,900.00	7,055.05	7,051.05	7,055.05	193.60	244.43	89.69	1,450.69	-1,160.34	6,774.25	6,428.84	345.41	19.612		
14,000.00	7,054.72	7,050.72	7,054.72	196.41	244.42	89.69	1,450.69	-1,160.34	6,859.84	6,514.22	345.62	19.848		
14,100.00	7,054.40	7,050.40	7,054.40	199.22	244.41	89.68	1,450.69	-1,160.34	6,945.82	6,599.99	345.83	20.085		
14,200.00	7,054.07	7,050.07	7,054.07	202.03	244.39	89.68	1,450.69	-1,160.34	7,032.18	6,686.15	346.02	20.323		
14,300.00	7,053.75	7,049.75	7,053.75	204.85	244.38	89.67	1,450.69	-1,160.34	7,118.88	6,772.67	346.21	20.562		
14,400.00	7,053.42	7,049.42	7,053.42	207.66	244.37	89.67	1,450.69	-1,160.34	7,205.94	6,859.55	346.39	20.803		
14,500.00	7,053.10	7,049.10	7,053.10	210.48	244.36	89.66	1,450.69	-1,160.34	7,293.32	6,946.76	346.56	21.045		
14,600.00	7,052.77	7,048.77	7,052.77	213.29	244.35	89.66	1,450.69	-1,160.34	7,381.03	7,034.30	346.73	21.288		
14,700.00	7,052.45	7,048.45	7,052.45	216.11	244.34	89.65	1,450.69	-1,160.34	7,469.04	7,122.16	346.88	21.532		
14,800.00	7,052.12	7,048.12	7,052.12	218.93	244.33	89.65	1,450.69	-1,160.34	7,557.36	7,210.32	347.03	21.777		
14,900.00	7,051.80	7,047.80	7,051.80	221.75	244.32	89.64	1,450.69	-1,160.34	7,645.96	7,298.78	347.18	22.023		
15,000.00	7,051.47	7,047.47	7,051.47	224.57	244.30	89.64	1,450.69	-1,160.34	7,734.83	7,387.52	347.32	22.270		
15,100.00	7,051.15	7,047.15	7,051.15	227.39	244.29	89.63	1,450.69	-1,160.34	7,823.98	7,476.53	347.45	22.518		
15,145.13	7,051.00	7,047.00	7,051.00	228.67	244.29	89.63	1,450.69	-1,160.34	7,864.30	7,516.79	347.51	22.631		





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	18.00	3.28	3.28	-82.43	146.47	-1,101.99	1,111.82					
100.00	100.00	82.00	100.00	3.28	3.58	-82.43	146.47	-1,101.99	1,111.68	1,104.82	6.86	161.972		
200.00	200.00	182.00	200.00	3.34	5.66	-82.43	146.47	-1,101.99	1,111.68	1,102.69	8.99	123.612 CC		
300.00	299.98	281.98	299.98	3.44	8.74	93.27	146.47	-1,101.99	1,111.78	1,099.60	12.18	91.303		
400.00	399.84	381.84	399.84	3.59	12.04	93.53	146.47	-1,101.99	1,112.09	1,096.46	15.63	71.159		
500.00	499.45	481.45	499.45	3.79	15.42	93.97	146.47	-1,101.99	1,112.66	1,093.46	19.20	57.948		
600.00	598.70	580.70	598.70	4.03	18.81	94.57	146.47	-1,101.99	1,113.58	1,090.73	22.84	48.747		
700.00	697.47	679.47	697.47	4.31	22.22	95.34	146.47	-1,101.99	1,114.94	1,088.41	26.53	42.023		
800.00	795.62	777.62	795.62	4.64	25.61	96.25	146.47	-1,101.99	1,116.91	1,086.66	30.25	36.923		
900.00	893.06	875.06	893.06	5.00	28.99	97.31	146.47	-1,101.99	1,119.63	1,085.65	33.99	32.943		
1,000.00	989.64	971.64	989.64	5.40	32.34	98.51	146.47	-1,101.99	1,123.32	1,085.58	37.74	29.768 ES		
1,100.00	1,085.27	1,067.27	1,085.27	5.83	35.66	99.82	146.47	-1,101.99	1,128.18	1,086.70	41.49	27.193		
1,200.00	1,180.44	1,162.44	1,180.44	6.29	38.97	101.28	146.47	-1,101.99	1,134.08	1,088.83	45.25	25.062		
1,300.00	1,275.61	1,257.61	1,275.61	6.76	42.29	102.72	146.47	-1,101.99	1,140.78	1,091.74	49.03	23.265		
1,400.00	1,370.78	1,352.78	1,370.78	7.26	45.60	104.15	146.47	-1,101.99	1,148.25	1,095.42	52.83	21.734		
1,500.00	1,465.95	1,447.95	1,465.95	7.76	48.91	105.56	146.47	-1,101.99	1,156.50	1,099.86	56.64	20.419		
1,600.00	1,561.12	1,543.12	1,561.12	8.27	52.23	106.95	146.47	-1,101.99	1,165.49	1,105.04	60.45	19.279		
1,700.00	1,656.29	1,638.29	1,656.29	8.80	55.54	108.32	146.47	-1,101.99	1,175.22	1,110.95	64.28	18.284		
1,800.00	1,751.46	1,733.46	1,751.46	9.32	58.86	109.67	146.47	-1,101.99	1,185.67	1,117.56	68.10	17.410		
1,900.00	1,846.63	1,828.63	1,846.63	9.86	62.18	110.99	146.47	-1,101.99	1,196.81	1,124.88	71.93	16.638		
2,000.00	1,941.80	1,923.80	1,941.80	10.40	65.50	112.30	146.47	-1,101.99	1,208.63	1,132.86	75.76	15.953		
2,100.00	2,036.96	2,018.96	2,036.96	10.94	68.81	113.58	146.47	-1,101.99	1,221.10	1,141.51	79.59	15.341		
2,200.00	2,132.13	2,114.13	2,132.13	11.49	72.13	114.83	146.47	-1,101.99	1,234.22	1,150.79	83.43	14.794		
2,300.00	2,227.30	2,209.30	2,227.30	12.04	75.45	116.06	146.47	-1,101.99	1,247.95	1,160.69	87.26	14.301		
2,400.00	2,322.47	2,304.47	2,322.47	12.59	78.77	117.27	146.47	-1,101.99	1,262.28	1,171.18	91.09	13.857		
2,500.00	2,417.64	2,400.36	2,417.64	13.15	82.12	118.45	146.47	-1,101.99	1,277.18	1,182.23	94.95	13.451		
2,600.00	2,512.81	2,505.19	2,512.81	13.70	85.77	119.60	146.47	-1,101.99	1,292.65	1,193.53	99.12	13.042		
2,700.00	2,607.98	2,589.98	2,607.98	14.26	88.73	120.73	146.47	-1,101.99	1,308.65	1,206.07	102.59	12.757		
2,800.00	2,703.15	2,685.15	2,703.15	14.82	92.05	121.83	146.47	-1,101.99	1,325.17	1,218.76	106.41	12.453		
2,900.00	2,798.32	2,780.32	2,798.32	15.38	95.37	122.90	146.47	-1,101.99	1,342.19	1,231.95	110.24	12.175		
3,000.00	2,893.49	2,875.49	2,893.49	15.95	98.69	123.95	146.47	-1,101.99	1,359.69	1,245.63	114.07	11.920		
3,100.00	2,988.66	2,970.66	2,988.66	16.51	102.01	124.98	146.47	-1,101.99	1,377.66	1,259.76	117.89	11.686		
3,200.00	3,083.83	3,065.83	3,083.83	17.07	105.33	125.98	146.47	-1,101.99	1,396.06	1,274.35	121.71	11.470		
3,300.00	3,179.00	3,161.00	3,179.00	17.64	108.65	126.96	146.47	-1,101.99	1,414.90	1,289.36	125.54	11.271		
3,400.00	3,274.17	3,256.17	3,274.17	18.21	111.98	127.91	146.47	-1,101.99	1,434.14	1,304.78	129.36	11.087		
3,500.00	3,369.34	3,351.34	3,369.34	18.77	115.30	128.83	146.47	-1,101.99	1,453.78	1,320.60	133.17	10.916		
3,600.00	3,464.51	3,446.51	3,464.51	19.34	118.62	129.74	146.47	-1,101.99	1,473.79	1,336.80	136.99	10.758		
3,700.00	3,559.68	3,541.68	3,559.68	19.91	121.94	130.62	146.47	-1,101.99	1,494.17	1,353.36	140.81	10.611		
3,800.00	3,654.84	3,636.84	3,654.84	20.48	125.26	131.48	146.47	-1,101.99	1,514.90	1,370.28	144.62	10.475		
3,900.00	3,750.01	3,732.01	3,750.01	21.05	128.58	132.31	146.47	-1,101.99	1,535.96	1,387.52	148.44	10.348		
4,000.00	3,845.18	3,827.18	3,845.18	21.62	131.90	133.13	146.47	-1,101.99	1,557.34	1,405.09	152.25	10.229		
4,100.00	3,940.35	3,922.35	3,940.35	22.19	135.22	133.92	146.47	-1,101.99	1,579.03	1,422.97	156.06	10.118		
4,200.00	4,035.52	4,017.52	4,035.52	22.76	138.55	134.69	146.47	-1,101.99	1,601.01	1,441.14	159.87	10.014		
4,300.00	4,130.69	4,112.69	4,130.69	23.33	141.87	135.44	146.47	-1,101.99	1,623.28	1,459.60	163.68	9.917		
4,400.00	4,225.86	4,207.86	4,225.86	23.91	145.19	136.18	146.47	-1,101.99	1,645.82	1,478.33	167.49	9.826		
4,500.00	4,321.03	4,303.03	4,321.03	24.48	148.51	136.89	146.47	-1,101.99	1,668.62	1,497.32	171.30	9.741		
4,600.00	4,416.20	4,401.80	4,416.20	25.05	151.96	137.59	146.47	-1,101.99	1,691.67	1,516.44	175.23	9.654		
4,700.00	4,511.37	4,506.63	4,511.37	25.62	155.62	138.26	146.47	-1,101.99	1,714.96	1,535.59	179.37	9.561		
4,800.00	4,606.54	4,588.54	4,606.54	26.20	158.47	138.92	146.47	-1,101.99	1,738.48	1,555.76	182.72	9.515		
4,900.00	4,701.71	4,683.71	4,701.71	26.77	161.80	139.57	146.47	-1,101.99	1,762.22	1,575.70	186.52	9.448		
5,000.00	4,796.88	4,778.88	4,796.88	27.34	165.12	140.19	146.47	-1,101.99	1,786.17	1,595.85	190.33	9.385		
5,100.00	4,892.05	4,874.05	4,892.05	27.92	168.44	140.80	146.47	-1,101.99	1,810.33	1,616.20	194.13	9.325		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,969.22	4,987.22	28.49	171.76	141.40	146.47	-1,101.99	1,834.68	1,636.75	197.94	9.269	
5,300.00	5,082.39	5,064.39	5,082.39	29.07	175.08	141.98	146.47	-1,101.99	1,859.22	1,657.48	201.74	9.216	
5,400.00	5,177.56	5,159.56	5,177.56	29.64	178.41	142.54	146.47	-1,101.99	1,883.95	1,678.40	205.54	9.166	
5,500.00	5,272.72	5,254.72	5,272.72	30.21	181.73	143.09	146.47	-1,101.99	1,908.84	1,699.49	209.35	9.118	
5,600.00	5,367.89	5,349.89	5,367.89	30.79	185.05	143.63	146.47	-1,101.99	1,933.90	1,720.75	213.15	9.073	
5,700.00	5,463.06	5,445.06	5,463.06	31.36	188.37	144.15	146.47	-1,101.99	1,959.13	1,742.17	216.95	9.030	
5,800.00	5,558.23	5,540.23	5,558.23	31.94	191.69	144.66	146.47	-1,101.99	1,984.50	1,763.75	220.76	8.990	
5,900.00	5,653.40	5,635.40	5,653.40	32.51	195.01	145.16	146.47	-1,101.99	2,010.03	1,785.47	224.56	8.951	
6,000.00	5,748.57	5,730.57	5,748.57	33.09	198.34	145.65	146.47	-1,101.99	2,035.70	1,807.34	228.36	8.914	
6,100.00	5,843.74	5,825.74	5,843.74	33.67	201.66	146.12	146.47	-1,101.99	2,061.51	1,829.34	232.16	8.880	
6,200.00	5,938.91	5,920.91	5,938.91	34.24	204.98	146.59	146.47	-1,101.99	2,087.45	1,851.48	235.97	8.846	
6,300.00	6,034.08	6,016.08	6,034.08	34.82	208.30	147.04	146.47	-1,101.99	2,113.51	1,873.75	239.77	8.815	
6,400.00	6,129.25	6,111.25	6,129.25	35.39	211.62	147.48	146.47	-1,101.99	2,139.70	1,896.13	243.57	8.785	
6,500.00	6,224.42	6,206.42	6,224.42	35.97	214.95	147.91	146.47	-1,101.99	2,166.01	1,918.64	247.37	8.756	
6,600.00	6,319.59	6,301.59	6,319.59	36.54	218.27	148.33	146.47	-1,101.99	2,192.44	1,941.26	251.17	8.729	
6,700.00	6,414.76	6,403.24	6,414.76	37.12	221.82	148.74	146.47	-1,101.99	2,218.97	1,963.77	255.20	8.695	
6,800.00	6,509.91	6,508.09	6,509.91	37.70	225.48	141.31	146.47	-1,101.99	2,245.37	1,986.03	259.34	8.658	
6,900.00	6,603.99	6,585.99	6,603.99	38.26	228.20	117.34	146.47	-1,101.99	2,266.88	2,004.35	262.53	8.635	
7,000.00	6,694.76	6,676.76	6,694.76	38.78	231.36	102.58	146.47	-1,101.99	2,281.65	2,015.52	266.13	8.573	
7,100.00	6,779.96	6,761.96	6,779.96	39.24	234.34	94.30	146.47	-1,101.99	2,289.98	2,020.49	269.49	8.497	
7,200.00	6,857.50	6,839.50	6,857.50	39.65	237.04	89.88	146.47	-1,101.99	2,292.46	2,019.90	272.56	8.411	
7,300.00	6,925.48	6,907.48	6,925.48	40.02	239.42	87.81	146.47	-1,101.99	2,289.91	2,014.62	275.29	8.318	
7,400.00	6,982.21	6,964.21	6,982.21	40.33	241.40	87.20	146.47	-1,101.99	2,283.31	2,005.63	277.68	8.223	
7,500.00	7,026.31	7,008.31	7,026.31	40.63	242.94	87.48	146.47	-1,101.99	2,273.67	1,993.93	279.73	8.128	
7,600.00	7,056.68	7,038.68	7,056.68	40.91	244.00	88.28	146.47	-1,101.99	2,261.95	1,980.51	281.44	8.037	
7,700.00	7,072.58	7,054.58	7,072.58	41.25	244.55	89.34	146.47	-1,101.99	2,248.98	1,966.19	282.79	7.953	
7,800.00	7,074.86	7,056.86	7,074.86	41.69	244.63	90.02	146.47	-1,101.99	2,235.77	1,951.95	283.81	7.878	
7,900.00	7,074.54	7,056.54	7,074.54	42.34	244.62	90.01	146.47	-1,101.99	2,226.12	1,941.23	284.89	7.814	
8,000.00	7,074.21	7,056.21	7,074.21	43.27	244.61	90.01	146.47	-1,101.99	2,220.94	1,934.83	286.11	7.762	
8,065.18	7,074.00	7,056.00	7,074.00	44.03	244.60	90.00	146.47	-1,101.99	2,219.98	1,932.99	286.99	7.735	
8,100.00	7,073.89	7,055.89	7,073.89	44.47	244.60	90.00	146.47	-1,101.99	2,220.26	1,932.81	287.45	7.724	
8,200.00	7,073.57	7,055.57	7,073.57	45.91	244.59	89.99	146.47	-1,101.99	2,224.07	1,935.20	288.87	7.699	
8,300.00	7,073.24	7,055.24	7,073.24	47.53	244.58	89.98	146.47	-1,101.99	2,232.37	1,942.01	290.36	7.688 SF	
8,400.00	7,072.92	7,054.92	7,072.92	49.31	244.56	89.97	146.47	-1,101.99	2,245.09	1,953.20	291.89	7.692	
8,500.00	7,072.59	7,054.59	7,072.59	51.20	244.55	89.96	146.47	-1,101.99	2,262.17	1,968.74	293.42	7.710	
8,600.00	7,072.27	7,054.27	7,072.27	53.19	244.54	89.96	146.47	-1,101.99	2,283.50	1,988.54	294.96	7.742	
8,700.00	7,071.94	7,053.94	7,071.94	55.27	244.53	89.95	146.47	-1,101.99	2,308.96	2,012.50	296.46	7.788	
8,800.00	7,071.62	7,053.62	7,071.62	57.43	244.52	89.94	146.47	-1,101.99	2,338.43	2,040.50	297.93	7.849	
8,900.00	7,071.29	7,053.29	7,071.29	59.64	244.51	89.93	146.47	-1,101.99	2,371.76	2,072.41	299.35	7.923	
9,000.00	7,070.97	7,052.97	7,070.97	61.92	244.50	89.92	146.47	-1,101.99	2,408.78	2,108.07	300.70	8.010	
9,100.00	7,070.64	7,052.64	7,070.64	64.24	244.48	89.91	146.47	-1,101.99	2,449.32	2,147.33	301.99	8.111	
9,200.00	7,070.32	7,052.32	7,070.32	66.61	244.47	89.90	146.47	-1,101.99	2,493.22	2,190.01	303.21	8.223	
9,300.00	7,069.99	7,051.99	7,069.99	69.01	244.46	89.90	146.47	-1,101.99	2,540.29	2,235.94	304.35	8.347	
9,400.00	7,069.67	7,051.67	7,069.67	71.45	244.45	89.89	146.47	-1,101.99	2,590.38	2,284.95	305.42	8.481	
9,500.00	7,069.34	7,051.34	7,069.34	73.92	244.44	89.88	146.47	-1,101.99	2,643.29	2,336.88	306.42	8.626	
9,600.00	7,069.02	7,051.02	7,069.02	76.42	244.43	89.87	146.47	-1,101.99	2,698.88	2,391.54	307.34	8.781	
9,700.00	7,068.69	7,050.69	7,068.69	78.95	244.42	89.86	146.47	-1,101.99	2,756.98	2,448.78	308.19	8.946	
9,800.00	7,068.37	7,050.37	7,068.37	81.49	244.41	89.85	146.47	-1,101.99	2,817.42	2,508.45	308.98	9.118	
9,900.00	7,068.04	7,050.04	7,068.04	84.06	244.39	89.85	146.47	-1,101.99	2,880.08	2,570.37	309.70	9.299	
10,000.00	7,067.72	7,049.72	7,067.72	86.65	244.38	89.84	146.47	-1,101.99	2,944.79	2,634.42	310.37	9.488	
10,100.00	7,067.39	7,049.39	7,067.39	89.25	244.37	89.83	146.47	-1,101.99	3,011.44	2,700.46	310.98	9.684	
10,200.00	7,067.07	7,049.07	7,067.07	91.87	244.36	89.82	146.47	-1,101.99	3,079.89	2,768.35	311.54	9.886	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	7,048.74	7,066.74	94.50	244.35	89.81	146.47	-1,101.99	3,150.03	2,837.98	312.05	10.095		
10,400.00	7,066.42	7,048.42	7,066.42	97.14	244.34	89.80	146.47	-1,101.99	3,221.74	2,909.23	312.52	10.309		
10,500.00	7,066.09	7,048.09	7,066.09	99.80	244.33	89.80	146.47	-1,101.99	3,294.93	2,981.99	312.95	10.529		
10,600.00	7,065.77	7,047.77	7,065.77	102.47	244.31	89.79	146.47	-1,101.99	3,369.50	3,056.17	313.34	10.754		
10,700.00	7,065.44	7,047.44	7,065.44	105.15	244.30	89.78	146.47	-1,101.99	3,445.36	3,131.67	313.69	10.983		
10,800.00	7,065.12	7,047.12	7,065.12	107.83	244.29	89.77	146.47	-1,101.99	3,522.42	3,208.41	314.02	11.217		
10,900.00	7,064.79	7,046.79	7,064.79	110.53	244.28	89.76	146.47	-1,101.99	3,600.61	3,286.30	314.31	11.455		
11,000.00	7,064.47	7,046.47	7,064.47	113.23	244.27	89.75	146.47	-1,101.99	3,679.86	3,365.28	314.58	11.698		
11,100.00	7,064.14	7,046.14	7,064.14	115.95	244.26	89.75	146.47	-1,101.99	3,760.10	3,445.27	314.83	11.943		
11,200.00	7,063.82	7,045.82	7,063.82	118.66	244.25	89.74	146.47	-1,101.99	3,841.26	3,526.21	315.06	12.192		
11,300.00	7,063.49	7,045.49	7,063.49	121.39	244.24	89.73	146.47	-1,101.99	3,923.30	3,608.04	315.26	12.445		
11,400.00	7,063.17	7,045.17	7,063.17	124.12	244.22	89.72	146.47	-1,101.99	4,006.15	3,690.70	315.45	12.700		
11,500.00	7,062.84	7,044.84	7,062.84	126.86	244.21	89.71	146.47	-1,101.99	4,089.76	3,774.14	315.62	12.958		
11,600.00	7,062.52	7,044.52	7,062.52	129.60	244.20	89.70	146.47	-1,101.99	4,174.10	3,858.33	315.78	13.219		
11,700.00	7,062.19	7,044.19	7,062.19	132.35	244.19	89.70	146.47	-1,101.99	4,259.12	3,943.20	315.92	13.482		
11,800.00	7,061.87	7,043.87	7,061.87	135.10	244.18	89.69	146.47	-1,101.99	4,344.77	4,028.72	316.05	13.747		
11,900.00	7,061.54	7,043.54	7,061.54	137.85	244.17	89.68	146.47	-1,101.99	4,431.03	4,114.86	316.17	14.015		
12,000.00	7,061.22	7,043.22	7,061.22	140.61	244.16	89.67	146.47	-1,101.99	4,517.85	4,201.57	316.28	14.285		
12,100.00	7,060.89	7,042.89	7,060.89	143.38	244.14	89.66	146.47	-1,101.99	4,605.20	4,288.83	316.38	14.556		
12,200.00	7,060.57	7,042.57	7,060.57	146.15	244.13	89.65	146.47	-1,101.99	4,693.06	4,376.60	316.47	14.830		
12,300.00	7,060.24	7,042.24	7,060.24	148.92	244.12	89.64	146.47	-1,101.99	4,781.40	4,464.85	316.55	15.105		
12,400.00	7,059.92	7,041.92	7,059.92	151.69	244.11	89.64	146.47	-1,101.99	4,870.19	4,553.56	316.63	15.381		
12,500.00	7,059.59	7,041.59	7,059.59	154.47	244.10	89.63	146.47	-1,101.99	4,959.41	4,642.71	316.70	15.660		
12,600.00	7,059.27	7,041.27	7,059.27	157.25	244.09	89.62	146.47	-1,101.99	5,049.03	4,732.27	316.76	15.940		
12,700.00	7,058.94	7,040.94	7,058.94	160.03	244.08	89.61	146.47	-1,101.99	5,139.03	4,822.21	316.82	16.221		
12,800.00	7,058.62	7,040.62	7,058.62	162.82	244.07	89.60	146.47	-1,101.99	5,229.40	4,912.52	316.88	16.503		
12,900.00	7,058.29	7,040.29	7,058.29	165.61	244.05	89.59	146.47	-1,101.99	5,320.11	5,003.18	316.93	16.787		
13,000.00	7,057.97	7,039.97	7,057.97	168.40	244.04	89.59	146.47	-1,101.99	5,411.14	5,094.17	316.97	17.071		
13,100.00	7,057.64	7,039.64	7,057.64	171.19	244.03	89.58	146.47	-1,101.99	5,502.49	5,185.48	317.02	17.357		
13,200.00	7,057.32	7,039.32	7,057.32	173.99	244.02	89.57	146.47	-1,101.99	5,594.14	5,277.08	317.06	17.644		
13,300.00	7,057.00	7,039.00	7,057.00	176.78	244.01	89.56	146.47	-1,101.99	5,686.07	5,368.97	317.09	17.932		
13,400.00	7,056.67	7,038.67	7,056.67	179.58	244.00	89.55	146.47	-1,101.99	5,778.26	5,461.13	317.13	18.221		
13,500.00	7,056.35	7,038.35	7,056.35	182.38	243.99	89.54	146.47	-1,101.99	5,870.71	5,553.55	317.16	18.510		
13,600.00	7,056.02	7,038.02	7,056.02	185.19	243.97	89.54	146.47	-1,101.99	5,963.40	5,646.22	317.19	18.801		
13,700.00	7,055.70	7,037.70	7,055.70	187.99	243.96	89.53	146.47	-1,101.99	6,056.33	5,739.11	317.22	19.092		
13,800.00	7,055.37	7,037.37	7,055.37	190.80	243.95	89.52	146.47	-1,101.99	6,149.48	5,832.24	317.24	19.384		
13,900.00	7,055.05	7,037.05	7,055.05	193.60	243.94	89.51	146.47	-1,101.99	6,242.84	5,925.57	317.27	19.677		
14,000.00	7,054.72	7,036.72	7,054.72	196.41	243.93	89.50	146.47	-1,101.99	6,336.40	6,019.11	317.29	19.970		
14,100.00	7,054.40	7,036.40	7,054.40	199.22	243.92	89.49	146.47	-1,101.99	6,430.16	6,112.84	317.32	20.264		
14,200.00	7,054.07	7,036.07	7,054.07	202.03	243.91	89.49	146.47	-1,101.99	6,524.10	6,206.76	317.34	20.559		
14,300.00	7,053.75	7,035.75	7,053.75	204.85	243.89	89.48	146.47	-1,101.99	6,618.22	6,300.86	317.36	20.854		
14,400.00	7,053.42	7,035.42	7,053.42	207.66	243.88	89.47	146.47	-1,101.99	6,712.51	6,395.13	317.38	21.150		
14,500.00	7,053.10	7,035.10	7,053.10	210.48	243.87	89.46	146.47	-1,101.99	6,806.96	6,489.57	317.40	21.446		
14,600.00	7,052.77	7,034.77	7,052.77	213.29	243.86	89.45	146.47	-1,101.99	6,901.57	6,584.16	317.42	21.743		
14,700.00	7,052.45	7,034.45	7,052.45	216.11	243.85	89.44	146.47	-1,101.99	6,996.33	6,678.90	317.43	22.040		
14,800.00	7,052.12	7,034.12	7,052.12	218.93	243.84	89.44	146.47	-1,101.99	7,091.23	6,773.78	317.45	22.338		
14,900.00	7,051.80	7,033.80	7,051.80	221.75	243.83	89.43	146.47	-1,101.99	7,186.28	6,868.80	317.47	22.636		
15,000.00	7,051.47	7,033.47	7,051.47	224.57	243.82	89.42	146.47	-1,101.99	7,281.45	6,963.96	317.49	22.935		
15,100.00	7,051.15	7,033.15	7,051.15	227.39	243.80	89.41	146.47	-1,101.99	7,376.75	7,059.25	317.50	23.234		
15,145.13	7,051.00	7,033.00	7,051.00	228.67	243.80	89.41	146.47	-1,101.99	7,419.80	7,102.29	317.51	23.369		





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	11.00	3.28	3.28	-60.79	827.74	-1,480.22	1,695.97				
100.00	100.00	89.00	100.00	3.28	3.63	-60.79	827.74	-1,480.22	1,695.94	1,689.02	6.91	245.290	
200.00	200.00	189.00	200.00	3.34	5.86	-60.79	827.74	-1,480.22	1,695.94	1,686.74	9.19	184.459 CC	
300.00	299.98	288.98	299.98	3.44	8.96	114.87	827.74	-1,480.22	1,696.67	1,684.26	12.40	136.786	
400.00	399.84	388.84	399.84	3.59	12.28	114.99	827.74	-1,480.22	1,698.88	1,683.01	15.86	107.089 ES	
500.00	499.45	488.45	499.45	3.79	15.65	115.18	827.74	-1,480.22	1,702.58	1,683.14	19.44	87.576	
600.00	598.70	587.70	598.70	4.03	19.06	115.46	827.74	-1,480.22	1,707.83	1,684.74	23.09	73.977	
700.00	697.47	686.47	697.47	4.31	22.46	115.80	827.74	-1,480.22	1,714.66	1,687.89	26.77	64.043	
800.00	795.62	784.62	795.62	4.64	25.85	116.21	827.74	-1,480.22	1,723.16	1,692.67	30.49	56.516	
900.00	893.06	882.06	893.06	5.00	29.23	116.68	827.74	-1,480.22	1,733.39	1,699.16	34.22	50.651	
1,000.00	989.64	978.64	989.64	5.40	32.58	117.20	827.74	-1,480.22	1,745.44	1,707.48	37.96	45.977	
1,100.00	1,085.27	1,074.27	1,085.27	5.83	35.91	117.79	827.74	-1,480.22	1,759.41	1,717.71	41.71	42.186	
1,200.00	1,180.44	1,169.44	1,180.44	6.29	39.22	118.63	827.74	-1,480.22	1,774.49	1,729.03	45.45	39.039	
1,300.00	1,275.61	1,264.61	1,275.61	6.76	42.53	119.46	827.74	-1,480.22	1,789.97	1,740.75	49.22	36.367	
1,400.00	1,370.78	1,359.78	1,370.78	7.26	45.84	120.28	827.74	-1,480.22	1,805.83	1,752.83	53.00	34.073	
1,500.00	1,465.95	1,454.95	1,465.95	7.76	49.16	121.09	827.74	-1,480.22	1,822.08	1,765.29	56.79	32.085	
1,600.00	1,561.12	1,550.12	1,561.12	8.27	52.47	121.88	827.74	-1,480.22	1,838.69	1,778.10	60.59	30.347	
1,700.00	1,656.29	1,645.29	1,656.29	8.80	55.79	122.65	827.74	-1,480.22	1,855.67	1,791.27	64.39	28.818	
1,800.00	1,751.46	1,740.46	1,751.46	9.32	59.11	123.42	827.74	-1,480.22	1,872.99	1,804.79	68.20	27.462	
1,900.00	1,846.63	1,835.63	1,846.63	9.86	62.42	124.17	827.74	-1,480.22	1,890.65	1,818.64	72.02	26.252	
2,000.00	1,941.80	1,930.80	1,941.80	10.40	65.74	124.91	827.74	-1,480.22	1,908.65	1,832.81	75.84	25.168	
2,100.00	2,036.96	2,025.96	2,036.96	10.94	69.06	125.63	827.74	-1,480.22	1,926.96	1,847.31	79.66	24.191	
2,200.00	2,132.13	2,121.13	2,132.13	11.49	72.38	126.35	827.74	-1,480.22	1,945.59	1,862.11	83.48	23.307	
2,300.00	2,227.30	2,216.30	2,227.30	12.04	75.70	127.04	827.74	-1,480.22	1,964.52	1,877.22	87.30	22.503	
2,400.00	2,322.47	2,311.47	2,322.47	12.59	79.02	127.73	827.74	-1,480.22	1,983.75	1,892.62	91.13	21.769	
2,500.00	2,417.64	2,406.64	2,417.64	13.15	82.34	128.41	827.74	-1,480.22	2,003.26	1,908.31	94.95	21.098	
2,600.00	2,512.81	2,501.81	2,512.81	13.70	85.66	129.07	827.74	-1,480.22	2,023.05	1,924.27	98.78	20.481	
2,700.00	2,607.98	2,603.02	2,607.98	14.26	89.19	129.72	827.74	-1,480.22	2,043.11	1,940.30	102.81	19.872	
2,800.00	2,703.15	2,707.85	2,703.15	14.82	92.84	130.35	827.74	-1,480.22	2,063.43	1,956.46	106.97	19.289	
2,900.00	2,798.32	2,787.32	2,798.32	15.38	95.62	130.98	827.74	-1,480.22	2,084.00	1,973.75	110.25	18.902	
3,000.00	2,893.49	2,882.49	2,893.49	15.95	98.94	131.59	827.74	-1,480.22	2,104.83	1,990.75	114.08	18.451	
3,100.00	2,988.66	2,977.66	2,988.66	16.51	102.26	132.20	827.74	-1,480.22	2,125.89	2,007.99	117.90	18.031	
3,200.00	3,083.83	3,072.83	3,083.83	17.07	105.58	132.79	827.74	-1,480.22	2,147.18	2,025.46	121.73	17.640	
3,300.00	3,179.00	3,168.00	3,179.00	17.64	108.90	133.37	827.74	-1,480.22	2,168.70	2,043.15	125.55	17.274	
3,400.00	3,274.17	3,263.17	3,274.17	18.21	112.22	133.94	827.74	-1,480.22	2,190.44	2,061.07	129.37	16.931	
3,500.00	3,369.34	3,358.34	3,369.34	18.77	115.54	134.50	827.74	-1,480.22	2,212.39	2,079.20	133.20	16.610	
3,600.00	3,464.51	3,453.51	3,464.51	19.34	118.86	135.05	827.74	-1,480.22	2,234.55	2,097.53	137.02	16.308	
3,700.00	3,559.68	3,548.68	3,559.68	19.91	122.18	135.58	827.74	-1,480.22	2,256.91	2,116.07	140.84	16.025	
3,800.00	3,654.84	3,643.84	3,654.84	20.48	125.50	136.11	827.74	-1,480.22	2,279.46	2,134.80	144.66	15.757	
3,900.00	3,750.01	3,739.01	3,750.01	21.05	128.83	136.63	827.74	-1,480.22	2,302.20	2,153.72	148.48	15.505	
4,000.00	3,845.18	3,834.18	3,845.18	21.62	132.15	137.14	827.74	-1,480.22	2,325.13	2,172.82	152.30	15.266	
4,100.00	3,940.35	3,929.35	3,940.35	22.19	135.47	137.64	827.74	-1,480.22	2,348.23	2,192.11	156.12	15.041	
4,200.00	4,035.52	4,024.52	4,035.52	22.76	138.79	138.12	827.74	-1,480.22	2,371.50	2,211.56	159.94	14.827	
4,300.00	4,130.69	4,119.69	4,130.69	23.33	142.11	138.61	827.74	-1,480.22	2,394.94	2,231.18	163.76	14.625	
4,400.00	4,225.86	4,214.86	4,225.86	23.91	145.43	139.08	827.74	-1,480.22	2,418.55	2,250.97	167.58	14.432	
4,500.00	4,321.03	4,310.03	4,321.03	24.48	148.75	139.54	827.74	-1,480.22	2,442.31	2,270.91	171.40	14.249	
4,600.00	4,416.20	4,405.20	4,416.20	25.05	152.08	139.99	827.74	-1,480.22	2,466.23	2,291.01	175.21	14.075	
4,700.00	4,511.37	4,500.37	4,511.37	25.62	155.40	140.44	827.74	-1,480.22	2,490.29	2,311.26	179.03	13.910	
4,800.00	4,606.54	4,604.46	4,606.54	26.20	159.03	140.88	827.74	-1,480.22	2,514.50	2,331.34	183.16	13.729	
4,900.00	4,701.71	4,709.29	4,701.71	26.77	162.69	141.30	827.74	-1,480.22	2,538.85	2,351.54	187.31	13.554	
5,000.00	4,796.88	4,785.88	4,796.88	27.34	165.36	141.73	827.74	-1,480.22	2,563.34	2,372.86	190.48	13.457	
5,100.00	4,892.05	4,881.05	4,892.05	27.92	168.68	142.14	827.74	-1,480.22	2,587.95	2,393.66	194.29	13.320	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,976.22	4,987.22	28.49	172.01	142.54	827.74	-1,480.22	2,612.70	2,414.59	198.11	13.188		
5,300.00	5,082.39	5,071.39	5,082.39	29.07	175.33	142.94	827.74	-1,480.22	2,637.57	2,435.65	201.92	13.062		
5,400.00	5,177.56	5,166.56	5,177.56	29.64	178.65	143.34	827.74	-1,480.22	2,662.57	2,456.83	205.74	12.942		
5,500.00	5,272.72	5,261.72	5,272.72	30.21	181.97	143.72	827.74	-1,480.22	2,687.68	2,478.13	209.55	12.826		
5,600.00	5,367.89	5,356.89	5,367.89	30.79	185.29	144.10	827.74	-1,480.22	2,712.91	2,499.55	213.36	12.715		
5,700.00	5,463.06	5,452.06	5,463.06	31.36	188.61	144.47	827.74	-1,480.22	2,738.25	2,521.07	217.18	12.608		
5,800.00	5,558.23	5,547.23	5,558.23	31.94	191.94	144.83	827.74	-1,480.22	2,763.70	2,542.71	220.99	12.506		
5,900.00	5,653.40	5,642.40	5,653.40	32.51	195.26	145.19	827.74	-1,480.22	2,789.25	2,564.45	224.80	12.408		
6,000.00	5,748.57	5,737.57	5,748.57	33.09	198.58	145.54	827.74	-1,480.22	2,814.91	2,586.30	228.61	12.313		
6,100.00	5,843.74	5,832.74	5,843.74	33.67	201.90	145.89	827.74	-1,480.22	2,840.67	2,608.24	232.43	12.222		
6,200.00	5,938.91	5,927.91	5,938.91	34.24	205.22	146.23	827.74	-1,480.22	2,866.52	2,630.29	236.24	12.134		
6,300.00	6,034.08	6,023.08	6,034.08	34.82	208.55	146.56	827.74	-1,480.22	2,892.47	2,652.42	240.05	12.050		
6,400.00	6,129.25	6,118.25	6,129.25	35.39	211.87	146.89	827.74	-1,480.22	2,918.51	2,674.65	243.86	11.968		
6,500.00	6,224.42	6,213.42	6,224.42	35.97	215.19	147.21	827.74	-1,480.22	2,944.65	2,696.98	247.67	11.889		
6,600.00	6,319.59	6,308.59	6,319.59	36.54	218.51	147.52	827.74	-1,480.22	2,970.87	2,719.38	251.48	11.813		
6,700.00	6,414.76	6,403.76	6,414.76	37.12	221.83	147.83	827.74	-1,480.22	2,997.17	2,741.88	255.29	11.740		
6,800.00	6,509.91	6,501.09	6,509.91	37.70	225.23	148.14	827.74	-1,480.22	3,023.31	2,764.13	259.18	11.665		
6,900.00	6,603.99	6,607.01	6,603.99	38.26	228.93	116.24	827.74	-1,480.22	3,044.34	2,780.98	263.36	11.560		
7,000.00	6,694.76	6,683.76	6,694.76	38.78	231.61	101.34	827.74	-1,480.22	3,058.25	2,791.75	266.49	11.476		
7,100.00	6,779.96	6,768.96	6,779.96	39.24	234.58	92.90	827.74	-1,480.22	3,065.18	2,795.30	269.88	11.358		
7,200.00	6,857.50	6,846.50	6,857.50	39.65	237.29	88.34	827.74	-1,480.22	3,065.56	2,792.58	272.98	11.230		
7,300.00	6,925.48	6,914.48	6,925.48	40.02	239.66	86.20	827.74	-1,480.22	3,060.02	2,784.28	275.74	11.097		
7,400.00	6,982.21	6,971.21	6,982.21	40.33	241.64	85.62	827.74	-1,480.22	3,049.38	2,771.20	278.17	10.962		
7,500.00	7,026.31	7,015.31	7,026.31	40.63	243.18	86.08	827.74	-1,480.22	3,034.49	2,754.23	280.26	10.827		
7,600.00	7,056.68	7,045.68	7,056.68	40.91	244.24	87.26	827.74	-1,480.22	3,016.25	2,734.24	282.01	10.696		
7,700.00	7,072.58	7,061.58	7,072.58	41.25	244.80	88.91	827.74	-1,480.22	2,995.46	2,712.06	283.40	10.570		
7,800.00	7,074.86	7,063.86	7,074.86	41.69	244.88	90.04	827.74	-1,480.22	2,973.21	2,688.75	284.46	10.452		
7,900.00	7,074.54	7,063.54	7,074.54	42.34	244.87	90.03	827.74	-1,480.22	2,953.34	2,667.74	285.60	10.341		
8,000.00	7,074.21	7,063.21	7,074.21	43.27	244.85	90.03	827.74	-1,480.22	2,936.74	2,649.86	286.88	10.237		
8,100.00	7,073.89	7,062.89	7,073.89	44.47	244.84	90.02	827.74	-1,480.22	2,923.47	2,635.16	288.30	10.140		
8,200.00	7,073.57	7,062.57	7,073.57	45.91	244.83	90.02	827.74	-1,480.22	2,913.57	2,623.73	289.85	10.052		
8,300.00	7,073.24	7,062.24	7,073.24	47.53	244.82	90.01	827.74	-1,480.22	2,907.08	2,615.60	291.49	9.973		
8,400.00	7,072.92	7,061.92	7,072.92	49.31	244.81	90.00	827.74	-1,480.22	2,904.02	2,610.82	293.21	9.904		
8,438.86	7,072.79	7,061.79	7,072.79	50.04	244.80	90.00	827.74	-1,480.22	2,903.76	2,609.86	293.90	9.880		
8,500.00	7,072.59	7,061.59	7,072.59	51.20	244.80	90.00	827.74	-1,480.22	2,904.41	2,609.42	294.99	9.846		
8,600.00	7,072.27	7,061.27	7,072.27	53.19	244.79	89.99	827.74	-1,480.22	2,908.23	2,611.42	296.81	9.798		
8,700.00	7,071.94	7,060.94	7,071.94	55.27	244.77	89.98	827.74	-1,480.22	2,915.48	2,616.82	298.66	9.762		
8,800.00	7,071.62	7,060.62	7,071.62	57.43	244.76	89.98	827.74	-1,480.22	2,926.14	2,625.61	300.52	9.737		
8,900.00	7,071.29	7,060.29	7,071.29	59.64	244.75	89.97	827.74	-1,480.22	2,940.15	2,637.78	302.38	9.723		
9,000.00	7,070.97	7,059.97	7,070.97	61.92	244.74	89.96	827.74	-1,480.22	2,957.49	2,653.27	304.21	9.722 SF		
9,100.00	7,070.64	7,059.64	7,070.64	64.24	244.73	89.96	827.74	-1,480.22	2,978.08	2,672.06	306.02	9.732		
9,200.00	7,070.32	7,059.32	7,070.32	66.61	244.72	89.95	827.74	-1,480.22	3,001.86	2,694.08	307.78	9.753		
9,300.00	7,069.99	7,058.99	7,069.99	69.01	244.71	89.94	827.74	-1,480.22	3,028.76	2,719.26	309.50	9.786		
9,400.00	7,069.67	7,058.67	7,069.67	71.45	244.70	89.94	827.74	-1,480.22	3,058.70	2,747.53	311.16	9.830		
9,500.00	7,069.34	7,058.34	7,069.34	73.92	244.68	89.93	827.74	-1,480.22	3,091.58	2,778.81	312.77	9.885		
9,600.00	7,069.02	7,058.02	7,069.02	76.42	244.67	89.93	827.74	-1,480.22	3,127.31	2,813.01	314.30	9.950		
9,700.00	7,068.69	7,057.69	7,068.69	78.95	244.66	89.92	827.74	-1,480.22	3,165.80	2,850.03	315.77	10.026		
9,800.00	7,068.37	7,057.37	7,068.37	81.49	244.65	89.91	827.74	-1,480.22	3,206.95	2,889.78	317.17	10.111		
9,900.00	7,068.04	7,057.04	7,068.04	84.06	244.64	89.91	827.74	-1,480.22	3,250.66	2,932.15	318.51	10.206		
10,000.00	7,067.72	7,056.72	7,067.72	86.65	244.63	89.90	827.74	-1,480.22	3,296.81	2,977.05	319.77	10.310		
10,100.00	7,067.39	7,056.39	7,067.39	89.25	244.62	89.89	827.74	-1,480.22	3,345.33	3,024.37	320.96	10.423		
10,200.00	7,067.07	7,056.07	7,067.07	91.87	244.60	89.89	827.74	-1,480.22	3,396.09	3,074.01	322.08	10.544		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.74	7,055.74	7,066.74	94.50	244.59	89.88	827.74	-1,480.22	3,449.01	3,125.87	323.14	10.674		
10,400.00	7,066.42	7,055.42	7,066.42	97.14	244.58	89.87	827.74	-1,480.22	3,503.98	3,179.85	324.13	10.810		
10,500.00	7,066.09	7,055.09	7,066.09	99.80	244.57	89.87	827.74	-1,480.22	3,560.91	3,235.86	325.06	10.955		
10,600.00	7,065.77	7,054.77	7,065.77	102.47	244.56	89.86	827.74	-1,480.22	3,619.71	3,293.79	325.93	11.106		
10,700.00	7,065.44	7,054.44	7,065.44	105.15	244.55	89.86	827.74	-1,480.22	3,680.29	3,353.55	326.74	11.264		
10,800.00	7,065.12	7,054.12	7,065.12	107.83	244.54	89.85	827.74	-1,480.22	3,742.56	3,415.06	327.50	11.428		
10,900.00	7,064.79	7,053.79	7,064.79	110.53	244.52	89.84	827.74	-1,480.22	3,806.44	3,478.23	328.21	11.598		
11,000.00	7,064.47	7,053.47	7,064.47	113.23	244.51	89.84	827.74	-1,480.22	3,871.85	3,542.98	328.87	11.773		
11,100.00	7,064.14	7,053.14	7,064.14	115.95	244.50	89.83	827.74	-1,480.22	3,938.71	3,609.23	329.48	11.954		
11,200.00	7,063.82	7,052.82	7,063.82	118.66	244.49	89.82	827.74	-1,480.22	4,006.95	3,676.90	330.05	12.140		
11,300.00	7,063.49	7,052.49	7,063.49	121.39	244.48	89.82	827.74	-1,480.22	4,076.50	3,745.92	330.58	12.331		
11,400.00	7,063.17	7,052.17	7,063.17	124.12	244.47	89.81	827.74	-1,480.22	4,147.30	3,816.23	331.08	12.527		
11,500.00	7,062.84	7,051.84	7,062.84	126.86	244.46	89.80	827.74	-1,480.22	4,219.28	3,887.75	331.53	12.727		
11,600.00	7,062.52	7,051.52	7,062.52	129.60	244.45	89.80	827.74	-1,480.22	4,292.38	3,960.43	331.96	12.931		
11,700.00	7,062.19	7,051.19	7,062.19	132.35	244.43	89.79	827.74	-1,480.22	4,366.55	4,034.20	332.35	13.138		
11,800.00	7,061.87	7,050.87	7,061.87	135.10	244.42	89.78	827.74	-1,480.22	4,441.73	4,109.02	332.71	13.350		
11,900.00	7,061.54	7,050.54	7,061.54	137.85	244.41	89.78	827.74	-1,480.22	4,517.88	4,184.83	333.05	13.565		
12,000.00	7,061.22	7,050.22	7,061.22	140.61	244.40	89.77	827.74	-1,480.22	4,594.94	4,261.57	333.36	13.784		
12,100.00	7,060.89	7,049.89	7,060.89	143.38	244.39	89.77	827.74	-1,480.22	4,672.86	4,339.21	333.65	14.005		
12,200.00	7,060.57	7,049.57	7,060.57	146.15	244.38	89.76	827.74	-1,480.22	4,751.62	4,417.70	333.92	14.230		
12,300.00	7,060.24	7,049.24	7,060.24	148.92	244.37	89.75	827.74	-1,480.22	4,831.16	4,496.99	334.17	14.457		
12,400.00	7,059.92	7,048.92	7,059.92	151.69	244.35	89.75	827.74	-1,480.22	4,911.45	4,577.05	334.40	14.687		
12,500.00	7,059.59	7,048.59	7,059.59	154.47	244.34	89.74	827.74	-1,480.22	4,992.45	4,657.84	334.61	14.920		
12,600.00	7,059.27	7,048.27	7,059.27	157.25	244.33	89.73	827.74	-1,480.22	5,074.13	4,739.32	334.81	15.155		
12,700.00	7,058.94	7,047.94	7,058.94	160.03	244.32	89.73	827.74	-1,480.22	5,156.45	4,821.46	334.99	15.393		
12,800.00	7,058.62	7,047.62	7,058.62	162.82	244.31	89.72	827.74	-1,480.22	5,239.39	4,904.23	335.15	15.633		
12,900.00	7,058.29	7,047.29	7,058.29	165.61	244.30	89.71	827.74	-1,480.22	5,322.91	4,987.61	335.31	15.875		
13,000.00	7,057.97	7,046.97	7,057.97	168.40	244.29	89.71	827.74	-1,480.22	5,407.00	5,071.55	335.45	16.119		
13,100.00	7,057.64	7,046.64	7,057.64	171.19	244.28	89.70	827.74	-1,480.22	5,491.62	5,156.03	335.58	16.364		
13,200.00	7,057.32	7,046.32	7,057.32	173.99	244.26	89.69	827.74	-1,480.22	5,576.74	5,241.04	335.71	16.612		
13,300.00	7,057.00	7,046.00	7,057.00	176.78	244.25	89.69	827.74	-1,480.22	5,662.36	5,326.54	335.82	16.861		
13,400.00	7,056.67	7,045.67	7,056.67	179.58	244.24	89.68	827.74	-1,480.22	5,748.44	5,412.51	335.92	17.112		
13,500.00	7,056.35	7,045.35	7,056.35	182.38	244.23	89.68	827.74	-1,480.22	5,834.96	5,498.94	336.02	17.365		
13,600.00	7,056.02	7,045.02	7,056.02	185.19	244.22	89.67	827.74	-1,480.22	5,921.90	5,585.80	336.10	17.619		
13,700.00	7,055.70	7,044.70	7,055.70	187.99	244.21	89.66	827.74	-1,480.22	6,009.26	5,673.07	336.19	17.875		
13,800.00	7,055.37	7,044.37	7,055.37	190.80	244.20	89.66	827.74	-1,480.22	6,097.00	5,760.74	336.26	18.132		
13,900.00	7,055.05	7,044.05	7,055.05	193.60	244.18	89.65	827.74	-1,480.22	6,185.11	5,848.78	336.33	18.390		
14,000.00	7,054.72	7,043.72	7,054.72	196.41	244.17	89.64	827.74	-1,480.22	6,273.58	5,937.19	336.39	18.650		
14,100.00	7,054.40	7,043.40	7,054.40	199.22	244.16	89.64	827.74	-1,480.22	6,362.39	6,025.94	336.45	18.910		
14,200.00	7,054.07	7,043.07	7,054.07	202.03	244.15	89.63	827.74	-1,480.22	6,451.53	6,115.03	336.50	19.172		
14,300.00	7,053.75	7,042.75	7,053.75	204.85	244.14	89.62	827.74	-1,480.22	6,540.98	6,204.43	336.55	19.435		
14,400.00	7,053.42	7,042.42	7,053.42	207.66	244.13	89.62	827.74	-1,480.22	6,630.74	6,294.14	336.60	19.699		
14,500.00	7,053.10	7,042.10	7,053.10	210.48	244.12	89.61	827.74	-1,480.22	6,720.78	6,384.14	336.64	19.964		
14,600.00	7,052.77	7,041.77	7,052.77	213.29	244.11	89.61	827.74	-1,480.22	6,811.10	6,474.42	336.68	20.230		
14,700.00	7,052.45	7,041.45	7,052.45	216.11	244.09	89.60	827.74	-1,480.22	6,901.69	6,564.98	336.71	20.497		
14,800.00	7,052.12	7,041.12	7,052.12	218.93	244.08	89.59	827.74	-1,480.22	6,992.53	6,655.79	336.75	20.765		
14,900.00	7,051.80	7,040.80	7,051.80	221.75	244.07	89.59	827.74	-1,480.22	7,083.63	6,746.85	336.78	21.034		
15,000.00	7,051.47	7,040.47	7,051.47	224.57	244.06	89.58	827.74	-1,480.22	7,174.95	6,838.15	336.80	21.303		
15,100.00	7,051.15	7,040.15	7,051.15	227.39	244.05	89.57	827.74	-1,480.22	7,266.51	6,929.68	336.83	21.573		
15,145.13	7,051.00	7,040.00	7,051.00	228.67	244.04	89.57	827.74	-1,480.22	7,307.90	6,971.06	336.84	21.695		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	48.00	3.28	3.28	-75.01	1,335.68	-4,988.19	5,164.14					
100.00	100.00	52.00	100.00	3.28	3.40	-75.01	1,335.68	-4,988.19	5,163.92	5,157.23	6.69	772.117		
200.00	200.00	152.00	200.00	3.34	4.84	-75.01	1,335.68	-4,988.19	5,163.92	5,155.74	8.18	631.417		
300.00	299.98	251.98	299.98	3.44	7.78	100.62	1,335.68	-4,988.19	5,164.24	5,153.02	11.22	460.435		
400.00	399.84	351.84	399.84	3.59	11.04	100.65	1,335.68	-4,988.19	5,165.21	5,150.58	14.62	353.193		
500.00	499.45	451.45	499.45	3.79	14.39	100.72	1,335.68	-4,988.19	5,166.83	5,148.65	18.18	284.208		
600.00	598.70	550.70	598.70	4.03	17.78	100.80	1,335.68	-4,988.19	5,169.12	5,147.31	21.81	236.965		
700.00	697.47	649.47	697.47	4.31	21.18	100.91	1,335.68	-4,988.19	5,172.10	5,146.61	25.50	202.854		
800.00	795.62	747.62	795.62	4.64	24.57	101.04	1,335.68	-4,988.19	5,175.80	5,146.59	29.21	177.185		
900.00	893.06	845.06	893.06	5.00	27.95	101.19	1,335.68	-4,988.19	5,180.25	5,147.30	32.95	157.234		
1,000.00	989.64	941.64	989.64	5.40	31.30	101.36	1,335.68	-4,988.19	5,185.48	5,148.79	36.69	141.322		
1,100.00	1,085.27	1,037.27	1,085.27	5.83	34.62	101.55	1,335.68	-4,988.19	5,191.54	5,151.10	40.44	128.365		
1,200.00	1,180.44	1,132.44	1,180.44	6.29	37.93	101.87	1,335.68	-4,988.19	5,198.08	5,153.87	44.21	117.584		
1,300.00	1,275.61	1,227.61	1,275.61	6.76	41.24	102.19	1,335.68	-4,988.19	5,204.79	5,156.80	47.99	108.452		
1,400.00	1,370.78	1,322.78	1,370.78	7.26	44.55	102.50	1,335.68	-4,988.19	5,211.67	5,159.88	51.79	100.627		
1,500.00	1,465.95	1,417.95	1,465.95	7.76	47.87	102.81	1,335.68	-4,988.19	5,218.72	5,163.12	55.60	93.854		
1,600.00	1,561.12	1,513.12	1,561.12	8.27	51.18	103.13	1,335.68	-4,988.19	5,225.94	5,166.52	59.43	87.937		
1,700.00	1,656.29	1,608.29	1,656.29	8.80	54.50	103.44	1,335.68	-4,988.19	5,233.34	5,170.08	63.26	82.727		
1,800.00	1,751.46	1,703.46	1,751.46	9.32	57.82	103.75	1,335.68	-4,988.19	5,240.90	5,173.80	67.10	78.107		
1,900.00	1,846.63	1,801.37	1,846.63	9.86	61.23	104.06	1,335.68	-4,988.19	5,248.63	5,177.59	71.04	73.883		
2,000.00	1,941.80	1,906.20	1,941.80	10.40	64.88	104.37	1,335.68	-4,988.19	5,256.53	5,181.31	75.23	69.877		
2,100.00	2,036.96	1,988.96	2,036.96	10.94	67.77	104.68	1,335.68	-4,988.19	5,264.60	5,185.95	78.65	66.940		
2,200.00	2,132.13	2,084.13	2,132.13	11.49	71.09	104.99	1,335.68	-4,988.19	5,272.83	5,190.33	82.50	63.910		
2,300.00	2,227.30	2,179.30	2,227.30	12.04	74.41	105.30	1,335.68	-4,988.19	5,281.23	5,194.87	86.36	61.151		
2,400.00	2,322.47	2,274.47	2,322.47	12.59	77.73	105.60	1,335.68	-4,988.19	5,289.79	5,199.57	90.23	58.629		
2,500.00	2,417.64	2,369.64	2,417.64	13.15	81.05	105.91	1,335.68	-4,988.19	5,298.52	5,204.43	94.09	56.314		
2,600.00	2,512.81	2,464.81	2,512.81	13.70	84.37	106.21	1,335.68	-4,988.19	5,307.41	5,209.46	97.95	54.182		
2,700.00	2,607.98	2,559.98	2,607.98	14.26	87.68	106.52	1,335.68	-4,988.19	5,316.47	5,214.64	101.82	52.214		
2,800.00	2,703.15	2,655.15	2,703.15	14.82	91.01	106.82	1,335.68	-4,988.19	5,325.68	5,219.99	105.69	50.390		
2,900.00	2,798.32	2,750.32	2,798.32	15.38	94.33	107.12	1,335.68	-4,988.19	5,335.06	5,225.50	109.56	48.696		
3,000.00	2,893.49	2,845.49	2,893.49	15.95	97.65	107.42	1,335.68	-4,988.19	5,344.59	5,231.16	113.43	47.118		
3,100.00	2,988.66	2,940.66	2,988.66	16.51	100.97	107.72	1,335.68	-4,988.19	5,354.29	5,236.99	117.30	45.646		
3,200.00	3,083.83	3,035.83	3,083.83	17.07	104.29	108.02	1,335.68	-4,988.19	5,364.14	5,242.97	121.17	44.269		
3,300.00	3,179.00	3,131.00	3,179.00	17.64	107.61	108.32	1,335.68	-4,988.19	5,374.15	5,249.11	125.04	42.979		
3,400.00	3,274.17	3,226.17	3,274.17	18.21	110.93	108.62	1,335.68	-4,988.19	5,384.32	5,255.41	128.91	41.767		
3,500.00	3,369.34	3,321.34	3,369.34	18.77	114.25	108.91	1,335.68	-4,988.19	5,394.64	5,261.86	132.79	40.626		
3,600.00	3,464.51	3,416.51	3,464.51	19.34	117.57	109.21	1,335.68	-4,988.19	5,405.12	5,268.46	136.66	39.552		
3,700.00	3,559.68	3,511.68	3,559.68	19.91	120.89	109.50	1,335.68	-4,988.19	5,415.75	5,275.22	140.53	38.538		
3,800.00	3,654.84	3,606.84	3,654.84	20.48	124.21	109.79	1,335.68	-4,988.19	5,426.54	5,282.13	144.40	37.579		
3,900.00	3,750.01	3,702.01	3,750.01	21.05	127.53	110.08	1,335.68	-4,988.19	5,437.47	5,289.20	148.28	36.671		
4,000.00	3,845.18	3,802.82	3,845.18	21.62	131.05	110.37	1,335.68	-4,988.19	5,448.56	5,296.21	152.34	35.765		
4,100.00	3,940.35	3,907.65	3,940.35	22.19	134.71	110.66	1,335.68	-4,988.19	5,459.80	5,303.24	156.55	34.875		
4,200.00	4,035.52	3,987.52	4,035.52	22.76	137.50	110.95	1,335.68	-4,988.19	5,471.18	5,311.29	159.89	34.218		
4,300.00	4,130.69	4,082.69	4,130.69	23.33	140.82	111.24	1,335.68	-4,988.19	5,482.72	5,318.96	163.76	33.480		
4,400.00	4,225.86	4,177.86	4,225.86	23.91	144.14	111.53	1,335.68	-4,988.19	5,494.40	5,326.77	167.63	32.776		
4,500.00	4,321.03	4,273.03	4,321.03	24.48	147.46	111.81	1,335.68	-4,988.19	5,506.23	5,334.72	171.51	32.105		
4,600.00	4,416.20	4,368.20	4,416.20	25.05	150.78	112.09	1,335.68	-4,988.19	5,518.20	5,342.83	175.38	31.465		
4,700.00	4,511.37	4,463.37	4,511.37	25.62	154.11	112.38	1,335.68	-4,988.19	5,530.32	5,351.08	179.25	30.853		
4,800.00	4,606.54	4,558.54	4,606.54	26.20	157.43	112.66	1,335.68	-4,988.19	5,542.58	5,359.47	183.12	30.268		
4,900.00	4,701.71	4,653.71	4,701.71	26.77	160.75	112.94	1,335.68	-4,988.19	5,554.99	5,368.00	186.99	29.708		
5,000.00	4,796.88	4,748.88	4,796.88	27.34	164.07	113.22	1,335.68	-4,988.19	5,567.54	5,376.68	190.85	29.172		
5,100.00	4,892.05	4,844.05	4,892.05	27.92	167.39	113.50	1,335.68	-4,988.19	5,580.22	5,385.50	194.72	28.657		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,939.22	4,987.22	28.49	170.71	113.77	1,335.68	-4,988.19	5,593.05	5,394.46	198.59	28.164		
5,300.00	5,082.39	5,034.39	5,082.39	29.07	174.04	114.05	1,335.68	-4,988.19	5,606.02	5,403.56	202.46	27.690		
5,400.00	5,177.56	5,129.56	5,177.56	29.64	177.36	114.32	1,335.68	-4,988.19	5,619.12	5,412.80	206.33	27.234		
5,500.00	5,272.72	5,224.72	5,272.72	30.21	180.68	114.60	1,335.68	-4,988.19	5,632.36	5,422.17	210.19	26.796		
5,600.00	5,367.89	5,319.89	5,367.89	30.79	184.00	114.87	1,335.68	-4,988.19	5,645.74	5,431.68	214.06	26.375		
5,700.00	5,463.06	5,415.06	5,463.06	31.36	187.32	115.14	1,335.68	-4,988.19	5,659.25	5,441.33	217.93	25.969		
5,800.00	5,558.23	5,510.23	5,558.23	31.94	190.65	115.41	1,335.68	-4,988.19	5,672.90	5,451.11	221.79	25.578		
5,900.00	5,653.40	5,605.40	5,653.40	32.51	193.97	115.68	1,335.68	-4,988.19	5,686.68	5,461.02	225.66	25.201		
6,000.00	5,748.57	5,700.57	5,748.57	33.09	197.29	115.94	1,335.68	-4,988.19	5,700.59	5,471.07	229.52	24.837		
6,100.00	5,843.74	5,804.26	5,843.74	33.67	200.91	116.21	1,335.68	-4,988.19	5,714.63	5,480.95	233.68	24.455		
6,200.00	5,938.91	5,909.09	5,938.91	34.24	204.57	116.48	1,335.68	-4,988.19	5,728.80	5,490.92	237.88	24.083		
6,300.00	6,034.08	5,986.08	6,034.08	34.82	207.25	116.74	1,335.68	-4,988.19	5,743.10	5,501.99	241.11	23.820		
6,400.00	6,129.25	6,081.25	6,129.25	35.39	210.58	117.00	1,335.68	-4,988.19	5,757.53	5,512.56	244.97	23.503		
6,500.00	6,224.42	6,176.42	6,224.42	35.97	213.90	117.26	1,335.68	-4,988.19	5,772.09	5,523.26	248.83	23.197		
6,600.00	6,319.59	6,271.59	6,319.59	36.54	217.22	117.52	1,335.68	-4,988.19	5,786.77	5,534.08	252.69	22.900		
6,700.00	6,414.76	6,366.76	6,414.76	37.12	220.54	117.78	1,335.68	-4,988.19	5,801.58	5,545.03	256.55	22.613		
6,800.00	6,509.91	6,461.91	6,509.91	37.70	223.86	118.05	1,335.68	-4,988.19	5,816.05	5,555.64	260.41	22.334		
6,900.00	6,603.99	6,555.99	6,603.99	38.26	227.15	118.31	1,335.68	-4,988.19	5,821.03	5,556.80	264.24	22.030		
7,000.00	6,694.76	6,646.76	6,694.76	38.78	230.32	118.57	1,335.68	-4,988.19	5,831.04	5,545.12	267.92	21.697		
7,100.00	6,779.96	6,731.96	6,779.96	39.24	233.29	118.83	1,335.68	-4,988.19	5,792.42	5,521.06	271.36	21.346		
7,200.00	6,857.50	6,809.50	6,857.50	39.65	236.00	119.09	1,335.68	-4,988.19	5,759.85	5,485.34	274.51	20.982		
7,300.00	6,925.48	6,877.48	6,925.48	40.02	238.37	119.35	1,335.68	-4,988.19	5,716.27	5,438.96	277.31	20.613		
7,400.00	6,982.21	6,934.21	6,982.21	40.33	240.35	119.61	1,335.68	-4,988.19	5,662.89	5,383.16	279.73	20.244		
7,500.00	7,026.31	6,978.31	7,026.31	40.63	241.89	119.87	1,335.68	-4,988.19	5,601.13	5,319.38	281.75	19.880		
7,600.00	7,056.68	7,008.68	7,056.68	40.91	242.95	119.90	1,335.68	-4,988.19	5,532.57	5,249.23	283.34	19.527		
7,700.00	7,072.58	7,024.58	7,072.58	41.25	243.51	120.16	1,335.68	-4,988.19	5,458.90	5,174.43	284.48	19.189		
7,800.00	7,074.86	7,026.86	7,074.86	41.69	243.58	120.22	1,335.68	-4,988.19	5,382.13	5,096.93	285.20	18.872		
7,900.00	7,074.54	7,026.54	7,074.54	42.34	243.57	120.22	1,335.68	-4,988.19	5,305.53	5,019.62	285.91	18.556		
8,000.00	7,074.21	7,026.21	7,074.21	43.27	243.56	120.21	1,335.68	-4,988.19	5,229.72	4,943.00	286.73	18.239		
8,100.00	7,073.89	7,025.89	7,073.89	44.47	243.55	120.21	1,335.68	-4,988.19	5,154.74	4,867.10	287.64	17.921		
8,200.00	7,073.57	7,025.57	7,073.57	45.91	243.54	120.20	1,335.68	-4,988.19	5,080.62	4,791.96	288.66	17.601		
8,300.00	7,073.24	7,025.24	7,073.24	47.53	243.53	120.20	1,335.68	-4,988.19	5,007.40	4,717.61	289.78	17.280		
8,400.00	7,072.92	7,024.92	7,072.92	49.31	243.52	120.19	1,335.68	-4,988.19	4,935.11	4,644.11	291.01	16.959		
8,500.00	7,072.59	7,024.59	7,072.59	51.20	243.51	120.19	1,335.68	-4,988.19	4,863.81	4,571.47	292.34	16.638		
8,600.00	7,072.27	7,024.27	7,072.27	53.19	243.49	120.18	1,335.68	-4,988.19	4,793.54	4,499.76	293.78	16.317		
8,700.00	7,071.94	7,023.94	7,071.94	55.27	243.48	120.18	1,335.68	-4,988.19	4,724.34	4,429.02	295.32	15.997		
8,800.00	7,071.62	7,023.62	7,071.62	57.43	243.47	120.17	1,335.68	-4,988.19	4,656.25	4,359.28	296.97	15.679		
8,900.00	7,071.29	7,023.29	7,071.29	59.64	243.46	120.16	1,335.68	-4,988.19	4,589.34	4,290.62	298.72	15.363		
9,000.00	7,070.97	7,022.97	7,070.97	61.92	243.45	120.16	1,335.68	-4,988.19	4,523.64	4,223.06	300.58	15.050		
9,100.00	7,070.64	7,022.64	7,070.64	64.24	243.44	120.15	1,335.68	-4,988.19	4,459.22	4,156.69	302.54	14.740		
9,200.00	7,070.32	7,022.32	7,070.32	66.61	243.43	120.15	1,335.68	-4,988.19	4,396.13	4,091.54	304.59	14.433		
9,300.00	7,069.99	7,021.99	7,069.99	69.01	243.41	120.14	1,335.68	-4,988.19	4,334.44	4,027.68	306.75	14.130		
9,400.00	7,069.67	7,021.67	7,069.67	71.45	243.40	120.14	1,335.68	-4,988.19	4,274.18	3,965.18	309.00	13.832		
9,500.00	7,069.34	7,021.34	7,069.34	73.92	243.39	120.13	1,335.68	-4,988.19	4,215.45	3,904.10	311.35	13.539		
9,600.00	7,069.02	7,021.02	7,069.02	76.42	243.38	120.13	1,335.68	-4,988.19	4,158.28	3,844.50	313.79	13.252		
9,700.00	7,068.69	7,020.69	7,068.69	78.95	243.37	120.12	1,335.68	-4,988.19	4,102.76	3,786.45	316.31	12.971		
9,800.00	7,068.37	7,020.37	7,068.37	81.49	243.36	120.12	1,335.68	-4,988.19	4,048.95	3,730.03	318.92	12.696		
9,900.00	7,068.04	7,020.04	7,068.04	84.06	243.35	120.11	1,335.68	-4,988.19	3,996.91	3,675.31	321.60	12.428		
10,000.00	7,067.72	7,019.72	7,067.72	86.65	243.34	120.11	1,335.68	-4,988.19	3,946.72	3,622.37	324.36	12.168		
10,100.00	7,067.39	7,019.39	7,067.39	89.25	243.32	120.10	1,335.68	-4,988.19	3,898.46	3,571.27	327.19	11.915		
10,200.00	7,067.07	7,019.07	7,067.07	91.87	243.31	120.09	1,335.68	-4,988.19	3,852.18	3,522.10	330.08	11.671		
10,300.00	7,066.74	7,018.74	7,066.74	94.50	243.30	120.09	1,335.68	-4,988.19	3,807.97	3,474.95	333.02	11.435		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,066.42	7,018.42	7,066.42	97.14	243.29	90.08	1,335.68	-4,988.19	3,765.89	3,429.87	336.02	11.207	
10,500.00	7,066.09	7,018.09	7,066.09	99.80	243.28	90.08	1,335.68	-4,988.19	3,726.03	3,386.97	339.06	10.989	
10,600.00	7,065.77	7,017.77	7,065.77	102.47	243.27	90.07	1,335.68	-4,988.19	3,688.44	3,346.31	342.13	10.781	
10,700.00	7,065.44	7,017.44	7,065.44	105.15	243.26	90.07	1,335.68	-4,988.19	3,653.21	3,307.98	345.23	10.582	
10,800.00	7,065.12	7,017.12	7,065.12	107.83	243.24	90.06	1,335.68	-4,988.19	3,620.39	3,272.05	348.34	10.393	
10,900.00	7,064.79	7,016.79	7,064.79	110.53	243.23	90.06	1,335.68	-4,988.19	3,590.07	3,238.60	351.47	10.215	
11,000.00	7,064.47	7,016.47	7,064.47	113.23	243.22	90.05	1,335.68	-4,988.19	3,562.29	3,207.70	354.59	10.046	
11,100.00	7,064.14	7,016.14	7,064.14	115.95	243.21	90.05	1,335.68	-4,988.19	3,537.12	3,179.43	357.69	9.889	
11,200.00	7,063.82	7,015.82	7,063.82	118.66	243.20	90.04	1,335.68	-4,988.19	3,514.62	3,153.84	360.78	9.742	
11,300.00	7,063.49	7,015.49	7,063.49	121.39	243.19	90.03	1,335.68	-4,988.19	3,494.84	3,131.01	363.83	9.606	
11,400.00	7,063.17	7,015.17	7,063.17	124.12	243.18	90.03	1,335.68	-4,988.19	3,477.82	3,110.98	366.83	9.481	
11,500.00	7,062.84	7,014.84	7,062.84	126.86	243.17	90.02	1,335.68	-4,988.19	3,463.60	3,093.82	369.78	9.367	
11,600.00	7,062.52	7,014.52	7,062.52	129.60	243.15	90.02	1,335.68	-4,988.19	3,452.23	3,079.55	372.67	9.263	
11,700.00	7,062.19	7,014.19	7,062.19	132.35	243.14	90.01	1,335.68	-4,988.19	3,443.72	3,068.23	375.48	9.171	
11,800.00	7,061.87	7,013.87	7,061.87	135.10	243.13	90.01	1,335.68	-4,988.19	3,438.10	3,059.89	378.21	9.090	
11,900.00	7,061.54	7,013.54	7,061.54	137.85	243.12	90.00	1,335.68	-4,988.19	3,435.38	3,054.53	380.85	9.020	
11,943.38	7,061.40	7,013.40	7,061.40	139.05	243.11	90.00	1,335.68	-4,988.19	3,435.11	3,053.15	381.96	8.993 CC	
12,000.00	7,061.22	7,013.22	7,061.22	140.61	243.11	90.00	1,335.68	-4,988.19	3,435.57	3,052.19	383.38	8.961 ES	
12,100.00	7,060.89	7,012.89	7,060.89	143.38	243.10	89.99	1,335.68	-4,988.19	3,438.67	3,052.87	385.81	8.913	
12,200.00	7,060.57	7,012.57	7,060.57	146.15	243.09	89.99	1,335.68	-4,988.19	3,444.68	3,056.56	388.12	8.875	
12,300.00	7,060.24	7,012.24	7,060.24	148.92	243.07	89.98	1,335.68	-4,988.19	3,453.57	3,063.25	390.31	8.848	
12,400.00	7,059.92	7,011.92	7,059.92	151.69	243.06	89.98	1,335.68	-4,988.19	3,465.32	3,072.94	392.38	8.831	
12,500.00	7,059.59	7,011.59	7,059.59	154.47	243.05	89.97	1,335.68	-4,988.19	3,479.91	3,085.58	394.33	8.825 SF	
12,600.00	7,059.27	7,011.27	7,059.27	157.25	243.04	89.96	1,335.68	-4,988.19	3,497.30	3,101.16	396.14	8.828	
12,700.00	7,058.94	7,010.94	7,058.94	160.03	243.03	89.96	1,335.68	-4,988.19	3,517.45	3,119.62	397.83	8.842	
12,800.00	7,058.62	7,010.62	7,058.62	162.82	243.02	89.95	1,335.68	-4,988.19	3,540.30	3,140.92	399.38	8.864	
12,900.00	7,058.29	7,010.29	7,058.29	165.61	243.01	89.95	1,335.68	-4,988.19	3,565.82	3,165.01	400.81	8.897	
13,000.00	7,057.97	7,009.97	7,057.97	168.40	243.00	89.94	1,335.68	-4,988.19	3,593.94	3,191.83	402.11	8.938	
13,100.00	7,057.64	7,009.64	7,057.64	171.19	242.98	89.94	1,335.68	-4,988.19	3,624.60	3,221.31	403.29	8.988	
13,200.00	7,057.32	7,009.32	7,057.32	173.99	242.97	89.93	1,335.68	-4,988.19	3,657.74	3,253.40	404.34	9.046	
13,300.00	7,057.00	7,009.00	7,057.00	176.78	242.96	89.93	1,335.68	-4,988.19	3,693.28	3,288.01	405.28	9.113	
13,400.00	7,056.67	7,008.67	7,056.67	179.58	242.95	89.92	1,335.68	-4,988.19	3,731.18	3,325.08	406.10	9.188	
13,500.00	7,056.35	7,008.35	7,056.35	182.38	242.94	89.92	1,335.68	-4,988.19	3,771.34	3,364.53	406.81	9.270	
13,600.00	7,056.02	7,008.02	7,056.02	185.19	242.93	89.91	1,335.68	-4,988.19	3,813.70	3,406.28	407.42	9.361	
13,700.00	7,055.70	7,007.70	7,055.70	187.99	242.92	89.90	1,335.68	-4,988.19	3,858.19	3,450.26	407.93	9.458	
13,800.00	7,055.37	7,007.37	7,055.37	190.80	242.90	89.90	1,335.68	-4,988.19	3,904.74	3,496.38	408.35	9.562	
13,900.00	7,055.05	7,007.05	7,055.05	193.60	242.89	89.89	1,335.68	-4,988.19	3,953.26	3,544.58	408.68	9.673	
14,000.00	7,054.72	7,006.72	7,054.72	196.41	242.88	89.89	1,335.68	-4,988.19	4,003.70	3,594.77	408.93	9.791	
14,100.00	7,054.40	7,006.40	7,054.40	199.22	242.87	89.88	1,335.68	-4,988.19	4,055.97	3,646.87	409.10	9.914	
14,200.00	7,054.07	7,006.07	7,054.07	202.03	242.86	89.88	1,335.68	-4,988.19	4,110.02	3,700.81	409.20	10.044	
14,300.00	7,053.75	7,005.75	7,053.75	204.85	242.85	89.87	1,335.68	-4,988.19	4,165.76	3,756.52	409.24	10.179	
14,400.00	7,053.42	7,005.42	7,053.42	207.66	242.84	89.87	1,335.68	-4,988.19	4,223.14	3,813.93	409.21	10.320	
14,500.00	7,053.10	7,005.10	7,053.10	210.48	242.83	89.86	1,335.68	-4,988.19	4,282.08	3,872.95	409.13	10.466	
14,600.00	7,052.77	7,004.77	7,052.77	213.29	242.81	89.86	1,335.68	-4,988.19	4,342.52	3,933.53	408.99	10.618	
14,700.00	7,052.45	7,004.45	7,052.45	216.11	242.80	89.85	1,335.68	-4,988.19	4,404.41	3,995.60	408.81	10.774	
14,800.00	7,052.12	7,004.12	7,052.12	218.93	242.79	89.85	1,335.68	-4,988.19	4,467.68	4,059.09	408.59	10.934	
14,900.00	7,051.80	7,003.80	7,051.80	221.75	242.78	89.84	1,335.68	-4,988.19	4,532.27	4,123.94	408.33	11.100	
15,000.00	7,051.47	7,003.47	7,051.47	224.57	242.77	89.83	1,335.68	-4,988.19	4,598.13	4,190.10	408.03	11.269	
15,100.00	7,051.15	7,003.15	7,051.15	227.39	242.76	89.83	1,335.68	-4,988.19	4,665.20	4,257.50	407.70	11.443	
15,145.13	7,051.00	7,003.00	7,051.00	228.67	242.75	89.83	1,335.68	-4,988.19	4,695.85	4,288.31	407.54	11.522	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	46.00	3.28	3.28	-75.16	1,356.47	-5,118.07	5,294.97					
100.00	100.00	54.00	100.00	3.28	3.41	-75.16	1,356.47	-5,118.07	5,294.77	5,288.07	6.70	790.563		
200.00	200.00	154.00	200.00	3.34	4.89	-75.16	1,356.47	-5,118.07	5,294.77	5,286.54	8.23	643.360		
300.00	299.98	253.98	299.98	3.44	7.84	100.47	1,356.47	-5,118.07	5,295.09	5,283.81	11.28	469.450		
400.00	399.84	353.84	399.84	3.59	11.10	100.51	1,356.47	-5,118.07	5,296.04	5,281.35	14.69	360.496		
500.00	499.45	453.45	499.45	3.79	14.46	100.57	1,356.47	-5,118.07	5,297.64	5,279.39	18.25	290.318		
600.00	598.70	552.70	598.70	4.03	17.85	100.65	1,356.47	-5,118.07	5,299.90	5,278.02	21.88	242.198		
700.00	697.47	651.47	697.47	4.31	21.25	100.76	1,356.47	-5,118.07	5,302.84	5,277.28	25.57	207.420		
800.00	795.62	749.62	795.62	4.64	24.64	100.88	1,356.47	-5,118.07	5,306.49	5,277.21	29.28	181.229		
900.00	893.06	847.06	893.06	5.00	28.02	101.03	1,356.47	-5,118.07	5,310.88	5,277.86	33.02	160.860		
1,000.00	989.64	943.64	989.64	5.40	31.37	101.19	1,356.47	-5,118.07	5,316.03	5,279.27	36.76	144.606		
1,100.00	1,085.27	1,039.27	1,085.27	5.83	34.69	101.38	1,356.47	-5,118.07	5,322.00	5,281.49	40.51	131.365		
1,200.00	1,180.44	1,134.44	1,180.44	6.29	38.00	101.69	1,356.47	-5,118.07	5,328.44	5,284.16	44.28	120.342		
1,300.00	1,275.61	1,229.61	1,275.61	6.76	41.31	102.00	1,356.47	-5,118.07	5,335.05	5,286.99	48.06	111.004		
1,400.00	1,370.78	1,324.78	1,370.78	7.26	44.62	102.30	1,356.47	-5,118.07	5,341.82	5,289.96	51.86	103.001		
1,500.00	1,465.95	1,419.95	1,465.95	7.76	47.94	102.61	1,356.47	-5,118.07	5,348.77	5,293.09	55.68	96.071		
1,600.00	1,561.12	1,515.12	1,561.12	8.27	51.25	102.92	1,356.47	-5,118.07	5,355.88	5,296.38	59.50	90.016		
1,700.00	1,656.29	1,610.29	1,656.29	8.80	54.57	103.22	1,356.47	-5,118.07	5,363.15	5,299.82	63.33	84.684		
1,800.00	1,751.46	1,705.46	1,751.46	9.32	57.89	103.53	1,356.47	-5,118.07	5,370.59	5,303.42	67.17	79.955		
1,900.00	1,846.63	1,800.63	1,846.63	9.86	61.20	103.83	1,356.47	-5,118.07	5,378.20	5,307.18	71.02	75.733		
2,000.00	1,941.80	1,904.20	1,941.80	10.40	64.81	104.13	1,356.47	-5,118.07	5,385.97	5,310.81	75.16	71.662		
2,100.00	2,036.96	2,009.04	2,036.96	10.94	68.47	104.43	1,356.47	-5,118.07	5,393.91	5,314.56	79.35	67.977		
2,200.00	2,132.13	2,086.13	2,132.13	11.49	71.16	104.73	1,356.47	-5,118.07	5,402.00	5,319.43	82.58	65.419		
2,300.00	2,227.30	2,181.30	2,227.30	12.04	74.48	105.04	1,356.47	-5,118.07	5,410.26	5,323.83	86.44	62.593		
2,400.00	2,322.47	2,276.47	2,322.47	12.59	77.80	105.33	1,356.47	-5,118.07	5,418.68	5,328.39	90.30	60.009		
2,500.00	2,417.64	2,371.64	2,417.64	13.15	81.12	105.63	1,356.47	-5,118.07	5,427.26	5,333.10	94.16	57.637		
2,600.00	2,512.81	2,466.81	2,512.81	13.70	84.43	105.93	1,356.47	-5,118.07	5,436.01	5,337.98	98.03	55.453		
2,700.00	2,607.98	2,561.98	2,607.98	14.26	87.75	106.23	1,356.47	-5,118.07	5,444.91	5,343.01	101.90	53.436		
2,800.00	2,703.15	2,657.15	2,703.15	14.82	91.07	106.52	1,356.47	-5,118.07	5,453.97	5,348.20	105.76	51.567		
2,900.00	2,798.32	2,752.32	2,798.32	15.38	94.40	106.82	1,356.47	-5,118.07	5,463.18	5,353.55	109.63	49.831		
3,000.00	2,893.49	2,847.49	2,893.49	15.95	97.72	107.11	1,356.47	-5,118.07	5,472.56	5,359.05	113.50	48.214		
3,100.00	2,988.66	2,942.66	2,988.66	16.51	101.04	107.41	1,356.47	-5,118.07	5,482.08	5,364.71	117.38	46.705		
3,200.00	3,083.83	3,037.83	3,083.83	17.07	104.36	107.70	1,356.47	-5,118.07	5,491.77	5,370.52	121.25	45.294		
3,300.00	3,179.00	3,133.00	3,179.00	17.64	107.68	107.99	1,356.47	-5,118.07	5,501.61	5,376.49	125.12	43.971		
3,400.00	3,274.17	3,228.17	3,274.17	18.21	111.00	108.28	1,356.47	-5,118.07	5,511.60	5,382.61	128.99	42.728		
3,500.00	3,369.34	3,323.34	3,369.34	18.77	114.32	108.57	1,356.47	-5,118.07	5,521.74	5,388.88	132.86	41.559		
3,600.00	3,464.51	3,418.51	3,464.51	19.34	117.64	108.86	1,356.47	-5,118.07	5,532.04	5,395.30	136.74	40.457		
3,700.00	3,559.68	3,513.68	3,559.68	19.91	120.96	109.15	1,356.47	-5,118.07	5,542.49	5,401.88	140.61	39.417		
3,800.00	3,654.84	3,608.84	3,654.84	20.48	124.28	109.43	1,356.47	-5,118.07	5,553.09	5,408.60	144.48	38.434		
3,900.00	3,750.01	3,704.01	3,750.01	21.05	127.60	109.72	1,356.47	-5,118.07	5,563.83	5,415.48	148.36	37.503		
4,000.00	3,845.18	3,800.22	3,845.18	21.62	130.98	110.00	1,356.47	-5,118.07	5,574.73	5,422.44	152.29	36.607		
4,100.00	3,940.35	3,905.65	3,940.35	22.19	134.64	110.29	1,356.47	-5,118.07	5,585.77	5,429.28	156.50	35.693		
4,200.00	4,035.52	3,989.52	4,035.52	22.76	137.57	110.57	1,356.47	-5,118.07	5,596.96	5,436.99	159.97	34.987		
4,300.00	4,130.69	4,084.69	4,130.69	23.33	140.89	110.85	1,356.47	-5,118.07	5,608.30	5,444.45	163.85	34.229		
4,400.00	4,225.86	4,179.86	4,225.86	23.91	144.21	111.13	1,356.47	-5,118.07	5,619.78	5,452.06	167.72	33.507		
4,500.00	4,321.03	4,275.03	4,321.03	24.48	147.53	111.41	1,356.47	-5,118.07	5,631.40	5,459.81	171.59	32.819		
4,600.00	4,416.20	4,370.20	4,416.20	25.05	150.85	111.69	1,356.47	-5,118.07	5,643.17	5,467.71	175.46	32.162		
4,700.00	4,511.37	4,465.37	4,511.37	25.62	154.18	111.96	1,356.47	-5,118.07	5,655.08	5,475.75	179.33	31.534		
4,800.00	4,606.54	4,560.54	4,606.54	26.20	157.50	112.24	1,356.47	-5,118.07	5,667.13	5,483.93	183.20	30.933		
4,900.00	4,701.71	4,655.71	4,701.71	26.77	160.82	112.52	1,356.47	-5,118.07	5,679.32	5,492.25	187.07	30.359		
5,000.00	4,796.88	4,750.88	4,796.88	27.34	164.14	112.79	1,356.47	-5,118.07	5,691.65	5,500.71	190.94	29.808		
5,100.00	4,892.05	4,846.05	4,892.05	27.92	167.46	113.06	1,356.47	-5,118.07	5,704.12	5,509.31	194.81	29.280		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,941.22	4,987.22	28.49	170.78	113.33	1,356.47	-5,118.07	5,716.73	5,518.05	198.68	28.773		
5,300.00	5,082.39	5,036.39	5,082.39	29.07	174.11	113.60	1,356.47	-5,118.07	5,729.47	5,526.92	202.55	28.286		
5,400.00	5,177.56	5,131.56	5,177.56	29.64	177.43	113.87	1,356.47	-5,118.07	5,742.35	5,535.93	206.42	27.819		
5,500.00	5,272.72	5,226.72	5,272.72	30.21	180.75	114.14	1,356.47	-5,118.07	5,755.37	5,545.08	210.29	27.369		
5,600.00	5,367.89	5,321.89	5,367.89	30.79	184.07	114.41	1,356.47	-5,118.07	5,768.52	5,554.36	214.15	26.936		
5,700.00	5,463.06	5,417.06	5,463.06	31.36	187.39	114.68	1,356.47	-5,118.07	5,781.80	5,563.78	218.02	26.519		
5,800.00	5,558.23	5,512.23	5,558.23	31.94	190.72	114.94	1,356.47	-5,118.07	5,795.21	5,573.33	221.89	26.118		
5,900.00	5,653.40	5,607.40	5,653.40	32.51	194.04	115.20	1,356.47	-5,118.07	5,808.76	5,583.01	225.75	25.730		
6,000.00	5,748.57	5,702.57	5,748.57	33.09	197.36	115.47	1,356.47	-5,118.07	5,822.44	5,592.82	229.62	25.357		
6,100.00	5,843.74	5,802.26	5,843.74	33.67	200.84	115.73	1,356.47	-5,118.07	5,836.24	5,602.60	233.64	24.979		
6,200.00	5,938.91	5,907.09	5,938.91	34.24	204.50	115.99	1,356.47	-5,118.07	5,850.18	5,612.33	237.84	24.597		
6,300.00	6,034.08	5,988.08	6,034.08	34.82	207.32	116.25	1,356.47	-5,118.07	5,864.24	5,623.03	241.21	24.312		
6,400.00	6,129.25	6,083.25	6,129.25	35.39	210.65	116.51	1,356.47	-5,118.07	5,878.43	5,633.35	245.08	23.986		
6,500.00	6,224.42	6,178.42	6,224.42	35.97	213.97	116.76	1,356.47	-5,118.07	5,892.74	5,643.80	248.94	23.672		
6,600.00	6,319.59	6,273.59	6,319.59	36.54	217.29	117.02	1,356.47	-5,118.07	5,907.18	5,654.38	252.80	23.367		
6,700.00	6,414.76	6,368.76	6,414.76	37.12	220.61	117.27	1,356.47	-5,118.07	5,921.74	5,665.08	256.66	23.072		
6,800.00	6,509.91	6,463.91	6,509.91	37.70	223.93	110.08	1,356.47	-5,118.07	5,935.96	5,675.44	260.52	22.785		
6,900.00	6,603.99	6,557.99	6,603.99	38.26	227.22	87.31	1,356.47	-5,118.07	5,940.64	5,676.29	264.34	22.473		
7,000.00	6,694.76	6,648.76	6,694.76	38.78	230.39	73.60	1,356.47	-5,118.07	5,932.26	5,664.24	268.03	22.133		
7,100.00	6,779.96	6,733.96	6,779.96	39.24	233.36	66.36	1,356.47	-5,118.07	5,911.19	5,639.71	271.47	21.774		
7,200.00	6,857.50	6,811.50	6,857.50	39.65	236.07	63.21	1,356.47	-5,118.07	5,878.09	5,603.46	274.62	21.404		
7,300.00	6,925.48	6,879.48	6,925.48	40.02	238.44	62.92	1,356.47	-5,118.07	5,833.92	5,556.50	277.43	21.029		
7,400.00	6,982.21	6,936.21	6,982.21	40.33	240.42	64.96	1,356.47	-5,118.07	5,779.90	5,500.05	279.85	20.654		
7,500.00	7,026.31	6,980.31	7,026.31	40.63	241.96	69.17	1,356.47	-5,118.07	5,717.45	5,435.59	281.86	20.285		
7,600.00	7,056.68	7,010.68	7,056.68	40.91	243.02	75.59	1,356.47	-5,118.07	5,648.16	5,364.72	283.44	19.927		
7,700.00	7,072.58	7,026.58	7,072.58	41.25	243.57	84.20	1,356.47	-5,118.07	5,573.75	5,289.18	284.57	19.587		
7,800.00	7,074.86	7,028.86	7,074.86	41.69	243.65	90.23	1,356.47	-5,118.07	5,496.23	5,210.95	285.28	19.266		
7,900.00	7,074.54	7,028.54	7,074.54	42.34	243.64	90.22	1,356.47	-5,118.07	5,418.85	5,132.87	285.98	18.948		
8,000.00	7,074.21	7,028.21	7,074.21	43.27	243.63	90.22	1,356.47	-5,118.07	5,342.22	5,055.44	286.78	18.628		
8,100.00	7,073.89	7,027.89	7,073.89	44.47	243.62	90.21	1,356.47	-5,118.07	5,266.37	4,978.70	287.68	18.307		
8,200.00	7,073.57	7,027.57	7,073.57	45.91	243.61	90.21	1,356.47	-5,118.07	5,191.35	4,902.67	288.67	17.984		
8,300.00	7,073.24	7,027.24	7,073.24	47.53	243.60	90.20	1,356.47	-5,118.07	5,117.17	4,827.41	289.77	17.660		
8,400.00	7,072.92	7,026.92	7,072.92	49.31	243.59	90.20	1,356.47	-5,118.07	5,043.89	4,752.93	290.97	17.335		
8,500.00	7,072.59	7,026.59	7,072.59	51.20	243.58	90.19	1,356.47	-5,118.07	4,971.54	4,679.27	292.27	17.010		
8,600.00	7,072.27	7,026.27	7,072.27	53.19	243.56	90.19	1,356.47	-5,118.07	4,900.16	4,606.49	293.67	16.686		
8,700.00	7,071.94	7,025.94	7,071.94	55.27	243.55	90.18	1,356.47	-5,118.07	4,829.80	4,534.62	295.18	16.362		
8,800.00	7,071.62	7,025.62	7,071.62	57.43	243.54	90.18	1,356.47	-5,118.07	4,760.50	4,463.71	296.80	16.040		
8,900.00	7,071.29	7,025.29	7,071.29	59.64	243.53	90.17	1,356.47	-5,118.07	4,692.31	4,393.80	298.51	15.719		
9,000.00	7,070.97	7,024.97	7,070.97	61.92	243.52	90.17	1,356.47	-5,118.07	4,625.27	4,324.94	300.33	15.401		
9,100.00	7,070.64	7,024.64	7,070.64	64.24	243.51	90.16	1,356.47	-5,118.07	4,559.44	4,257.19	302.25	15.085		
9,200.00	7,070.32	7,024.32	7,070.32	66.61	243.50	90.15	1,356.47	-5,118.07	4,494.88	4,190.61	304.27	14.773		
9,300.00	7,069.99	7,023.99	7,069.99	69.01	243.48	90.15	1,356.47	-5,118.07	4,431.62	4,125.24	306.38	14.464		
9,400.00	7,069.67	7,023.67	7,069.67	71.45	243.47	90.14	1,356.47	-5,118.07	4,369.75	4,061.15	308.60	14.160		
9,500.00	7,069.34	7,023.34	7,069.34	73.92	243.46	90.14	1,356.47	-5,118.07	4,309.30	3,998.40	310.90	13.861		
9,600.00	7,069.02	7,023.02	7,069.02	76.42	243.45	90.13	1,356.47	-5,118.07	4,250.35	3,937.05	313.30	13.566		
9,700.00	7,068.69	7,022.69	7,068.69	78.95	243.44	90.13	1,356.47	-5,118.07	4,192.95	3,877.16	315.78	13.278		
9,800.00	7,068.37	7,022.37	7,068.37	81.49	243.43	90.12	1,356.47	-5,118.07	4,137.17	3,818.82	318.35	12.996		
9,900.00	7,068.04	7,022.04	7,068.04	84.06	243.42	90.12	1,356.47	-5,118.07	4,083.08	3,762.08	321.00	12.720		
10,000.00	7,067.72	7,021.72	7,067.72	86.65	243.41	90.11	1,356.47	-5,118.07	4,030.75	3,707.02	323.73	12.451		
10,100.00	7,067.39	7,021.39	7,067.39	89.25	243.39	90.11	1,356.47	-5,118.07	3,980.24	3,653.71	326.53	12.189		
10,200.00	7,067.07	7,021.07	7,067.07	91.87	243.38	90.10	1,356.47	-5,118.07	3,931.63	3,602.23	329.40	11.936		
10,300.00	7,066.74	7,020.74	7,066.74	94.50	243.37	90.10	1,356.47	-5,118.07	3,884.98	3,552.65	332.33	11.690		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.00	7,066.42	7,020.42	7,066.42	97.14	243.36	90.09	1,356.47	-5,118.07	3,840.38	3,505.06	335.31	11.453	
10,500.00	7,066.09	7,020.09	7,066.09	99.80	243.35	90.08	1,356.47	-5,118.07	3,797.88	3,459.53	338.35	11.225	
10,600.00	7,065.77	7,019.77	7,065.77	102.47	243.34	90.08	1,356.47	-5,118.07	3,757.56	3,416.13	341.42	11.006	
10,700.00	7,065.44	7,019.44	7,065.44	105.15	243.33	90.07	1,356.47	-5,118.07	3,719.49	3,374.96	344.53	10.796	
10,800.00	7,065.12	7,019.12	7,065.12	107.83	243.31	90.07	1,356.47	-5,118.07	3,683.75	3,336.08	347.67	10.596	
10,900.00	7,064.79	7,018.79	7,064.79	110.53	243.30	90.06	1,356.47	-5,118.07	3,650.39	3,299.58	350.82	10.405	
11,000.00	7,064.47	7,018.47	7,064.47	113.23	243.29	90.06	1,356.47	-5,118.07	3,619.50	3,265.52	353.97	10.225	
11,100.00	7,064.14	7,018.14	7,064.14	115.95	243.28	90.05	1,356.47	-5,118.07	3,591.12	3,233.99	357.13	10.056	
11,200.00	7,063.82	7,017.82	7,063.82	118.66	243.27	90.05	1,356.47	-5,118.07	3,565.32	3,205.05	360.27	9.896	
11,300.00	7,063.49	7,017.49	7,063.49	121.39	243.26	90.04	1,356.47	-5,118.07	3,542.16	3,178.77	363.39	9.748	
11,400.00	7,063.17	7,017.17	7,063.17	124.12	243.25	90.04	1,356.47	-5,118.07	3,521.69	3,155.21	366.47	9.610	
11,500.00	7,062.84	7,016.84	7,062.84	126.86	243.24	90.03	1,356.47	-5,118.07	3,503.95	3,134.43	369.52	9.483	
11,600.00	7,062.52	7,016.52	7,062.52	129.60	243.22	90.03	1,356.47	-5,118.07	3,488.99	3,116.48	372.50	9.366	
11,700.00	7,062.19	7,016.19	7,062.19	132.35	243.21	90.02	1,356.47	-5,118.07	3,476.84	3,101.41	375.43	9.261	
11,800.00	7,061.87	7,015.87	7,061.87	135.10	243.20	90.01	1,356.47	-5,118.07	3,467.53	3,089.26	378.27	9.167	
11,900.00	7,061.54	7,015.54	7,061.54	137.85	243.19	90.01	1,356.47	-5,118.07	3,461.09	3,080.05	381.04	9.083	
12,000.00	7,061.22	7,015.22	7,061.22	140.61	243.18	90.00	1,356.47	-5,118.07	3,457.53	3,073.82	383.71	9.011	
12,073.12	7,060.98	7,014.98	7,060.98	142.63	243.17	90.00	1,356.47	-5,118.07	3,456.76	3,071.16	385.60	8.965 CC	
12,100.00	7,060.89	7,014.89	7,060.89	143.38	243.17	90.00	1,356.47	-5,118.07	3,456.86	3,070.58	386.28	8.949	
12,200.00	7,060.57	7,014.57	7,060.57	146.15	243.16	89.99	1,356.47	-5,118.07	3,459.09	3,070.34	388.75	8.898 ES	
12,300.00	7,060.24	7,014.24	7,060.24	148.92	243.14	89.99	1,356.47	-5,118.07	3,464.20	3,073.10	391.10	8.858	
12,400.00	7,059.92	7,013.92	7,059.92	151.69	243.13	89.98	1,356.47	-5,118.07	3,472.18	3,078.85	393.33	8.828	
12,500.00	7,059.59	7,013.59	7,059.59	154.47	243.12	89.98	1,356.47	-5,118.07	3,483.02	3,087.59	395.43	8.808	
12,600.00	7,059.27	7,013.27	7,059.27	157.25	243.11	89.97	1,356.47	-5,118.07	3,496.68	3,099.27	397.41	8.799 SF	
12,700.00	7,058.94	7,012.94	7,058.94	160.03	243.10	89.97	1,356.47	-5,118.07	3,513.14	3,113.88	399.26	8.799	
12,800.00	7,058.62	7,012.62	7,058.62	162.82	243.09	89.96	1,356.47	-5,118.07	3,532.36	3,131.38	400.98	8.809	
12,900.00	7,058.29	7,012.29	7,058.29	165.61	243.08	89.96	1,356.47	-5,118.07	3,554.28	3,151.72	402.57	8.829	
13,000.00	7,057.97	7,011.97	7,057.97	168.40	243.06	89.95	1,356.47	-5,118.07	3,578.87	3,174.84	404.02	8.858	
13,100.00	7,057.64	7,011.64	7,057.64	171.19	243.05	89.94	1,356.47	-5,118.07	3,606.06	3,200.71	405.35	8.896	
13,200.00	7,057.32	7,011.32	7,057.32	173.99	243.04	89.94	1,356.47	-5,118.07	3,635.80	3,229.25	406.55	8.943	
13,300.00	7,057.00	7,011.00	7,057.00	176.78	243.03	89.93	1,356.47	-5,118.07	3,668.03	3,260.40	407.63	8.998	
13,400.00	7,056.67	7,010.67	7,056.67	179.58	243.02	89.93	1,356.47	-5,118.07	3,702.67	3,294.09	408.58	9.062	
13,500.00	7,056.35	7,010.35	7,056.35	182.38	243.01	89.92	1,356.47	-5,118.07	3,739.67	3,330.25	409.43	9.134	
13,600.00	7,056.02	7,010.02	7,056.02	185.19	243.00	89.92	1,356.47	-5,118.07	3,778.96	3,368.80	410.16	9.213	
13,700.00	7,055.70	7,009.70	7,055.70	187.99	242.99	89.91	1,356.47	-5,118.07	3,820.46	3,409.68	410.78	9.301	
13,800.00	7,055.37	7,009.37	7,055.37	190.80	242.97	89.91	1,356.47	-5,118.07	3,864.10	3,452.80	411.30	9.395	
13,900.00	7,055.05	7,009.05	7,055.05	193.60	242.96	89.90	1,356.47	-5,118.07	3,909.82	3,498.08	411.73	9.496	
14,000.00	7,054.72	7,008.72	7,054.72	196.41	242.95	89.90	1,356.47	-5,118.07	3,957.53	3,545.46	412.07	9.604	
14,100.00	7,054.40	7,008.40	7,054.40	199.22	242.94	89.89	1,356.47	-5,118.07	4,007.17	3,594.85	412.32	9.719	
14,200.00	7,054.07	7,008.07	7,054.07	202.03	242.93	89.89	1,356.47	-5,118.07	4,058.67	3,646.17	412.49	9.839	
14,300.00	7,053.75	7,007.75	7,053.75	204.85	242.92	89.88	1,356.47	-5,118.07	4,111.95	3,699.36	412.59	9.966	
14,400.00	7,053.42	7,007.42	7,053.42	207.66	242.91	89.87	1,356.47	-5,118.07	4,166.95	3,754.33	412.63	10.099	
14,500.00	7,053.10	7,007.10	7,053.10	210.48	242.89	89.87	1,356.47	-5,118.07	4,223.61	3,811.01	412.60	10.237	
14,600.00	7,052.77	7,006.77	7,052.77	213.29	242.88	89.86	1,356.47	-5,118.07	4,281.85	3,869.34	412.51	10.380	
14,700.00	7,052.45	7,006.45	7,052.45	216.11	242.87	89.86	1,356.47	-5,118.07	4,341.62	3,929.25	412.37	10.529	
14,800.00	7,052.12	7,006.12	7,052.12	218.93	242.86	89.85	1,356.47	-5,118.07	4,402.84	3,990.66	412.18	10.682	
14,900.00	7,051.80	7,005.80	7,051.80	221.75	242.85	89.85	1,356.47	-5,118.07	4,465.46	4,053.52	411.94	10.840	
15,000.00	7,051.47	7,005.47	7,051.47	224.57	242.84	89.84	1,356.47	-5,118.07	4,529.43	4,117.76	411.67	11.003	
15,100.00	7,051.15	7,005.15	7,051.15	227.39	242.83	89.84	1,356.47	-5,118.07	4,594.68	4,183.33	411.36	11.170	
15,145.13	7,051.00	7,005.00	7,051.00	228.67	242.82	89.83	1,356.47	-5,118.07	4,624.54	4,213.33	411.21	11.246	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	53.00	3.28	3.28	-91.34	-115.36	-4,915.33	4,916.97					
100.00	100.00	47.00	100.00	3.28	3.38	-91.34	-115.36	-4,915.33	4,916.68	4,910.02	6.67	737.602		
200.00	200.00	147.00	200.00	3.34	4.71	-91.34	-115.36	-4,915.33	4,916.68	4,908.63	8.05	610.662		
300.00	299.98	246.98	299.98	3.44	7.62	84.29	-115.36	-4,915.33	4,916.51	4,905.45	11.06	444.608		
400.00	399.84	346.84	399.84	3.59	10.87	84.36	-115.36	-4,915.33	4,915.99	4,901.53	14.46	340.027		
500.00	499.45	446.45	499.45	3.79	14.22	84.48	-115.36	-4,915.33	4,915.14	4,897.13	18.01	272.917		
600.00	598.70	545.70	598.70	4.03	17.61	84.64	-115.36	-4,915.33	4,913.98	4,892.33	21.64	227.057		
700.00	697.47	644.47	697.47	4.31	21.01	84.85	-115.36	-4,915.33	4,912.53	4,887.20	25.32	193.986		
800.00	795.62	742.62	795.62	4.64	24.40	85.10	-115.36	-4,915.33	4,910.82	4,881.79	29.04	169.114		
900.00	893.06	840.06	893.06	5.00	27.78	85.40	-115.36	-4,915.33	4,908.91	4,876.14	32.77	149.782		
1,000.00	989.64	936.64	989.64	5.40	31.13	85.73	-115.36	-4,915.33	4,906.84	4,870.32	36.52	134.356		
1,100.00	1,085.27	1,032.27	1,085.27	5.83	34.45	86.10	-115.36	-4,915.33	4,904.66	4,864.39	40.27	121.783		
1,200.00	1,180.44	1,127.44	1,180.44	6.29	37.76	86.44	-115.36	-4,915.33	4,902.56	4,858.52	44.04	111.318		
1,300.00	1,275.61	1,222.61	1,275.61	6.76	41.07	86.78	-115.36	-4,915.33	4,900.65	4,852.82	47.83	102.461		
1,400.00	1,370.78	1,317.78	1,370.78	7.26	44.38	87.12	-115.36	-4,915.33	4,898.93	4,847.30	51.63	94.878		
1,500.00	1,465.95	1,412.95	1,465.95	7.76	47.69	87.46	-115.36	-4,915.33	4,897.41	4,841.96	55.45	88.318		
1,600.00	1,561.12	1,508.12	1,561.12	8.27	51.01	87.80	-115.36	-4,915.33	4,896.08	4,836.79	59.28	82.591		
1,700.00	1,656.29	1,603.29	1,656.29	8.80	54.32	88.14	-115.36	-4,915.33	4,894.93	4,831.81	63.12	77.550		
1,800.00	1,751.46	1,701.54	1,751.46	9.32	57.75	88.49	-115.36	-4,915.33	4,893.98	4,826.91	67.07	72.965		
1,900.00	1,846.63	1,806.37	1,846.63	9.86	61.40	88.83	-115.36	-4,915.33	4,893.23	4,821.97	71.26	68.666		
2,000.00	1,941.80	1,888.80	1,941.80	10.40	64.28	89.17	-115.36	-4,915.33	4,892.66	4,817.99	74.67	65.520		
2,100.00	2,036.96	1,983.96	2,036.96	10.94	67.59	89.51	-115.36	-4,915.33	4,892.29	4,813.76	78.54	62.293		
2,200.00	2,132.13	2,079.13	2,132.13	11.49	70.91	89.85	-115.36	-4,915.33	4,892.11	4,809.71	82.40	59.369		
2,242.71	2,172.78	2,119.78	2,172.78	11.72	72.33	90.00	-115.36	-4,915.33	4,892.10	4,808.04	84.05	58.202		
2,300.00	2,227.30	2,174.30	2,227.30	12.04	74.23	90.20	-115.36	-4,915.33	4,892.13	4,805.86	86.27	56.707		
2,400.00	2,322.47	2,269.47	2,322.47	12.59	77.55	90.54	-115.36	-4,915.33	4,892.33	4,802.19	90.14	54.273		
2,500.00	2,417.64	2,364.64	2,417.64	13.15	80.87	90.88	-115.36	-4,915.33	4,892.73	4,798.72	94.02	52.041		
2,600.00	2,512.81	2,459.81	2,512.81	13.70	84.19	91.22	-115.36	-4,915.33	4,893.33	4,795.43	97.89	49.987		
2,700.00	2,607.98	2,554.98	2,607.98	14.26	87.51	91.56	-115.36	-4,915.33	4,894.11	4,792.34	101.77	48.089		
2,800.00	2,703.15	2,650.15	2,703.15	14.82	90.83	91.91	-115.36	-4,915.33	4,895.09	4,789.44	105.65	46.333		
2,900.00	2,798.32	2,745.32	2,798.32	15.38	94.15	92.25	-115.36	-4,915.33	4,896.26	4,786.73	109.53	44.702		
3,000.00	2,893.49	2,840.49	2,893.49	15.95	97.47	92.59	-115.36	-4,915.33	4,897.62	4,784.21	113.41	43.184		
3,100.00	2,988.66	2,935.66	2,988.66	16.51	100.79	92.93	-115.36	-4,915.33	4,899.17	4,781.88	117.30	41.767		
3,200.00	3,083.83	3,030.83	3,083.83	17.07	104.11	93.27	-115.36	-4,915.33	4,900.92	4,779.74	121.18	40.443		
3,300.00	3,179.00	3,126.00	3,179.00	17.64	107.43	93.61	-115.36	-4,915.33	4,902.86	4,777.79	125.07	39.202		
3,400.00	3,274.17	3,221.17	3,274.17	18.21	110.75	93.95	-115.36	-4,915.33	4,904.98	4,776.03	128.95	38.037		
3,500.00	3,369.34	3,316.34	3,369.34	18.77	114.08	94.29	-115.36	-4,915.33	4,907.30	4,774.47	132.84	36.942		
3,600.00	3,464.51	3,411.51	3,464.51	19.34	117.40	94.64	-115.36	-4,915.33	4,909.82	4,773.09	136.72	35.910		
3,700.00	3,559.68	3,506.68	3,559.68	19.91	120.72	94.97	-115.36	-4,915.33	4,912.52	4,771.91	140.61	34.937		
3,800.00	3,654.84	3,601.84	3,654.84	20.48	124.04	95.31	-115.36	-4,915.33	4,915.41	4,770.91	144.50	34.017		
3,900.00	3,750.01	3,702.99	3,750.01	21.05	127.57	95.65	-115.36	-4,915.33	4,918.49	4,769.90	148.59	33.100		
4,000.00	3,845.18	3,807.82	3,845.18	21.62	131.23	95.99	-115.36	-4,915.33	4,921.76	4,768.94	152.82	32.206		
4,100.00	3,940.35	3,887.35	3,940.35	22.19	134.00	96.33	-115.36	-4,915.33	4,925.22	4,769.06	156.16	31.539		
4,200.00	4,035.52	3,982.52	4,035.52	22.76	137.32	96.67	-115.36	-4,915.33	4,928.87	4,768.82	160.05	30.796		
4,300.00	4,130.69	4,077.69	4,130.69	23.33	140.65	97.01	-115.36	-4,915.33	4,932.71	4,768.77	163.94	30.089		
4,400.00	4,225.86	4,172.86	4,225.86	23.91	143.97	97.34	-115.36	-4,915.33	4,936.74	4,768.91	167.83	29.416		
4,500.00	4,321.03	4,268.03	4,321.03	24.48	147.29	97.68	-115.36	-4,915.33	4,940.95	4,769.24	171.71	28.774		
4,600.00	4,416.20	4,363.20	4,416.20	25.05	150.61	98.01	-115.36	-4,915.33	4,945.35	4,769.75	175.60	28.163		
4,700.00	4,511.37	4,458.37	4,511.37	25.62	153.93	98.35	-115.36	-4,915.33	4,949.94	4,770.45	179.49	27.578		
4,800.00	4,606.54	4,553.54	4,606.54	26.20	157.25	98.68	-115.36	-4,915.33	4,954.71	4,771.34	183.37	27.020		
4,900.00	4,701.71	4,648.71	4,701.71	26.77	160.57	99.02	-115.36	-4,915.33	4,959.67	4,772.41	187.26	26.485		
5,000.00	4,796.88	4,743.88	4,796.88	27.34	163.90	99.35	-115.36	-4,915.33	4,964.81	4,773.67	191.15	25.974		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
5,100.00	4,892.05	4,839.05	4,892.05	27.92	167.22	99.69	-115.36	-4,915.33	4,970.14	4,775.11	195.03	25.483		
5,200.00	4,987.22	4,934.22	4,987.22	28.49	170.54	100.02	-115.36	-4,915.33	4,975.65	4,776.73	198.92	25.013		
5,300.00	5,082.39	5,029.39	5,082.39	29.07	173.86	100.35	-115.36	-4,915.33	4,981.35	4,778.54	202.81	24.562		
5,400.00	5,177.56	5,124.56	5,177.56	29.64	177.18	100.68	-115.36	-4,915.33	4,987.23	4,780.53	206.69	24.129		
5,500.00	5,272.72	5,219.72	5,272.72	30.21	180.51	101.01	-115.36	-4,915.33	4,993.29	4,782.71	210.58	23.712		
5,600.00	5,367.89	5,314.89	5,367.89	30.79	183.83	101.34	-115.36	-4,915.33	4,999.53	4,785.06	214.46	23.312		
5,700.00	5,463.06	5,410.06	5,463.06	31.36	187.15	101.67	-115.36	-4,915.33	5,005.95	4,787.60	218.35	22.927		
5,800.00	5,558.23	5,505.23	5,558.23	31.94	190.47	102.00	-115.36	-4,915.33	5,012.55	4,790.32	222.23	22.556		
5,900.00	5,653.40	5,600.40	5,653.40	32.51	193.79	102.32	-115.36	-4,915.33	5,019.33	4,793.22	226.11	22.198		
6,000.00	5,748.57	5,704.43	5,748.57	33.09	197.42	102.65	-115.36	-4,915.33	5,026.29	4,795.98	230.30	21.825		
6,100.00	5,843.74	5,809.26	5,843.74	33.67	201.08	102.97	-115.36	-4,915.33	5,033.42	4,798.90	234.52	21.462		
6,200.00	5,938.91	5,885.91	5,938.91	34.24	203.76	103.30	-115.36	-4,915.33	5,040.74	4,802.98	237.76	21.201		
6,300.00	6,034.08	5,981.08	6,034.08	34.82	207.08	103.62	-115.36	-4,915.33	5,048.23	4,806.59	241.64	20.892		
6,400.00	6,129.25	6,076.25	6,129.25	35.39	210.40	103.95	-115.36	-4,915.33	5,055.89	4,810.37	245.52	20.593		
6,500.00	6,224.42	6,171.42	6,224.42	35.97	213.72	104.27	-115.36	-4,915.33	5,063.73	4,814.33	249.40	20.304		
6,600.00	6,319.59	6,266.59	6,319.59	36.54	217.05	104.59	-115.36	-4,915.33	5,071.74	4,818.46	253.28	20.024		
6,700.00	6,414.76	6,361.76	6,414.76	37.12	220.37	104.91	-115.36	-4,915.33	5,079.93	4,822.77	257.16	19.754		
6,800.00	6,509.91	6,456.91	6,509.91	37.70	223.69	97.90	-115.36	-4,915.33	5,087.77	4,826.73	261.03	19.491		
6,900.00	6,603.99	6,550.99	6,603.99	38.26	226.97	75.49	-115.36	-4,915.33	5,085.01	4,820.14	264.87	19.198		
7,000.00	6,694.76	6,641.76	6,694.76	38.78	230.14	61.96	-115.36	-4,915.33	5,067.87	4,799.31	268.55	18.871		
7,100.00	6,779.96	6,726.96	6,779.96	39.24	233.12	54.79	-115.36	-4,915.33	5,036.86	4,764.86	272.00	18.518		
7,200.00	6,857.50	6,804.50	6,857.50	39.65	235.82	51.64	-115.36	-4,915.33	4,992.84	4,717.70	275.14	18.147		
7,300.00	6,925.48	6,872.48	6,925.48	40.02	238.20	51.39	-115.36	-4,915.33	4,936.95	4,659.04	277.91	17.765		
7,400.00	6,982.21	6,929.21	6,982.21	40.33	240.18	53.71	-115.36	-4,915.33	4,870.63	4,590.36	280.27	17.378		
7,500.00	7,026.31	6,973.31	7,026.31	40.63	241.72	58.84	-115.36	-4,915.33	4,795.53	4,513.34	282.19	16.994		
7,600.00	7,056.68	7,003.68	7,056.68	40.91	242.78	67.49	-115.36	-4,915.33	4,713.50	4,429.87	283.63	16.618		
7,700.00	7,072.58	7,019.58	7,072.58	41.25	243.33	80.53	-115.36	-4,915.33	4,626.52	4,341.94	284.58	16.258		
7,800.00	7,074.86	7,021.86	7,074.86	41.69	243.41	90.38	-115.36	-4,915.33	4,536.81	4,251.75	285.06	15.916		
7,900.00	7,074.54	7,021.54	7,074.54	42.34	243.40	90.37	-115.36	-4,915.33	4,447.09	4,161.60	285.49	15.577		
8,000.00	7,074.21	7,021.21	7,074.21	43.27	243.39	90.36	-115.36	-4,915.33	4,357.82	4,071.83	285.98	15.238		
8,100.00	7,073.89	7,020.89	7,073.89	44.47	243.38	90.35	-115.36	-4,915.33	4,269.02	3,982.47	286.54	14.898		
8,200.00	7,073.57	7,020.57	7,073.57	45.91	243.37	90.35	-115.36	-4,915.33	4,180.73	3,893.56	287.17	14.558		
8,300.00	7,073.24	7,020.24	7,073.24	47.53	243.35	90.34	-115.36	-4,915.33	4,092.98	3,805.10	287.88	14.218		
8,400.00	7,072.92	7,019.92	7,072.92	49.31	243.34	90.33	-115.36	-4,915.33	4,005.80	3,717.14	288.66	13.877		
8,500.00	7,072.59	7,019.59	7,072.59	51.20	243.33	90.32	-115.36	-4,915.33	3,919.23	3,629.71	289.52	13.537		
8,600.00	7,072.27	7,019.27	7,072.27	53.19	243.32	90.31	-115.36	-4,915.33	3,833.32	3,542.84	290.48	13.197		
8,700.00	7,071.94	7,018.94	7,071.94	55.27	243.31	90.30	-115.36	-4,915.33	3,748.11	3,456.58	291.53	12.857		
8,800.00	7,071.62	7,018.62	7,071.62	57.43	243.30	90.29	-115.36	-4,915.33	3,663.64	3,370.97	292.68	12.518		
8,900.00	7,071.29	7,018.29	7,071.29	59.64	243.29	90.28	-115.36	-4,915.33	3,579.98	3,286.05	293.93	12.180		
9,000.00	7,070.97	7,017.97	7,070.97	61.92	243.27	90.27	-115.36	-4,915.33	3,497.17	3,201.88	295.29	11.843		
9,100.00	7,070.64	7,017.64	7,070.64	64.24	243.26	90.26	-115.36	-4,915.33	3,415.29	3,118.51	296.77	11.508		
9,200.00	7,070.32	7,017.32	7,070.32	66.61	243.25	90.25	-115.36	-4,915.33	3,334.39	3,036.01	298.37	11.175		
9,300.00	7,069.99	7,016.99	7,069.99	69.01	243.24	90.24	-115.36	-4,915.33	3,254.55	2,954.45	300.10	10.845		
9,400.00	7,069.67	7,016.67	7,069.67	71.45	243.23	90.23	-115.36	-4,915.33	3,175.86	2,873.90	301.96	10.517		
9,500.00	7,069.34	7,016.34	7,069.34	73.92	243.22	90.22	-115.36	-4,915.33	3,098.39	2,794.44	303.95	10.194		
9,600.00	7,069.02	7,016.02	7,069.02	76.42	243.21	90.21	-115.36	-4,915.33	3,022.25	2,716.16	306.09	9.874		
9,700.00	7,068.69	7,015.69	7,068.69	78.95	243.19	90.20	-115.36	-4,915.33	2,947.53	2,639.17	308.37	9.559		
9,800.00	7,068.37	7,015.37	7,068.37	81.49	243.18	90.20	-115.36	-4,915.33	2,874.36	2,563.56	310.79	9.248		
9,900.00	7,068.04	7,015.04	7,068.04	84.06	243.17	90.19	-115.36	-4,915.33	2,802.83	2,489.47	313.37	8.944		
10,000.00	7,067.72	7,014.72	7,067.72	86.65	243.16	90.18	-115.36	-4,915.33	2,733.10	2,417.01	316.09	8.647		
10,100.00	7,067.39	7,014.39	7,067.39	89.25	243.15	90.17	-115.36	-4,915.33	2,665.30	2,346.33	318.97	8.356		
10,200.00	7,067.07	7,014.07	7,067.07	91.87	243.14	90.16	-115.36	-4,915.33	2,599.57	2,277.58	321.99	8.073		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	7,013.74	7,066.74	94.50	243.13	90.15	-115.36	-4,915.33	2,536.09	2,210.93	325.16	7.800		
10,400.00	7,066.42	7,013.42	7,066.42	97.14	243.12	90.14	-115.36	-4,915.33	2,475.01	2,146.55	328.47	7.535		
10,500.00	7,066.09	7,013.09	7,066.09	99.80	243.10	90.13	-115.36	-4,915.33	2,416.54	2,084.63	331.90	7.281		
10,600.00	7,065.77	7,012.77	7,065.77	102.47	243.09	90.12	-115.36	-4,915.33	2,360.85	2,025.39	335.46	7.038		
10,700.00	7,065.44	7,012.44	7,065.44	105.15	243.08	90.11	-115.36	-4,915.33	2,308.15	1,969.04	339.12	6.806		
10,800.00	7,065.12	7,012.12	7,065.12	107.83	243.07	90.10	-115.36	-4,915.33	2,258.66	1,915.80	342.86	6.588		
10,900.00	7,064.79	7,011.79	7,064.79	110.53	243.06	90.09	-115.36	-4,915.33	2,212.58	1,865.92	346.66	6.383		
11,000.00	7,064.47	7,011.47	7,064.47	113.23	243.05	90.08	-115.36	-4,915.33	2,170.13	1,819.63	350.50	6.192		
11,100.00	7,064.14	7,011.14	7,064.14	115.95	243.04	90.07	-115.36	-4,915.33	2,131.53	1,777.20	354.33	6.016		
11,200.00	7,063.82	7,010.82	7,063.82	118.66	243.02	90.06	-115.36	-4,915.33	2,096.99	1,738.86	358.14	5.855		
11,300.00	7,063.49	7,010.49	7,063.49	121.39	243.01	90.05	-115.36	-4,915.33	2,066.72	1,704.86	361.87	5.711		
11,400.00	7,063.17	7,010.17	7,063.17	124.12	243.00	90.05	-115.36	-4,915.33	2,040.91	1,675.42	365.49	5.584		
11,500.00	7,062.84	7,009.84	7,062.84	126.86	242.99	90.04	-115.36	-4,915.33	2,019.72	1,650.77	368.95	5.474		
11,600.00	7,062.52	7,009.52	7,062.52	129.60	242.98	90.03	-115.36	-4,915.33	2,003.30	1,631.08	372.22	5.382		
11,700.00	7,062.19	7,009.19	7,062.19	132.35	242.97	90.02	-115.36	-4,915.33	1,991.78	1,616.52	375.26	5.308		
11,800.00	7,061.87	7,008.87	7,061.87	135.10	242.96	90.01	-115.36	-4,915.33	1,985.23	1,607.20	378.03	5.251		
11,880.21	7,061.61	7,008.61	7,061.61	137.31	242.95	90.00	-115.36	-4,915.33	1,983.61	1,603.56	380.04	5.219 CC		
11,900.00	7,061.54	7,008.54	7,061.54	137.85	242.95	90.00	-115.36	-4,915.33	1,983.71	1,603.20	380.51	5.213 ES		
12,000.00	7,061.22	7,008.22	7,061.22	140.61	242.93	89.99	-115.36	-4,915.33	1,987.22	1,604.55	382.67	5.193		
12,100.00	7,060.89	7,007.89	7,060.89	143.38	242.92	89.98	-115.36	-4,915.33	1,995.75	1,611.25	384.50	5.191 SF		
12,200.00	7,060.57	7,007.57	7,060.57	146.15	242.91	89.97	-115.36	-4,915.33	2,009.22	1,623.23	385.99	5.205		
12,300.00	7,060.24	7,007.24	7,060.24	148.92	242.90	89.96	-115.36	-4,915.33	2,027.54	1,640.40	387.15	5.237		
12,400.00	7,059.92	7,006.92	7,059.92	151.69	242.89	89.95	-115.36	-4,915.33	2,050.58	1,662.61	387.97	5.285		
12,500.00	7,059.59	7,006.59	7,059.59	154.47	242.88	89.94	-115.36	-4,915.33	2,078.18	1,689.70	388.49	5.349		
12,600.00	7,059.27	7,006.27	7,059.27	157.25	242.87	89.93	-115.36	-4,915.33	2,110.17	1,721.46	388.71	5.429		
12,700.00	7,058.94	7,005.94	7,058.94	160.03	242.85	89.92	-115.36	-4,915.33	2,146.34	1,757.67	388.66	5.522		
12,800.00	7,058.62	7,005.62	7,058.62	162.82	242.84	89.91	-115.36	-4,915.33	2,186.48	1,798.11	388.37	5.630		
12,900.00	7,058.29	7,005.29	7,058.29	165.61	242.83	89.90	-115.36	-4,915.33	2,230.40	1,842.53	387.87	5.750		
13,000.00	7,057.97	7,004.97	7,057.97	168.40	242.82	89.89	-115.36	-4,915.33	2,277.86	1,890.68	387.18	5.883		
13,100.00	7,057.64	7,004.64	7,057.64	171.19	242.81	89.89	-115.36	-4,915.33	2,328.64	1,942.32	386.33	6.028		
13,200.00	7,057.32	7,004.32	7,057.32	173.99	242.80	89.88	-115.36	-4,915.33	2,382.55	1,997.21	385.34	6.183		
13,300.00	7,057.00	7,004.00	7,057.00	176.78	242.79	89.87	-115.36	-4,915.33	2,439.36	2,055.11	384.25	6.348		
13,400.00	7,056.67	7,003.67	7,056.67	179.58	242.78	89.86	-115.36	-4,915.33	2,498.89	2,115.82	383.07	6.523		
13,500.00	7,056.35	7,003.35	7,056.35	182.38	242.76	89.85	-115.36	-4,915.33	2,560.94	2,179.12	381.82	6.707		
13,600.00	7,056.02	7,003.02	7,056.02	185.19	242.75	89.84	-115.36	-4,915.33	2,625.33	2,244.81	380.52	6.899		
13,700.00	7,055.70	7,002.70	7,055.70	187.99	242.74	89.83	-115.36	-4,915.33	2,691.90	2,312.72	379.18	7.099		
13,800.00	7,055.37	7,002.37	7,055.37	190.80	242.73	89.82	-115.36	-4,915.33	2,760.48	2,382.66	377.82	7.306		
13,900.00	7,055.05	7,002.05	7,055.05	193.60	242.72	89.81	-115.36	-4,915.33	2,830.94	2,454.49	376.45	7.520		
14,000.00	7,054.72	7,001.72	7,054.72	196.41	242.71	89.80	-115.36	-4,915.33	2,903.13	2,528.06	375.08	7.740		
14,100.00	7,054.40	7,001.40	7,054.40	199.22	242.70	89.79	-115.36	-4,915.33	2,976.93	2,603.22	373.71	7.966		
14,200.00	7,054.07	7,001.07	7,054.07	202.03	242.68	89.78	-115.36	-4,915.33	3,052.23	2,679.87	372.35	8.197		
14,300.00	7,053.75	7,000.75	7,053.75	204.85	242.67	89.77	-115.36	-4,915.33	3,128.90	2,757.89	371.01	8.433		
14,400.00	7,053.42	7,000.42	7,053.42	207.66	242.66	89.76	-115.36	-4,915.33	3,206.87	2,837.17	369.70	8.674		
14,500.00	7,053.10	7,000.10	7,053.10	210.48	242.65	89.75	-115.36	-4,915.33	3,286.02	2,917.62	368.40	8.920		
14,600.00	7,052.77	7,000.23	7,052.77	213.29	242.66	89.74	-115.36	-4,915.33	3,366.29	2,999.13	367.16	9.169		
14,700.00	7,052.45	7,000.55	7,052.45	216.11	242.67	89.74	-115.36	-4,915.33	3,447.59	3,081.64	365.94	9.421		
14,800.00	7,052.12	7,000.88	7,052.12	218.93	242.68	89.73	-115.36	-4,915.33	3,529.84	3,165.09	364.76	9.677		
14,900.00	7,051.80	7,001.20	7,051.80	221.75	242.69	89.72	-115.36	-4,915.33	3,613.00	3,249.39	363.61	9.937		
15,000.00	7,051.47	7,001.53	7,051.47	224.57	242.70	89.71	-115.36	-4,915.33	3,696.99	3,334.50	362.49	10.199		
15,100.00	7,051.15	7,001.85	7,051.15	227.39	242.71	89.70	-115.36	-4,915.33	3,781.75	3,420.35	361.40	10.464		
15,145.13	7,051.00	7,002.00	7,051.00	228.67	242.72	89.69	-115.36	-4,915.33	3,820.25	3,459.33	360.92	10.585		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	56.00	3.28	3.28	-110.25	-2,822.91	-7,653.09	8,157.31					
100.00	100.00	44.00	100.00	3.28	3.37	-110.25	-2,822.91	-7,653.09	8,157.12	8,150.46	6.65	1,226.000		
200.00	200.00	144.00	200.00	3.34	4.64	-110.25	-2,822.91	-7,653.09	8,157.12	8,149.14	7.98	1,022.613		
300.00	299.98	243.98	299.98	3.44	7.52	65.39	-2,822.91	-7,653.09	8,156.39	8,145.43	10.96	743.938		
400.00	399.84	343.84	399.84	3.59	10.77	65.46	-2,822.91	-7,653.09	8,154.21	8,139.85	14.36	567.902		
500.00	499.45	443.45	499.45	3.79	14.12	65.58	-2,822.91	-7,653.09	8,150.59	8,132.68	17.91	455.118		
600.00	598.70	542.70	598.70	4.03	17.51	65.75	-2,822.91	-7,653.09	8,145.54	8,124.00	21.54	378.159		
700.00	697.47	641.47	697.47	4.31	20.91	65.97	-2,822.91	-7,653.09	8,139.07	8,113.85	25.22	322.720		
800.00	795.62	739.62	795.62	4.64	24.30	66.24	-2,822.91	-7,653.09	8,131.22	8,102.29	28.93	281.050		
900.00	893.06	837.06	893.06	5.00	27.67	66.55	-2,822.91	-7,653.09	8,122.01	8,089.35	32.66	248.667		
1,000.00	989.64	933.64	989.64	5.40	31.02	66.91	-2,822.91	-7,653.09	8,111.49	8,075.08	36.40	222.823		
1,100.00	1,085.27	1,029.27	1,085.27	5.83	34.34	67.29	-2,822.91	-7,653.09	8,099.68	8,059.53	40.15	201.745		
1,200.00	1,180.44	1,124.44	1,180.44	6.29	37.65	67.49	-2,822.91	-7,653.09	8,087.37	8,043.46	43.90	184.209		
1,300.00	1,275.61	1,219.61	1,275.61	6.76	40.96	67.68	-2,822.91	-7,653.09	8,075.16	8,027.48	47.68	169.365		
1,400.00	1,370.78	1,314.78	1,370.78	7.26	44.28	67.87	-2,822.91	-7,653.09	8,063.04	8,011.57	51.47	156.651		
1,500.00	1,465.95	1,409.95	1,465.95	7.76	47.59	68.07	-2,822.91	-7,653.09	8,051.03	7,995.75	55.28	145.647		
1,600.00	1,561.12	1,505.12	1,561.12	8.27	50.90	68.26	-2,822.91	-7,653.09	8,039.12	7,980.02	59.09	136.038		
1,700.00	1,656.29	1,600.29	1,656.29	8.80	54.22	68.46	-2,822.91	-7,653.09	8,027.30	7,964.38	62.92	127.577		
1,800.00	1,751.46	1,704.54	1,751.46	9.32	57.85	68.65	-2,822.91	-7,653.09	8,015.59	7,948.51	67.07	119.506		
1,900.00	1,846.63	1,809.37	1,846.63	9.86	61.51	68.85	-2,822.91	-7,653.09	8,003.97	7,932.72	71.25	112.336		
2,000.00	1,941.80	1,885.80	1,941.80	10.40	64.17	69.05	-2,822.91	-7,653.09	7,992.46	7,918.02	74.44	107.362		
2,100.00	2,036.96	1,980.96	2,036.96	10.94	67.49	69.24	-2,822.91	-7,653.09	7,981.05	7,902.75	78.30	101.935		
2,200.00	2,132.13	2,076.13	2,132.13	11.49	70.81	69.44	-2,822.91	-7,653.09	7,969.74	7,887.59	82.15	97.013		
2,300.00	2,227.30	2,171.30	2,227.30	12.04	74.13	69.64	-2,822.91	-7,653.09	7,958.53	7,872.52	86.01	92.529		
2,400.00	2,322.47	2,266.47	2,322.47	12.59	77.45	69.84	-2,822.91	-7,653.09	7,947.43	7,857.55	89.87	88.428		
2,500.00	2,417.64	2,361.64	2,417.64	13.15	80.77	70.04	-2,822.91	-7,653.09	7,936.43	7,842.69	93.74	84.664		
2,600.00	2,512.81	2,456.81	2,512.81	13.70	84.09	70.24	-2,822.91	-7,653.09	7,925.53	7,827.92	97.61	81.196		
2,700.00	2,607.98	2,551.98	2,607.98	14.26	87.41	70.44	-2,822.91	-7,653.09	7,914.74	7,813.26	101.48	77.993		
2,800.00	2,703.15	2,647.15	2,703.15	14.82	90.73	70.64	-2,822.91	-7,653.09	7,904.05	7,798.70	105.35	75.024		
2,900.00	2,798.32	2,742.32	2,798.32	15.38	94.05	70.84	-2,822.91	-7,653.09	7,893.47	7,784.24	109.23	72.265		
3,000.00	2,893.49	2,837.49	2,893.49	15.95	97.37	71.04	-2,822.91	-7,653.09	7,882.99	7,769.88	113.11	69.695		
3,100.00	2,988.66	2,932.66	2,988.66	16.51	100.69	71.24	-2,822.91	-7,653.09	7,872.62	7,755.63	116.98	67.296		
3,200.00	3,083.83	3,027.83	3,083.83	17.07	104.01	71.45	-2,822.91	-7,653.09	7,862.35	7,741.48	120.87	65.051		
3,300.00	3,179.00	3,123.00	3,179.00	17.64	107.33	71.65	-2,822.91	-7,653.09	7,852.19	7,727.44	124.75	62.945		
3,400.00	3,274.17	3,218.17	3,274.17	18.21	110.65	71.85	-2,822.91	-7,653.09	7,842.14	7,713.51	128.63	60.967		
3,500.00	3,369.34	3,313.34	3,369.34	18.77	113.97	72.06	-2,822.91	-7,653.09	7,832.19	7,699.68	132.51	59.105		
3,600.00	3,464.51	3,408.51	3,464.51	19.34	117.29	72.26	-2,822.91	-7,653.09	7,822.36	7,685.96	136.40	57.349		
3,700.00	3,559.68	3,503.68	3,559.68	19.91	120.61	72.47	-2,822.91	-7,653.09	7,812.63	7,672.34	140.29	55.691		
3,800.00	3,654.84	3,601.16	3,654.84	20.48	124.01	72.67	-2,822.91	-7,653.09	7,803.01	7,658.75	144.25	54.092		
3,900.00	3,750.01	3,705.99	3,750.01	21.05	127.67	72.88	-2,822.91	-7,653.09	7,793.50	7,645.02	148.48	52.489		
4,000.00	3,845.18	3,789.18	3,845.18	21.62	130.58	73.08	-2,822.91	-7,653.09	7,784.09	7,632.14	151.95	51.228		
4,100.00	3,940.35	3,884.35	3,940.35	22.19	133.90	73.29	-2,822.91	-7,653.09	7,774.80	7,618.96	155.84	49.890		
4,200.00	4,035.52	3,979.52	4,035.52	22.76	137.22	73.50	-2,822.91	-7,653.09	7,765.62	7,605.89	159.73	48.617		
4,300.00	4,130.69	4,074.69	4,130.69	23.33	140.54	73.71	-2,822.91	-7,653.09	7,756.55	7,592.93	163.62	47.405		
4,400.00	4,225.86	4,169.86	4,225.86	23.91	143.86	73.91	-2,822.91	-7,653.09	7,747.59	7,580.08	167.51	46.250		
4,500.00	4,321.03	4,265.03	4,321.03	24.48	147.18	74.12	-2,822.91	-7,653.09	7,738.74	7,567.34	171.41	45.148		
4,600.00	4,416.20	4,360.20	4,416.20	25.05	150.51	74.33	-2,822.91	-7,653.09	7,730.01	7,554.71	175.30	44.096		
4,700.00	4,511.37	4,455.37	4,511.37	25.62	153.83	74.54	-2,822.91	-7,653.09	7,721.38	7,542.19	179.19	43.089		
4,800.00	4,606.54	4,550.54	4,606.54	26.20	157.15	74.75	-2,822.91	-7,653.09	7,712.87	7,529.78	183.09	42.126		
4,900.00	4,701.71	4,645.71	4,701.71	26.77	160.47	74.96	-2,822.91	-7,653.09	7,704.47	7,517.49	186.99	41.204		
5,000.00	4,796.88	4,740.88	4,796.88	27.34	163.79	75.17	-2,822.91	-7,653.09	7,696.19	7,505.31	190.88	40.319		
5,100.00	4,892.05	4,836.05	4,892.05	27.92	167.11	75.38	-2,822.91	-7,653.09	7,688.02	7,493.24	194.78	39.471		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,987.22	4,931.22	4,987.22	28.49	170.44	75.60	-2,822.91	-7,653.09	7,679.96	7,481.28	198.67	38.656		
5,300.00	5,082.39	5,026.39	5,082.39	29.07	173.76	75.81	-2,822.91	-7,653.09	7,672.02	7,469.44	202.57	37.873		
5,400.00	5,177.56	5,121.56	5,177.56	29.64	177.08	76.02	-2,822.91	-7,653.09	7,664.19	7,457.72	206.47	37.120		
5,500.00	5,272.72	5,216.72	5,272.72	30.21	180.40	76.23	-2,822.91	-7,653.09	7,656.47	7,446.11	210.37	36.396		
5,600.00	5,367.89	5,311.89	5,367.89	30.79	183.72	76.45	-2,822.91	-7,653.09	7,648.88	7,434.61	214.27	35.698		
5,700.00	5,463.06	5,407.06	5,463.06	31.36	187.04	76.66	-2,822.91	-7,653.09	7,641.40	7,423.23	218.17	35.026		
5,800.00	5,558.23	5,502.23	5,558.23	31.94	190.37	76.87	-2,822.91	-7,653.09	7,634.03	7,411.97	222.06	34.377		
5,900.00	5,653.40	5,602.60	5,653.40	32.51	193.87	77.09	-2,822.91	-7,653.09	7,626.78	7,400.64	226.15	33.725		
6,000.00	5,748.57	5,707.43	5,748.57	33.09	197.53	77.30	-2,822.91	-7,653.09	7,619.65	7,389.27	230.38	33.074		
6,100.00	5,843.74	5,787.74	5,843.74	33.67	200.33	77.52	-2,822.91	-7,653.09	7,612.63	7,378.87	233.77	32.565		
6,200.00	5,938.91	5,882.91	5,938.91	34.24	203.65	77.73	-2,822.91	-7,653.09	7,605.74	7,368.07	237.67	32.002		
6,300.00	6,034.08	5,978.08	6,034.08	34.82	206.98	77.95	-2,822.91	-7,653.09	7,598.96	7,357.39	241.57	31.457		
6,400.00	6,129.25	6,073.25	6,129.25	35.39	210.30	78.17	-2,822.91	-7,653.09	7,592.29	7,346.83	245.47	30.930		
6,500.00	6,224.42	6,168.42	6,224.42	35.97	213.62	78.38	-2,822.91	-7,653.09	7,585.75	7,336.38	249.37	30.420		
6,600.00	6,319.59	6,263.59	6,319.59	36.54	216.94	78.60	-2,822.91	-7,653.09	7,579.33	7,326.05	253.27	29.926		
6,700.00	6,414.76	6,358.76	6,414.76	37.12	220.26	78.82	-2,822.91	-7,653.09	7,573.02	7,315.85	257.17	29.447		
6,800.00	6,509.91	6,453.91	6,509.91	37.70	223.58	71.73	-2,822.91	-7,653.09	7,566.28	7,305.21	261.08	28.981		
6,900.00	6,603.99	6,547.99	6,603.99	38.26	226.87	48.91	-2,822.91	-7,653.09	7,548.37	7,283.45	264.92	28.493		
7,000.00	6,694.76	6,638.76	6,694.76	38.78	230.04	34.27	-2,822.91	-7,653.09	7,515.48	7,246.89	268.59	27.981		
7,100.00	6,779.96	6,723.96	6,779.96	39.24	233.01	25.17	-2,822.91	-7,653.09	7,468.41	7,196.40	272.01	27.456		
7,200.00	6,857.50	6,801.50	6,857.50	39.65	235.72	19.06	-2,822.91	-7,653.09	7,408.27	7,133.18	275.10	26.930		
7,300.00	6,925.48	6,869.48	6,925.48	40.02	238.09	14.38	-2,822.91	-7,653.09	7,336.53	7,058.75	277.78	26.411		
7,400.00	6,982.21	6,926.21	6,982.21	40.33	240.07	10.03	-2,822.91	-7,653.09	7,254.92	6,974.93	280.00	25.911		
7,500.00	7,026.31	6,970.31	7,026.31	40.63	241.61	4.61	-2,822.91	-7,653.09	7,165.44	6,883.74	281.70	25.436		
7,600.00	7,056.68	7,000.68	7,056.68	40.91	242.67	-5.64	-2,822.91	-7,653.09	7,070.27	6,787.42	282.85	24.997		
7,700.00	7,072.58	7,016.58	7,072.58	41.25	243.23	-40.71	-2,822.91	-7,653.09	6,971.76	6,688.34	283.42	24.598		
7,800.00	7,074.86	7,018.86	7,074.86	41.69	243.31	-91.80	-2,822.91	-7,653.09	6,872.28	6,588.80	283.47	24.243		
7,900.00	7,074.54	7,018.54	7,074.54	42.34	243.29	-91.78	-2,822.91	-7,653.09	6,772.81	6,489.39	283.42	23.897		
8,000.00	7,074.21	7,018.21	7,074.21	43.27	243.28	-91.75	-2,822.91	-7,653.09	6,673.37	6,389.99	283.37	23.550		
8,100.00	7,073.89	7,017.89	7,073.89	44.47	243.27	-91.72	-2,822.91	-7,653.09	6,573.93	6,290.61	283.33	23.202		
8,200.00	7,073.57	7,017.57	7,073.57	45.91	243.26	-91.70	-2,822.91	-7,653.09	6,474.52	6,191.24	283.29	22.855		
8,300.00	7,073.24	7,017.24	7,073.24	47.53	243.25	-91.67	-2,822.91	-7,653.09	6,375.13	6,091.88	283.25	22.507		
8,400.00	7,072.92	7,016.92	7,072.92	49.31	243.24	-91.64	-2,822.91	-7,653.09	6,275.75	5,992.54	283.21	22.159		
8,500.00	7,072.59	7,016.59	7,072.59	51.20	243.23	-91.62	-2,822.91	-7,653.09	6,176.40	5,893.22	283.17	21.811		
8,600.00	7,072.27	7,016.27	7,072.27	53.19	243.21	-91.59	-2,822.91	-7,653.09	6,077.06	5,793.92	283.14	21.463		
8,700.00	7,071.94	7,015.94	7,071.94	55.27	243.20	-91.57	-2,822.91	-7,653.09	5,977.75	5,694.63	283.12	21.114		
8,800.00	7,071.62	7,015.62	7,071.62	57.43	243.19	-91.54	-2,822.91	-7,653.09	5,878.46	5,595.37	283.10	20.765		
8,900.00	7,071.29	7,015.29	7,071.29	59.64	243.18	-91.51	-2,822.91	-7,653.09	5,779.20	5,496.12	283.08	20.416		
9,000.00	7,070.97	7,014.97	7,070.97	61.92	243.17	-91.49	-2,822.91	-7,653.09	5,679.96	5,396.89	283.07	20.066		
9,100.00	7,070.64	7,014.64	7,070.64	64.24	243.16	-91.46	-2,822.91	-7,653.09	5,580.75	5,297.69	283.06	19.716		
9,200.00	7,070.32	7,014.32	7,070.32	66.61	243.15	-91.43	-2,822.91	-7,653.09	5,481.57	5,198.51	283.06	19.365		
9,300.00	7,069.99	7,013.99	7,069.99	69.01	243.14	-91.41	-2,822.91	-7,653.09	5,382.41	5,099.35	283.07	19.015		
9,400.00	7,069.67	7,013.67	7,069.67	71.45	243.12	-91.38	-2,822.91	-7,653.09	5,283.29	5,000.21	283.08	18.663		
9,500.00	7,069.34	7,013.34	7,069.34	73.92	243.11	-91.35	-2,822.91	-7,653.09	5,184.21	4,901.10	283.11	18.312		
9,600.00	7,069.02	7,013.02	7,069.02	76.42	243.10	-91.33	-2,822.91	-7,653.09	5,085.16	4,802.02	283.14	17.960		
9,700.00	7,068.69	7,012.69	7,068.69	78.95	243.09	-91.30	-2,822.91	-7,653.09	4,986.14	4,702.97	283.18	17.608		
9,800.00	7,068.37	7,012.37	7,068.37	81.49	243.08	-91.28	-2,822.91	-7,653.09	4,887.17	4,603.94	283.23	17.255		
9,900.00	7,068.04	7,012.04	7,068.04	84.06	243.07	-91.25	-2,822.91	-7,653.09	4,788.24	4,504.94	283.30	16.902		
10,000.00	7,067.72	7,011.72	7,067.72	86.65	243.06	-91.22	-2,822.91	-7,653.09	4,689.36	4,405.98	283.38	16.548		
10,100.00	7,067.39	7,011.39	7,067.39	89.25	243.04	-91.20	-2,822.91	-7,653.09	4,590.52	4,307.05	283.47	16.194		
10,200.00	7,067.07	7,011.07	7,067.07	91.87	243.03	-91.17	-2,822.91	-7,653.09	4,491.74	4,208.15	283.58	15.839		
10,300.00	7,066.74	7,010.74	7,066.74	94.50	243.02	-91.14	-2,822.91	-7,653.09	4,393.01	4,109.29	283.71	15.484		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	7,066.42	7,010.42	7,066.42	97.14	243.01	-91.12	-2,822.91	-7,653.09	4,294.34	4,010.47	283.87	15.128	1544 CC, ES, SF	
10,500.00	7,066.09	7,010.09	7,066.09	99.80	243.00	-91.09	-2,822.91	-7,653.09	4,195.73	3,911.69	284.04	14.772		
10,600.00	7,065.77	7,009.77	7,065.77	102.47	242.99	-91.06	-2,822.91	-7,653.09	4,097.19	3,812.95	284.24	14.415		
10,700.00	7,065.44	7,009.44	7,065.44	105.15	242.98	-91.04	-2,822.91	-7,653.09	3,998.72	3,714.25	284.46	14.057		
10,800.00	7,065.12	7,009.12	7,065.12	107.83	242.97	-91.01	-2,822.91	-7,653.09	3,900.33	3,615.61	284.72	13.699		
10,900.00	7,064.79	7,008.79	7,064.79	110.53	242.95	-90.99	-2,822.91	-7,653.09	3,802.02	3,517.01	285.01	13.340		
11,000.00	7,064.47	7,008.47	7,064.47	113.23	242.94	-90.96	-2,822.91	-7,653.09	3,703.81	3,418.46	285.35	12.980		
11,100.00	7,064.14	7,008.14	7,064.14	115.95	242.93	-90.93	-2,822.91	-7,653.09	3,605.69	3,319.97	285.72	12.620		
11,200.00	7,063.82	7,007.82	7,063.82	118.66	242.92	-90.91	-2,822.91	-7,653.09	3,507.68	3,221.53	286.14	12.259		
11,300.00	7,063.49	7,007.49	7,063.49	121.39	242.91	-90.88	-2,822.91	-7,653.09	3,409.78	3,123.16	286.62	11.897		
11,400.00	7,063.17	7,007.17	7,063.17	124.12	242.90	-90.85	-2,822.91	-7,653.09	3,312.01	3,024.86	287.15	11.534		
11,500.00	7,062.84	7,006.84	7,062.84	126.86	242.89	-90.83	-2,822.91	-7,653.09	3,214.38	2,926.62	287.75	11.171		
11,600.00	7,062.52	7,006.52	7,062.52	129.60	242.87	-90.80	-2,822.91	-7,653.09	3,116.89	2,828.46	288.43	10.806		
11,700.00	7,062.19	7,006.19	7,062.19	132.35	242.86	-90.77	-2,822.91	-7,653.09	3,019.58	2,730.38	289.19	10.441		
11,800.00	7,061.87	7,005.87	7,061.87	135.10	242.85	-90.75	-2,822.91	-7,653.09	2,922.44	2,632.39	290.04	10.076		
11,900.00	7,061.54	7,005.54	7,061.54	137.85	242.84	-90.72	-2,822.91	-7,653.09	2,825.50	2,534.50	291.00	9.710		
12,000.00	7,061.22	7,005.22	7,061.22	140.61	242.83	-90.70	-2,822.91	-7,653.09	2,728.78	2,436.70	292.08	9.343		
12,100.00	7,060.89	7,004.89	7,060.89	143.38	242.82	-90.67	-2,822.91	-7,653.09	2,632.31	2,339.03	293.29	8.975		
12,200.00	7,060.57	7,004.57	7,060.57	146.15	242.81	-90.64	-2,822.91	-7,653.09	2,536.11	2,241.47	294.64	8.607		
12,300.00	7,060.24	7,004.24	7,060.24	148.92	242.80	-90.62	-2,822.91	-7,653.09	2,440.22	2,144.06	296.16	8.239		
12,400.00	7,059.92	7,003.92	7,059.92	151.69	242.78	-90.59	-2,822.91	-7,653.09	2,344.67	2,046.80	297.87	7.871		
12,500.00	7,059.59	7,003.59	7,059.59	154.47	242.77	-90.56	-2,822.91	-7,653.09	2,249.51	1,949.71	299.80	7.503		
12,600.00	7,059.27	7,003.27	7,059.27	157.25	242.76	-90.54	-2,822.91	-7,653.09	2,154.78	1,852.82	301.96	7.136		
12,700.00	7,058.94	7,002.94	7,058.94	160.03	242.75	-90.51	-2,822.91	-7,653.09	2,060.56	1,756.17	304.39	6.769		
12,800.00	7,058.62	7,002.62	7,058.62	162.82	242.74	-90.48	-2,822.91	-7,653.09	1,966.90	1,659.77	307.13	6.404		
12,900.00	7,058.29	7,002.29	7,058.29	165.61	242.73	-90.46	-2,822.91	-7,653.09	1,873.90	1,563.68	310.22	6.040		
13,000.00	7,057.97	7,001.97	7,057.97	168.40	242.72	-90.43	-2,822.91	-7,653.09	1,781.66	1,467.95	313.71	5.679		
13,100.00	7,057.64	7,001.64	7,057.64	171.19	242.70	-90.41	-2,822.91	-7,653.09	1,690.30	1,372.65	317.65	5.321		
13,200.00	7,057.32	7,001.32	7,057.32	173.99	242.69	-90.38	-2,822.91	-7,653.09	1,599.98	1,277.87	322.11	4.967		
13,300.00	7,057.00	7,001.00	7,057.00	176.78	242.68	-90.35	-2,822.91	-7,653.09	1,510.87	1,183.72	327.15	4.618		
13,400.00	7,056.67	7,000.67	7,056.67	179.58	242.67	-90.33	-2,822.91	-7,653.09	1,423.21	1,090.35	332.86	4.276		
13,500.00	7,056.35	7,000.35	7,056.35	182.38	242.66	-90.30	-2,822.91	-7,653.09	1,337.29	997.95	339.34	3.941		
13,600.00	7,056.02	7,000.02	7,056.02	185.19	242.65	-90.27	-2,822.91	-7,653.09	1,253.45	906.78	346.67	3.616		
13,700.00	7,055.70	7,000.30	7,055.70	187.99	242.66	-90.25	-2,822.91	-7,653.09	1,172.15	817.17	354.98	3.302		
13,800.00	7,055.37	7,000.63	7,055.37	190.80	242.67	-90.22	-2,822.91	-7,653.09	1,093.96	729.62	364.34	3.003		
13,900.00	7,055.05	7,000.95	7,055.05	193.60	242.68	-90.19	-2,822.91	-7,653.09	1,019.58	644.78	374.80	2.720		
14,000.00	7,054.72	7,001.28	7,054.72	196.41	242.69	-90.17	-2,822.91	-7,653.09	949.92	563.56	386.37	2.459		
14,100.00	7,054.40	7,001.60	7,054.40	199.22	242.70	-90.14	-2,822.91	-7,653.09	886.09	487.19	398.90	2.221		
14,200.00	7,054.07	7,001.93	7,054.07	202.03	242.71	-90.12	-2,822.91	-7,653.09	829.43	417.36	412.08	2.013		
14,300.00	7,053.75	7,002.25	7,053.75	204.85	242.73	-90.09	-2,822.91	-7,653.09	781.51	356.20	425.31	1.838		
14,400.00	7,053.42	7,002.58	7,053.42	207.66	242.74	-90.06	-2,822.91	-7,653.09	744.02	306.33	437.69	1.700		
14,500.00	7,053.10	7,002.90	7,053.10	210.48	242.75	-90.04	-2,822.91	-7,653.09	718.59	270.52	448.06	1.604		
14,600.00	7,052.77	7,003.23	7,052.77	213.29	242.76	-90.01	-2,822.91	-7,653.09	706.52	251.24	455.28	1.552		
14,635.99	7,052.65	7,003.35	7,052.65	214.31	242.76	-90.00	-2,822.91	-7,653.09	705.60	248.66	456.94	1.544		
14,700.00	7,052.45	7,003.55	7,052.45	216.11	242.77	-89.98	-2,822.91	-7,653.09	708.50	249.93	458.57	1.545		
14,800.00	7,052.12	7,003.88	7,052.12	218.93	242.78	-89.96	-2,822.91	-7,653.09	724.41	266.63	457.78	1.582		
14,900.00	7,051.80	7,004.20	7,051.80	221.75	242.79	-89.93	-2,822.91	-7,653.09	753.37	299.92	453.46	1.661		
15,000.00	7,051.47	7,004.53	7,051.47	224.57	242.81	-89.90	-2,822.91	-7,653.09	793.96	347.39	446.57	1.778		
15,100.00	7,051.15	7,004.85	7,051.15	227.39	242.82	-89.88	-2,822.91	-7,653.09	844.50	406.35	438.14	1.927		
15,145.13	7,051.00	7,005.00	7,051.00	228.67	242.82	-89.87	-2,822.91	-7,653.09	870.11	436.03	434.08	2.004		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	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	43.00	3.28	3.28	-101.54	-1,331.04	-6,517.47	6,652.14					
100.00	100.00	57.00	100.00	3.28	3.43	-101.54	-1,331.04	-6,517.47	6,652.00	6,645.29	6.71	991.016		
200.00	200.00	157.00	200.00	3.34	4.97	-101.54	-1,331.04	-6,517.47	6,652.00	6,643.69	8.31	800.666		
300.00	299.98	256.98	299.98	3.44	7.94	74.09	-1,331.04	-6,517.47	6,651.52	6,640.15	11.37	584.768		
400.00	399.84	356.84	399.84	3.59	11.20	74.16	-1,331.04	-6,517.47	6,650.09	6,635.30	14.79	449.597		
500.00	499.45	456.45	499.45	3.79	14.56	74.28	-1,331.04	-6,517.47	6,647.71	6,629.36	18.35	362.274		
600.00	598.70	555.70	598.70	4.03	17.96	74.45	-1,331.04	-6,517.47	6,644.40	6,622.42	21.99	302.218		
700.00	697.47	654.47	697.47	4.31	21.36	74.66	-1,331.04	-6,517.47	6,640.19	6,614.52	25.67	258.687		
800.00	795.62	752.62	795.62	4.64	24.75	74.91	-1,331.04	-6,517.47	6,635.09	6,605.71	29.38	225.813		
900.00	893.06	850.06	893.06	5.00	28.12	75.21	-1,331.04	-6,517.47	6,629.15	6,596.03	33.12	200.171		
1,000.00	989.64	946.64	989.64	5.40	31.47	75.55	-1,331.04	-6,517.47	6,622.40	6,585.54	36.86	179.649		
1,100.00	1,085.27	1,042.27	1,085.27	5.83	34.80	75.92	-1,331.04	-6,517.47	6,614.89	6,574.28	40.61	162.876		
1,200.00	1,180.44	1,137.44	1,180.44	6.29	38.10	76.17	-1,331.04	-6,517.47	6,607.13	6,562.76	44.38	148.890		
1,300.00	1,275.61	1,232.61	1,275.61	6.76	41.42	76.42	-1,331.04	-6,517.47	6,599.51	6,551.35	48.16	137.033		
1,400.00	1,370.78	1,327.78	1,370.78	7.26	44.73	76.66	-1,331.04	-6,517.47	6,592.02	6,540.06	51.96	126.866		
1,500.00	1,465.95	1,422.95	1,465.95	7.76	48.04	76.91	-1,331.04	-6,517.47	6,584.67	6,528.89	55.77	118.058		
1,600.00	1,561.12	1,518.12	1,561.12	8.27	51.36	77.16	-1,331.04	-6,517.47	6,577.45	6,517.85	59.60	110.360		
1,700.00	1,656.29	1,613.29	1,656.29	8.80	54.67	77.41	-1,331.04	-6,517.47	6,570.36	6,506.93	63.43	103.577		
1,800.00	1,751.46	1,708.46	1,751.46	9.32	57.99	77.66	-1,331.04	-6,517.47	6,563.41	6,496.14	67.28	97.558		
1,900.00	1,846.63	1,803.63	1,846.63	9.86	61.31	77.91	-1,331.04	-6,517.47	6,556.60	6,485.48	71.13	92.183		
2,000.00	1,941.80	1,901.20	1,941.80	10.40	64.71	78.16	-1,331.04	-6,517.47	6,549.93	6,474.86	75.06	87.257		
2,100.00	2,036.96	2,006.04	2,036.96	10.94	68.36	78.41	-1,331.04	-6,517.47	6,543.39	6,464.13	79.26	82.555		
2,200.00	2,132.13	2,089.13	2,132.13	11.49	71.26	78.66	-1,331.04	-6,517.47	6,536.99	6,454.29	82.70	79.041		
2,300.00	2,227.30	2,184.30	2,227.30	12.04	74.58	78.91	-1,331.04	-6,517.47	6,530.73	6,444.16	86.57	75.438		
2,400.00	2,322.47	2,279.47	2,322.47	12.59	77.90	79.17	-1,331.04	-6,517.47	6,524.61	6,434.17	90.44	72.142		
2,500.00	2,417.64	2,374.64	2,417.64	13.15	81.22	79.42	-1,331.04	-6,517.47	6,518.62	6,424.31	94.31	69.116		
2,600.00	2,512.81	2,469.81	2,512.81	13.70	84.54	79.67	-1,331.04	-6,517.47	6,512.78	6,414.59	98.19	66.328		
2,700.00	2,607.98	2,564.98	2,607.98	14.26	87.86	79.92	-1,331.04	-6,517.47	6,507.07	6,405.00	102.07	63.753		
2,800.00	2,703.15	2,660.15	2,703.15	14.82	91.18	80.18	-1,331.04	-6,517.47	6,501.51	6,395.56	105.95	61.365		
2,900.00	2,798.32	2,755.32	2,798.32	15.38	94.50	80.43	-1,331.04	-6,517.47	6,496.08	6,386.25	109.83	59.147		
3,000.00	2,893.49	2,850.49	2,893.49	15.95	97.82	80.69	-1,331.04	-6,517.47	6,490.80	6,377.09	113.71	57.081		
3,100.00	2,988.66	2,945.66	2,988.66	16.51	101.14	80.94	-1,331.04	-6,517.47	6,485.65	6,368.06	117.60	55.151		
3,200.00	3,083.83	3,040.83	3,083.83	17.07	104.46	81.20	-1,331.04	-6,517.47	6,480.65	6,359.17	121.48	53.346		
3,300.00	3,179.00	3,136.00	3,179.00	17.64	107.78	81.45	-1,331.04	-6,517.47	6,475.79	6,350.42	125.37	51.653		
3,400.00	3,274.17	3,231.17	3,274.17	18.21	111.10	81.71	-1,331.04	-6,517.47	6,471.07	6,341.82	129.26	50.063		
3,500.00	3,369.34	3,326.34	3,369.34	18.77	114.42	81.97	-1,331.04	-6,517.47	6,466.50	6,333.35	133.15	48.566		
3,600.00	3,464.51	3,421.51	3,464.51	19.34	117.75	82.22	-1,331.04	-6,517.47	6,462.07	6,325.03	137.04	47.155		
3,700.00	3,559.68	3,516.68	3,559.68	19.91	121.07	82.48	-1,331.04	-6,517.47	6,457.78	6,316.85	140.93	45.823		
3,800.00	3,654.84	3,611.84	3,654.84	20.48	124.39	82.74	-1,331.04	-6,517.47	6,453.63	6,308.81	144.82	44.563		
3,900.00	3,750.01	3,707.01	3,750.01	21.05	127.71	83.00	-1,331.04	-6,517.47	6,449.63	6,300.91	148.71	43.369		
4,000.00	3,845.18	3,802.18	3,845.18	21.62	131.03	83.25	-1,331.04	-6,517.47	6,445.77	6,293.16	152.61	42.238		
4,100.00	3,940.35	3,902.65	3,940.35	22.19	134.54	83.51	-1,331.04	-6,517.47	6,442.05	6,285.36	156.69	41.114		
4,200.00	4,035.52	4,007.48	4,035.52	22.76	138.19	83.77	-1,331.04	-6,517.47	6,438.48	6,277.56	160.92	40.011		
4,300.00	4,130.69	4,087.69	4,130.69	23.33	140.99	84.03	-1,331.04	-6,517.47	6,435.05	6,270.76	164.29	39.169		
4,400.00	4,225.86	4,182.86	4,225.86	23.91	144.32	84.29	-1,331.04	-6,517.47	6,431.77	6,263.58	168.19	38.242		
4,500.00	4,321.03	4,278.03	4,321.03	24.48	147.64	84.55	-1,331.04	-6,517.47	6,428.63	6,256.55	172.08	37.358		
4,600.00	4,416.20	4,373.20	4,416.20	25.05	150.96	84.81	-1,331.04	-6,517.47	6,425.64	6,249.66	175.98	36.514		
4,700.00	4,511.37	4,468.37	4,511.37	25.62	154.28	85.07	-1,331.04	-6,517.47	6,422.80	6,242.92	179.87	35.707		
4,800.00	4,606.54	4,563.54	4,606.54	26.20	157.60	85.33	-1,331.04	-6,517.47	6,420.09	6,236.32	183.77	34.935		
4,900.00	4,701.71	4,658.71	4,701.71	26.77	160.92	85.59	-1,331.04	-6,517.47	6,417.54	6,229.87	187.67	34.196		
5,000.00	4,796.88	4,753.88	4,796.88	27.34	164.25	85.85	-1,331.04	-6,517.47	6,415.13	6,223.56	191.57	33.488		
5,100.00	4,892.05	4,849.05	4,892.05	27.92	167.57	86.11	-1,331.04	-6,517.47	6,412.87	6,217.40	195.46	32.808		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,944.22	4,987.22	28.49	170.89	86.37	-1,331.04	-6,517.47	6,410.75	6,211.39	199.36	32.156	
5,300.00	5,082.39	5,039.39	5,082.39	29.07	174.21	86.63	-1,331.04	-6,517.47	6,408.78	6,205.52	203.26	31.530	
5,400.00	5,177.56	5,134.56	5,177.56	29.64	177.53	86.89	-1,331.04	-6,517.47	6,406.96	6,199.80	207.16	30.928	
5,500.00	5,272.72	5,229.72	5,272.72	30.21	180.85	87.15	-1,331.04	-6,517.47	6,405.28	6,194.22	211.06	30.349	
5,600.00	5,367.89	5,324.89	5,367.89	30.79	184.18	87.41	-1,331.04	-6,517.47	6,403.75	6,188.80	214.95	29.791	
5,700.00	5,463.06	5,420.06	5,463.06	31.36	187.50	87.67	-1,331.04	-6,517.47	6,402.37	6,183.51	218.85	29.254	
5,800.00	5,558.23	5,515.23	5,558.23	31.94	190.82	87.93	-1,331.04	-6,517.47	6,401.13	6,178.38	222.75	28.737	
5,900.00	5,653.40	5,610.40	5,653.40	32.51	194.14	88.20	-1,331.04	-6,517.47	6,400.04	6,173.39	226.65	28.238	
6,000.00	5,748.57	5,705.57	5,748.57	33.09	197.46	88.46	-1,331.04	-6,517.47	6,399.10	6,168.55	230.55	27.756	
6,100.00	5,843.74	5,800.74	5,843.74	33.67	200.79	88.72	-1,331.04	-6,517.47	6,398.30	6,163.86	234.45	27.291	
6,200.00	5,938.91	5,904.09	5,938.91	34.24	204.39	88.98	-1,331.04	-6,517.47	6,397.66	6,159.02	238.63	26.810	
6,300.00	6,034.08	6,000.92	6,034.08	34.82	208.05	89.24	-1,331.04	-6,517.47	6,397.16	6,154.29	242.87	26.340	
6,400.00	6,129.25	6,086.25	6,129.25	35.39	210.75	89.50	-1,331.04	-6,517.47	6,396.80	6,150.66	246.14	25.988	
6,500.00	6,224.42	6,181.42	6,224.42	35.97	214.07	89.77	-1,331.04	-6,517.47	6,396.60	6,146.55	250.04	25.582	
6,589.55	6,309.64	6,266.64	6,309.64	36.48	217.05	90.00	-1,331.04	-6,517.47	6,396.54	6,143.00	253.53	25.230	
6,600.00	6,319.59	6,276.59	6,319.59	36.54	217.40	90.03	-1,331.04	-6,517.47	6,396.54	6,142.60	253.94	25.189	
6,700.00	6,414.76	6,371.76	6,414.76	37.12	220.72	90.29	-1,331.04	-6,517.47	6,396.63	6,138.79	257.84	24.809	
6,800.00	6,509.91	6,466.91	6,509.91	37.70	224.04	83.28	-1,331.04	-6,517.47	6,396.31	6,134.57	261.74	24.438	
6,900.00	6,603.99	6,560.99	6,603.99	38.26	227.32	60.79	-1,331.04	-6,517.47	6,384.75	6,119.17	265.58	24.041	
7,000.00	6,694.76	6,651.76	6,694.76	38.78	230.49	46.84	-1,331.04	-6,517.47	6,358.04	6,088.77	269.27	23.612	
7,100.00	6,779.96	6,736.96	6,779.96	39.24	233.47	38.88	-1,331.04	-6,517.47	6,316.83	6,044.13	272.71	23.163	
7,200.00	6,857.50	6,814.50	6,857.50	39.65	236.17	34.51	-1,331.04	-6,517.47	6,262.14	5,986.32	275.82	22.703	
7,300.00	6,925.48	6,882.48	6,925.48	40.02	238.54	32.56	-1,331.04	-6,517.47	6,195.30	5,916.75	278.55	22.241	
7,400.00	6,982.21	6,939.21	6,982.21	40.33	240.53	32.64	-1,331.04	-6,517.47	6,117.92	5,837.09	280.84	21.785	
7,500.00	7,026.31	6,983.31	7,026.31	40.63	242.06	35.19	-1,331.04	-6,517.47	6,031.89	5,749.26	282.63	21.342	
7,600.00	7,056.68	7,013.68	7,056.68	40.91	243.12	42.31	-1,331.04	-6,517.47	5,939.28	5,655.39	283.89	20.921	
7,700.00	7,072.58	7,029.58	7,072.58	41.25	243.68	62.52	-1,331.04	-6,517.47	5,842.34	5,557.75	284.59	20.529	
7,800.00	7,074.86	7,031.86	7,074.86	41.69	243.76	91.36	-1,331.04	-6,517.47	5,743.43	5,458.65	284.78	20.168	
7,900.00	7,074.54	7,031.54	7,074.54	42.34	243.75	91.34	-1,331.04	-6,517.47	5,644.37	5,359.50	284.88	19.814	
8,000.00	7,074.21	7,031.21	7,074.21	43.27	243.74	91.31	-1,331.04	-6,517.47	5,545.35	5,260.37	284.98	19.459	
8,100.00	7,073.89	7,030.89	7,073.89	44.47	243.73	91.29	-1,331.04	-6,517.47	5,446.36	5,161.26	285.09	19.104	
8,200.00	7,073.57	7,030.57	7,073.57	45.91	243.71	91.26	-1,331.04	-6,517.47	5,347.40	5,062.19	285.22	18.749	
8,300.00	7,073.24	7,030.24	7,073.24	47.53	243.70	91.24	-1,331.04	-6,517.47	5,248.49	4,963.14	285.35	18.393	
8,400.00	7,072.92	7,029.92	7,072.92	49.31	243.69	91.22	-1,331.04	-6,517.47	5,149.62	4,864.12	285.49	18.038	
8,500.00	7,072.59	7,029.59	7,072.59	51.20	243.68	91.19	-1,331.04	-6,517.47	5,050.79	4,765.14	285.65	17.682	
8,600.00	7,072.27	7,029.27	7,072.27	53.19	243.67	91.17	-1,331.04	-6,517.47	4,952.01	4,666.19	285.82	17.325	
8,700.00	7,071.94	7,028.94	7,071.94	55.27	243.66	91.15	-1,331.04	-6,517.47	4,853.28	4,567.27	286.01	16.969	
8,800.00	7,071.62	7,028.62	7,071.62	57.43	243.65	91.12	-1,331.04	-6,517.47	4,754.60	4,468.39	286.21	16.612	
8,900.00	7,071.29	7,028.29	7,071.29	59.64	243.63	91.10	-1,331.04	-6,517.47	4,655.98	4,369.55	286.43	16.255	
9,000.00	7,070.97	7,027.97	7,070.97	61.92	243.62	91.07	-1,331.04	-6,517.47	4,557.42	4,270.76	286.67	15.898	
9,100.00	7,070.64	7,027.64	7,070.64	64.24	243.61	91.05	-1,331.04	-6,517.47	4,458.93	4,172.00	286.92	15.540	
9,200.00	7,070.32	7,027.32	7,070.32	66.61	243.60	91.03	-1,331.04	-6,517.47	4,360.50	4,073.30	287.20	15.183	
9,300.00	7,069.99	7,026.99	7,069.99	69.01	243.59	91.00	-1,331.04	-6,517.47	4,262.14	3,974.64	287.51	14.825	
9,400.00	7,069.67	7,026.67	7,069.67	71.45	243.58	90.98	-1,331.04	-6,517.47	4,163.87	3,876.03	287.83	14.466	
9,500.00	7,069.34	7,026.34	7,069.34	73.92	243.57	90.95	-1,331.04	-6,517.47	4,065.68	3,777.49	288.19	14.108	
9,600.00	7,069.02	7,026.02	7,069.02	76.42	243.56	90.93	-1,331.04	-6,517.47	3,967.57	3,679.00	288.57	13.749	
9,700.00	7,068.69	7,025.69	7,068.69	78.95	243.54	90.91	-1,331.04	-6,517.47	3,869.57	3,580.58	288.99	13.390	
9,800.00	7,068.37	7,025.37	7,068.37	81.49	243.53	90.88	-1,331.04	-6,517.47	3,771.67	3,482.22	289.45	13.031	
9,900.00	7,068.04	7,025.04	7,068.04	84.06	243.52	90.86	-1,331.04	-6,517.47	3,673.88	3,383.94	289.94	12.671	
10,000.00	7,067.72	7,024.72	7,067.72	86.65	243.51	90.83	-1,331.04	-6,517.47	3,576.22	3,285.73	290.48	12.311	
10,100.00	7,067.39	7,024.39	7,067.39	89.25	243.50	90.81	-1,331.04	-6,517.47	3,478.68	3,187.62	291.07	11.952	
10,200.00	7,067.07	7,024.07	7,067.07	91.87	243.49	90.79	-1,331.04	-6,517.47	3,381.30	3,089.59	291.71	11.591	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	
10,300.00	7,066.74	7,023.74	7,066.74	94.50	243.48	90.76	-1,331.04	-6,517.47	3,284.06	2,991.66	292.40	11.231	
10,400.00	7,066.42	7,023.42	7,066.42	97.14	243.46	90.74	-1,331.04	-6,517.47	3,187.00	2,893.84	293.16	10.871	
10,500.00	7,066.09	7,023.09	7,066.09	99.80	243.45	90.71	-1,331.04	-6,517.47	3,090.13	2,796.14	293.99	10.511	
10,600.00	7,065.77	7,022.77	7,065.77	102.47	243.44	90.69	-1,331.04	-6,517.47	2,993.47	2,698.56	294.90	10.151	
10,700.00	7,065.44	7,022.44	7,065.44	105.15	243.43	90.67	-1,331.04	-6,517.47	2,897.02	2,601.12	295.90	9.791	
10,800.00	7,065.12	7,022.12	7,065.12	107.83	243.42	90.64	-1,331.04	-6,517.47	2,800.83	2,503.84	296.99	9.431	
10,900.00	7,064.79	7,021.79	7,064.79	110.53	243.41	90.62	-1,331.04	-6,517.47	2,704.92	2,406.73	298.19	9.071	
11,000.00	7,064.47	7,021.47	7,064.47	113.23	243.40	90.60	-1,331.04	-6,517.47	2,609.31	2,309.80	299.51	8.712	
11,100.00	7,064.14	7,021.14	7,064.14	115.95	243.39	90.57	-1,331.04	-6,517.47	2,514.05	2,213.08	300.96	8.353	
11,200.00	7,063.82	7,020.82	7,063.82	118.66	243.37	90.55	-1,331.04	-6,517.47	2,419.16	2,116.60	302.56	7.996	
11,300.00	7,063.49	7,020.49	7,063.49	121.39	243.36	90.52	-1,331.04	-6,517.47	2,324.71	2,020.38	304.33	7.639	
11,400.00	7,063.17	7,020.17	7,063.17	124.12	243.35	90.50	-1,331.04	-6,517.47	2,230.73	1,924.45	306.28	7.283	
11,500.00	7,062.84	7,019.84	7,062.84	126.86	243.34	90.48	-1,331.04	-6,517.47	2,137.31	1,828.87	308.44	6.929	
11,600.00	7,062.52	7,019.52	7,062.52	129.60	243.33	90.45	-1,331.04	-6,517.47	2,044.51	1,733.67	310.84	6.577	
11,700.00	7,062.19	7,019.19	7,062.19	132.35	243.32	90.43	-1,331.04	-6,517.47	1,952.42	1,638.91	313.50	6.228	
11,800.00	7,061.87	7,018.87	7,061.87	135.10	243.31	90.40	-1,331.04	-6,517.47	1,861.14	1,544.68	316.46	5.881	
11,900.00	7,061.54	7,018.54	7,061.54	137.85	243.29	90.38	-1,331.04	-6,517.47	1,770.81	1,451.04	319.76	5.538	
12,000.00	7,061.22	7,018.22	7,061.22	140.61	243.28	90.36	-1,331.04	-6,517.47	1,681.57	1,358.12	323.45	5.199	
12,100.00	7,060.89	7,017.89	7,060.89	143.38	243.27	90.33	-1,331.04	-6,517.47	1,593.61	1,266.05	327.56	4.865	
12,200.00	7,060.57	7,017.57	7,060.57	146.15	243.26	90.31	-1,331.04	-6,517.47	1,507.15	1,175.01	332.15	4.538	
12,300.00	7,060.24	7,017.24	7,060.24	148.92	243.25	90.28	-1,331.04	-6,517.47	1,422.47	1,085.19	337.28	4.218	
12,400.00	7,059.92	7,016.92	7,059.92	151.69	243.24	90.26	-1,331.04	-6,517.47	1,339.90	996.90	343.00	3.906	
12,500.00	7,059.59	7,016.59	7,059.59	154.47	243.23	90.24	-1,331.04	-6,517.47	1,259.86	910.49	349.37	3.606	
12,600.00	7,059.27	7,016.27	7,059.27	157.25	243.22	90.21	-1,331.04	-6,517.47	1,182.86	826.42	356.44	3.319	
12,700.00	7,058.94	7,015.94	7,058.94	160.03	243.20	90.19	-1,331.04	-6,517.47	1,109.54	745.33	364.21	3.046	
12,800.00	7,058.62	7,015.62	7,058.62	162.82	243.19	90.17	-1,331.04	-6,517.47	1,040.67	668.00	372.67	2.792	
12,900.00	7,058.29	7,015.29	7,058.29	165.61	243.18	90.14	-1,331.04	-6,517.47	977.19	595.50	381.69	2.560	
13,000.00	7,057.97	7,014.97	7,057.97	168.40	243.17	90.12	-1,331.04	-6,517.47	920.23	529.16	391.07	2.353	
13,100.00	7,057.64	7,014.64	7,057.64	171.19	243.16	90.09	-1,331.04	-6,517.47	871.05	470.64	400.42	2.175	
13,200.00	7,057.32	7,014.32	7,057.32	173.99	243.15	90.07	-1,331.04	-6,517.47	831.05	421.86	409.20	2.031	
13,300.00	7,057.00	7,014.00	7,057.00	176.78	243.14	90.05	-1,331.04	-6,517.47	801.60	384.88	416.72	1.924	
13,400.00	7,056.67	7,013.67	7,056.67	179.58	243.12	90.02	-1,331.04	-6,517.47	783.88	361.63	422.26	1.856	
13,490.44	7,056.38	7,013.38	7,056.38	182.11	243.11	90.00	-1,331.04	-6,517.47	778.65	353.58	425.07	1.832 CC	
13,500.00	7,056.35	7,013.35	7,056.35	182.38	243.11	90.00	-1,331.04	-6,517.47	778.71	353.47	425.24	1.831 ES, SF	
13,600.00	7,056.02	7,013.02	7,056.02	185.19	243.10	89.97	-1,331.04	-6,517.47	786.32	360.92	425.40	1.848	
13,700.00	7,055.70	7,012.70	7,055.70	187.99	243.09	89.95	-1,331.04	-6,517.47	806.36	383.45	422.91	1.907	
13,800.00	7,055.37	7,012.37	7,055.37	190.80	243.08	89.93	-1,331.04	-6,517.47	837.93	419.70	418.22	2.004	
13,900.00	7,055.05	7,012.05	7,055.05	193.60	243.07	89.90	-1,331.04	-6,517.47	879.79	467.78	412.01	2.135	
14,000.00	7,054.72	7,011.72	7,054.72	196.41	243.06	89.88	-1,331.04	-6,517.47	930.56	525.64	404.92	2.298	
14,100.00	7,054.40	7,011.40	7,054.40	199.22	243.04	89.85	-1,331.04	-6,517.47	988.87	591.38	397.49	2.488	
14,200.00	7,054.07	7,011.07	7,054.07	202.03	243.03	89.83	-1,331.04	-6,517.47	1,053.46	663.36	390.10	2.700	
14,300.00	7,053.75	7,010.75	7,053.75	204.85	243.02	89.81	-1,331.04	-6,517.47	1,123.25	740.24	383.00	2.933	
14,400.00	7,053.42	7,010.42	7,053.42	207.66	243.01	89.78	-1,331.04	-6,517.47	1,197.33	820.99	376.34	3.182	
14,500.00	7,053.10	7,010.10	7,053.10	210.48	243.00	89.76	-1,331.04	-6,517.47	1,274.95	904.79	370.17	3.444	
14,600.00	7,052.77	7,009.77	7,052.77	213.29	242.99	89.73	-1,331.04	-6,517.47	1,355.51	991.01	364.51	3.719	
14,700.00	7,052.45	7,009.45	7,052.45	216.11	242.98	89.71	-1,331.04	-6,517.47	1,438.51	1,079.17	359.34	4.003	
14,800.00	7,052.12	7,009.12	7,052.12	218.93	242.97	89.69	-1,331.04	-6,517.47	1,523.56	1,168.91	354.65	4.296	
14,900.00	7,051.80	7,008.80	7,051.80	221.75	242.95	89.66	-1,331.04	-6,517.47	1,610.32	1,259.94	350.39	4.596	
15,000.00	7,051.47	7,008.47	7,051.47	224.57	242.94	89.64	-1,331.04	-6,517.47	1,698.54	1,352.03	346.52	4.902	
15,100.00	7,051.15	7,008.15	7,051.15	227.39	242.93	89.62	-1,331.04	-6,517.47	1,788.01	1,445.00	343.00	5.213	
15,145.13	7,051.00	7,008.00	7,051.00	228.67	242.93	89.60	-1,331.04	-6,517.47	1,828.73	1,487.21	341.52	5.355	

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	38.00	3.28	3.28	-91.45	-194.45	-7,656.17	7,658.73					
100.00	100.00	100.00	125.59	3.28	3.29	-91.45	-194.16	-7,655.88	7,658.38	7,651.81	6.57	1,165.331		
200.00	200.00	181.21	219.21	3.34	3.33	-91.45	-193.57	-7,655.48	7,657.95	7,651.29	6.67	1,148.921		
300.00	299.98	254.90	292.89	3.44	3.40	84.18	-193.11	-7,655.44	7,657.70	7,650.86	6.84	1,120.325		
400.00	399.84	330.62	368.62	3.59	3.49	84.22	-192.91	-7,655.64	7,657.43	7,650.34	7.08	1,081.257		
500.00	499.45	412.27	450.27	3.79	3.63	84.28	-192.98	-7,656.09	7,657.10	7,649.68	7.41	1,032.719		
600.00	598.70	520.64	558.63	4.03	3.85	84.39	-193.25	-7,656.69	7,656.45	7,648.57	7.88	971.865		
700.00	697.47	611.19	649.18	4.31	4.07	84.51	-193.91	-7,657.19	7,655.50	7,647.12	8.38	913.630		
800.00	795.62	698.31	736.29	4.64	4.30	84.65	-194.78	-7,657.79	7,654.38	7,645.44	8.93	856.723		
900.00	893.06	798.01	835.98	5.00	4.59	84.83	-195.80	-7,658.53	7,653.04	7,643.46	9.58	798.596		
1,000.00	989.64	899.29	937.26	5.40	4.90	85.05	-196.80	-7,659.25	7,651.42	7,641.13	10.29	743.381		
1,100.00	1,085.27	999.51	1,037.47	5.83	5.22	85.30	-197.65	-7,659.89	7,649.54	7,638.49	11.05	692.257		
1,200.00	1,180.44	1,095.29	1,133.25	6.29	5.55	85.52	-198.21	-7,660.49	7,647.61	7,635.77	11.83	646.254		
1,300.00	1,275.61	1,187.60	1,225.55	6.76	5.87	85.73	-198.56	-7,661.07	7,645.81	7,633.18	12.63	605.164		
1,400.00	1,370.78	1,293.88	1,331.83	7.26	6.26	85.97	-198.85	-7,661.70	7,644.10	7,630.59	13.51	565.858		
1,500.00	1,465.95	1,382.90	1,420.85	7.76	6.58	86.17	-199.08	-7,662.19	7,642.46	7,628.12	14.34	532.923		
1,600.00	1,561.12	1,477.44	1,515.39	8.27	6.94	86.39	-199.45	-7,662.76	7,641.00	7,625.79	15.21	502.414		
1,700.00	1,656.29	1,567.31	1,605.25	8.80	7.28	86.59	-199.78	-7,663.32	7,639.68	7,623.60	16.07	475.337		
1,800.00	1,751.46	1,664.02	1,701.96	9.32	7.65	86.81	-200.03	-7,663.99	7,638.53	7,621.56	16.97	450.035		
1,900.00	1,846.63	1,760.22	1,798.16	9.86	8.03	87.03	-200.13	-7,664.59	7,637.46	7,619.58	17.88	427.098		
2,000.00	1,941.80	1,857.07	1,895.01	10.40	8.41	87.25	-200.29	-7,665.21	7,636.51	7,617.71	18.80	406.152		
2,100.00	2,036.96	1,949.14	1,987.08	10.94	8.77	87.46	-200.51	-7,665.78	7,635.67	7,615.96	19.71	387.395		
2,200.00	2,132.13	2,061.69	2,099.62	11.49	9.22	87.72	-200.69	-7,666.49	7,634.98	7,614.27	20.71	368.727		
2,300.00	2,227.30	2,176.15	2,214.08	12.04	9.68	87.98	-200.78	-7,666.78	7,634.03	7,612.31	21.72	351.544		
2,400.00	2,322.47	2,291.43	2,329.36	12.59	10.15	88.24	-201.43	-7,666.87	7,633.03	7,610.30	22.73	335.779		
2,500.00	2,417.64	2,382.37	2,420.30	13.15	10.52	88.45	-201.97	-7,666.83	7,632.02	7,608.36	23.65	322.641		
2,600.00	2,512.81	2,477.68	2,515.60	13.70	10.90	88.67	-202.40	-7,666.83	7,631.18	7,606.58	24.60	310.230		
2,700.00	2,607.98	2,600.80	2,638.73	14.26	11.40	88.95	-202.80	-7,666.61	7,630.31	7,604.65	25.66	297.392		
2,800.00	2,703.15	2,713.45	2,751.38	14.82	11.86	89.21	-202.86	-7,666.03	7,629.25	7,602.57	26.68	285.994		
2,900.00	2,798.32	2,798.31	2,836.23	15.38	12.21	89.40	-202.63	-7,665.56	7,628.28	7,600.70	27.59	276.533		
3,000.00	2,893.49	2,849.38	2,887.30	15.95	12.42	89.52	-202.34	-7,665.43	7,627.76	7,599.40	28.36	268.970		
3,026.69	2,918.89	2,862.80	2,900.72	16.10	12.47	89.56	-202.24	-7,665.44	7,627.74	7,599.17	28.56	267.032		
3,100.00	2,988.66	2,900.01	2,937.93	16.51	12.63	89.64	-201.91	-7,665.59	7,627.92	7,598.79	29.13	261.845		
3,200.00	3,083.83	2,956.08	2,993.99	17.07	12.86	89.78	-201.31	-7,666.07	7,628.73	7,598.80	29.93	254.909		
3,300.00	3,179.00	3,018.53	3,056.44	17.64	13.12	89.93	-200.57	-7,666.91	7,630.14	7,599.38	30.75	248.134		
3,400.00	3,274.17	3,101.98	3,139.87	18.21	13.46	90.13	-199.43	-7,668.22	7,631.92	7,600.26	31.66	241.042		
3,500.00	3,369.34	3,153.73	3,191.60	18.77	13.68	90.25	-198.63	-7,669.22	7,634.18	7,601.73	32.44	235.325		
3,600.00	3,464.51	3,208.16	3,246.00	19.34	13.91	90.38	-197.71	-7,670.57	7,637.09	7,603.86	33.23	229.821		
3,700.00	3,559.68	3,277.45	3,315.26	19.91	14.20	90.55	-196.45	-7,672.55	7,640.54	7,606.45	34.08	224.168		
3,800.00	3,654.84	3,361.83	3,399.58	20.48	14.55	90.75	-194.68	-7,675.18	7,644.37	7,609.36	35.00	218.392		
3,900.00	3,750.01	3,471.25	3,508.91	21.05	15.01	91.02	-191.86	-7,678.50	7,648.32	7,612.29	36.03	212.267		
4,000.00	3,845.18	3,595.63	3,633.20	21.62	15.53	91.33	-188.48	-7,681.85	7,652.10	7,614.98	37.13	206.109		
4,100.00	3,940.35	3,695.89	3,733.40	22.19	15.95	91.58	-186.10	-7,684.33	7,655.79	7,617.67	38.12	200.849		
4,200.00	4,035.52	3,797.67	3,835.12	22.76	16.38	91.82	-184.01	-7,686.82	7,659.54	7,620.43	39.12	195.821		
4,300.00	4,130.69	3,896.68	3,934.09	23.33	16.80	92.06	-182.18	-7,689.18	7,663.36	7,623.26	40.10	191.099		
4,400.00	4,225.86	4,003.56	4,040.93	23.91	17.25	92.32	-180.58	-7,691.66	7,667.21	7,626.08	41.12	186.447		
4,500.00	4,321.03	4,114.58	4,151.91	24.48	17.72	92.58	-178.96	-7,694.03	7,671.01	7,628.85	42.16	181.939		
4,600.00	4,416.20	4,205.72	4,243.03	25.05	18.10	92.80	-177.73	-7,695.94	7,674.88	7,631.77	43.12	178.003		
4,700.00	4,511.37	4,311.55	4,348.83	25.62	18.54	93.04	-176.58	-7,698.12	7,678.83	7,634.69	44.13	173.985		
4,800.00	4,606.54	4,419.68	4,456.93	26.20	19.00	93.29	-175.81	-7,700.23	7,682.75	7,637.58	45.16	170.109		
4,900.00	4,701.71	4,549.49	4,586.72	26.77	19.55	93.59	-175.19	-7,702.48	7,686.57	7,640.28	46.29	166.063		
5,000.00	4,796.88	4,665.53	4,702.76	27.34	20.04	93.86	-174.85	-7,703.92	7,689.99	7,642.64	47.35	162.404		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	4,756.72	4,793.94	27.92	20.42	94.07	-174.57	-7,705.03	7,693.53	7,645.22	48.31	159.263		
5,200.00	4,987.22	4,856.13	4,893.34	28.49	20.84	94.30	-174.27	-7,706.26	7,697.22	7,647.92	49.30	156.132		
5,300.00	5,082.39	4,955.28	4,992.49	29.07	21.26	94.52	-173.91	-7,707.38	7,700.93	7,650.64	50.29	153.128		
5,400.00	5,177.56	5,055.88	5,093.07	29.64	21.69	94.75	-173.47	-7,708.48	7,704.75	7,653.46	51.29	150.223		
5,500.00	5,272.72	5,154.98	5,192.16	30.21	22.11	94.98	-173.03	-7,709.46	7,708.59	7,656.31	52.28	147.448		
5,600.00	5,367.89	5,252.68	5,289.86	30.79	22.52	95.21	-172.72	-7,710.44	7,712.55	7,659.28	53.27	144.794		
5,700.00	5,463.06	5,408.75	5,445.93	31.36	23.18	95.56	-172.05	-7,711.46	7,716.37	7,661.87	54.50	141.575		
5,800.00	5,558.23	5,515.93	5,553.11	31.94	23.63	95.81	-171.27	-7,711.50	7,719.75	7,664.22	55.53	139.022		
5,900.00	5,653.40	5,583.31	5,620.49	32.51	23.92	95.97	-170.93	-7,711.64	7,723.35	7,666.97	56.38	136.980		
6,000.00	5,748.57	5,675.71	5,712.89	33.09	24.31	96.18	-170.66	-7,712.04	7,727.26	7,669.91	57.35	134.749		
6,100.00	5,843.74	5,763.04	5,800.21	33.67	24.68	96.38	-170.36	-7,712.42	7,731.30	7,673.02	58.29	132.644		
6,200.00	5,938.91	5,851.87	5,889.04	34.24	25.06	96.58	-170.00	-7,712.91	7,735.59	7,676.36	59.23	130.596		
6,300.00	6,034.08	5,936.10	5,973.27	34.82	25.42	96.77	-169.64	-7,713.42	7,740.06	7,679.90	60.16	128.659		
6,400.00	6,129.25	6,017.20	6,054.36	35.39	25.76	96.96	-169.42	-7,714.13	7,744.86	7,683.79	61.07	126.816		
6,500.00	6,224.42	6,119.19	6,156.35	35.97	26.19	97.19	-169.26	-7,715.00	7,749.74	7,687.66	62.08	124.842		
6,600.00	6,319.59	6,186.11	6,223.27	36.54	26.48	97.34	-169.20	-7,715.71	7,754.92	7,692.00	62.93	123.240		
6,700.00	6,414.76	6,279.42	6,316.56	37.12	26.88	97.54	-169.23	-7,716.95	7,760.45	7,696.56	63.89	121.463		
6,800.00	6,509.91	6,374.42	6,411.55	37.70	27.28	90.46	-169.45	-7,718.22	7,765.52	7,700.65	64.86	119.719		
6,900.00	6,603.99	6,500.91	6,538.04	38.26	27.82	68.03	-169.87	-7,719.75	7,759.38	7,693.41	65.97	117.620		
7,000.00	6,694.76	6,600.39	6,637.52	38.78	28.24	54.26	-170.37	-7,720.68	7,737.95	7,671.03	66.92	115.634		
7,100.00	6,779.96	6,687.93	6,725.05	39.24	28.62	46.66	-171.09	-7,721.51	7,702.02	7,634.26	67.76	113.659		
7,200.00	6,857.50	6,753.44	6,790.54	39.65	28.89	42.82	-171.93	-7,722.23	7,652.61	7,584.15	68.47	111.771		
7,300.00	6,925.48	6,809.53	6,846.63	40.02	29.13	41.67	-172.71	-7,722.98	7,591.02	7,521.94	69.09	109.876		
7,400.00	6,982.21	6,858.97	6,896.06	40.33	29.34	42.92	-173.36	-7,723.71	7,518.70	7,449.06	69.64	107.962		
7,500.00	7,026.31	6,897.77	6,934.85	40.63	29.51	47.05	-173.81	-7,724.30	7,437.37	7,367.26	70.12	106.069		
7,600.00	7,056.68	6,919.04	6,956.11	40.91	29.60	55.54	-174.04	-7,724.64	7,348.99	7,278.50	70.49	104.259		
7,700.00	7,072.58	6,930.52	6,967.59	41.25	29.65	72.04	-174.15	-7,724.84	7,255.66	7,184.88	70.79	102.501		
7,800.00	7,074.86	6,933.18	6,970.25	41.69	29.66	87.58	-174.18	-7,724.89	7,159.71	7,088.69	71.02	100.808		
7,900.00	7,074.54	6,934.14	6,971.21	42.34	29.66	87.61	-174.19	-7,724.90	7,063.53	6,992.26	71.26	99.118		
8,000.00	7,074.21	6,935.11	6,972.18	43.27	29.67	87.63	-174.20	-7,724.92	6,967.45	6,895.92	71.53	97.411		
8,100.00	7,073.89	6,936.09	6,973.16	44.47	29.67	87.66	-174.20	-7,724.94	6,871.48	6,799.67	71.81	95.685		
8,200.00	7,073.57	6,937.08	6,974.15	45.91	29.68	87.69	-174.21	-7,724.96	6,775.63	6,703.50	72.13	93.941		
8,300.00	7,073.24	6,938.08	6,975.15	47.53	29.68	87.72	-174.22	-7,724.98	6,679.90	6,607.43	72.47	92.179		
8,400.00	7,072.92	6,939.08	6,976.15	49.31	29.68	87.75	-174.23	-7,724.99	6,584.30	6,511.46	72.83	90.400		
8,500.00	7,072.59	6,940.10	6,977.17	51.20	29.69	87.78	-174.24	-7,725.01	6,488.83	6,415.59	73.23	88.606		
8,600.00	7,072.27	6,941.12	6,978.19	53.19	29.69	87.81	-174.25	-7,725.03	6,393.49	6,319.83	73.66	86.795		
8,700.00	7,071.94	6,942.16	6,979.23	55.27	29.70	87.84	-174.26	-7,725.05	6,298.31	6,224.18	74.12	84.969		
8,800.00	7,071.62	6,943.20	6,980.27	57.43	29.70	87.87	-174.27	-7,725.07	6,203.27	6,128.65	74.62	83.130		
8,900.00	7,071.29	6,944.26	6,981.33	59.64	29.71	87.90	-174.28	-7,725.09	6,108.39	6,033.24	75.15	81.277		
9,000.00	7,070.97	6,945.32	6,982.39	61.92	29.71	87.93	-174.29	-7,725.11	6,013.68	5,937.95	75.73	79.413		
9,100.00	7,070.64	6,946.40	6,983.46	64.24	29.72	87.97	-174.30	-7,725.13	5,919.14	5,842.80	76.34	77.538		
9,200.00	7,070.32	6,947.48	6,984.55	66.61	29.72	88.00	-174.31	-7,725.15	5,824.78	5,747.79	76.99	75.654		
9,300.00	7,069.99	6,948.57	6,985.64	69.01	29.73	88.03	-174.32	-7,725.17	5,730.62	5,652.93	77.69	73.762		
9,400.00	7,069.67	6,949.68	6,986.75	71.45	29.73	88.06	-174.33	-7,725.19	5,636.65	5,558.22	78.44	71.864		
9,500.00	7,069.34	6,950.79	6,987.86	73.92	29.73	88.10	-174.34	-7,725.21	5,542.90	5,463.67	79.23	69.961		
9,600.00	7,069.02	6,951.92	6,988.99	76.42	29.74	88.13	-174.35	-7,725.23	5,449.37	5,369.30	80.07	68.055		
9,700.00	7,068.69	6,953.06	6,990.12	78.95	29.74	88.16	-174.36	-7,725.26	5,356.07	5,275.10	80.97	66.149		
9,800.00	7,068.37	6,954.20	6,991.27	81.49	29.75	88.20	-174.37	-7,725.28	5,263.02	5,181.09	81.92	64.243		
9,900.00	7,068.04	6,955.36	6,992.43	84.06	29.75	88.23	-174.38	-7,725.30	5,170.22	5,087.29	82.94	62.340		
10,000.00	7,067.72	6,956.53	6,993.60	86.65	29.76	88.26	-174.40	-7,725.32	5,077.70	4,993.69	84.01	60.443		
10,100.00	7,067.39	6,957.72	6,994.78	89.25	29.76	88.30	-174.41	-7,725.35	4,985.47	4,900.32	85.15	58.552		
10,200.00	7,067.07	6,958.91	6,995.98	91.87	29.77	88.33	-174.42	-7,725.37	4,893.54	4,807.19	86.35	56.671		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,066.74	6,960.12	6,997.18	94.50	29.77	88.37	-174.43	-7,725.39	4,801.94	4,714.31	87.63	54.801	
10,400.00	7,066.42	6,961.33	6,998.40	97.14	29.78	88.41	-174.44	-7,725.42	4,710.67	4,621.70	88.97	52.945	
10,500.00	7,066.09	6,962.56	6,999.63	99.80	29.78	88.44	-174.45	-7,725.44	4,619.77	4,529.37	90.40	51.104	
10,600.00	7,065.77	6,963.81	7,000.87	102.47	29.79	88.48	-174.46	-7,725.47	4,529.25	4,437.34	91.91	49.282	
10,700.00	7,065.44	6,965.06	7,002.13	105.15	29.80	88.52	-174.47	-7,725.49	4,439.13	4,345.64	93.50	47.479	
10,800.00	7,065.12	6,966.33	7,003.39	107.83	29.80	88.55	-174.48	-7,725.52	4,349.45	4,254.28	95.18	45.699	
10,900.00	7,064.79	6,967.61	7,004.68	110.53	29.81	88.59	-174.49	-7,725.54	4,260.23	4,163.28	96.95	43.944	
11,000.00	7,064.47	6,968.90	7,005.97	113.23	29.81	88.63	-174.50	-7,725.57	4,171.49	4,072.68	98.82	42.215	
11,100.00	7,064.14	6,970.21	7,007.28	115.95	29.82	88.67	-174.52	-7,725.59	4,083.28	3,982.49	100.79	40.514	
11,200.00	7,063.82	6,971.53	7,008.60	118.66	29.82	88.71	-174.53	-7,725.62	3,995.62	3,892.76	102.86	38.844	
11,300.00	7,063.49	6,972.87	7,009.93	121.39	29.83	88.75	-174.54	-7,725.65	3,908.55	3,803.50	105.05	37.206	
11,400.00	7,063.17	6,974.22	7,011.28	124.12	29.83	88.79	-174.55	-7,725.68	3,822.12	3,714.76	107.36	35.602	
11,500.00	7,062.84	6,975.58	7,012.64	126.86	29.84	88.83	-174.56	-7,725.70	3,736.36	3,626.58	109.78	34.034	
11,600.00	7,062.52	6,976.96	7,014.02	129.60	29.85	88.87	-174.57	-7,725.73	3,651.32	3,538.99	112.33	32.504	
11,700.00	7,062.19	6,978.35	7,015.41	132.35	29.85	88.91	-174.58	-7,725.76	3,567.06	3,452.04	115.02	31.012	
11,800.00	7,061.87	6,979.76	7,016.82	135.10	29.86	88.95	-174.60	-7,725.79	3,483.63	3,365.79	117.84	29.561	
11,900.00	7,061.54	6,981.18	7,018.24	137.85	29.86	88.99	-174.61	-7,725.82	3,401.10	3,280.29	120.81	28.152	
12,000.00	7,061.22	6,982.62	7,019.68	140.61	29.87	89.03	-174.62	-7,725.85	3,319.52	3,195.59	123.93	26.786	
12,100.00	7,060.89	6,984.07	7,021.13	143.38	29.88	89.08	-174.63	-7,725.88	3,238.98	3,111.78	127.20	25.463	
12,200.00	7,060.57	6,985.54	7,022.60	146.15	29.88	89.12	-174.64	-7,725.91	3,159.55	3,028.91	130.64	24.186	
12,300.00	7,060.24	6,987.03	7,024.09	148.92	29.89	89.16	-174.66	-7,725.95	3,081.32	2,947.08	134.24	22.955	
12,400.00	7,059.92	6,988.53	7,025.59	151.69	29.90	89.21	-174.67	-7,725.98	3,004.37	2,866.37	138.00	21.770	
12,500.00	7,059.59	6,990.05	7,027.11	154.47	29.90	89.25	-174.68	-7,726.01	2,928.82	2,786.87	141.95	20.633	
12,600.00	7,059.27	6,991.59	7,028.65	157.25	29.91	89.30	-174.69	-7,726.04	2,854.77	2,708.71	146.07	19.544	
12,700.00	7,058.94	6,993.14	7,030.20	160.03	29.92	89.34	-174.70	-7,726.08	2,782.35	2,631.98	150.36	18.504	
12,800.00	7,058.62	6,994.72	7,031.77	162.82	29.92	89.39	-174.72	-7,726.11	2,711.67	2,556.83	154.84	17.513	
12,900.00	7,058.29	6,996.31	7,033.36	165.61	29.93	89.44	-174.73	-7,726.15	2,642.89	2,483.41	159.49	16.571	
13,000.00	7,057.97	6,997.91	7,034.97	168.40	29.94	89.48	-174.74	-7,726.18	2,576.16	2,411.85	164.31	15.679	
13,100.00	7,057.64	6,999.54	7,036.60	171.19	29.94	89.53	-174.75	-7,726.22	2,511.63	2,342.34	169.29	14.836	
13,200.00	7,057.32	7,001.26	7,038.31	173.99	29.95	89.58	-174.77	-7,726.26	2,449.49	2,275.06	174.43	14.043	
13,300.00	7,057.00	7,003.01	7,040.07	176.78	29.96	89.63	-174.78	-7,726.30	2,389.91	2,210.22	179.69	13.300	
13,400.00	7,056.67	7,004.76	7,041.82	179.58	29.96	89.69	-174.79	-7,726.34	2,333.10	2,148.03	185.07	12.606	
13,500.00	7,056.35	7,006.52	7,043.57	182.38	29.97	89.74	-174.81	-7,726.38	2,279.27	2,088.72	190.54	11.962	
13,600.00	7,056.02	7,008.28	7,045.33	185.19	29.98	89.79	-174.82	-7,726.42	2,228.61	2,032.55	196.06	11.367	
13,700.00	7,055.70	7,010.04	7,047.09	187.99	29.99	89.84	-174.83	-7,726.46	2,181.37	1,979.77	201.60	10.820	
13,800.00	7,055.37	7,011.80	7,048.85	190.80	29.99	89.89	-174.84	-7,726.49	2,137.76	1,930.65	207.11	10.322	
13,900.00	7,055.05	7,013.56	7,050.62	193.60	30.00	89.95	-174.86	-7,726.53	2,098.02	1,885.48	212.54	9.871	
14,000.00	7,054.72	7,015.33	7,052.38	196.41	30.01	90.00	-174.87	-7,726.57	2,062.36	1,844.53	217.83	9.468	
14,100.00	7,054.40	7,017.10	7,054.15	199.22	30.02	90.05	-174.88	-7,726.61	2,031.00	1,808.07	222.93	9.111	
14,200.00	7,054.07	7,018.87	7,055.92	202.03	30.02	90.10	-174.89	-7,726.65	2,004.14	1,776.38	227.76	8.799	
14,300.00	7,053.75	7,020.64	7,057.69	204.85	30.03	90.15	-174.91	-7,726.69	1,981.97	1,749.69	232.28	8.533	
14,400.00	7,053.42	7,022.41	7,059.47	207.66	30.04	90.21	-174.92	-7,726.73	1,964.65	1,728.24	236.41	8.310	
14,500.00	7,053.10	7,024.19	7,061.24	210.48	30.05	90.26	-174.93	-7,726.77	1,952.29	1,712.19	240.10	8.131	
14,600.00	7,052.77	7,025.97	7,063.02	213.29	30.06	90.31	-174.94	-7,726.81	1,945.01	1,701.69	243.31	7.994	
14,692.04	7,052.47	7,027.61	7,064.66	215.89	30.06	90.36	-174.95	-7,726.85	1,942.83	1,697.02	245.80	7.904 CC	
14,700.00	7,052.45	7,027.75	7,064.80	216.11	30.06	90.36	-174.95	-7,726.85	1,942.84	1,696.84	246.00	7.898 ES	
14,800.00	7,052.12	7,029.53	7,066.58	218.93	30.07	90.42	-174.96	-7,726.89	1,945.82	1,697.69	248.14	7.842	
14,900.00	7,051.80	7,031.32	7,068.36	221.75	30.08	90.47	-174.97	-7,726.93	1,953.92	1,704.21	249.71	7.825 SF	
15,000.00	7,051.47	7,033.10	7,070.15	224.57	30.09	90.52	-174.99	-7,726.97	1,967.07	1,716.35	250.73	7.845	
15,100.00	7,051.15	7,034.89	7,071.94	227.39	30.09	90.57	-175.00	-7,727.01	1,985.18	1,733.98	251.20	7.903	
15,145.13	7,051.00	7,035.70	7,072.75	228.67	30.10	90.60	-175.00	-7,727.03	1,994.94	1,743.70	251.24	7.940	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	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	-109.82	-1,285.38	-3,565.95	3,791.03					
100.00	100.00	39.00	100.00	3.28	3.35	-109.82	-1,285.38	-3,565.95	3,790.54	3,783.91	6.63	571.328		
200.00	200.00	139.00	200.00	3.34	4.52	-109.82	-1,285.38	-3,565.95	3,790.54	3,782.69	7.85	482.566		
300.00	299.98	238.98	299.98	3.44	7.37	65.83	-1,285.38	-3,565.95	3,789.83	3,779.02	10.81	350.679		
400.00	399.84	338.84	399.84	3.59	10.60	65.94	-1,285.38	-3,565.95	3,787.69	3,773.49	14.19	266.882		
500.00	499.45	438.45	499.45	3.79	13.95	66.12	-1,285.38	-3,565.95	3,784.13	3,766.39	17.74	213.323		
600.00	598.70	537.70	598.70	4.03	17.34	66.38	-1,285.38	-3,565.95	3,779.19	3,757.83	21.37	176.858		
700.00	697.47	636.47	697.47	4.31	20.73	66.71	-1,285.38	-3,565.95	3,772.90	3,747.86	25.05	150.628		
800.00	795.62	734.62	795.62	4.64	24.12	67.12	-1,285.38	-3,565.95	3,765.30	3,736.54	28.76	130.927		
900.00	893.06	832.06	893.06	5.00	27.50	67.59	-1,285.38	-3,565.95	3,756.45	3,723.96	32.49	115.620		
1,000.00	989.64	928.64	989.64	5.40	30.85	68.13	-1,285.38	-3,565.95	3,746.40	3,710.17	36.23	103.403		
1,100.00	1,085.27	1,024.27	1,085.27	5.83	34.17	68.73	-1,285.38	-3,565.95	3,735.24	3,695.26	39.98	93.435		
1,200.00	1,180.44	1,119.44	1,180.44	6.29	37.48	69.15	-1,285.38	-3,565.95	3,723.72	3,679.98	43.73	85.145		
1,300.00	1,275.61	1,214.61	1,275.61	6.76	40.79	69.57	-1,285.38	-3,565.95	3,712.42	3,664.91	47.51	78.136		
1,400.00	1,370.78	1,309.78	1,370.78	7.26	44.10	70.00	-1,285.38	-3,565.95	3,701.34	3,650.03	51.31	72.140		
1,500.00	1,465.95	1,404.95	1,465.95	7.76	47.41	70.43	-1,285.38	-3,565.95	3,690.49	3,635.37	55.12	66.957		
1,600.00	1,561.12	1,500.12	1,561.12	8.27	50.73	70.86	-1,285.38	-3,565.95	3,679.85	3,620.92	58.94	62.436		
1,700.00	1,656.29	1,604.71	1,656.29	8.80	54.37	71.29	-1,285.38	-3,565.95	3,669.45	3,606.35	63.10	58.155		
1,800.00	1,751.46	1,709.54	1,751.46	9.32	58.03	71.73	-1,285.38	-3,565.95	3,659.27	3,592.00	67.27	54.394		
1,900.00	1,846.63	1,785.63	1,846.63	9.86	60.68	72.17	-1,285.38	-3,565.95	3,649.32	3,578.87	70.45	51.797		
2,000.00	1,941.80	1,880.80	1,941.80	10.40	64.00	72.61	-1,285.38	-3,565.95	3,639.61	3,565.30	74.31	48.981		
2,100.00	2,036.96	1,975.96	2,036.96	10.94	67.32	73.05	-1,285.38	-3,565.95	3,630.12	3,551.96	78.16	46.442		
2,200.00	2,132.13	2,071.13	2,132.13	11.49	70.63	73.49	-1,285.38	-3,565.95	3,620.88	3,538.85	82.03	44.143		
2,300.00	2,227.30	2,166.30	2,227.30	12.04	73.95	73.94	-1,285.38	-3,565.95	3,611.87	3,525.98	85.89	42.051		
2,400.00	2,322.47	2,261.47	2,322.47	12.59	77.27	74.39	-1,285.38	-3,565.95	3,603.10	3,513.33	89.76	40.140		
2,500.00	2,417.64	2,356.64	2,417.64	13.15	80.59	74.84	-1,285.38	-3,565.95	3,594.57	3,500.93	93.64	38.389		
2,600.00	2,512.81	2,451.81	2,512.81	13.70	83.91	75.29	-1,285.38	-3,565.95	3,586.28	3,488.77	97.51	36.778		
2,700.00	2,607.98	2,546.98	2,607.98	14.26	87.23	75.74	-1,285.38	-3,565.95	3,578.24	3,476.85	101.39	35.292		
2,800.00	2,703.15	2,642.15	2,703.15	14.82	90.55	76.20	-1,285.38	-3,565.95	3,570.44	3,465.17	105.27	33.917		
2,900.00	2,798.32	2,737.32	2,798.32	15.38	93.87	76.66	-1,285.38	-3,565.95	3,562.89	3,453.74	109.15	32.641		
3,000.00	2,893.49	2,832.49	2,893.49	15.95	97.19	77.12	-1,285.38	-3,565.95	3,555.59	3,442.56	113.04	31.455		
3,100.00	2,988.66	2,927.66	2,988.66	16.51	100.51	77.58	-1,285.38	-3,565.95	3,548.54	3,431.62	116.93	30.349		
3,200.00	3,083.83	3,022.83	3,083.83	17.07	103.83	78.04	-1,285.38	-3,565.95	3,541.75	3,420.93	120.81	29.316		
3,300.00	3,179.00	3,118.00	3,179.00	17.64	107.15	78.51	-1,285.38	-3,565.95	3,535.20	3,410.50	124.70	28.349		
3,400.00	3,274.17	3,213.17	3,274.17	18.21	110.48	78.97	-1,285.38	-3,565.95	3,528.92	3,400.32	128.59	27.442		
3,500.00	3,369.34	3,308.34	3,369.34	18.77	113.80	79.44	-1,285.38	-3,565.95	3,522.88	3,390.40	132.49	26.591		
3,600.00	3,464.51	3,403.51	3,464.51	19.34	117.12	79.91	-1,285.38	-3,565.95	3,517.11	3,380.73	136.38	25.789		
3,700.00	3,559.68	3,501.32	3,559.68	19.91	120.53	80.38	-1,285.38	-3,565.95	3,511.59	3,371.23	140.37	25.018		
3,800.00	3,654.84	3,606.16	3,654.84	20.48	124.19	80.85	-1,285.38	-3,565.95	3,506.34	3,361.74	144.60	24.249		
3,900.00	3,750.01	3,689.01	3,750.01	21.05	127.08	81.32	-1,285.38	-3,565.95	3,501.35	3,353.28	148.06	23.648		
4,000.00	3,845.18	3,784.18	3,845.18	21.62	130.40	81.80	-1,285.38	-3,565.95	3,496.62	3,344.66	151.96	23.010		
4,100.00	3,940.35	3,879.35	3,940.35	22.19	133.72	82.27	-1,285.38	-3,565.95	3,492.15	3,336.29	155.86	22.406		
4,200.00	4,035.52	3,974.52	4,035.52	22.76	137.04	82.75	-1,285.38	-3,565.95	3,487.94	3,328.19	159.75	21.833		
4,300.00	4,130.69	4,069.69	4,130.69	23.33	140.37	83.22	-1,285.38	-3,565.95	3,484.01	3,320.36	163.65	21.289		
4,400.00	4,225.86	4,164.86	4,225.86	23.91	143.69	83.70	-1,285.38	-3,565.95	3,480.34	3,312.79	167.55	20.772		
4,500.00	4,321.03	4,260.03	4,321.03	24.48	147.01	84.18	-1,285.38	-3,565.95	3,476.93	3,305.48	171.45	20.280		
4,600.00	4,416.20	4,355.20	4,416.20	25.05	150.33	84.66	-1,285.38	-3,565.95	3,473.80	3,298.45	175.35	19.811		
4,700.00	4,511.37	4,450.37	4,511.37	25.62	153.65	85.14	-1,285.38	-3,565.95	3,470.93	3,291.68	179.25	19.364		
4,800.00	4,606.54	4,545.54	4,606.54	26.20	156.97	85.62	-1,285.38	-3,565.95	3,468.33	3,285.19	183.15	18.937		
4,900.00	4,701.71	4,640.71	4,701.71	26.77	160.30	86.10	-1,285.38	-3,565.95	3,466.01	3,278.96	187.05	18.530		
5,000.00	4,796.88	4,735.88	4,796.88	27.34	163.62	86.59	-1,285.38	-3,565.95	3,463.95	3,273.00	190.94	18.141		
5,100.00	4,892.05	4,831.05	4,892.05	27.92	166.94	87.07	-1,285.38	-3,565.95	3,462.16	3,267.32	194.84	17.769		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	4,987.22	4,926.22	4,987.22	28.49	170.26	87.55	-1,285.38	-3,565.95	3,460.65	3,261.91	198.74	17.413		
5,300.00	5,082.39	5,021.39	5,082.39	29.07	173.58	88.04	-1,285.38	-3,565.95	3,459.41	3,256.77	202.64	17.072		
5,400.00	5,177.56	5,116.56	5,177.56	29.64	176.90	88.52	-1,285.38	-3,565.95	3,458.44	3,251.90	206.54	16.745		
5,500.00	5,272.72	5,211.72	5,272.72	30.21	180.23	89.00	-1,285.38	-3,565.95	3,457.74	3,247.30	210.44	16.431		
5,600.00	5,367.89	5,306.89	5,367.89	30.79	183.55	89.49	-1,285.38	-3,565.95	3,457.32	3,242.98	214.34	16.130		
5,700.00	5,463.06	5,402.06	5,463.06	31.36	186.87	89.97	-1,285.38	-3,565.95	3,457.16	3,238.93	218.23	15.842		
5,705.86	5,468.64	5,407.64	5,468.64	31.40	187.06	90.00	-1,285.38	-3,565.95	3,457.16	3,238.70	218.46	15.825		
5,800.00	5,558.23	5,502.77	5,558.23	31.94	190.38	90.46	-1,285.38	-3,565.95	3,457.28	3,234.96	222.32	15.551		
5,900.00	5,653.40	5,607.60	5,653.40	32.51	194.04	90.94	-1,285.38	-3,565.95	3,457.68	3,231.12	226.56	15.262		
6,000.00	5,748.57	5,687.57	5,748.57	33.09	196.84	91.42	-1,285.38	-3,565.95	3,458.34	3,228.42	229.92	15.041		
6,100.00	5,843.74	5,782.74	5,843.74	33.67	200.16	91.91	-1,285.38	-3,565.95	3,459.28	3,225.46	233.82	14.795		
6,200.00	5,938.91	5,877.91	5,938.91	34.24	203.48	92.39	-1,285.38	-3,565.95	3,460.49	3,222.78	237.71	14.557		
6,300.00	6,034.08	5,973.08	6,034.08	34.82	206.80	92.87	-1,285.38	-3,565.95	3,461.97	3,220.36	241.61	14.329		
6,400.00	6,129.25	6,068.25	6,129.25	35.39	210.12	93.36	-1,285.38	-3,565.95	3,463.73	3,218.22	245.50	14.109		
6,500.00	6,224.42	6,163.42	6,224.42	35.97	213.45	93.84	-1,285.38	-3,565.95	3,465.75	3,216.36	249.39	13.897		
6,600.00	6,319.59	6,258.59	6,319.59	36.54	216.77	94.32	-1,285.38	-3,565.95	3,468.05	3,214.76	253.29	13.692		
6,700.00	6,414.76	6,353.76	6,414.76	37.12	220.09	94.80	-1,285.38	-3,565.95	3,470.61	3,213.43	257.18	13.495		
6,800.00	6,509.91	6,448.91	6,509.91	37.70	223.41	95.28	-1,285.38	-3,565.95	3,472.90	3,211.83	261.07	13.303		
6,900.00	6,603.99	6,542.99	6,603.99	38.26	226.69	95.76	-1,285.38	-3,565.95	3,464.19	3,199.28	264.91	13.077		
7,000.00	6,694.76	6,633.76	6,694.76	38.78	229.86	96.24	-1,285.38	-3,565.95	3,440.59	3,172.00	268.59	12.810		
7,100.00	6,779.96	6,718.96	6,779.96	39.24	232.84	96.72	-1,285.38	-3,565.95	3,402.74	3,130.71	272.03	12.509		
7,200.00	6,857.50	6,803.50	6,857.50	39.65	235.79	97.20	-1,285.38	-3,565.95	3,351.61	3,076.21	275.40	12.170		
7,300.00	6,925.48	6,864.48	6,925.48	40.02	237.92	97.68	-1,285.38	-3,565.95	3,288.47	3,010.57	277.90	11.833		
7,400.00	6,982.21	6,921.21	6,982.21	40.33	239.90	98.16	-1,285.38	-3,565.95	3,214.88	2,934.66	280.22	11.473		
7,500.00	7,026.31	6,965.31	7,026.31	40.63	241.44	98.64	-1,285.38	-3,565.95	3,132.62	2,850.56	282.06	11.106		
7,600.00	7,056.68	7,004.32	7,056.68	40.91	242.80	99.12	-1,285.38	-3,565.95	3,043.68	2,759.98	283.70	10.728		
7,700.00	7,072.58	7,011.58	7,072.58	41.25	243.05	99.60	-1,285.38	-3,565.95	2,950.18	2,665.97	284.21	10.380		
7,800.00	7,074.86	7,013.86	7,074.86	41.69	243.13	100.08	-1,285.38	-3,565.95	2,854.40	2,569.87	284.53	10.032		
7,900.00	7,074.54	7,013.54	7,074.54	42.34	243.12	100.56	-1,285.38	-3,565.95	2,758.60	2,473.81	284.79	9.686		
8,000.00	7,074.21	7,013.21	7,074.21	43.27	243.11	101.04	-1,285.38	-3,565.95	2,663.11	2,378.02	285.09	9.341		
8,100.00	7,073.89	7,012.89	7,073.89	44.47	243.10	101.52	-1,285.38	-3,565.95	2,567.96	2,282.53	285.43	8.997		
8,200.00	7,073.57	7,012.57	7,073.57	45.91	243.09	102.00	-1,285.38	-3,565.95	2,473.19	2,187.36	285.83	8.653		
8,300.00	7,073.24	7,012.24	7,073.24	47.53	243.07	102.48	-1,285.38	-3,565.95	2,378.86	2,092.56	286.29	8.309		
8,400.00	7,072.92	7,011.92	7,072.92	49.31	243.06	102.96	-1,285.38	-3,565.95	2,285.00	1,998.17	286.83	7.966		
8,500.00	7,072.59	7,011.59	7,072.59	51.20	243.05	103.44	-1,285.38	-3,565.95	2,191.69	1,904.24	287.45	7.625		
8,600.00	7,072.27	7,011.27	7,072.27	53.19	243.04	103.92	-1,285.38	-3,565.95	2,098.99	1,810.83	288.16	7.284		
8,700.00	7,071.94	7,010.94	7,071.94	55.27	243.03	104.40	-1,285.38	-3,565.95	2,007.00	1,718.01	288.99	6.945		
8,800.00	7,071.62	7,010.62	7,071.62	57.43	243.02	104.88	-1,285.38	-3,565.95	1,915.81	1,625.86	289.95	6.607		
8,900.00	7,071.29	7,010.29	7,071.29	59.64	243.01	105.36	-1,285.38	-3,565.95	1,825.54	1,534.48	291.06	6.272		
9,000.00	7,070.97	7,009.97	7,070.97	61.92	243.00	105.84	-1,285.38	-3,565.95	1,736.34	1,443.98	292.35	5.939		
9,100.00	7,070.64	7,009.64	7,070.64	64.24	242.98	106.32	-1,285.38	-3,565.95	1,648.37	1,354.53	293.84	5.610		
9,200.00	7,070.32	7,009.32	7,070.32	66.61	242.97	106.80	-1,285.38	-3,565.95	1,561.86	1,266.29	295.57	5.284		
9,300.00	7,069.99	7,008.99	7,069.99	69.01	242.96	107.28	-1,285.38	-3,565.95	1,477.05	1,179.48	297.57	4.964		
9,400.00	7,069.67	7,008.67	7,069.67	71.45	242.95	107.76	-1,285.38	-3,565.95	1,394.25	1,094.37	299.88	4.649		
9,500.00	7,069.34	7,008.34	7,069.34	73.92	242.94	108.24	-1,285.38	-3,565.95	1,313.85	1,011.32	302.53	4.343		
9,600.00	7,069.02	7,008.02	7,069.02	76.42	242.93	108.72	-1,285.38	-3,565.95	1,236.32	930.75	305.56	4.046		
9,700.00	7,068.69	7,007.69	7,068.69	78.95	242.92	109.20	-1,285.38	-3,565.95	1,162.22	853.21	309.01	3.761		
9,800.00	7,068.37	7,007.37	7,068.37	81.49	242.90	109.68	-1,285.38	-3,565.95	1,092.25	779.38	312.87	3.491		
9,900.00	7,068.04	7,007.04	7,068.04	84.06	242.89	110.16	-1,285.38	-3,565.95	1,027.27	710.13	317.14	3.239		
10,000.00	7,067.72	7,006.72	7,067.72	86.65	242.88	110.64	-1,285.38	-3,565.95	968.27	646.53	321.74	3.009		
10,100.00	7,067.39	7,006.39	7,067.39	89.25	242.87	111.12	-1,285.38	-3,565.95	916.42	589.87	326.55	2.806		
10,200.00	7,067.07	7,006.07	7,067.07	91.87	242.86	111.60	-1,285.38	-3,565.95	872.98	541.62	331.36	2.635		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.00	7,066.74	7,005.74	7,066.74	94.50	242.85	90.06	-1,285.38	-3,565.95	839.26	503.40	335.86	2.499	
10,400.00	7,066.42	7,005.42	7,066.42	97.14	242.84	90.03	-1,285.38	-3,565.95	816.47	476.76	339.71	2.403	
10,500.00	7,066.09	7,005.09	7,066.09	99.80	242.82	90.01	-1,285.38	-3,565.95	805.54	462.97	342.57	2.351	
10,538.66	7,065.97	7,004.97	7,065.97	100.83	242.82	90.00	-1,285.38	-3,565.95	804.61	461.26	343.35	2.343	CC, ES, SF
10,600.00	7,065.77	7,004.77	7,065.77	102.47	242.81	89.99	-1,285.38	-3,565.95	806.95	462.75	344.19	2.344	
10,700.00	7,065.44	7,004.44	7,065.44	105.15	242.80	89.96	-1,285.38	-3,565.95	820.63	476.11	344.52	2.382	
10,800.00	7,065.12	7,004.12	7,065.12	107.83	242.79	89.94	-1,285.38	-3,565.95	845.99	502.34	343.65	2.462	
10,900.00	7,064.79	7,003.79	7,064.79	110.53	242.78	89.92	-1,285.38	-3,565.95	882.02	540.20	341.82	2.580	
11,000.00	7,064.47	7,003.47	7,064.47	113.23	242.77	89.89	-1,285.38	-3,565.95	927.49	588.16	339.33	2.733	
11,100.00	7,064.14	7,003.14	7,064.14	115.95	242.76	89.87	-1,285.38	-3,565.95	981.07	644.62	336.45	2.916	
11,200.00	7,063.82	7,002.82	7,063.82	118.66	242.75	89.85	-1,285.38	-3,565.95	1,041.52	708.12	333.40	3.124	
11,300.00	7,063.49	7,002.49	7,063.49	121.39	242.73	89.82	-1,285.38	-3,565.95	1,107.71	777.36	330.35	3.353	
11,400.00	7,063.17	7,002.17	7,063.17	124.12	242.72	89.80	-1,285.38	-3,565.95	1,178.68	851.27	327.41	3.600	
11,500.00	7,062.84	7,001.84	7,062.84	126.86	242.71	89.78	-1,285.38	-3,565.95	1,253.62	928.98	324.64	3.862	
11,600.00	7,062.52	7,001.52	7,062.52	129.60	242.70	89.75	-1,285.38	-3,565.95	1,331.85	1,009.79	322.06	4.135	
11,700.00	7,062.19	7,001.19	7,062.19	132.35	242.69	89.73	-1,285.38	-3,565.95	1,412.83	1,093.14	319.69	4.419	
11,800.00	7,061.87	7,000.87	7,061.87	135.10	242.68	89.71	-1,285.38	-3,565.95	1,496.11	1,178.59	317.52	4.712	
11,900.00	7,061.54	7,000.54	7,061.54	137.85	242.67	89.69	-1,285.38	-3,565.95	1,581.33	1,265.79	315.54	5.011	
12,000.00	7,061.22	7,000.22	7,061.22	140.61	242.65	89.66	-1,285.38	-3,565.95	1,668.20	1,354.45	313.75	5.317	
12,100.00	7,060.89	7,000.11	7,060.89	143.38	242.65	89.64	-1,285.38	-3,565.95	1,756.46	1,444.34	312.12	5.628	
12,200.00	7,060.57	7,000.43	7,060.57	146.15	242.66	89.62	-1,285.38	-3,565.95	1,845.92	1,535.26	310.66	5.942	
12,300.00	7,060.24	7,000.76	7,060.24	148.92	242.67	89.59	-1,285.38	-3,565.95	1,936.41	1,627.07	309.33	6.260	
12,400.00	7,059.92	7,001.08	7,059.92	151.69	242.68	89.57	-1,285.38	-3,565.95	2,027.79	1,719.66	308.13	6.581	
12,500.00	7,059.59	7,001.41	7,059.59	154.47	242.70	89.55	-1,285.38	-3,565.95	2,119.95	1,812.92	307.03	6.905	
12,600.00	7,059.27	7,001.73	7,059.27	157.25	242.71	89.52	-1,285.38	-3,565.95	2,212.80	1,906.76	306.03	7.231	
12,700.00	7,058.94	7,002.06	7,058.94	160.03	242.72	89.50	-1,285.38	-3,565.95	2,306.24	2,001.12	305.12	7.558	
12,800.00	7,058.62	7,002.38	7,058.62	162.82	242.73	89.48	-1,285.38	-3,565.95	2,400.21	2,095.92	304.29	7.888	
12,900.00	7,058.29	7,002.71	7,058.29	165.61	242.74	89.45	-1,285.38	-3,565.95	2,494.64	2,191.12	303.52	8.219	
13,000.00	7,057.97	7,003.03	7,057.97	168.40	242.75	89.43	-1,285.38	-3,565.95	2,589.50	2,286.68	302.82	8.551	
13,100.00	7,057.64	7,003.36	7,057.64	171.19	242.76	89.41	-1,285.38	-3,565.95	2,684.73	2,382.55	302.18	8.884	
13,200.00	7,057.32	7,003.68	7,057.32	173.99	242.78	89.38	-1,285.38	-3,565.95	2,780.29	2,478.70	301.59	9.219	
13,300.00	7,057.00	7,004.01	7,057.00	176.78	242.79	89.36	-1,285.38	-3,565.95	2,876.16	2,575.11	301.05	9.554	
13,400.00	7,056.67	7,004.33	7,056.67	179.58	242.80	89.34	-1,285.38	-3,565.95	2,972.30	2,671.75	300.55	9.890	
13,500.00	7,056.35	7,004.66	7,056.35	182.38	242.81	89.31	-1,285.38	-3,565.95	3,068.68	2,768.60	300.09	10.226	
13,600.00	7,056.02	7,004.98	7,056.02	185.19	242.82	89.29	-1,285.38	-3,565.95	3,165.29	2,865.63	299.66	10.563	
13,700.00	7,055.70	7,005.30	7,055.70	187.99	242.83	89.27	-1,285.38	-3,565.95	3,262.11	2,962.84	299.27	10.900	
13,800.00	7,055.37	7,005.63	7,055.37	190.80	242.84	89.25	-1,285.38	-3,565.95	3,359.11	3,060.21	298.90	11.238	
13,900.00	7,055.05	7,005.95	7,055.05	193.60	242.86	89.22	-1,285.38	-3,565.95	3,456.28	3,157.71	298.57	11.576	
14,000.00	7,054.72	7,006.28	7,054.72	196.41	242.87	89.20	-1,285.38	-3,565.95	3,553.61	3,255.35	298.25	11.915	
14,100.00	7,054.40	7,006.60	7,054.40	199.22	242.88	89.18	-1,285.38	-3,565.95	3,651.08	3,353.12	297.96	12.253	
14,200.00	7,054.07	7,006.93	7,054.07	202.03	242.89	89.15	-1,285.38	-3,565.95	3,748.69	3,450.99	297.70	12.592	
14,300.00	7,053.75	7,007.25	7,053.75	204.85	242.90	89.13	-1,285.38	-3,565.95	3,846.41	3,548.97	297.45	12.931	
14,400.00	7,053.42	7,007.58	7,053.42	207.66	242.91	89.11	-1,285.38	-3,565.95	3,944.26	3,647.04	297.22	13.271	
14,500.00	7,053.10	7,007.90	7,053.10	210.48	242.92	89.08	-1,285.38	-3,565.95	4,042.21	3,745.20	297.00	13.610	
14,600.00	7,052.77	7,008.23	7,052.77	213.29	242.93	89.06	-1,285.38	-3,565.95	4,140.25	3,843.45	296.81	13.949	
14,700.00	7,052.45	7,008.55	7,052.45	216.11	242.95	89.04	-1,285.38	-3,565.95	4,238.39	3,941.77	296.62	14.289	
14,800.00	7,052.12	7,008.88	7,052.12	218.93	242.96	89.01	-1,285.38	-3,565.95	4,336.61	4,040.16	296.45	14.628	
14,900.00	7,051.80	7,009.20	7,051.80	221.75	242.97	88.99	-1,285.38	-3,565.95	4,434.91	4,138.62	296.30	14.968	
15,000.00	7,051.47	7,009.53	7,051.47	224.57	242.98	88.97	-1,285.38	-3,565.95	4,533.29	4,237.14	296.15	15.307	
15,100.00	7,051.15	7,009.85	7,051.15	227.39	242.99	88.94	-1,285.38	-3,565.95	4,631.74	4,335.72	296.02	15.647	
15,145.13	7,051.00	7,010.00	7,051.00	228.67	243.00	88.93	-1,285.38	-3,565.95	4,676.18	4,380.22	295.96	15.800	

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	58.03	3.28	3.28	-90.46	-73.85	-9,142.87	9,143.35					
100.00	100.00	184.47	209.45	3.28	3.34	-90.45	-72.40	-9,141.30	9,142.25	9,135.62	6.62	1,380.680		
200.00	200.00	289.40	314.37	3.34	3.45	-90.45	-71.89	-9,139.97	9,140.97	9,134.18	6.79	1,346.745		
300.00	299.98	369.67	394.64	3.44	3.58	85.20	-71.71	-9,139.06	9,139.68	9,132.67	7.01	1,303.079		
400.00	399.84	464.91	489.87	3.59	3.76	85.26	-71.48	-9,138.10	9,138.23	9,130.89	7.35	1,243.598		
500.00	499.45	547.94	572.89	3.79	3.95	85.34	-71.26	-9,137.34	9,136.60	9,128.87	7.74	1,181.147		
600.00	598.70	624.42	649.37	4.03	4.15	85.43	-71.38	-9,136.81	9,134.92	9,126.75	8.17	1,117.765		
700.00	697.47	737.18	762.14	4.31	4.46	85.58	-71.53	-9,136.25	9,133.19	9,124.42	8.77	1,040.988		
800.00	795.62	845.20	870.15	4.64	4.80	85.75	-71.39	-9,135.42	9,130.94	9,121.51	9.43	968.207		
900.00	893.06	926.36	951.31	5.00	5.06	85.91	-71.26	-9,134.82	9,128.51	9,118.45	10.06	907.747		
1,000.00	989.64	984.00	1,008.95	5.40	5.26	86.05	-71.31	-9,134.50	9,126.11	9,115.47	10.65	857.131		
1,100.00	1,085.27	984.00	1,008.95	5.83	5.26	86.09	-71.31	-9,134.50	9,124.35	9,113.27	11.08	823.572		
1,200.00	1,180.44	1,044.73	1,069.67	6.29	5.46	86.20	-71.32	-9,134.72	9,122.85	9,111.12	11.74	777.184		
1,300.00	1,275.61	1,112.00	1,136.93	6.76	5.68	86.33	-71.08	-9,136.17	9,122.72	9,110.28	12.44	733.184		
1,342.49	1,316.05	1,112.00	1,136.93	6.97	5.68	86.33	-71.08	-9,136.17	9,122.62	9,109.97	12.65	721.122		
1,400.00	1,370.78	1,112.00	1,136.93	7.26	5.68	86.33	-71.08	-9,136.17	9,122.80	9,109.87	12.93	705.292		
1,500.00	1,465.95	1,112.00	1,136.93	7.76	5.68	86.33	-71.08	-9,136.17	9,123.98	9,110.54	13.44	678.951		
1,600.00	1,561.12	1,112.00	1,136.93	8.27	5.68	86.33	-71.08	-9,136.17	9,126.26	9,112.31	13.95	654.173		
1,700.00	1,656.29	1,171.17	1,196.05	8.80	5.88	86.45	-70.79	-9,138.57	9,128.86	9,114.19	14.67	622.362		
1,800.00	1,751.46	1,194.99	1,219.84	9.32	5.96	86.50	-70.70	-9,139.86	9,132.58	9,117.31	15.27	597.917		
1,900.00	1,846.63	1,241.00	1,265.74	9.86	6.12	86.58	-70.56	-9,142.88	9,137.26	9,121.30	15.96	572.463		
2,000.00	1,941.80	1,241.00	1,265.74	10.40	6.12	86.58	-70.56	-9,142.88	9,142.56	9,126.07	16.49	554.308		
2,100.00	2,036.96	1,241.00	1,265.74	10.94	6.12	86.58	-70.56	-9,142.88	9,148.96	9,131.93	17.03	537.288		
2,200.00	2,132.13	1,287.31	1,311.89	11.49	6.28	86.67	-70.45	-9,146.65	9,155.95	9,138.22	17.73	516.442		
2,300.00	2,227.30	1,309.66	1,334.15	12.04	6.36	86.72	-70.39	-9,148.74	9,163.92	9,145.57	18.35	499.498		
2,400.00	2,322.47	1,369.00	1,393.14	12.59	6.58	86.83	-70.24	-9,155.15	9,173.06	9,153.96	19.10	480.268		
2,500.00	2,417.64	1,369.00	1,393.14	13.15	6.58	86.83	-70.24	-9,155.15	9,182.47	9,162.83	19.64	467.608		
2,600.00	2,512.81	1,369.00	1,393.14	13.70	6.58	86.83	-70.24	-9,155.15	9,192.96	9,172.78	20.17	455.696		
2,700.00	2,607.98	1,369.00	1,393.14	14.26	6.58	86.83	-70.24	-9,155.15	9,204.52	9,183.81	20.71	444.483		
2,800.00	2,703.15	1,427.73	1,451.39	14.82	6.80	86.94	-70.28	-9,162.62	9,216.44	9,194.98	21.46	429.376		
2,900.00	2,798.32	1,452.83	1,476.24	15.38	6.90	86.99	-70.41	-9,166.14	9,229.41	9,207.32	22.09	417.732		
3,000.00	2,893.49	1,498.00	1,520.90	15.95	7.07	87.07	-70.81	-9,172.96	9,243.27	9,220.47	22.80	405.360		
3,100.00	2,988.66	1,498.00	1,520.90	16.51	7.07	87.07	-70.81	-9,172.96	9,257.77	9,234.44	23.33	396.798		
3,200.00	3,083.83	1,498.00	1,520.90	17.07	7.07	87.07	-70.81	-9,172.96	9,273.32	9,249.47	23.86	388.708		
3,300.00	3,179.00	1,548.53	1,570.72	17.64	7.28	87.16	-71.41	-9,181.36	9,289.36	9,264.78	24.59	377.845		
3,400.00	3,274.17	1,571.42	1,593.24	18.21	7.37	87.20	-71.71	-9,185.44	9,306.39	9,281.19	25.20	369.301		
3,500.00	3,369.34	1,626.00	1,646.80	18.77	7.60	87.30	-72.49	-9,195.89	9,324.44	9,298.49	25.95	359.380		
3,600.00	3,464.51	1,626.00	1,646.80	19.34	7.60	87.30	-72.49	-9,195.89	9,342.87	9,316.41	26.46	353.083		
3,700.00	3,559.68	1,626.00	1,646.80	19.91	7.60	87.30	-72.49	-9,195.89	9,362.34	9,335.37	26.97	347.115		
3,800.00	3,654.84	1,626.00	1,646.80	20.48	7.60	87.30	-72.49	-9,195.89	9,382.83	9,355.35	27.48	341.457		
3,900.00	3,750.01	1,682.39	1,701.92	21.05	7.86	87.40	-73.43	-9,207.76	9,403.60	9,375.37	28.23	333.108		
4,000.00	3,845.18	1,703.92	1,722.90	21.62	7.96	87.43	-73.84	-9,212.60	9,425.45	9,396.63	28.83	326.980		
4,100.00	3,940.35	1,754.00	1,771.54	22.19	8.19	87.52	-74.90	-9,224.47	9,448.29	9,418.74	29.55	319.762		
4,200.00	4,035.52	1,754.00	1,771.54	22.76	8.19	87.52	-74.90	-9,224.47	9,471.55	9,441.51	30.04	315.290		
4,300.00	4,130.69	1,754.00	1,771.54	23.33	8.19	87.52	-74.90	-9,224.47	9,495.80	9,465.27	30.53	311.044		
4,400.00	4,225.86	1,797.87	1,813.99	23.91	8.42	87.59	-75.84	-9,235.51	9,520.69	9,489.47	31.22	304.967		
4,500.00	4,321.03	1,824.07	1,839.28	24.48	8.55	87.63	-76.34	-9,242.33	9,546.36	9,514.53	31.82	299.976		
4,600.00	4,416.20	1,883.00	1,895.99	25.05	8.86	87.73	-77.30	-9,258.31	9,572.95	9,540.36	32.59	293.780		
4,700.00	4,511.37	1,883.00	1,895.99	25.62	8.86	87.73	-77.30	-9,258.31	9,599.87	9,566.81	33.06	290.396		
4,800.00	4,606.54	1,883.00	1,895.99	26.20	8.86	87.73	-77.30	-9,258.31	9,627.75	9,594.22	33.53	287.181		
4,900.00	4,701.71	1,935.45	1,946.27	26.77	9.16	87.82	-78.09	-9,273.21	9,656.15	9,621.89	34.25	281.912		
5,000.00	4,796.88	1,965.54	1,975.04	27.34	9.33	87.87	-78.57	-9,282.02	9,685.29	9,650.42	34.87	277.791		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	2,011.00	2,018.39	27.92	9.60	87.95	-79.32	-9,295.68	9,715.12	9,679.56	35.56	273.235		
5,200.00	4,987.22	2,011.00	2,018.39	28.49	9.60	87.95	-79.32	-9,295.68	9,745.56	9,709.56	36.01	270.662		
5,300.00	5,082.39	2,073.37	2,077.70	29.07	9.99	88.05	-80.37	-9,314.94	9,776.50	9,739.72	36.79	265.762		
5,400.00	5,177.56	2,140.00	2,140.90	29.64	10.41	88.16	-81.48	-9,336.02	9,808.09	9,770.49	37.59	260.908		
5,500.00	5,272.72	2,202.00	2,202.90	30.21	10.83	88.27	-82.60	-9,357.10	9,839.17	9,801.57	38.40	256.054		
5,600.00	5,367.89	2,264.00	2,264.90	30.79	11.25	88.38	-83.72	-9,378.18	9,870.25	9,832.65	39.21	251.200		
5,700.00	5,463.06	2,326.00	2,326.90	31.36	11.67	88.49	-84.84	-9,399.26	9,901.33	9,863.73	40.02	246.346		
5,800.00	5,558.23	2,388.00	2,388.90	31.94	12.09	88.60	-85.96	-9,420.34	9,932.41	9,894.81	40.83	241.492		
5,900.00	5,653.40	2,450.00	2,450.90	32.51	12.51	88.71	-87.08	-9,441.42	9,963.49	9,925.89	41.64	236.638		
6,000.00	5,748.57	2,512.00	2,512.90	33.09	12.93	88.82	-88.20	-9,462.50	9,994.57	9,956.97	42.45	231.784		
7,500.00	7,026.31	6,938.85	6,789.83	40.63	39.39	41.13	-111.56	-10,301.17	9,966.08	9,894.19	71.89	138.627		
7,600.00	7,056.68	6,968.04	6,819.01	40.91	39.49	48.63	-112.21	-10,302.01	9,876.15	9,803.88	72.27	136.652		
7,700.00	7,072.58	6,984.67	6,835.63	41.25	39.55	65.52	-112.60	-10,302.50	9,781.25	9,708.69	72.56	134.807		
7,800.00	7,074.86	6,989.33	6,840.28	41.69	39.57	84.24	-112.72	-10,302.64	9,683.76	9,611.01	72.76	133.101		
7,900.00	7,074.54	6,991.69	6,842.64	42.34	39.57	84.31	-112.78	-10,302.71	9,586.01	9,513.07	72.94	131.416		
8,000.00	7,074.21	6,994.06	6,845.01	43.27	39.58	84.38	-112.83	-10,302.78	9,488.31	9,415.16	73.15	129.716		
8,100.00	7,073.89	6,996.44	6,847.39	44.47	39.59	84.44	-112.89	-10,302.85	9,390.65	9,317.29	73.36	128.002		
8,200.00	7,073.57	6,998.83	6,849.77	45.91	39.60	84.51	-112.95	-10,302.92	9,293.05	9,219.45	73.59	126.273		
8,300.00	7,073.24	7,001.23	6,852.17	47.53	39.61	84.58	-113.01	-10,303.00	9,195.49	9,121.65	73.84	124.530		
8,400.00	7,072.92	7,003.64	6,854.59	49.31	39.62	84.65	-113.07	-10,303.07	9,097.99	9,023.88	74.10	122.773		
8,500.00	7,072.59	7,006.07	6,857.01	51.20	39.63	84.71	-113.13	-10,303.14	9,000.54	8,926.15	74.38	121.002		
8,600.00	7,072.27	7,008.50	6,859.44	53.19	39.63	84.78	-113.20	-10,303.22	8,903.14	8,828.46	74.68	119.217		
8,700.00	7,071.94	7,010.95	6,861.89	55.27	39.64	84.85	-113.26	-10,303.29	8,805.81	8,730.81	74.99	117.419		
8,800.00	7,071.62	7,013.41	6,864.34	57.43	39.65	84.92	-113.32	-10,303.36	8,708.53	8,633.20	75.33	115.609		
8,900.00	7,071.29	7,015.88	6,866.81	59.64	39.66	84.99	-113.38	-10,303.44	8,611.31	8,535.64	75.68	113.787		
9,000.00	7,070.97	7,018.36	6,869.29	61.92	39.67	85.06	-113.45	-10,303.51	8,514.16	8,438.11	76.05	111.952		
9,100.00	7,070.64	7,020.91	6,871.84	64.24	39.68	85.13	-113.52	-10,303.59	8,417.08	8,340.63	76.44	110.107		
9,200.00	7,070.32	7,023.47	6,874.39	66.61	39.69	85.20	-113.58	-10,303.67	8,320.06	8,243.20	76.86	108.250		
9,300.00	7,069.99	7,026.02	6,876.95	69.01	39.70	85.27	-113.65	-10,303.75	8,223.11	8,145.82	77.30	106.384		
9,400.00	7,069.67	7,028.56	6,879.49	71.45	39.71	85.34	-113.71	-10,303.83	8,126.24	8,048.48	77.76	104.509		
9,500.00	7,069.34	7,031.10	6,882.02	73.92	39.72	85.42	-113.77	-10,303.90	8,029.44	7,951.20	78.24	102.625		
9,600.00	7,069.02	7,033.63	6,884.55	76.42	39.72	85.49	-113.84	-10,303.98	7,932.72	7,853.97	78.75	100.733		
9,700.00	7,068.69	7,036.15	6,887.07	78.95	39.73	85.56	-113.90	-10,304.06	7,836.09	7,756.80	79.28	98.835		
9,800.00	7,068.37	7,038.67	6,889.58	81.49	39.74	85.63	-113.96	-10,304.13	7,739.53	7,659.69	79.85	96.930		
9,900.00	7,068.04	7,041.17	6,892.09	84.06	39.75	85.70	-114.02	-10,304.21	7,643.07	7,562.63	80.44	95.020		
10,000.00	7,067.72	7,043.67	6,894.59	86.65	39.76	85.77	-114.08	-10,304.28	7,546.69	7,465.64	81.05	93.106		
10,100.00	7,067.39	7,046.17	6,897.08	89.25	39.77	85.84	-114.14	-10,304.36	7,450.41	7,368.71	81.70	91.189		
10,200.00	7,067.07	7,048.65	6,899.56	91.87	39.78	85.91	-114.19	-10,304.43	7,354.23	7,271.85	82.38	89.270		
10,300.00	7,066.74	7,051.13	6,902.03	94.50	39.79	85.98	-114.25	-10,304.51	7,258.15	7,175.06	83.09	87.349		
10,400.00	7,066.42	7,053.60	6,904.50	97.14	39.80	86.05	-114.31	-10,304.58	7,162.18	7,078.34	83.84	85.428		
10,500.00	7,066.09	7,056.06	6,906.96	99.80	39.81	86.12	-114.36	-10,304.65	7,066.32	6,981.70	84.62	83.509		
10,600.00	7,065.77	7,058.51	6,909.41	102.47	39.81	86.19	-114.42	-10,304.73	6,970.57	6,885.14	85.43	81.591		
10,700.00	7,065.44	7,060.96	6,911.86	105.15	39.82	86.26	-114.47	-10,304.80	6,874.95	6,788.66	86.29	79.676		
10,800.00	7,065.12	7,063.40	6,914.30	107.83	39.83	86.32	-114.52	-10,304.87	6,779.44	6,692.27	87.18	77.766		
10,900.00	7,064.79	7,065.83	6,916.73	110.53	39.84	86.39	-114.58	-10,304.95	6,684.07	6,595.96	88.11	75.862		
11,000.00	7,064.47	7,068.26	6,919.15	113.23	39.85	86.46	-114.63	-10,305.02	6,588.84	6,499.76	89.08	73.964		
11,100.00	7,064.14	7,070.68	6,921.57	115.95	39.86	86.53	-114.68	-10,305.09	6,493.75	6,403.65	90.10	72.074		
11,200.00	7,063.82	7,073.09	6,923.98	118.66	39.87	86.60	-114.73	-10,305.16	6,398.80	6,307.64	91.16	70.193		
11,300.00	7,063.49	7,075.49	6,926.38	121.39	39.88	86.67	-114.78	-10,305.23	6,304.02	6,211.75	92.27	68.323		
11,400.00	7,063.17	7,077.89	6,928.78	124.12	39.88	86.73	-114.83	-10,305.30	6,209.39	6,115.97	93.42	66.464		
11,500.00	7,062.84	7,080.28	6,931.16	126.86	39.89	86.80	-114.87	-10,305.38	6,114.94	6,020.30	94.63	64.618		
11,600.00	7,062.52	7,082.66	6,933.55	129.60	39.90	86.87	-114.92	-10,305.45	6,020.66	5,924.77	95.89	62.786		

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





## Anticollision Report



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<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
11,700.00	7,062.19	7,085.04	6,935.92	132.35	39.91	86.93	-114.97	-10,305.52	5,926.57	5,829.36	97.21	60.969		
11,800.00	7,061.87	7,087.40	6,938.29	135.10	39.92	87.00	-115.01	-10,305.59	5,832.67	5,734.10	98.58	59.169		
11,900.00	7,061.54	7,089.77	6,940.65	137.85	39.93	87.07	-115.06	-10,305.66	5,738.98	5,638.98	100.01	57.386		
12,000.00	7,061.22	7,092.12	6,943.00	140.61	39.94	87.13	-115.10	-10,305.72	5,645.51	5,544.01	101.50	55.622		
12,100.00	7,060.89	7,094.47	6,945.35	143.38	39.94	87.20	-115.15	-10,305.79	5,552.26	5,449.20	103.05	53.877		
12,200.00	7,060.57	7,096.81	6,947.69	146.15	39.95	87.27	-115.19	-10,305.86	5,459.25	5,354.57	104.68	52.153		
12,300.00	7,060.24	7,099.14	6,950.02	148.92	39.96	87.33	-115.23	-10,305.93	5,366.49	5,260.12	106.37	50.451		
12,400.00	7,059.92	7,101.47	6,952.35	151.69	39.97	87.40	-115.27	-10,306.00	5,273.99	5,165.86	108.13	48.772		
12,500.00	7,059.59	7,103.79	6,954.67	154.47	39.98	87.46	-115.31	-10,306.07	5,181.77	5,071.80	109.98	47.117		
12,600.00	7,059.27	7,106.11	6,956.98	157.25	39.99	87.53	-115.35	-10,306.13	5,089.85	4,977.95	111.90	45.487		
12,700.00	7,058.94	7,108.41	6,959.28	160.03	39.99	87.60	-115.39	-10,306.20	4,998.23	4,884.33	113.90	43.883		
12,800.00	7,058.62	7,110.71	6,961.58	162.82	40.00	87.66	-115.43	-10,306.27	4,906.94	4,790.95	115.99	42.306		
12,900.00	7,058.29	7,113.01	6,963.88	165.61	40.01	87.73	-115.47	-10,306.33	4,815.99	4,697.82	118.17	40.756		
13,000.00	7,057.97	7,115.29	6,966.16	168.40	40.02	87.79	-115.51	-10,306.40	4,725.41	4,604.97	120.44	39.234		
13,100.00	7,057.64	7,117.58	6,968.44	171.19	40.03	87.85	-115.54	-10,306.47	4,635.21	4,512.40	122.81	37.742		
13,200.00	7,057.32	7,119.85	6,970.71	173.99	40.04	87.92	-115.58	-10,306.53	4,545.42	4,420.13	125.29	36.279		
13,300.00	7,057.00	7,122.12	6,972.98	176.78	40.04	87.98	-115.62	-10,306.60	4,456.07	4,328.20	127.87	34.848		
13,400.00	7,056.67	7,124.38	6,975.24	179.58	40.05	88.05	-115.65	-10,306.66	4,367.18	4,236.61	130.57	33.447		
13,500.00	7,056.35	7,126.63	6,977.49	182.38	40.06	88.11	-115.69	-10,306.73	4,278.77	4,145.39	133.38	32.079		
13,600.00	7,056.02	7,128.88	6,979.74	185.19	40.07	88.17	-115.72	-10,306.79	4,190.89	4,054.57	136.32	30.743		
13,700.00	7,055.70	7,131.12	6,981.98	187.99	40.08	88.24	-115.75	-10,306.86	4,103.55	3,964.17	139.39	29.440		
13,800.00	7,055.37	7,133.36	6,984.21	190.80	40.09	88.30	-115.79	-10,306.92	4,016.81	3,874.23	142.59	28.171		
13,900.00	7,055.05	7,135.59	6,986.44	193.60	40.09	88.36	-115.82	-10,306.99	3,930.70	3,784.77	145.93	26.935		
14,000.00	7,054.72	7,137.81	6,988.66	196.41	40.10	88.43	-115.85	-10,307.05	3,845.26	3,695.84	149.42	25.735		
14,100.00	7,054.40	7,140.02	6,990.88	199.22	40.11	88.49	-115.88	-10,307.11	3,760.53	3,607.47	153.06	24.569		
14,200.00	7,054.07	7,142.23	6,993.09	202.03	40.12	88.55	-115.91	-10,307.18	3,676.57	3,519.71	156.86	23.438		
14,300.00	7,053.75	7,144.44	6,995.29	204.85	40.13	88.62	-115.94	-10,307.24	3,593.43	3,432.60	160.83	22.343		
14,400.00	7,053.42	7,146.64	6,997.49	207.66	40.13	88.68	-115.97	-10,307.30	3,511.17	3,346.19	164.98	21.283		
14,500.00	7,053.10	7,149.32	7,000.17	210.48	40.14	88.75	-116.01	-10,307.38	3,429.85	3,260.55	169.30	20.259		
14,600.00	7,052.77	7,152.07	7,002.92	213.29	40.15	88.83	-116.04	-10,307.46	3,349.53	3,175.73	173.81	19.272		
14,700.00	7,052.45	7,154.79	7,005.64	216.11	40.16	88.91	-116.08	-10,307.53	3,270.30	3,091.80	178.51	18.320		
14,800.00	7,052.12	7,157.47	7,008.32	218.93	40.17	88.98	-116.11	-10,307.61	3,192.24	3,008.84	183.40	17.406		
14,900.00	7,051.80	7,160.12	7,010.97	221.75	40.18	89.06	-116.15	-10,307.68	3,115.43	2,926.93	188.50	16.528		
15,000.00	7,051.47	7,162.74	7,013.58	224.57	40.19	89.13	-116.18	-10,307.75	3,039.96	2,846.16	193.80	15.686		
15,100.00	7,051.15	7,165.32	7,016.16	227.39	40.20	89.21	-116.21	-10,307.83	2,965.94	2,766.64	199.31	14.881		
15,145.13	7,051.00	7,166.48	7,017.32	228.67	40.20	89.24	-116.23	-10,307.86	2,933.05	2,731.19	201.86	14.530	CC, ES, SF	





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<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	38.00	3.28	3.28	-90.12	-19.44	-9,145.84	9,145.93					
100.00	100.00	62.00	100.00	3.28	3.45	-90.12	-19.44	-9,145.84	9,145.86	9,139.12	6.74	1,357.225		
200.00	200.00	162.00	200.00	3.34	5.10	-90.12	-19.44	-9,145.84	9,145.86	9,137.42	8.44	1,083.562		
300.00	299.98	261.98	299.98	3.44	8.09	85.50	-19.44	-9,145.84	9,145.72	9,134.18	11.53	792.946		
400.00	399.84	361.84	399.84	3.59	11.37	85.54	-19.44	-9,145.84	9,145.31	9,130.35	14.96	611.400		
500.00	499.45	461.45	499.45	3.79	14.73	85.61	-19.44	-9,145.84	9,144.64	9,126.12	18.52	493.780		
600.00	598.70	560.70	598.70	4.03	18.13	85.71	-19.44	-9,145.84	9,143.71	9,121.55	22.16	412.681		
700.00	697.47	659.47	697.47	4.31	21.53	85.83	-19.44	-9,145.84	9,142.54	9,116.70	25.84	353.793		
800.00	795.62	757.62	795.62	4.64	24.92	85.97	-19.44	-9,145.84	9,141.15	9,111.59	29.56	309.266		
900.00	893.06	855.06	893.06	5.00	28.30	86.14	-19.44	-9,145.84	9,139.56	9,106.27	33.29	274.512		
1,000.00	989.64	951.64	989.64	5.40	31.65	86.33	-19.44	-9,145.84	9,137.80	9,100.76	37.04	246.687		
1,100.00	1,085.27	1,047.27	1,085.27	5.83	34.97	86.54	-19.44	-9,145.84	9,135.90	9,095.11	40.80	223.945		
1,200.00	1,180.44	1,142.44	1,180.44	6.29	38.28	86.73	-19.44	-9,145.84	9,134.01	9,089.44	44.56	204.969		
1,300.00	1,275.61	1,237.61	1,275.61	6.76	41.59	86.91	-19.44	-9,145.84	9,132.22	9,083.86	48.35	188.872		
1,400.00	1,370.78	1,332.78	1,370.78	7.26	44.90	87.09	-19.44	-9,145.84	9,130.53	9,078.37	52.16	175.061		
1,500.00	1,465.95	1,427.95	1,465.95	7.76	48.22	87.27	-19.44	-9,145.84	9,128.94	9,072.97	55.97	163.091		
1,600.00	1,561.12	1,523.12	1,561.12	8.27	51.53	87.46	-19.44	-9,145.84	9,127.46	9,067.66	59.80	152.624		
1,700.00	1,656.29	1,618.29	1,656.29	8.80	54.85	87.64	-19.44	-9,145.84	9,126.08	9,062.44	63.64	143.398		
1,800.00	1,751.46	1,713.46	1,751.46	9.32	58.16	87.82	-19.44	-9,145.84	9,124.80	9,057.32	67.49	135.208		
1,900.00	1,846.63	1,808.63	1,846.63	9.86	61.48	88.01	-19.44	-9,145.84	9,123.63	9,052.29	71.34	127.891		
2,000.00	1,941.80	1,903.80	1,941.80	10.40	64.80	88.19	-19.44	-9,145.84	9,122.56	9,047.36	75.20	121.316		
2,100.00	2,036.96	2,001.04	2,036.96	10.94	68.19	88.37	-19.44	-9,145.84	9,121.59	9,042.46	79.13	115.273		
2,200.00	2,132.13	2,105.87	2,132.13	11.49	71.85	88.56	-19.44	-9,145.84	9,120.73	9,037.40	83.33	109.449		
2,300.00	2,227.30	2,199.30	2,227.30	12.04	74.76	88.74	-19.44	-9,145.84	9,119.97	9,033.18	86.79	105.077		
2,400.00	2,322.47	2,284.47	2,322.47	12.59	78.07	88.93	-19.44	-9,145.84	9,119.31	9,028.65	90.66	100.583		
2,500.00	2,417.64	2,379.64	2,417.64	13.15	81.39	89.11	-19.44	-9,145.84	9,118.76	9,024.22	94.54	96.455		
2,600.00	2,512.81	2,474.81	2,512.81	13.70	84.71	89.29	-19.44	-9,145.84	9,118.31	9,019.90	98.42	92.651		
2,700.00	2,607.98	2,569.98	2,607.98	14.26	88.03	89.48	-19.44	-9,145.84	9,117.96	9,015.67	102.29	89.134		
2,800.00	2,703.15	2,665.15	2,703.15	14.82	91.35	89.66	-19.44	-9,145.84	9,117.72	9,011.55	106.17	85.875		
2,900.00	2,798.32	2,760.32	2,798.32	15.38	94.67	89.84	-19.44	-9,145.84	9,117.58	9,007.52	110.06	82.844		
2,985.30	2,879.50	2,841.50	2,879.50	15.86	97.51	90.00	-19.44	-9,145.84	9,117.54	9,004.17	113.37	80.424		
3,000.00	2,893.49	2,855.49	2,893.49	15.95	97.99	90.03	-19.44	-9,145.84	9,117.54	9,003.60	113.94	80.021		
3,100.00	2,988.66	2,950.66	2,988.66	16.51	101.32	90.21	-19.44	-9,145.84	9,117.61	8,999.79	117.82	77.383		
3,200.00	3,083.83	3,045.83	3,083.83	17.07	104.64	90.39	-19.44	-9,145.84	9,117.78	8,996.07	121.71	74.914		
3,300.00	3,179.00	3,141.00	3,179.00	17.64	107.96	90.58	-19.44	-9,145.84	9,118.06	8,992.46	125.60	72.598		
3,400.00	3,274.17	3,236.17	3,274.17	18.21	111.28	90.76	-19.44	-9,145.84	9,118.43	8,988.95	129.48	70.421		
3,500.00	3,369.34	3,331.34	3,369.34	18.77	114.60	90.95	-19.44	-9,145.84	9,118.91	8,985.54	133.37	68.372		
3,600.00	3,464.51	3,426.51	3,464.51	19.34	117.92	91.13	-19.44	-9,145.84	9,119.50	8,982.24	137.26	66.439		
3,700.00	3,559.68	3,521.68	3,559.68	19.91	121.24	91.31	-19.44	-9,145.84	9,120.18	8,979.03	141.15	64.613		
3,800.00	3,654.84	3,616.84	3,654.84	20.48	124.56	91.50	-19.44	-9,145.84	9,120.97	8,975.93	145.04	62.885		
3,900.00	3,750.01	3,712.01	3,750.01	21.05	127.88	91.68	-19.44	-9,145.84	9,121.87	8,972.94	148.93	61.249		
4,000.00	3,845.18	3,807.18	3,845.18	21.62	131.20	91.86	-19.44	-9,145.84	9,122.87	8,970.04	152.82	59.696		
4,100.00	3,940.35	3,902.35	3,940.35	22.19	134.53	92.05	-19.44	-9,145.84	9,123.97	8,967.25	156.71	58.220		
4,200.00	4,035.52	4,002.48	4,035.52	22.76	138.02	92.23	-19.44	-9,145.84	9,125.17	8,964.39	160.78	56.756		
4,300.00	4,130.69	4,107.31	4,130.69	23.33	141.68	92.41	-19.44	-9,145.84	9,126.48	8,961.47	165.01	55.309		
4,400.00	4,225.86	4,187.86	4,225.86	23.91	144.49	92.60	-19.44	-9,145.84	9,127.89	8,959.49	168.39	54.207		
4,500.00	4,321.03	4,283.03	4,321.03	24.48	147.81	92.78	-19.44	-9,145.84	9,129.40	8,957.11	172.28	52.990		
4,600.00	4,416.20	4,378.20	4,416.20	25.05	151.13	92.96	-19.44	-9,145.84	9,131.01	8,954.84	176.18	51.829		
4,700.00	4,511.37	4,473.37	4,511.37	25.62	154.45	93.15	-19.44	-9,145.84	9,132.73	8,952.66	180.07	50.718		
4,800.00	4,606.54	4,568.54	4,606.54	26.20	157.78	93.33	-19.44	-9,145.84	9,134.55	8,950.59	183.96	49.654		
4,900.00	4,701.71	4,663.71	4,701.71	26.77	161.10	93.51	-19.44	-9,145.84	9,136.48	8,948.62	187.86	48.635		
5,000.00	4,796.88	4,758.88	4,796.88	27.34	164.42	93.69	-19.44	-9,145.84	9,138.51	8,946.75	191.75	47.658		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,892.05	4,854.05	4,892.05	27.92	167.74	93.88	-19.44	-9,145.84	9,140.63	8,944.99	195.64	46.721		
5,200.00	4,987.22	4,949.22	4,987.22	28.49	171.06	94.06	-19.44	-9,145.84	9,142.87	8,943.33	199.54	45.820		
5,300.00	5,082.39	5,044.39	5,082.39	29.07	174.39	94.24	-19.44	-9,145.84	9,145.20	8,941.77	203.43	44.955		
5,400.00	5,177.56	5,139.56	5,177.56	29.64	177.71	94.43	-19.44	-9,145.84	9,147.64	8,940.31	207.33	44.122		
5,500.00	5,272.72	5,234.72	5,272.72	30.21	181.03	94.61	-19.44	-9,145.84	9,150.18	8,938.96	211.22	43.321		
5,600.00	5,367.89	5,329.89	5,367.89	30.79	184.35	94.79	-19.44	-9,145.84	9,152.82	8,937.71	215.11	42.549		
5,700.00	5,463.06	5,425.06	5,463.06	31.36	187.67	94.97	-19.44	-9,145.84	9,155.57	8,936.56	219.01	41.805		
5,800.00	5,558.23	5,520.23	5,558.23	31.94	190.99	95.15	-19.44	-9,145.84	9,158.41	8,935.51	222.90	41.087		
5,900.00	5,653.40	5,615.40	5,653.40	32.51	194.32	95.34	-19.44	-9,145.84	9,161.36	8,934.56	226.80	40.395		
6,000.00	5,748.57	5,710.57	5,748.57	33.09	197.64	95.52	-19.44	-9,145.84	9,164.41	8,933.72	230.69	39.726		
6,100.00	5,843.74	5,805.74	5,843.74	33.67	200.96	95.70	-19.44	-9,145.84	9,167.56	8,932.98	234.58	39.080		
6,200.00	5,938.91	5,900.91	5,938.91	34.24	204.28	95.88	-19.44	-9,145.84	9,170.82	8,932.34	238.48	38.456		
6,300.00	6,034.08	6,003.92	6,034.08	34.82	207.88	96.06	-19.44	-9,145.84	9,174.17	8,931.53	242.65	37.809		
6,400.00	6,129.25	6,108.75	6,129.25	35.39	211.54	96.25	-19.44	-9,145.84	9,177.63	8,930.75	246.88	37.175		
6,500.00	6,224.42	6,186.42	6,224.42	35.97	214.25	96.43	-19.44	-9,145.84	9,181.19	8,931.03	250.16	36.701		
6,600.00	6,319.59	6,281.59	6,319.59	36.54	217.57	96.61	-19.44	-9,145.84	9,184.85	8,930.80	254.05	36.153		
6,700.00	6,414.76	6,376.76	6,414.76	37.12	220.89	96.79	-19.44	-9,145.84	9,188.61	8,930.66	257.95	35.622		
6,800.00	6,509.91	6,471.91	6,509.91	37.70	224.21	96.98	-19.44	-9,145.84	9,191.93	8,930.09	261.84	35.105		
6,900.00	6,603.99	6,565.99	6,603.99	38.26	227.50	97.17	-19.44	-9,145.84	9,184.12	8,918.44	265.68	34.568		
7,000.00	6,694.76	6,656.76	6,694.76	38.78	230.67	97.34	-19.44	-9,145.84	9,161.29	8,891.91	269.38	34.009		
7,100.00	6,779.96	6,741.96	6,779.96	39.24	233.64	97.52	-19.44	-9,145.84	9,124.01	8,851.19	272.82	33.443		
7,200.00	6,857.50	6,819.50	6,857.50	39.65	236.35	97.69	-19.44	-9,145.84	9,073.21	8,797.26	275.95	32.879		
7,300.00	6,925.48	6,887.48	6,925.48	40.02	238.72	97.86	-19.44	-9,145.84	9,010.15	8,731.45	278.71	32.328		
7,400.00	6,982.21	6,944.21	6,982.21	40.33	240.70	98.03	-19.44	-9,145.84	8,936.38	8,655.35	281.03	31.799		
7,500.00	7,026.31	6,988.31	7,026.31	40.63	242.24	98.20	-19.44	-9,145.84	8,853.69	8,570.83	282.86	31.300		
7,600.00	7,056.68	7,018.68	7,056.68	40.91	243.30	98.37	-19.44	-9,145.84	8,764.10	8,479.92	284.19	30.839		
7,700.00	7,072.58	7,034.58	7,072.58	41.25	243.85	98.54	-19.44	-9,145.84	8,669.79	8,384.82	284.97	30.423		
7,800.00	7,074.86	7,036.86	7,074.86	41.69	243.93	98.71	-19.44	-9,145.84	8,573.10	8,287.85	285.26	30.054		
7,900.00	7,074.54	7,036.54	7,074.54	42.34	243.92	98.88	-19.44	-9,145.84	8,476.21	8,190.76	285.45	29.694		
8,000.00	7,074.21	7,036.21	7,074.21	43.27	243.91	99.05	-19.44	-9,145.84	8,379.39	8,093.72	285.67	29.333		
8,100.00	7,073.89	7,035.89	7,073.89	44.47	243.90	99.22	-19.44	-9,145.84	8,282.64	7,996.74	285.90	28.970		
8,200.00	7,073.57	7,035.57	7,073.57	45.91	243.89	99.39	-19.44	-9,145.84	8,185.97	7,899.82	286.15	28.607		
8,300.00	7,073.24	7,035.24	7,073.24	47.53	243.88	99.56	-19.44	-9,145.84	8,089.39	7,802.96	286.43	28.242		
8,400.00	7,072.92	7,034.92	7,072.92	49.31	243.87	99.73	-19.44	-9,145.84	7,992.88	7,706.16	286.72	27.876		
8,500.00	7,072.59	7,034.59	7,072.59	51.20	243.85	99.90	-19.44	-9,145.84	7,896.47	7,609.42	287.04	27.510		
8,600.00	7,072.27	7,034.27	7,072.27	53.19	243.84	100.07	-19.44	-9,145.84	7,800.14	7,512.76	287.39	27.142		
8,700.00	7,071.94	7,033.94	7,071.94	55.27	243.83	100.24	-19.44	-9,145.84	7,703.91	7,416.16	287.75	26.773		
8,800.00	7,071.62	7,033.62	7,071.62	57.43	243.82	100.41	-19.44	-9,145.84	7,607.78	7,319.63	288.15	26.403		
8,900.00	7,071.29	7,033.29	7,071.29	59.64	243.81	100.58	-19.44	-9,145.84	7,511.74	7,223.18	288.56	26.031		
9,000.00	7,070.97	7,032.97	7,070.97	61.92	243.80	100.75	-19.44	-9,145.84	7,415.81	7,126.80	289.01	25.659		
9,100.00	7,070.64	7,032.64	7,070.64	64.24	243.79	100.92	-19.44	-9,145.84	7,319.99	7,030.51	289.49	25.286		
9,200.00	7,070.32	7,032.32	7,070.32	66.61	243.78	101.09	-19.44	-9,145.84	7,224.29	6,934.29	289.99	24.912		
9,300.00	7,069.99	7,031.99	7,069.99	69.01	243.76	101.26	-19.44	-9,145.84	7,128.70	6,838.17	290.53	24.537		
9,400.00	7,069.67	7,031.67	7,069.67	71.45	243.75	101.43	-19.44	-9,145.84	7,033.23	6,742.13	291.10	24.161		
9,500.00	7,069.34	7,031.34	7,069.34	73.92	243.74	101.60	-19.44	-9,145.84	6,937.89	6,646.19	291.70	23.784		
9,600.00	7,069.02	7,031.02	7,069.02	76.42	243.73	101.77	-19.44	-9,145.84	6,842.69	6,550.34	292.34	23.406		
9,700.00	7,068.69	7,030.69	7,068.69	78.95	243.72	101.94	-19.44	-9,145.84	6,747.62	6,454.60	293.02	23.028		
9,800.00	7,068.37	7,030.37	7,068.37	81.49	243.71	102.11	-19.44	-9,145.84	6,652.70	6,358.97	293.73	22.649		
9,900.00	7,068.04	7,030.04	7,068.04	84.06	243.70	102.28	-19.44	-9,145.84	6,557.93	6,263.44	294.49	22.269		
10,000.00	7,067.72	7,029.72	7,067.72	86.65	243.68	102.45	-19.44	-9,145.84	6,463.31	6,168.03	295.28	21.889		
10,100.00	7,067.39	7,029.39	7,067.39	89.25	243.67	102.62	-19.44	-9,145.84	6,368.86	6,072.75	296.12	21.508		
10,200.00	7,067.07	7,029.07	7,067.07	91.87	243.66	102.79	-19.44	-9,145.84	6,274.59	5,977.59	297.00	21.127		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,066.74	7,028.74	7,066.74	94.50	243.65	90.51	-19.44	-9,145.84	6,180.49	5,882.56	297.93	20.745		
10,400.00	7,066.42	7,028.42	7,066.42	97.14	243.64	90.50	-19.44	-9,145.84	6,086.58	5,787.68	298.90	20.363		
10,500.00	7,066.09	7,028.09	7,066.09	99.80	243.63	90.50	-19.44	-9,145.84	5,992.87	5,692.94	299.93	19.981		
10,600.00	7,065.77	7,027.77	7,065.77	102.47	243.62	90.49	-19.44	-9,145.84	5,899.36	5,598.36	301.01	19.599		
10,700.00	7,065.44	7,027.44	7,065.44	105.15	243.61	90.48	-19.44	-9,145.84	5,806.08	5,503.94	302.14	19.217		
10,800.00	7,065.12	7,027.12	7,065.12	107.83	243.59	90.47	-19.44	-9,145.84	5,713.01	5,409.69	303.33	18.835		
10,900.00	7,064.79	7,026.79	7,064.79	110.53	243.58	90.46	-19.44	-9,145.84	5,620.19	5,315.62	304.57	18.453		
11,000.00	7,064.47	7,026.47	7,064.47	113.23	243.57	90.45	-19.44	-9,145.84	5,527.62	5,221.74	305.88	18.071		
11,100.00	7,064.14	7,026.14	7,064.14	115.95	243.56	90.44	-19.44	-9,145.84	5,435.31	5,128.06	307.25	17.690		
11,200.00	7,063.82	7,025.82	7,063.82	118.66	243.55	90.43	-19.44	-9,145.84	5,343.27	5,034.59	308.68	17.310		
11,300.00	7,063.49	7,025.49	7,063.49	121.39	243.54	90.42	-19.44	-9,145.84	5,251.53	4,941.35	310.18	16.930		
11,400.00	7,063.17	7,025.17	7,063.17	124.12	243.53	90.42	-19.44	-9,145.84	5,160.09	4,848.34	311.76	16.552		
11,500.00	7,062.84	7,024.84	7,062.84	126.86	243.51	90.41	-19.44	-9,145.84	5,068.98	4,755.58	313.41	16.174		
11,600.00	7,062.52	7,024.52	7,062.52	129.60	243.50	90.40	-19.44	-9,145.84	4,978.21	4,663.08	315.13	15.797		
11,700.00	7,062.19	7,024.19	7,062.19	132.35	243.49	90.39	-19.44	-9,145.84	4,887.80	4,570.87	316.94	15.422		
11,800.00	7,061.87	7,023.87	7,061.87	135.10	243.48	90.38	-19.44	-9,145.84	4,797.77	4,478.95	318.82	15.048		
11,900.00	7,061.54	7,023.54	7,061.54	137.85	243.47	90.37	-19.44	-9,145.84	4,708.14	4,387.34	320.80	14.676		
12,000.00	7,061.22	7,023.22	7,061.22	140.61	243.46	90.36	-19.44	-9,145.84	4,618.94	4,296.07	322.87	14.306		
12,100.00	7,060.89	7,022.89	7,060.89	143.38	243.45	90.35	-19.44	-9,145.84	4,530.19	4,205.16	325.03	13.938		
12,200.00	7,060.57	7,022.57	7,060.57	146.15	243.43	90.35	-19.44	-9,145.84	4,441.92	4,114.63	327.29	13.572		
12,300.00	7,060.24	7,022.24	7,060.24	148.92	243.42	90.34	-19.44	-9,145.84	4,354.15	4,024.50	329.65	13.208		
12,400.00	7,059.92	7,021.92	7,059.92	151.69	243.41	90.33	-19.44	-9,145.84	4,266.93	3,934.80	332.13	12.847		
12,500.00	7,059.59	7,021.59	7,059.59	154.47	243.40	90.32	-19.44	-9,145.84	4,180.27	3,845.56	334.71	12.489		
12,600.00	7,059.27	7,021.27	7,059.27	157.25	243.39	90.31	-19.44	-9,145.84	4,094.22	3,756.82	337.41	12.134		
12,700.00	7,058.94	7,020.94	7,058.94	160.03	243.38	90.30	-19.44	-9,145.84	4,008.83	3,668.60	340.23	11.783		
12,800.00	7,058.62	7,020.62	7,058.62	162.82	243.37	90.29	-19.44	-9,145.84	3,924.12	3,580.94	343.18	11.435		
12,900.00	7,058.29	7,020.29	7,058.29	165.61	243.36	90.28	-19.44	-9,145.84	3,840.14	3,493.89	346.26	11.090		
13,000.00	7,057.97	7,019.97	7,057.97	168.40	243.34	90.27	-19.44	-9,145.84	3,756.95	3,407.48	349.47	10.750		
13,100.00	7,057.64	7,019.64	7,057.64	171.19	243.33	90.27	-19.44	-9,145.84	3,674.60	3,321.78	352.83	10.415		
13,200.00	7,057.32	7,019.32	7,057.32	173.99	243.32	90.26	-19.44	-9,145.84	3,593.15	3,236.82	356.33	10.084		
13,300.00	7,057.00	7,019.00	7,057.00	176.78	243.31	90.25	-19.44	-9,145.84	3,512.65	3,152.66	359.99	9.758		
13,400.00	7,056.67	7,018.67	7,056.67	179.58	243.30	90.24	-19.44	-9,145.84	3,433.18	3,069.38	363.80	9.437		
13,500.00	7,056.35	7,018.35	7,056.35	182.38	243.29	90.23	-19.44	-9,145.84	3,354.81	2,987.04	367.77	9.122		
13,600.00	7,056.02	7,018.02	7,056.02	185.19	243.28	90.22	-19.44	-9,145.84	3,277.61	2,905.70	371.91	8.813		
13,700.00	7,055.70	7,017.70	7,055.70	187.99	243.26	90.21	-19.44	-9,145.84	3,201.68	2,825.46	376.21	8.510		
13,800.00	7,055.37	7,017.37	7,055.37	190.80	243.25	90.20	-19.44	-9,145.84	3,127.10	2,746.41	380.69	8.214		
13,900.00	7,055.05	7,017.05	7,055.05	193.60	243.24	90.20	-19.44	-9,145.84	3,053.97	2,668.64	385.33	7.926		
14,000.00	7,054.72	7,016.72	7,054.72	196.41	243.23	90.19	-19.44	-9,145.84	2,982.41	2,592.25	390.15	7.644		
14,100.00	7,054.40	7,016.40	7,054.40	199.22	243.22	90.18	-19.44	-9,145.84	2,912.52	2,517.38	395.14	7.371		
14,200.00	7,054.07	7,016.07	7,054.07	202.03	243.21	90.17	-19.44	-9,145.84	2,844.43	2,444.13	400.30	7.106		
14,300.00	7,053.75	7,015.75	7,053.75	204.85	243.20	90.16	-19.44	-9,145.84	2,778.27	2,372.65	405.61	6.850		
14,400.00	7,053.42	7,015.42	7,053.42	207.66	243.19	90.15	-19.44	-9,145.84	2,714.18	2,303.10	411.08	6.603		
14,500.00	7,053.10	7,015.10	7,053.10	210.48	243.17	90.14	-19.44	-9,145.84	2,652.31	2,235.63	416.69	6.365		
14,600.00	7,052.77	7,014.77	7,052.77	213.29	243.16	90.13	-19.44	-9,145.84	2,592.83	2,170.41	422.42	6.138		
14,700.00	7,052.45	7,014.45	7,052.45	216.11	243.15	90.12	-19.44	-9,145.84	2,535.90	2,107.65	428.25	5.922		
14,800.00	7,052.12	7,014.12	7,052.12	218.93	243.14	90.12	-19.44	-9,145.84	2,481.69	2,047.53	434.16	5.716		
14,900.00	7,051.80	7,013.80	7,051.80	221.75	243.13	90.11	-19.44	-9,145.84	2,430.39	1,990.27	440.12	5.522		
15,000.00	7,051.47	7,013.47	7,051.47	224.57	243.12	90.10	-19.44	-9,145.84	2,382.18	1,936.09	446.10	5.340		
15,100.00	7,051.15	7,013.15	7,051.15	227.39	243.11	90.09	-19.44	-9,145.84	2,337.26	1,885.22	452.04	5.170		
15,145.13	7,051.00	7,013.00	7,051.00	228.67	243.10	90.09	-19.44	-9,145.84	2,318.12	1,863.41	454.70	5.098	CC, ES, SF	

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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	25.00	3.28	3.28	-90.30	-48.58	-9,143.06	9,143.23					
100.00	100.00	111.52	136.52	3.28	3.29	-90.31	-48.87	-9,142.70	9,142.91	9,136.33	6.58	1,390.047		
200.00	200.00	185.63	210.63	3.34	3.34	-90.31	-48.78	-9,142.51	9,142.65	9,135.98	6.67	1,370.217		
300.00	299.98	260.45	285.45	3.44	3.41	85.32	-48.73	-9,142.53	9,142.53	9,135.68	6.85	1,335.380		
400.00	399.84	347.40	372.40	3.59	3.53	85.35	-48.82	-9,142.73	9,142.33	9,135.22	7.11	1,285.181		
500.00	499.45	435.56	460.55	3.79	3.68	85.40	-48.95	-9,143.05	9,141.99	9,134.52	7.47	1,224.177		
600.00	598.70	612.61	637.60	4.03	4.08	85.55	-49.44	-9,143.34	9,141.32	9,133.20	8.11	1,126.734		
700.00	697.47	678.75	703.74	4.31	4.26	85.65	-49.78	-9,143.16	9,139.83	9,131.26	8.57	1,066.028		
800.00	795.62	727.00	751.99	4.64	4.40	85.73	-50.01	-9,143.20	9,138.52	9,129.49	9.03	1,011.628		
900.00	893.06	727.00	751.99	5.00	4.40	85.74	-50.01	-9,143.20	9,137.84	9,128.45	9.40	972.546		
1,000.00	989.64	796.45	821.43	5.40	4.60	85.86	-49.92	-9,143.92	9,137.18	9,127.18	10.00	913.971		
1,029.14	1,017.62	805.40	830.39	5.52	4.63	85.87	-49.84	-9,144.09	9,137.16	9,127.01	10.15	900.357		
1,100.00	1,085.27	856.00	880.96	5.83	4.78	85.97	-49.17	-9,145.42	9,137.43	9,126.82	10.61	861.067		
1,200.00	1,180.44	856.00	880.96	6.29	4.78	85.97	-49.17	-9,145.42	9,138.06	9,126.99	11.07	825.366		
1,300.00	1,275.61	856.00	880.96	6.76	4.78	85.97	-49.17	-9,145.42	9,139.78	9,128.23	11.55	791.357		
1,400.00	1,370.78	903.20	928.11	7.26	4.93	86.07	-48.16	-9,147.31	9,142.10	9,129.91	12.19	749.963		
1,500.00	1,465.95	926.19	951.06	7.76	5.01	86.12	-47.55	-9,148.50	9,145.40	9,132.64	12.77	716.321		
1,600.00	1,561.12	984.00	1,008.72	8.27	5.20	86.24	-45.66	-9,152.27	9,149.84	9,136.37	13.47	679.310		
1,700.00	1,656.29	984.00	1,008.72	8.80	5.20	86.24	-45.66	-9,152.27	9,154.61	9,140.62	13.99	654.457		
1,800.00	1,751.46	984.00	1,008.72	9.32	5.20	86.24	-45.66	-9,152.27	9,160.48	9,145.96	14.51	631.228		
1,900.00	1,846.63	984.00	1,008.72	9.86	5.20	86.24	-45.66	-9,152.27	9,167.43	9,152.39	15.04	609.531		
2,000.00	1,941.80	1,046.12	1,070.55	10.40	5.42	86.37	-42.79	-9,157.48	9,174.68	9,158.89	15.78	581.228		
2,100.00	2,036.96	1,112.00	1,135.95	10.94	5.65	86.52	-38.51	-9,164.20	9,183.38	9,166.83	16.55	554.841		
2,200.00	2,132.13	1,112.00	1,135.95	11.49	5.65	86.52	-38.51	-9,164.20	9,192.28	9,175.19	17.09	538.000		
2,300.00	2,227.30	1,112.00	1,135.95	12.04	5.65	86.52	-38.51	-9,164.20	9,202.26	9,184.64	17.62	522.226		
2,400.00	2,322.47	1,158.98	1,182.46	12.59	5.83	86.64	-34.72	-9,169.61	9,213.00	9,194.67	18.33	502.594		
2,500.00	2,417.64	1,193.85	1,216.93	13.15	5.97	86.72	-31.54	-9,173.84	9,224.48	9,205.48	19.00	485.549		
2,600.00	2,512.81	1,241.00	1,263.44	13.70	6.15	86.84	-26.74	-9,179.88	9,236.71	9,216.99	19.71	468.520		
2,700.00	2,607.98	1,275.34	1,297.25	14.26	6.29	86.93	-22.80	-9,184.42	9,249.58	9,229.19	20.39	453.701		
2,800.00	2,703.15	1,328.65	1,349.60	14.82	6.52	87.07	-15.75	-9,191.57	9,263.03	9,241.89	21.14	438.217		
2,900.00	2,798.32	1,369.00	1,389.11	15.38	6.70	87.18	-9.66	-9,197.05	9,277.04	9,255.20	21.84	424.827		
3,000.00	2,893.49	1,412.45	1,431.54	15.95	6.90	87.30	-2.52	-9,203.12	9,291.70	9,269.14	22.56	411.883		
3,100.00	2,988.66	1,447.40	1,465.59	16.51	7.06	87.40	3.57	-9,208.18	9,307.09	9,283.84	23.24	400.424		
3,200.00	3,083.83	1,498.00	1,514.73	17.07	7.31	87.55	12.91	-9,215.80	9,323.23	9,299.24	24.00	388.510		
3,300.00	3,179.00	1,498.00	1,514.73	17.64	7.31	87.55	12.91	-9,215.80	9,340.08	9,315.56	24.52	380.909		
3,400.00	3,274.17	1,548.41	1,563.53	18.21	7.57	87.70	22.75	-9,223.75	9,357.60	9,332.32	25.28	370.088		
3,500.00	3,369.34	1,580.97	1,594.96	18.77	7.74	87.80	29.32	-9,229.10	9,375.90	9,349.94	25.96	361.148		
3,600.00	3,464.51	1,626.00	1,638.33	19.34	7.98	87.93	38.71	-9,236.75	9,394.96	9,368.26	26.70	351.901		
3,700.00	3,559.68	1,626.00	1,638.33	19.91	7.98	87.93	38.71	-9,236.75	9,414.75	9,387.54	27.21	346.021		
3,800.00	3,654.84	1,680.54	1,690.66	20.48	8.29	88.10	50.71	-9,246.38	9,435.17	9,407.16	28.01	336.906		
3,900.00	3,750.01	1,713.95	1,722.57	21.05	8.49	88.21	58.49	-9,252.45	9,456.35	9,427.66	28.69	329.630		
4,000.00	3,845.18	1,754.00	1,760.70	21.62	8.72	88.33	68.25	-9,259.88	9,478.26	9,448.85	29.40	322.351		
4,100.00	3,940.35	1,754.00	1,760.70	22.19	8.72	88.33	68.25	-9,259.88	9,500.95	9,471.05	29.90	317.760		
4,200.00	4,035.52	1,754.00	1,760.70	22.76	8.72	88.33	68.25	-9,259.88	9,524.64	9,494.25	30.39	313.401		
4,300.00	4,130.69	1,816.60	1,819.98	23.33	9.13	88.54	84.23	-9,272.12	9,548.56	9,517.32	31.24	305.617		
4,400.00	4,225.86	1,838.77	1,840.87	23.91	9.27	88.61	90.06	-9,276.69	9,573.59	9,541.73	31.86	300.519		
4,500.00	4,321.03	1,883.00	1,882.40	24.48	9.56	88.76	101.96	-9,286.15	9,599.50	9,566.90	32.60	294.495		
4,600.00	4,416.20	1,883.00	1,882.40	25.05	9.56	88.76	101.96	-9,286.15	9,626.00	9,592.93	33.07	291.072		
4,700.00	4,511.37	2,070.93	2,058.57	25.62	10.90	89.38	153.84	-9,326.04	9,652.52	9,617.79	34.73	277.950		
4,800.00	4,606.54	2,167.34	2,149.27	26.20	11.60	89.69	179.64	-9,346.12	9,678.91	9,643.09	35.82	270.214		
4,900.00	4,701.71	2,236.30	2,214.27	26.77	12.11	89.91	197.51	-9,360.63	9,705.61	9,668.87	36.73	264.211		
5,000.00	4,796.88	2,360.46	2,331.58	27.34	13.03	90.30	228.53	-9,386.95	9,732.55	9,694.54	38.01	256.066		

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





# Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
5,100.00	4,892.05	2,431.41	2,398.77	27.92	13.56	90.52	245.77	-9,401.84	9,759.41	9,720.47	38.94	250.647		
5,200.00	4,987.22	2,475.65	2,440.56	28.49	13.90	90.66	256.82	-9,411.23	9,786.82	9,747.13	39.69	246.590		
5,300.00	5,082.39	2,525.00	2,487.06	29.07	14.28	90.81	269.51	-9,421.82	9,814.81	9,774.34	40.47	242.515		
5,400.00	5,177.56	2,614.19	2,570.98	29.64	14.97	91.09	292.88	-9,440.97	9,843.18	9,801.65	41.53	237.001		
5,500.00	5,272.72	2,653.00	2,607.50	30.21	15.28	91.22	303.10	-9,449.24	9,871.80	9,829.55	42.24	233.685		
5,600.00	5,367.89	2,704.50	2,655.86	30.79	15.70	91.38	316.88	-9,460.35	9,900.94	9,857.89	43.05	229.996		
5,700.00	5,463.06	2,735.93	2,685.28	31.36	15.95	91.48	325.48	-9,467.28	9,930.79	9,887.09	43.71	227.216		
5,800.00	5,558.23	2,782.00	2,728.29	31.94	16.32	91.63	338.35	-9,477.66	9,961.34	9,916.87	44.46	224.029		
5,900.00	5,653.40	2,900.00	2,929.16	32.51	42.00	92.30	396.50	-9,525.11	9,991.76	9,927.25	64.51	154.887		
7,200.00	6,857.50	7,193.99	7,038.92	39.65	38.61	46.25	783.69	-9,866.85	9,973.34	9,900.39	72.95	136.715		
7,300.00	6,925.48	7,276.62	7,121.53	40.02	38.87	45.60	782.70	-9,865.50	9,911.46	9,837.86	73.60	134.660		
7,400.00	6,982.21	7,316.14	7,161.04	40.33	38.99	47.41	782.05	-9,864.91	9,839.05	9,764.97	74.08	132.814		
7,500.00	7,026.31	7,346.95	7,191.84	40.63	39.09	52.32	781.55	-9,864.50	9,757.95	9,683.45	74.50	130.982		
7,600.00	7,056.68	7,367.98	7,212.87	40.91	39.15	61.89	781.21	-9,864.24	9,670.07	9,595.22	74.86	129.184		
7,700.00	7,072.58	7,378.64	7,223.53	41.25	39.19	78.97	781.04	-9,864.11	9,577.53	9,502.38	75.15	127.443		
7,800.00	7,074.86	7,379.48	7,224.37	41.69	39.19	93.51	781.03	-9,864.10	9,482.62	9,407.23	75.39	125.776		
7,900.00	7,074.54	7,378.43	7,223.32	42.34	39.19	93.49	781.05	-9,864.12	9,387.53	9,311.89	75.64	124.105		
8,000.00	7,074.21	7,377.37	7,222.26	43.27	39.18	93.47	781.06	-9,864.13	9,292.53	9,216.62	75.92	122.406		
8,100.00	7,073.89	7,376.30	7,221.19	44.47	39.18	93.45	781.08	-9,864.14	9,197.65	9,121.43	76.22	120.680		
8,200.00	7,073.57	7,375.23	7,220.11	45.91	39.18	93.43	781.10	-9,864.15	9,102.87	9,026.33	76.54	118.927		
8,300.00	7,073.24	7,374.14	7,219.03	47.53	39.17	93.41	781.11	-9,864.17	9,008.21	8,931.31	76.90	117.148		
8,400.00	7,072.92	7,373.06	7,217.94	49.31	39.17	93.39	781.13	-9,864.18	8,913.66	8,836.38	77.28	115.344		
8,500.00	7,072.59	7,371.96	7,216.85	51.20	39.17	93.37	781.15	-9,864.19	8,819.23	8,741.54	77.69	113.516		
8,600.00	7,072.27	7,370.86	7,215.75	53.19	39.16	93.34	781.17	-9,864.20	8,724.92	8,646.79	78.13	111.666		
8,700.00	7,071.94	7,369.75	7,214.64	55.27	39.16	93.32	781.19	-9,864.22	8,630.75	8,552.14	78.61	109.794		
8,800.00	7,071.62	7,368.64	7,213.53	57.43	39.16	93.30	781.20	-9,864.23	8,536.70	8,457.59	79.12	107.902		
8,900.00	7,071.29	7,367.51	7,212.40	59.64	39.15	93.28	781.22	-9,864.24	8,442.80	8,363.14	79.66	105.992		
9,000.00	7,070.97	7,366.39	7,211.27	61.92	39.15	93.26	781.24	-9,864.26	8,349.03	8,268.80	80.23	104.065		
9,100.00	7,070.64	7,365.25	7,210.14	64.24	39.15	93.23	781.26	-9,864.27	8,255.41	8,174.57	80.84	102.122		
9,200.00	7,070.32	7,364.10	7,208.99	66.61	39.14	93.21	781.28	-9,864.28	8,161.94	8,080.46	81.48	100.166		
9,300.00	7,069.99	7,362.95	7,207.84	69.01	39.14	93.19	781.30	-9,864.30	8,068.63	7,986.46	82.17	98.199		
9,400.00	7,069.67	7,361.79	7,206.68	71.45	39.13	93.17	781.31	-9,864.31	7,975.48	7,892.59	82.89	96.222		
9,500.00	7,069.34	7,360.63	7,205.52	73.92	39.13	93.14	781.33	-9,864.33	7,882.50	7,798.85	83.65	94.236		
9,600.00	7,069.02	7,359.46	7,204.35	76.42	39.13	93.12	781.35	-9,864.34	7,789.69	7,705.24	84.45	92.245		
9,700.00	7,068.69	7,358.27	7,203.16	78.95	39.12	93.10	781.37	-9,864.36	7,697.06	7,611.77	85.29	90.250		
9,800.00	7,068.37	7,357.08	7,201.98	81.49	39.12	93.07	781.39	-9,864.37	7,604.61	7,518.45	86.17	88.253		
9,900.00	7,068.04	7,355.89	7,200.78	84.06	39.12	93.05	781.41	-9,864.39	7,512.36	7,425.27	87.09	86.256		
10,000.00	7,067.72	7,354.68	7,199.58	86.65	39.11	93.03	781.43	-9,864.40	7,420.31	7,332.25	88.06	84.261		
10,100.00	7,067.39	7,353.47	7,198.36	89.25	39.11	93.00	781.45	-9,864.42	7,328.47	7,239.40	89.08	82.270		
10,200.00	7,067.07	7,352.25	7,197.14	91.87	39.10	92.98	781.47	-9,864.43	7,236.85	7,146.71	90.14	80.285		
10,300.00	7,066.74	7,351.02	7,195.91	94.50	39.10	92.95	781.49	-9,864.45	7,145.45	7,054.20	91.25	78.308		
10,400.00	7,066.42	7,349.79	7,194.68	97.14	39.10	92.93	781.51	-9,864.46	7,054.28	6,961.88	92.41	76.341		
10,500.00	7,066.09	7,348.54	7,193.43	99.80	39.09	92.91	781.53	-9,864.48	6,963.36	6,869.74	93.61	74.385		
10,600.00	7,065.77	7,347.29	7,192.18	102.47	39.09	92.88	781.55	-9,864.49	6,872.68	6,777.81	94.87	72.443		
10,700.00	7,065.44	7,346.03	7,190.92	105.15	39.09	92.86	781.57	-9,864.51	6,782.27	6,686.09	96.18	70.515		
10,800.00	7,065.12	7,344.76	7,189.65	107.83	39.08	92.83	781.59	-9,864.53	6,692.13	6,594.58	97.55	68.605		
10,900.00	7,064.79	7,343.48	7,188.37	110.53	39.08	92.81	781.61	-9,864.54	6,602.28	6,503.31	98.97	66.712		
11,000.00	7,064.47	7,342.19	7,187.08	113.23	39.07	92.78	781.63	-9,864.56	6,512.72	6,412.27	100.44	64.840		
11,100.00	7,064.14	7,340.89	7,185.79	115.95	39.07	92.76	781.65	-9,864.58	6,423.46	6,321.49	101.98	62.989		
11,200.00	7,063.82	7,339.59	7,184.48	118.66	39.07	92.73	781.67	-9,864.59	6,334.53	6,230.96	103.57	61.161		
11,300.00	7,063.49	7,338.27	7,183.17	121.39	39.06	92.70	781.70	-9,864.61	6,245.93	6,140.71	105.23	59.356		
11,400.00	7,063.17	7,336.95	7,181.85	124.12	39.06	92.68	781.72	-9,864.63	6,157.69	6,050.74	106.95	57.577		

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





## Anticollision Report



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	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		
11,500.00	7,062.84	7,335.62	7,180.52	126.86	39.05	92.65	781.74	-9,864.65	6,069.80	5,961.07	108.73	55.824		
11,600.00	7,062.52	7,334.28	7,179.18	129.60	39.05	92.63	781.76	-9,864.66	5,982.30	5,871.72	110.58	54.099		
11,700.00	7,062.19	7,332.93	7,177.83	132.35	39.04	92.60	781.78	-9,864.68	5,895.19	5,782.69	112.50	52.402		
11,800.00	7,061.87	7,331.57	7,176.47	135.10	39.04	92.57	781.80	-9,864.70	5,808.50	5,694.01	114.49	50.734		
11,900.00	7,061.54	7,330.20	7,175.10	137.85	39.04	92.55	781.83	-9,864.72	5,722.24	5,605.69	116.55	49.097		
12,000.00	7,061.22	7,328.82	7,173.72	140.61	39.03	92.52	781.85	-9,864.74	5,636.44	5,517.75	118.69	47.491		
12,100.00	7,060.89	7,327.43	7,172.33	143.38	39.03	92.49	781.87	-9,864.76	5,551.11	5,430.21	120.90	45.916		
12,200.00	7,060.57	7,326.03	7,170.93	146.15	39.02	92.46	781.89	-9,864.78	5,466.28	5,343.09	123.19	44.373		
12,300.00	7,060.24	7,324.63	7,169.52	148.92	39.02	92.44	781.92	-9,864.79	5,381.96	5,256.40	125.56	42.864		
12,400.00	7,059.92	7,323.21	7,168.11	151.69	39.01	92.41	781.94	-9,864.81	5,298.20	5,170.18	128.01	41.387		
12,500.00	7,059.59	7,321.78	7,166.68	154.47	39.01	92.38	781.96	-9,864.83	5,215.00	5,084.45	130.56	39.945		
12,600.00	7,059.27	7,320.34	7,165.24	157.25	39.00	92.35	781.99	-9,864.85	5,132.41	4,999.22	133.18	38.536		
12,700.00	7,058.94	7,318.89	7,163.79	160.03	39.00	92.32	782.01	-9,864.87	5,050.44	4,914.54	135.90	37.162		
12,800.00	7,058.62	7,317.43	7,162.33	162.82	39.00	92.29	782.03	-9,864.89	4,969.13	4,830.42	138.71	35.823		
12,900.00	7,058.29	7,315.96	7,160.86	165.61	38.99	92.27	782.06	-9,864.92	4,888.52	4,746.90	141.62	34.519		
13,000.00	7,057.97	7,314.48	7,159.38	168.40	38.99	92.24	782.08	-9,864.94	4,808.63	4,664.01	144.62	33.250		
13,100.00	7,057.64	7,312.99	7,157.89	171.19	38.98	92.21	782.11	-9,864.96	4,729.51	4,581.78	147.72	32.016		
13,200.00	7,057.32	7,311.49	7,156.39	173.99	38.98	92.18	782.13	-9,864.98	4,651.19	4,500.26	150.93	30.817		
13,300.00	7,057.00	7,309.97	7,154.88	176.78	38.97	92.15	782.15	-9,865.00	4,573.72	4,419.48	154.24	29.653		
13,400.00	7,056.67	7,308.45	7,153.35	179.58	38.97	92.12	782.18	-9,865.02	4,497.13	4,339.48	157.65	28.525		
13,500.00	7,056.35	7,306.91	7,151.82	182.38	38.96	92.09	782.20	-9,865.04	4,421.48	4,260.30	161.18	27.432		
13,600.00	7,056.02	7,305.37	7,150.27	185.19	38.96	92.06	782.23	-9,865.07	4,346.81	4,182.00	164.81	26.375		
13,700.00	7,055.70	7,303.81	7,148.71	187.99	38.95	92.03	782.25	-9,865.09	4,273.18	4,104.63	168.55	25.352		
13,800.00	7,055.37	7,302.24	7,147.14	190.80	38.95	92.00	782.28	-9,865.11	4,200.64	4,028.23	172.41	24.364		
13,900.00	7,055.05	7,300.66	7,145.56	193.60	38.94	91.97	782.31	-9,865.14	4,129.24	3,952.86	176.38	23.411		
14,000.00	7,054.72	7,299.06	7,143.97	196.41	38.94	91.93	782.33	-9,865.16	4,059.05	3,878.59	180.46	22.493		
14,100.00	7,054.40	7,297.45	7,142.36	199.22	38.93	91.90	782.36	-9,865.18	3,990.14	3,805.48	184.66	21.608		
14,200.00	7,054.07	7,295.84	7,140.74	202.03	38.93	91.87	782.38	-9,865.21	3,922.56	3,733.59	188.96	20.758		
14,300.00	7,053.75	7,294.21	7,139.11	204.85	38.92	91.84	782.41	-9,865.23	3,856.39	3,663.01	193.38	19.942		
14,400.00	7,053.42	7,301.37	7,146.27	207.66	38.95	91.98	782.26	-9,865.12	3,791.68	3,593.74	197.93	19.156		
14,500.00	7,053.10	7,298.78	7,143.69	210.48	38.94	91.93	782.31	-9,865.16	3,728.55	3,525.99	202.56	18.407		
14,600.00	7,052.77	7,296.19	7,141.09	213.29	38.93	91.88	782.36	-9,865.20	3,667.06	3,459.77	207.29	17.691		
14,700.00	7,052.45	7,293.59	7,138.49	216.11	38.92	91.83	782.40	-9,865.24	3,607.30	3,395.19	212.11	17.007		
14,800.00	7,052.12	7,290.97	7,135.88	218.93	38.91	91.78	782.45	-9,865.28	3,549.35	3,332.32	217.02	16.355		
14,900.00	7,051.80	7,288.35	7,133.26	221.75	38.90	91.72	782.50	-9,865.32	3,493.29	3,271.28	222.01	15.735		
15,000.00	7,051.47	7,285.72	7,130.63	224.57	38.90	91.67	782.54	-9,865.36	3,439.23	3,212.16	227.07	15.146		
15,100.00	7,051.15	7,283.09	7,127.99	227.39	38.89	91.62	782.59	-9,865.40	3,387.26	3,155.07	232.20	14.588		
15,145.13	7,051.00	7,281.89	7,126.80	228.67	38.88	91.60	782.61	-9,865.42	3,364.52	3,130.00	234.52	14.346 CC, ES, SF		

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



<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Reference Site:</b>	HARVESTERS STATE 7-15 PAD	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Reference Depths are relative to KB @ 4820.00ft

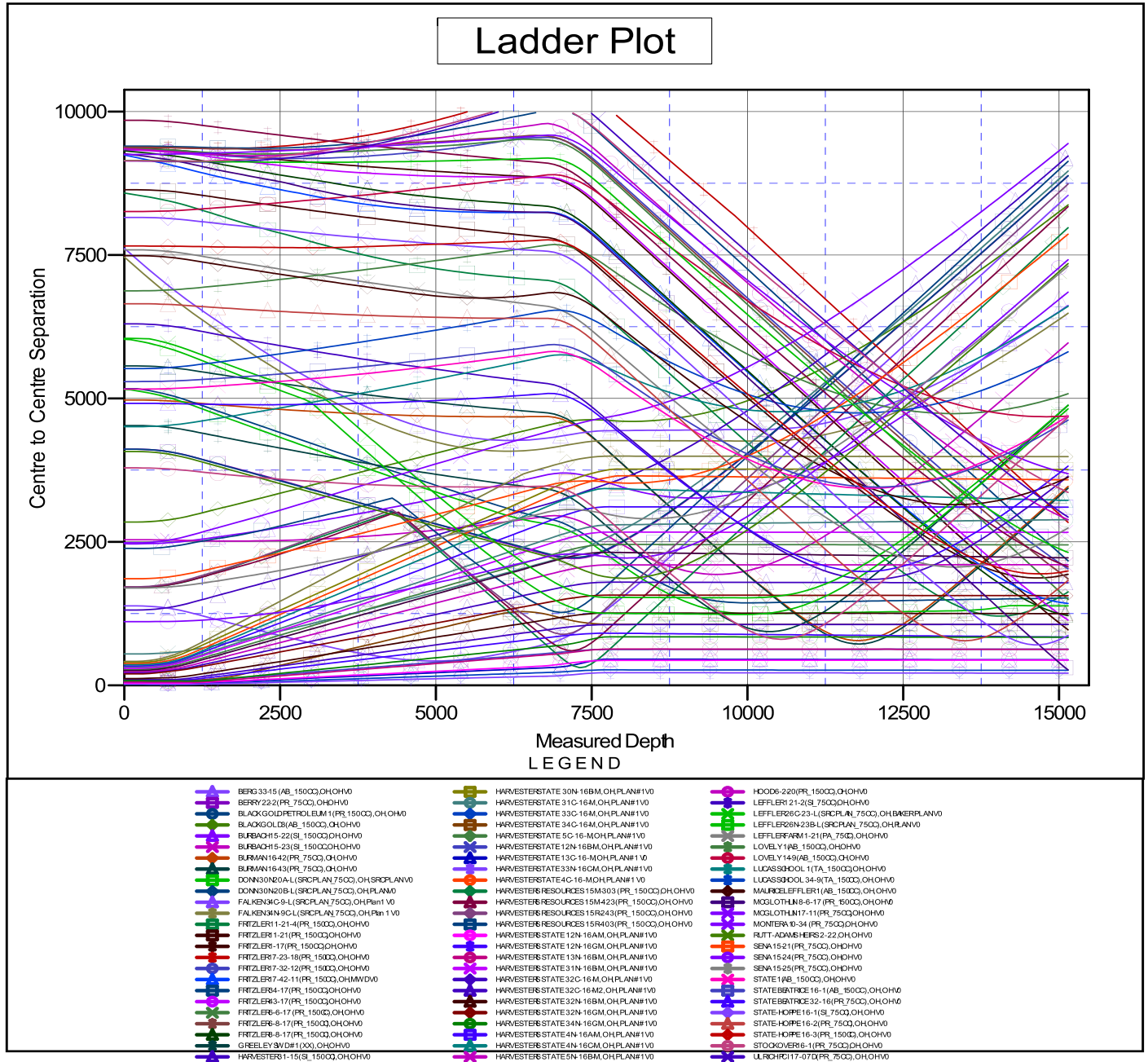
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 33N-16B-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°



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

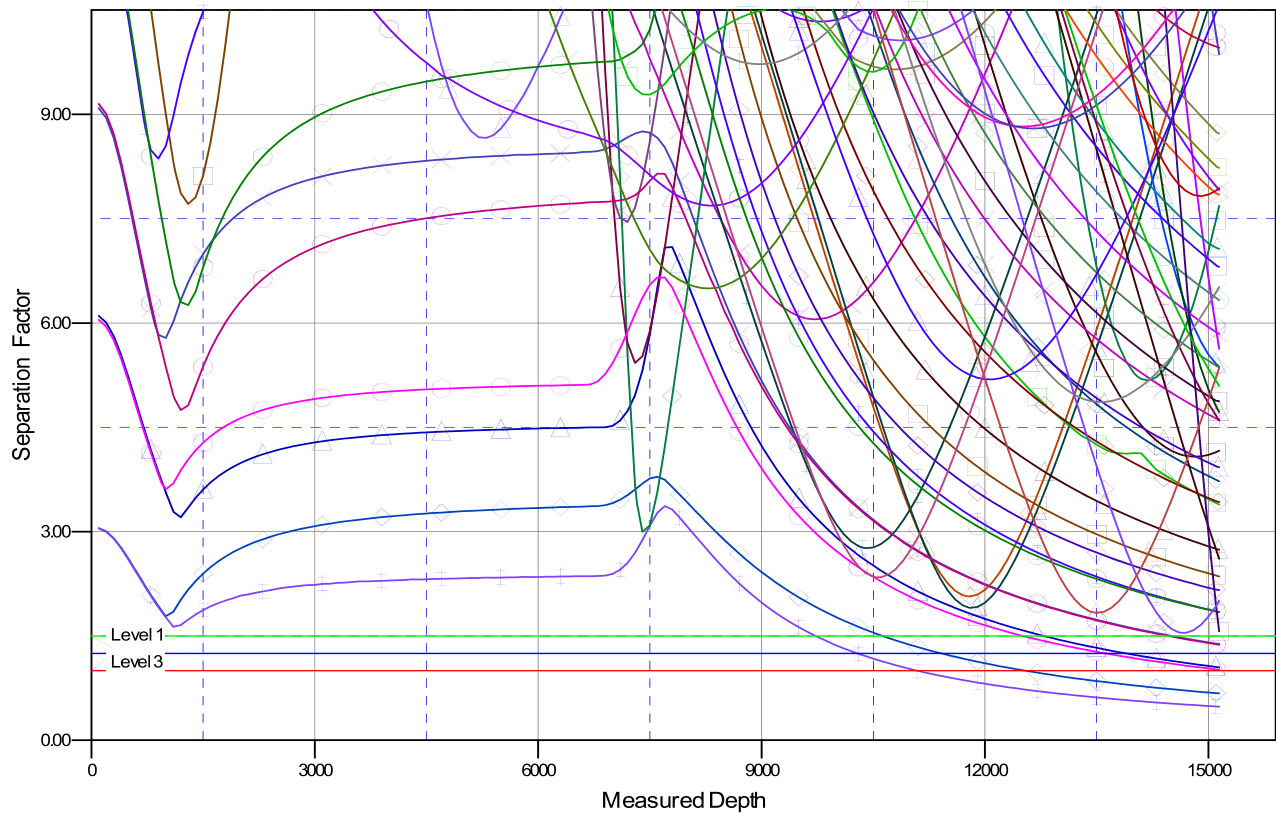


<b>Company:</b>	SRC ENERGY	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 33N-16B-M
<b>Project:</b>	SECTION 15, T6N, R66W	<b>TVD Reference:</b>	KB @ 4820.00ft
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<b>Site Error:</b>	3.28 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HARVESTERS STATE 33N-16B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.28 ft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	PLAN #1	<b>Offset TVD Reference:</b>	Reference Datum

Reference Depths are relative to KB @ 4820.00ft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 33N-16B-M  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.48°

## Separation Factor Plot



### LEGEND

BERG 33-15 (AB, 1500Q, OH, OHV0)	HARVESTER STATE 30N-16BM, OH, PLAN#1V0	H006-220 (PR, 1500Q, OH, OHV0)
BERR 22-2 (PR, 750Q, OH, OHV0)	HARVESTER STATE 31C-16M, OH, PLAN#1V0	LEFFLER 21-2 (SL, 750Q, OH, OHV0)
BLACK GOLD PETROLEUM 1 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 33C-16M, OH, PLAN#1V0	LEFFLER 26-23-L (SRC, PLAN, 750Q, OH, BAKER, PLANV0)
BURBACH 15-22 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 34C-16M, OH, PLAN#1V0	LEFFLER 26N-23B-L (SRC, PLAN, 750Q, OH, PLANV0)
BURBACH 15-23 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 5C-16-M, OH, PLAN#1V0	LEFFLER FARM 1-21 (PA, 750Q, OH, OHV0)
BURMAN 16-42 (PR, 750Q, OH, OHV0)	HARVESTER STATE 12N-16BM, OH, PLAN#1V0	LOVELY 1 (AB, 1500Q, OH, OHV0)
BURMAN 16-43 (PR, 750Q, OH, OHV0)	HARVESTER STATE 13C-16-M, OH, PLAN#1V0	LOVELY 149 (AB, 1500Q, OH, OHV0)
DOHN 02-04-L (SRC, PLAN, 750Q, OH, SRC, PLANV0)	HARVESTER STATE 33N-16CM, OH, PLAN#1V0	LUCAS SCHOOL 1 (TA, 1500Q, OH, OHV0)
DOHN 02-08-L (SRC, PLAN, 750Q, OH, PLANV0)	HARVESTER STATE 4C-16-M, OH, PLAN#1V0	LUCAS SCHOOL 34-9 (TA, 1500Q, OH, OHV0)
FALKEN 31-9-L (SRC, PLAN, 750Q, OH, PLANV0)	HARVESTER RESOURCES 15M303 (PR, 1500Q, OH, OHV0)	MAIRCE LEFFLER 1 (AB, 1500Q, OH, OHV0)
FALKEN 31-9-L (SRC, PLAN, 750Q, OH, PLANV0)	HARVESTER RESOURCES 15M423 (PR, 1500Q, OH, OHV0)	MOGLOTHUN 6-17 (PR, 600Q, OH, OHV0)
FALKEN 31-9-L (SRC, PLAN, 750Q, OH, PLANV0)	HARVESTER RESOURCES 15R243 (PR, 1500Q, OH, OHV0)	MOGLOTHUN 17-11 (PR, 750Q, OH, OHV0)
FRTZLER 11-21 (PR, 1500Q, OH, OHV0)	HARVESTER RESOURCES 15R403 (PR, 1500Q, OH, OHV0)	MONTERA 10-34 (PR, 750Q, OH, OHV0)
FRTZLER 11-21 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 12N-16AM, OH, PLAN#1V0	RUTT-ADAMS HERS 2-22 (OH, OHV0)
FRTZLER 16-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 12N-16GM, OH, PLAN#1V0	SENA 15-21 (PR, 750Q, OH, OHV0)
FRTZLER 17-23-16 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 13N-16BM, OH, PLAN#1V0	SENA 15-24 (PR, 750Q, OH, OHV0)
FRTZLER 17-32-12 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 31N-16BM, OH, PLAN#1V0	SENA 15-25 (PR, 750Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, MW, DV0)	HARVESTER STATE 32C-16M, OH, PLAN#1V0	STATE 1 (AB, 1500Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32C-16M2, OH, PLAN#1V0	STATEBATRICE 16-11 (AB, 1500Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32N-16BM, OH, PLAN#1V0	STATEBATRICE 32-16 (PR, 750Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32N-16GM, OH, PLAN#1V0	STATE-HOPE 16-1 (SL, 750Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 34N-16CM, OH, PLAN#1V0	STATE-HOPE 16-2 (PR, 750Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 4N-16AM, OH, PLAN#1V0	STATE-HOPE 16-3 (PR, 1500Q, OH, OHV0)
GRIELEY 30-01 (XX, OH, OHV0)	HARVESTER STATE 4N-16CM, OH, PLAN#1V0	STOCKOVER 6-11 (PR, 750Q, OH, OHV0)
HARVESTER 11-15 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 5N-16BM, OH, PLAN#1V0	ULRICH 17-07 (PR, 750Q, OH, OHV0)