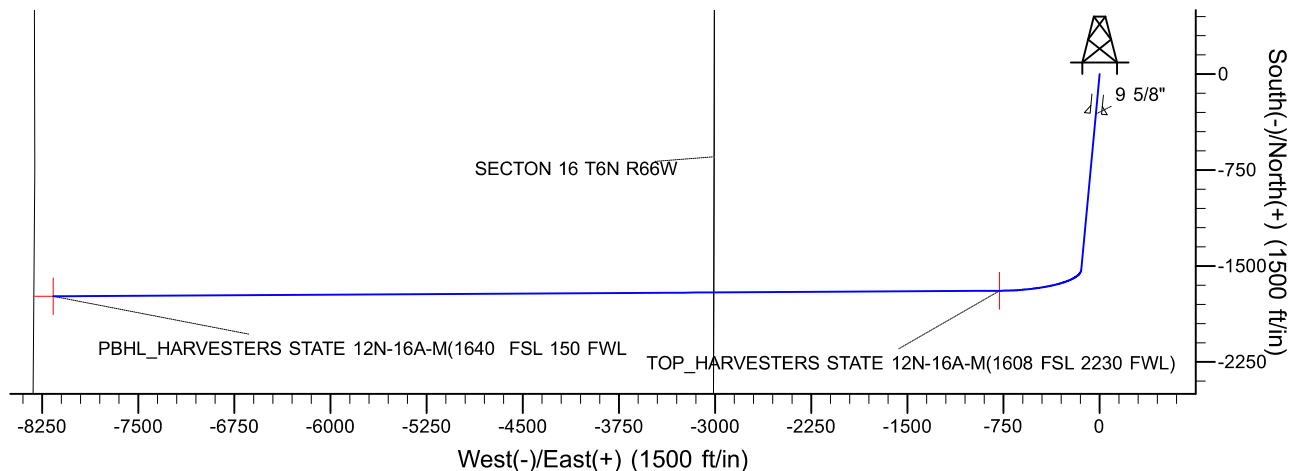
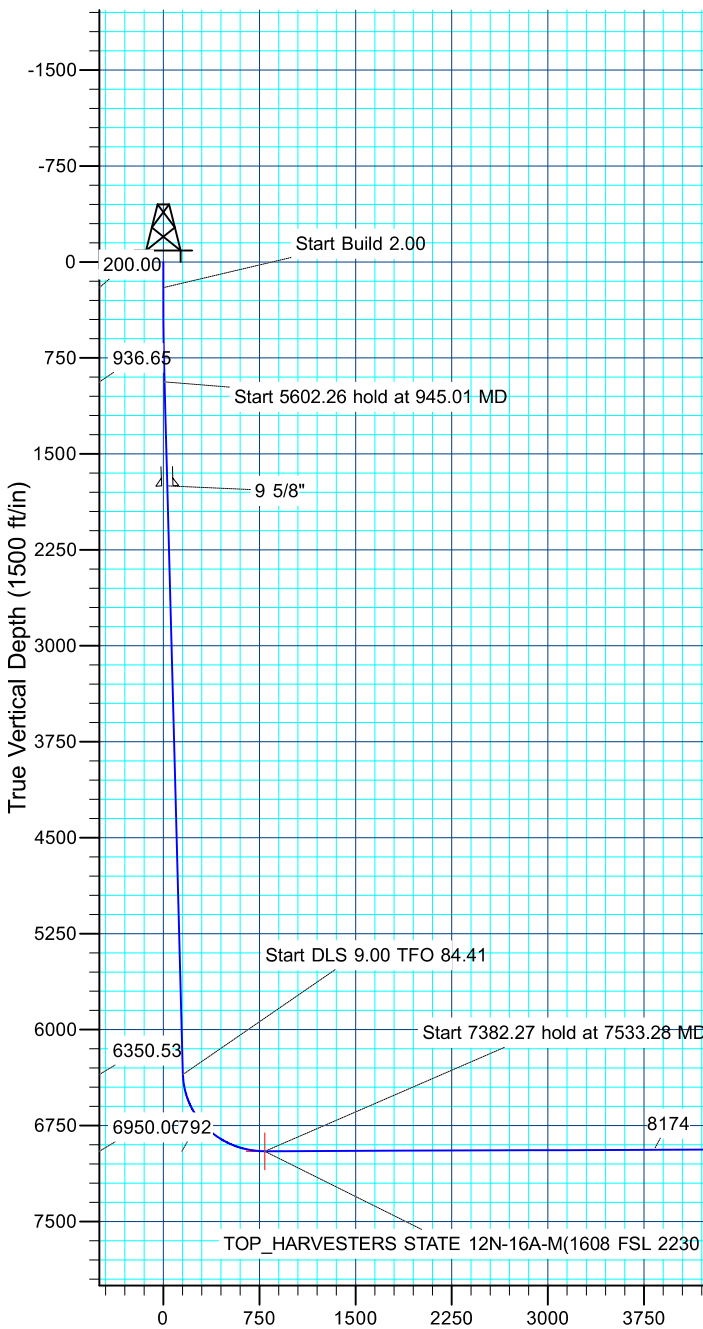
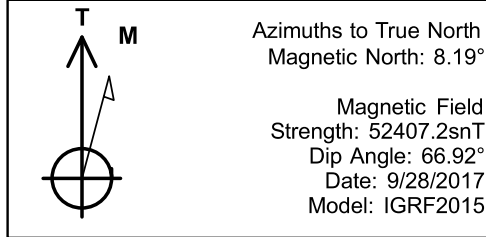




Project: SECTION 15, T6N, R66W  
Site: HARVESTERS STATE 7-15 PAD  
Well: HARVESTERS STATE 12N-16A-M  
Wellbore: OH  
Design: PLAN #1  
Lat: 40.4901870  
Long: -104.7625170



DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
PBHL	6922.00	-1737.46	-8164.00	1420463.23	3196971.79	40.4854140	-104.7918670	Point	
TOP	- plan hits target center								
	6950.00	-1693.27	-781.91	1420568.83	3204353.25	40.4855390	-104.7653280	Point	
	- plan misses target center by 0.01ft at 7533.27ft MD (6950.00 TVD, -1693.27 N, -781.91 E)								
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
945.01	14.90	185.38	936.65	-95.90	-9.03	2.00	185.38	9.61	
6547.28	14.90	185.38	6350.53	-1530.11	-144.13	0.00	0.00	153.29	
7533.28	90.22	269.66	6950.00	-1693.27	-781.91	9.00	84.41	792.04	
14915.55	90.22	269.66	6922.00	-1737.46	-8164.00	0.00	0.00	8174.25	PBHL
CASING DETAILS						PROJECT DETAILS: SECTION 15, T6N, R66W			
TVD	MD	Name	Size	Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone Colorado Northern Zone System Datum: Mean Sea Level					
1750.00	1786.67	9 5/8"	9.625						
TD at 14915.55									



# **SRC ENERGY**

**SECTION 15, T6N, R66W  
HARVESTERS STATE 7-15 PAD  
HARVESTERS STATE 12N-16A-M**

**OH**

**Plan: PLAN #1**

## **Standard Planning Report**

**02 October, 2017**





<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 12N-16A-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 12N-16A-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<b>Project</b>	SECTION 15, T6N, R66W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	HARVESTERS STATE 7-15 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,422,648.53 usft	<b>Latitude:</b> 40.4912300
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,205,120.94 usft	<b>Longitude:</b> -104.7625060
<b>Position Uncertainty:</b>	3.28 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 0.48 °

<b>Well</b>	HARVESTERS STATE 12N-16A-M, 1973' FNL & 2336' FEL			
<b>Well Position</b>	<b>+N/-S</b>	-379.98 ft	<b>Northing:</b>	1,422,268.53 usft
	<b>+E/-W</b>	-3.06 ft	<b>Easting:</b>	3,205,121.04 usft
<b>Position Uncertainty</b>		3.28 ft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 40.4901870
				<b>Longitude:</b> -104.7625170
				<b>Ground Level:</b> 4,800.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	9/28/2017	8.19	66.92	52,407

<b>Design</b>	PLAN #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	269.66

<b>Plan Survey Tool Program</b>	<b>Date</b>	10/2/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	14,915.54	PLAN #1 (OH)	MWD+IFR1
				OWSG MWD + IFR1

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
945.02	14.90	185.38	936.65	-95.90	-9.03	2.00	2.00	0.00	185.38	
6,547.28	14.90	185.38	6,350.53	-1,530.11	-144.13	0.00	0.00	0.00	0.00	
7,533.28	90.22	269.66	6,950.00	-1,693.27	-781.91	9.00	7.64	8.55	84.41	
14,915.55	90.22	269.66	6,922.00	-1,737.46	-8,164.00	0.00	0.00	0.00	0.00	PBHL_HARVESTERS

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 12N-16A-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 12N-16A-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
300.00	2.00	185.38	299.98	-1.74	-0.16	0.17	2.00	2.00	0.00
400.00	4.00	185.38	399.84	-6.95	-0.65	0.70	2.00	2.00	0.00
500.00	6.00	185.38	499.45	-15.62	-1.47	1.57	2.00	2.00	0.00
600.00	8.00	185.38	598.70	-27.76	-2.61	2.78	2.00	2.00	0.00
700.00	10.00	185.38	697.47	-43.33	-4.08	4.34	2.00	2.00	0.00
800.00	12.00	185.38	795.62	-62.33	-5.87	6.24	2.00	2.00	0.00
900.00	14.00	185.38	893.06	-84.72	-7.98	8.49	2.00	2.00	0.00
945.02	14.90	185.38	936.65	-95.90	-9.03	9.61	2.00	2.00	0.00
<b>Start 5602.26 hold at 945.01 MD</b>									
1,000.00	14.90	185.38	989.78	-109.98	-10.36	11.02	0.00	0.00	0.00
1,100.00	14.90	185.38	1,086.42	-135.58	-12.77	13.58	0.00	0.00	0.00
1,200.00	14.90	185.38	1,183.06	-161.18	-15.18	16.15	0.00	0.00	0.00
1,300.00	14.90	185.38	1,279.69	-186.78	-17.59	18.71	0.00	0.00	0.00
1,400.00	14.90	185.38	1,376.33	-212.38	-20.01	21.28	0.00	0.00	0.00
1,500.00	14.90	185.38	1,472.97	-237.98	-22.42	23.84	0.00	0.00	0.00
1,600.00	14.90	185.38	1,569.61	-263.58	-24.83	26.41	0.00	0.00	0.00
1,700.00	14.90	185.38	1,666.24	-289.18	-27.24	28.97	0.00	0.00	0.00
1,786.67	14.90	185.38	1,750.00	-311.37	-29.33	31.19	0.00	0.00	0.00
<b>9 5/8"</b>									
1,800.00	14.90	185.38	1,762.88	-314.78	-29.65	31.54	0.00	0.00	0.00
1,900.00	14.90	185.38	1,859.52	-340.39	-32.06	34.10	0.00	0.00	0.00
2,000.00	14.90	185.38	1,956.16	-365.99	-34.48	36.67	0.00	0.00	0.00
2,100.00	14.90	185.38	2,052.79	-391.59	-36.89	39.23	0.00	0.00	0.00
2,200.00	14.90	185.38	2,149.43	-417.19	-39.30	41.80	0.00	0.00	0.00
2,300.00	14.90	185.38	2,246.07	-442.79	-41.71	44.36	0.00	0.00	0.00
2,400.00	14.90	185.38	2,342.71	-468.39	-44.12	46.92	0.00	0.00	0.00
2,500.00	14.90	185.38	2,439.34	-493.99	-46.53	49.49	0.00	0.00	0.00
2,600.00	14.90	185.38	2,535.98	-519.59	-48.94	52.05	0.00	0.00	0.00
2,700.00	14.90	185.38	2,632.62	-545.19	-51.36	54.62	0.00	0.00	0.00
2,800.00	14.90	185.38	2,729.26	-570.79	-53.77	57.18	0.00	0.00	0.00
2,900.00	14.90	185.38	2,825.89	-596.39	-56.18	59.75	0.00	0.00	0.00
3,000.00	14.90	185.38	2,922.53	-621.99	-58.59	62.31	0.00	0.00	0.00
3,100.00	14.90	185.38	3,019.17	-647.59	-61.00	64.88	0.00	0.00	0.00
3,200.00	14.90	185.38	3,115.81	-673.19	-63.41	67.44	0.00	0.00	0.00
3,300.00	14.90	185.38	3,212.44	-698.79	-65.83	70.01	0.00	0.00	0.00
3,400.00	14.90	185.38	3,309.08	-724.39	-68.24	72.57	0.00	0.00	0.00
3,500.00	14.90	185.38	3,405.72	-749.99	-70.65	75.14	0.00	0.00	0.00
3,600.00	14.90	185.38	3,502.36	-775.59	-73.06	77.70	0.00	0.00	0.00
3,700.00	14.90	185.38	3,598.99	-801.19	-75.47	80.27	0.00	0.00	0.00
3,800.00	14.90	185.38	3,695.63	-826.79	-77.88	82.83	0.00	0.00	0.00
3,900.00	14.90	185.38	3,792.27	-852.39	-80.29	85.40	0.00	0.00	0.00
4,000.00	14.90	185.38	3,888.91	-877.99	-82.71	87.96	0.00	0.00	0.00
4,100.00	14.90	185.38	3,985.54	-903.60	-85.12	90.53	0.00	0.00	0.00
4,200.00	14.90	185.38	4,082.18	-929.20	-87.53	93.09	0.00	0.00	0.00
4,300.00	14.90	185.38	4,178.82	-954.80	-89.94	95.65	0.00	0.00	0.00
4,400.00	14.90	185.38	4,275.46	-980.40	-92.35	98.22	0.00	0.00	0.00
4,500.00	14.90	185.38	4,372.09	-1,006.00	-94.76	100.78	0.00	0.00	0.00
4,600.00	14.90	185.38	4,468.73	-1,031.60	-97.17	103.35	0.00	0.00	0.00
4,700.00	14.90	185.38	4,565.37	-1,057.20	-99.59	105.91	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 12N-16A-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 12N-16A-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,800.00	14.90	185.38	4,662.01	-1,082.80	-102.00	108.48	0.00	0.00	0.00
4,900.00	14.90	185.38	4,758.64	-1,108.40	-104.41	111.04	0.00	0.00	0.00
5,000.00	14.90	185.38	4,855.28	-1,134.00	-106.82	113.61	0.00	0.00	0.00
5,100.00	14.90	185.38	4,951.92	-1,159.60	-109.23	116.17	0.00	0.00	0.00
5,200.00	14.90	185.38	5,048.56	-1,185.20	-111.64	118.74	0.00	0.00	0.00
5,300.00	14.90	185.38	5,145.19	-1,210.80	-114.06	121.30	0.00	0.00	0.00
5,400.00	14.90	185.38	5,241.83	-1,236.40	-116.47	123.87	0.00	0.00	0.00
5,500.00	14.90	185.38	5,338.47	-1,262.00	-118.88	126.43	0.00	0.00	0.00
5,600.00	14.90	185.38	5,435.11	-1,287.60	-121.29	129.00	0.00	0.00	0.00
5,700.00	14.90	185.38	5,531.74	-1,313.20	-123.70	131.56	0.00	0.00	0.00
5,800.00	14.90	185.38	5,628.38	-1,338.80	-126.11	134.13	0.00	0.00	0.00
5,900.00	14.90	185.38	5,725.02	-1,364.40	-128.52	136.69	0.00	0.00	0.00
6,000.00	14.90	185.38	5,821.66	-1,390.00	-130.94	139.26	0.00	0.00	0.00
6,100.00	14.90	185.38	5,918.29	-1,415.60	-133.35	141.82	0.00	0.00	0.00
6,200.00	14.90	185.38	6,014.93	-1,441.20	-135.76	144.38	0.00	0.00	0.00
6,300.00	14.90	185.38	6,111.57	-1,466.81	-138.17	146.95	0.00	0.00	0.00
6,400.00	14.90	185.38	6,208.21	-1,492.41	-140.58	149.51	0.00	0.00	0.00
6,500.00	14.90	185.38	6,304.84	-1,518.01	-142.99	152.08	0.00	0.00	0.00
6,547.28	14.90	185.38	6,350.53	-1,530.11	-144.13	153.29	0.00	0.00	0.00
<b>Start DLS 9.00 TFO 84.41</b>									
6,600.00	16.06	202.70	6,401.37	-1,543.59	-147.59	156.82	9.00	2.19	32.85
6,700.00	21.13	226.37	6,496.25	-1,568.84	-166.01	175.40	9.00	5.08	23.67
6,800.00	28.17	239.97	6,587.15	-1,593.14	-199.56	209.10	9.00	7.04	13.60
6,900.00	36.04	248.26	6,671.83	-1,615.89	-247.42	257.09	9.00	7.87	8.29
7,000.00	44.29	253.85	6,748.21	-1,636.54	-308.41	318.20	9.00	8.25	5.59
7,100.00	52.75	257.98	6,814.41	-1,654.57	-381.02	390.92	9.00	8.45	4.13
7,200.00	61.32	261.27	6,868.79	-1,669.54	-463.47	473.46	9.00	8.57	3.29
7,300.00	69.95	264.06	6,910.01	-1,681.09	-553.73	563.79	9.00	8.64	2.78
7,400.00	78.63	266.55	6,937.07	-1,688.92	-649.58	659.68	9.00	8.68	2.49
7,500.00	87.32	268.89	6,949.29	-1,692.85	-748.65	758.77	9.00	8.70	2.34
7,533.28	90.22	269.66	6,950.00	-1,693.27	-781.91	792.03	9.00	8.70	2.30
<b>TOP HARVESTERS STATE 12N-16A-M(1608 FSL 2230 FWL)</b>									
7,533.28	90.22	269.66	6,950.00	-1,693.27	-781.91	792.04	9.00	8.70	2.30
<b>Start 7382.27 hold at 7533.28 MD</b>									
7,600.00	90.22	269.66	6,949.75	-1,693.67	-848.63	858.75	0.00	0.00	0.00
7,700.00	90.22	269.66	6,949.37	-1,694.27	-948.63	958.75	0.00	0.00	0.00
7,800.00	90.22	269.66	6,948.99	-1,694.87	-1,048.62	1,058.75	0.00	0.00	0.00
7,900.00	90.22	269.66	6,948.61	-1,695.47	-1,148.62	1,158.75	0.00	0.00	0.00
8,000.00	90.22	269.66	6,948.23	-1,696.07	-1,248.62	1,258.75	0.00	0.00	0.00
8,100.00	90.22	269.66	6,947.85	-1,696.66	-1,348.62	1,358.75	0.00	0.00	0.00
8,200.00	90.22	269.66	6,947.47	-1,697.26	-1,448.61	1,458.75	0.00	0.00	0.00
8,300.00	90.22	269.66	6,947.09	-1,697.86	-1,548.61	1,558.75	0.00	0.00	0.00
8,400.00	90.22	269.66	6,946.72	-1,698.46	-1,648.61	1,658.75	0.00	0.00	0.00
8,500.00	90.22	269.66	6,946.34	-1,699.06	-1,748.61	1,758.75	0.00	0.00	0.00
8,600.00	90.22	269.66	6,945.96	-1,699.66	-1,848.60	1,858.75	0.00	0.00	0.00
8,700.00	90.22	269.66	6,945.58	-1,700.26	-1,948.60	1,958.75	0.00	0.00	0.00
8,800.00	90.22	269.66	6,945.20	-1,700.85	-2,048.60	2,058.74	0.00	0.00	0.00
8,900.00	90.22	269.66	6,944.82	-1,701.45	-2,148.60	2,158.74	0.00	0.00	0.00
9,000.00	90.22	269.66	6,944.44	-1,702.05	-2,248.59	2,258.74	0.00	0.00	0.00
9,100.00	90.22	269.66	6,944.06	-1,702.65	-2,348.59	2,358.74	0.00	0.00	0.00
9,200.00	90.22	269.66	6,943.68	-1,703.25	-2,448.59	2,458.74	0.00	0.00	0.00
9,300.00	90.22	269.66	6,943.30	-1,703.85	-2,548.59	2,558.74	0.00	0.00	0.00
9,400.00	90.22	269.66	6,942.92	-1,704.45	-2,648.58	2,658.74	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 12N-16A-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 12N-16A-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,500.00	90.22	269.66	6,942.54	-1,705.04	-2,748.58	2,758.74	0.00	0.00	0.00	
9,600.00	90.22	269.66	6,942.16	-1,705.64	-2,848.58	2,858.74	0.00	0.00	0.00	
9,700.00	90.22	269.66	6,941.78	-1,706.24	-2,948.58	2,958.74	0.00	0.00	0.00	
9,800.00	90.22	269.66	6,941.40	-1,706.84	-3,048.57	3,058.74	0.00	0.00	0.00	
9,900.00	90.22	269.66	6,941.03	-1,707.44	-3,148.57	3,158.74	0.00	0.00	0.00	
10,000.00	90.22	269.66	6,940.65	-1,708.04	-3,248.57	3,258.74	0.00	0.00	0.00	
10,100.00	90.22	269.66	6,940.27	-1,708.64	-3,348.57	3,358.74	0.00	0.00	0.00	
10,200.00	90.22	269.66	6,939.89	-1,709.24	-3,448.56	3,458.73	0.00	0.00	0.00	
10,300.00	90.22	269.66	6,939.51	-1,709.83	-3,548.56	3,558.73	0.00	0.00	0.00	
10,400.00	90.22	269.66	6,939.13	-1,710.43	-3,648.56	3,658.73	0.00	0.00	0.00	
10,500.00	90.22	269.66	6,938.75	-1,711.03	-3,748.56	3,758.73	0.00	0.00	0.00	
10,600.00	90.22	269.66	6,938.37	-1,711.63	-3,848.55	3,858.73	0.00	0.00	0.00	
10,700.00	90.22	269.66	6,937.99	-1,712.23	-3,948.55	3,958.73	0.00	0.00	0.00	
10,800.00	90.22	269.66	6,937.61	-1,712.83	-4,048.55	4,058.73	0.00	0.00	0.00	
10,900.00	90.22	269.66	6,937.23	-1,713.43	-4,148.55	4,158.73	0.00	0.00	0.00	
11,000.00	90.22	269.66	6,936.85	-1,714.02	-4,248.54	4,258.73	0.00	0.00	0.00	
11,100.00	90.22	269.66	6,936.47	-1,714.62	-4,348.54	4,358.73	0.00	0.00	0.00	
11,200.00	90.22	269.66	6,936.09	-1,715.22	-4,448.54	4,458.73	0.00	0.00	0.00	
11,300.00	90.22	269.66	6,935.71	-1,715.82	-4,548.54	4,558.73	0.00	0.00	0.00	
11,400.00	90.22	269.66	6,935.34	-1,716.42	-4,648.53	4,658.73	0.00	0.00	0.00	
11,500.00	90.22	269.66	6,934.96	-1,717.02	-4,748.53	4,758.73	0.00	0.00	0.00	
11,600.00	90.22	269.66	6,934.58	-1,717.62	-4,848.53	4,858.72	0.00	0.00	0.00	
11,700.00	90.22	269.66	6,934.20	-1,718.22	-4,948.53	4,958.72	0.00	0.00	0.00	
11,800.00	90.22	269.66	6,933.82	-1,718.81	-5,048.52	5,058.72	0.00	0.00	0.00	
11,900.00	90.22	269.66	6,933.44	-1,719.41	-5,148.52	5,158.72	0.00	0.00	0.00	
12,000.00	90.22	269.66	6,933.06	-1,720.01	-5,248.52	5,258.72	0.00	0.00	0.00	
12,100.00	90.22	269.66	6,932.68	-1,720.61	-5,348.52	5,358.72	0.00	0.00	0.00	
12,200.00	90.22	269.66	6,932.30	-1,721.21	-5,448.51	5,458.72	0.00	0.00	0.00	
12,300.00	90.22	269.66	6,931.92	-1,721.81	-5,548.51	5,558.72	0.00	0.00	0.00	
12,400.00	90.22	269.66	6,931.54	-1,722.41	-5,648.51	5,658.72	0.00	0.00	0.00	
12,500.00	90.22	269.66	6,931.16	-1,723.00	-5,748.51	5,758.72	0.00	0.00	0.00	
12,600.00	90.22	269.66	6,930.78	-1,723.60	-5,848.50	5,858.72	0.00	0.00	0.00	
12,700.00	90.22	269.66	6,930.40	-1,724.20	-5,948.50	5,958.72	0.00	0.00	0.00	
12,800.00	90.22	269.66	6,930.03	-1,724.80	-6,048.50	6,058.72	0.00	0.00	0.00	
12,900.00	90.22	269.66	6,929.65	-1,725.40	-6,148.50	6,158.72	0.00	0.00	0.00	
13,000.00	90.22	269.66	6,929.27	-1,726.00	-6,248.49	6,258.71	0.00	0.00	0.00	
13,100.00	90.22	269.66	6,928.89	-1,726.60	-6,348.49	6,358.71	0.00	0.00	0.00	
13,200.00	90.22	269.66	6,928.51	-1,727.19	-6,448.49	6,458.71	0.00	0.00	0.00	
13,300.00	90.22	269.66	6,928.13	-1,727.79	-6,548.49	6,558.71	0.00	0.00	0.00	
13,400.00	90.22	269.66	6,927.75	-1,728.39	-6,648.48	6,658.71	0.00	0.00	0.00	
13,500.00	90.22	269.66	6,927.37	-1,728.99	-6,748.48	6,758.71	0.00	0.00	0.00	
13,600.00	90.22	269.66	6,926.99	-1,729.59	-6,848.48	6,858.71	0.00	0.00	0.00	
13,700.00	90.22	269.66	6,926.61	-1,730.19	-6,948.48	6,958.71	0.00	0.00	0.00	
13,800.00	90.22	269.66	6,926.23	-1,730.79	-7,048.47	7,058.71	0.00	0.00	0.00	
13,900.00	90.22	269.66	6,925.85	-1,731.39	-7,148.47	7,158.71	0.00	0.00	0.00	
14,000.00	90.22	269.66	6,925.47	-1,731.98	-7,248.47	7,258.71	0.00	0.00	0.00	
14,100.00	90.22	269.66	6,925.09	-1,732.58	-7,348.47	7,358.71	0.00	0.00	0.00	
14,200.00	90.22	269.66	6,924.71	-1,733.18	-7,448.46	7,458.71	0.00	0.00	0.00	
14,300.00	90.22	269.66	6,924.34	-1,733.78	-7,548.46	7,558.71	0.00	0.00	0.00	
14,400.00	90.22	269.66	6,923.96	-1,734.38	-7,648.46	7,658.70	0.00	0.00	0.00	
14,500.00	90.22	269.66	6,923.58	-1,734.98	-7,748.46	7,758.70	0.00	0.00	0.00	
14,600.00	90.22	269.66	6,923.20	-1,735.58	-7,848.45	7,858.70	0.00	0.00	0.00	
14,700.00	90.22	269.66	6,922.82	-1,736.17	-7,948.45	7,958.70	0.00	0.00	0.00	
14,800.00	90.22	269.66	6,922.44	-1,736.77	-8,048.45	8,058.70	0.00	0.00	0.00	

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 12N-16A-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4820.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4820.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 12N-16A-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,900.00	90.22	269.66	6,922.06	-1,737.37	-8,148.45	8,158.70	0.00	0.00	0.00
14,915.55	90.22	269.66	6,922.00	-1,737.46	-8,164.00	8,174.25	0.00	0.00	0.00
TD at 14915.55 - PBHL_HARVESTERS STATE 12N-16A-M(1640 FSL 150 FWL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_HARVESTERS S	0.00	0.00	6,922.00	-1,737.46	-8,164.00	1,420,463.24	3,196,971.80	40.4854140	-104.7918670
- plan hits target center									
- Point									
TOP_HARVESTERS ST	0.00	0.00	6,950.00	-1,693.27	-781.91	1,420,568.83	3,204,353.25	40.4855390	-104.7653280
- plan misses target center by 0.01ft at 7533.27ft MD (6950.00 TVD, -1693.27 N, -781.91 E)									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,786.67	1,750.00	9 5/8"	9.625	13.500	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	Start Build 2.00
945.02	936.65	-95.90	-9.03	Start 5602.26 hold at 945.01 MD
6,547.28	6,350.53	-1,530.11	-144.13	Start DLS 9.00 TFO 84.41
7,533.28	6,950.00	-1,693.27	-781.91	Start 7382.27 hold at 7533.28 MD
14,915.55	6,922.00	-1,737.46	-8,164.00	TD at 14915.55