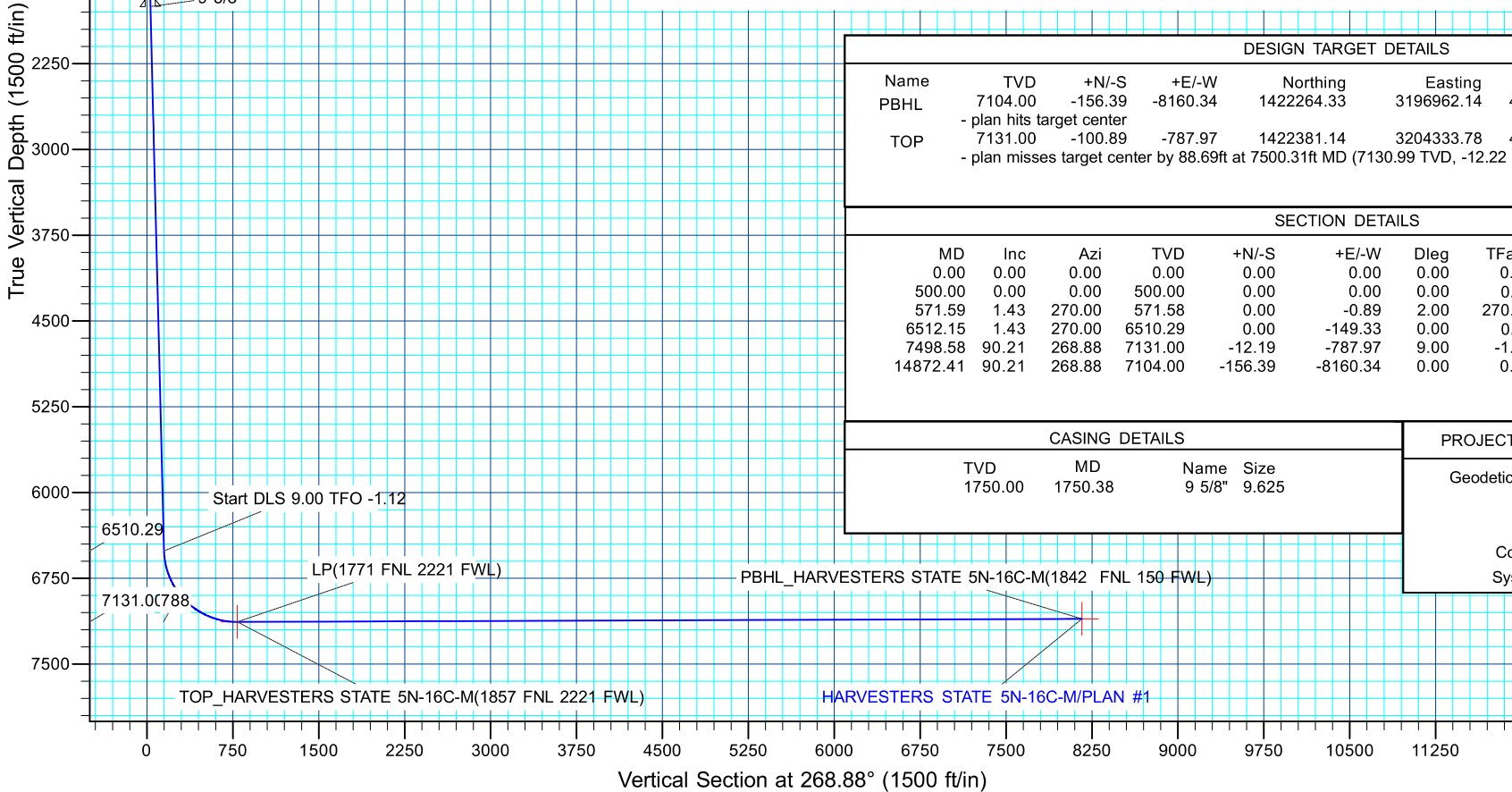
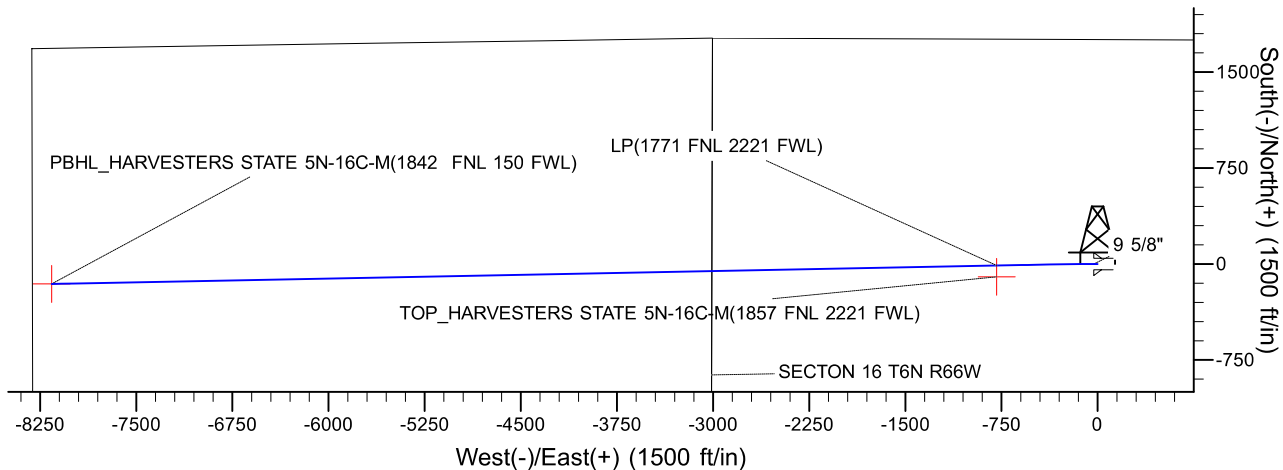
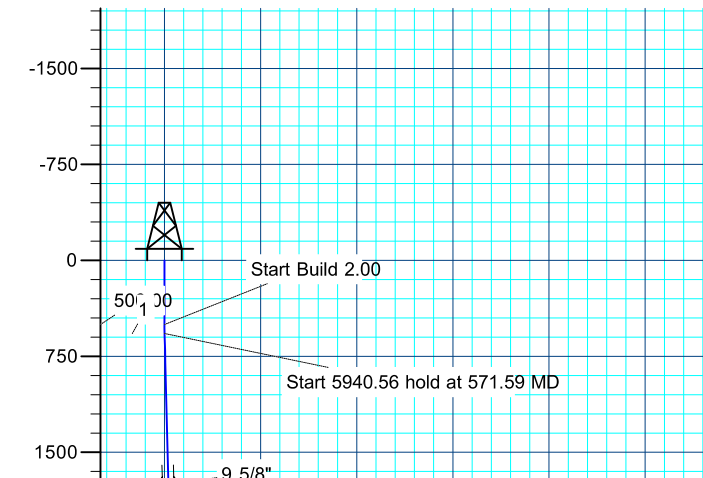
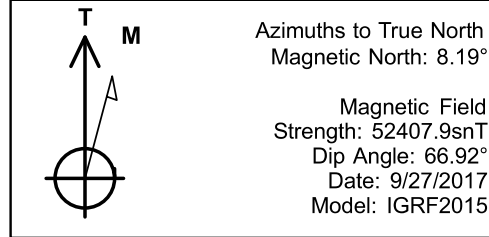




Project: SECTION 15, T6N, R66W  
Site: HARVESTERS STATE 7-15 PAD  
Well: HARVESTERS STATE 5N-16C-M  
Wellbore: OH  
Design: PLAN #1  
Lat: 40.4907910  
Long: -104.7625110



DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
PBHL	7104.00	-156.39	-8160.34	1422264.33	3196962.14	40.4903580	-104.7918500	Point	
TOP	- plan hits target center								
	7131.00	-100.89	-787.97	1422381.14	3204333.78	40.4905140	-104.7653440	Point	
- plan misses target center by 88.69ft at 7500.31ft MD (7130.99 TVD, -12.22 N, -789.70 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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
571.59	1.43	270.00	571.58	0.00	-0.89	2.00	270.00	0.89	
6512.15	1.43	270.00	6510.29	0.00	-149.33	0.00	0.00	149.30	
7498.58	90.21	268.88	7131.00	-12.19	-787.97	9.00	-1.12	788.06	
14872.41	90.21	268.88	7104.00	-156.39	-8160.34	0.00	0.00	8161.84	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	1750.38	9 5/8"	9.625						
ESTERS STATE 5N-16C-M(1842 FNL 150 FWL)									



# **SRC ENERGY**

**SECTION 15, T6N, R66W**

**HARVESTERS STATE 7-15 PAD**

**HARVESTERS STATE 5N-16C-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 5N-16C-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4821.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4821.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 5N-16C-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 5N-16C-M, 1753' FNL & 2334' FEL			
<b>Well Position</b>	<b>+N/-S</b>	-159.94 ft	<b>Northing:</b>	1,422,488.58 usft
	<b>+E/-W</b>	-1.39 ft	<b>Easting:</b>	3,205,120.88 usft
<b>Position Uncertainty</b>		3.28 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 4,801.00 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	9/27/2017	8.19	66.92	52,408

<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	268.88

<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	14,872.04	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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
571.59	1.43	270.00	571.58	0.00	-0.89	2.00	2.00	0.00	270.00	
6,512.15	1.43	270.00	6,510.29	0.00	-149.33	0.00	0.00	0.00	0.00	
7,498.58	90.21	268.88	7,131.00	-12.19	-787.97	9.00	9.00	-0.11	-1.12	
14,872.41	90.21	268.88	7,104.00	-156.39	-8,160.34	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 5N-16C-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4821.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4821.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 5N-16C-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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
571.59	1.43	270.00	571.58	0.00	-0.89	0.89	2.00	2.00	0.00
Start 5940.56 hold at 571.59 MD									
600.00	1.43	270.00	599.98	0.00	-1.60	1.60	0.00	0.00	0.00
700.00	1.43	270.00	699.95	0.00	-4.10	4.10	0.00	0.00	0.00
800.00	1.43	270.00	799.92	0.00	-6.60	6.60	0.00	0.00	0.00
900.00	1.43	270.00	899.89	0.00	-9.10	9.10	0.00	0.00	0.00
1,000.00	1.43	270.00	999.86	0.00	-11.60	11.60	0.00	0.00	0.00
1,100.00	1.43	270.00	1,099.83	0.00	-14.10	14.10	0.00	0.00	0.00
1,200.00	1.43	270.00	1,199.80	0.00	-16.60	16.59	0.00	0.00	0.00
1,300.00	1.43	270.00	1,299.77	0.00	-19.10	19.09	0.00	0.00	0.00
1,400.00	1.43	270.00	1,399.73	0.00	-21.59	21.59	0.00	0.00	0.00
1,500.00	1.43	270.00	1,499.70	0.00	-24.09	24.09	0.00	0.00	0.00
1,600.00	1.43	270.00	1,599.67	0.00	-26.59	26.59	0.00	0.00	0.00
1,700.00	1.43	270.00	1,699.64	0.00	-29.09	29.08	0.00	0.00	0.00
1,750.38	1.43	270.00	1,750.00	0.00	-30.35	30.34	0.00	0.00	0.00
9 5/8"									
1,800.00	1.43	270.00	1,799.61	0.00	-31.59	31.58	0.00	0.00	0.00
1,900.00	1.43	270.00	1,899.58	0.00	-34.09	34.08	0.00	0.00	0.00
2,000.00	1.43	270.00	1,999.55	0.00	-36.59	36.58	0.00	0.00	0.00
2,100.00	1.43	270.00	2,099.52	0.00	-39.08	39.08	0.00	0.00	0.00
2,200.00	1.43	270.00	2,199.48	0.00	-41.58	41.58	0.00	0.00	0.00
2,300.00	1.43	270.00	2,299.45	0.00	-44.08	44.07	0.00	0.00	0.00
2,400.00	1.43	270.00	2,399.42	0.00	-46.58	46.57	0.00	0.00	0.00
2,500.00	1.43	270.00	2,499.39	0.00	-49.08	49.07	0.00	0.00	0.00
2,600.00	1.43	270.00	2,599.36	0.00	-51.58	51.57	0.00	0.00	0.00
2,700.00	1.43	270.00	2,699.33	0.00	-54.08	54.07	0.00	0.00	0.00
2,800.00	1.43	270.00	2,799.30	0.00	-56.58	56.56	0.00	0.00	0.00
2,900.00	1.43	270.00	2,899.27	0.00	-59.07	59.06	0.00	0.00	0.00
3,000.00	1.43	270.00	2,999.23	0.00	-61.57	61.56	0.00	0.00	0.00
3,100.00	1.43	270.00	3,099.20	0.00	-64.07	64.06	0.00	0.00	0.00
3,200.00	1.43	270.00	3,199.17	0.00	-66.57	66.56	0.00	0.00	0.00
3,300.00	1.43	270.00	3,299.14	0.00	-69.07	69.06	0.00	0.00	0.00
3,400.00	1.43	270.00	3,399.11	0.00	-71.57	71.55	0.00	0.00	0.00
3,500.00	1.43	270.00	3,499.08	0.00	-74.07	74.05	0.00	0.00	0.00
3,600.00	1.43	270.00	3,599.05	0.00	-76.57	76.55	0.00	0.00	0.00
3,700.00	1.43	270.00	3,699.02	0.00	-79.06	79.05	0.00	0.00	0.00
3,800.00	1.43	270.00	3,798.98	0.00	-81.56	81.55	0.00	0.00	0.00
3,900.00	1.43	270.00	3,898.95	0.00	-84.06	84.05	0.00	0.00	0.00
4,000.00	1.43	270.00	3,998.92	0.00	-86.56	86.54	0.00	0.00	0.00
4,100.00	1.43	270.00	4,098.89	0.00	-89.06	89.04	0.00	0.00	0.00
4,200.00	1.43	270.00	4,198.86	0.00	-91.56	91.54	0.00	0.00	0.00
4,300.00	1.43	270.00	4,298.83	0.00	-94.06	94.04	0.00	0.00	0.00
4,400.00	1.43	270.00	4,398.80	0.00	-96.56	96.54	0.00	0.00	0.00
4,500.00	1.43	270.00	4,498.77	0.00	-99.05	99.03	0.00	0.00	0.00
4,600.00	1.43	270.00	4,598.73	0.00	-101.55	101.53	0.00	0.00	0.00
4,700.00	1.43	270.00	4,698.70	0.00	-104.05	104.03	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 5N-16C-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4821.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4821.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 5N-16C-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	1.43	270.00	4,798.67	0.00	-106.55	106.53	0.00	0.00	0.00
4,900.00	1.43	270.00	4,898.64	0.00	-109.05	109.03	0.00	0.00	0.00
5,000.00	1.43	270.00	4,998.61	0.00	-111.55	111.53	0.00	0.00	0.00
5,100.00	1.43	270.00	5,098.58	0.00	-114.05	114.02	0.00	0.00	0.00
5,200.00	1.43	270.00	5,198.55	0.00	-116.54	116.52	0.00	0.00	0.00
5,300.00	1.43	270.00	5,298.52	0.00	-119.04	119.02	0.00	0.00	0.00
5,400.00	1.43	270.00	5,398.49	0.00	-121.54	121.52	0.00	0.00	0.00
5,500.00	1.43	270.00	5,498.45	0.00	-124.04	124.02	0.00	0.00	0.00
5,600.00	1.43	270.00	5,598.42	0.00	-126.54	126.52	0.00	0.00	0.00
5,700.00	1.43	270.00	5,698.39	0.00	-129.04	129.01	0.00	0.00	0.00
5,800.00	1.43	270.00	5,798.36	0.00	-131.54	131.51	0.00	0.00	0.00
5,900.00	1.43	270.00	5,898.33	0.00	-134.04	134.01	0.00	0.00	0.00
6,000.00	1.43	270.00	5,998.30	0.00	-136.53	136.51	0.00	0.00	0.00
6,100.00	1.43	270.00	6,098.27	0.00	-139.03	139.01	0.00	0.00	0.00
6,200.00	1.43	270.00	6,198.24	0.00	-141.53	141.50	0.00	0.00	0.00
6,300.00	1.43	270.00	6,298.20	0.00	-144.03	144.00	0.00	0.00	0.00
6,400.00	1.43	270.00	6,398.17	0.00	-146.53	146.50	0.00	0.00	0.00
6,500.00	1.43	270.00	6,498.14	0.00	-149.03	149.00	0.00	0.00	0.00
6,512.15	1.43	270.00	6,510.29	0.00	-149.33	149.30	0.00	0.00	0.00
<b>Start DLS 9.00 TFO -1.12</b>									
6,600.00	9.34	269.05	6,597.68	-0.12	-157.57	157.54	9.00	9.00	-1.08
6,700.00	18.34	268.96	6,694.68	-0.54	-181.46	181.43	9.00	9.00	-0.09
6,800.00	27.34	268.93	6,786.74	-1.25	-220.22	220.21	9.00	9.00	-0.03
6,900.00	36.34	268.92	6,871.61	-2.24	-272.91	272.90	9.00	9.00	-0.02
7,000.00	45.34	268.91	6,947.19	-3.48	-338.22	338.23	9.00	9.00	-0.01
7,100.00	54.34	268.90	7,011.62	-4.94	-414.55	414.57	9.00	9.00	-0.01
7,200.00	63.34	268.89	7,063.31	-6.59	-500.02	500.05	9.00	9.00	-0.01
7,300.00	72.34	268.89	7,101.00	-8.38	-592.52	592.57	9.00	9.00	-0.01
7,400.00	81.34	268.88	7,123.74	-10.27	-689.77	689.84	9.00	9.00	0.00
7,498.58	90.21	268.88	7,131.00	-12.19	-787.97	788.06	9.00	9.00	0.00
<b>LP(1771 FNL 2221 FWL)</b>									
7,500.00	90.21	268.88	7,131.00	-12.21	-789.39	789.48	0.00	0.00	0.00
7,500.31	90.21	268.88	7,131.00	-12.22	-789.70	789.79	0.00	0.00	0.00
<b>TOP_HARVESTERS STATE 5N-16C-M(1857 FNL 2221 FWL)</b>									
7,600.00	90.21	268.88	7,130.63	-14.17	-889.37	889.48	0.00	0.00	0.00
7,700.00	90.21	268.88	7,130.26	-16.13	-989.35	989.48	0.00	0.00	0.00
7,800.00	90.21	268.88	7,129.90	-18.08	-1,089.33	1,089.48	0.00	0.00	0.00
7,900.00	90.21	268.88	7,129.53	-20.04	-1,189.31	1,189.47	0.00	0.00	0.00
8,000.00	90.21	268.88	7,129.17	-21.99	-1,289.29	1,289.47	0.00	0.00	0.00
8,100.00	90.21	268.88	7,128.80	-23.95	-1,389.27	1,389.47	0.00	0.00	0.00
8,200.00	90.21	268.88	7,128.43	-25.90	-1,489.25	1,489.47	0.00	0.00	0.00
8,300.00	90.21	268.88	7,128.07	-27.86	-1,589.23	1,589.47	0.00	0.00	0.00
8,400.00	90.21	268.88	7,127.70	-29.81	-1,689.21	1,689.47	0.00	0.00	0.00
8,500.00	90.21	268.88	7,127.33	-31.77	-1,789.19	1,789.47	0.00	0.00	0.00
8,600.00	90.21	268.88	7,126.97	-33.73	-1,889.17	1,889.47	0.00	0.00	0.00
8,700.00	90.21	268.88	7,126.60	-35.68	-1,989.15	1,989.47	0.00	0.00	0.00
8,800.00	90.21	268.88	7,126.24	-37.64	-2,089.13	2,089.47	0.00	0.00	0.00
8,900.00	90.21	268.88	7,125.87	-39.59	-2,189.11	2,189.47	0.00	0.00	0.00
9,000.00	90.21	268.88	7,125.50	-41.55	-2,289.09	2,289.47	0.00	0.00	0.00
9,100.00	90.21	268.88	7,125.14	-43.50	-2,389.07	2,389.47	0.00	0.00	0.00
9,200.00	90.21	268.88	7,124.77	-45.46	-2,489.05	2,489.47	0.00	0.00	0.00
9,300.00	90.21	268.88	7,124.41	-47.41	-2,589.03	2,589.47	0.00	0.00	0.00
9,400.00	90.21	268.88	7,124.04	-49.37	-2,689.01	2,689.46	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 5N-16C-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4821.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4821.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 5N-16C-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	90.21	268.88	7,123.67	-51.33	-2,788.99	2,789.46	0.00	0.00	0.00
9,600.00	90.21	268.88	7,123.31	-53.28	-2,888.97	2,889.46	0.00	0.00	0.00
9,700.00	90.21	268.88	7,122.94	-55.24	-2,988.95	2,989.46	0.00	0.00	0.00
9,800.00	90.21	268.88	7,122.57	-57.19	-3,088.93	3,089.46	0.00	0.00	0.00
9,900.00	90.21	268.88	7,122.21	-59.15	-3,188.91	3,189.46	0.00	0.00	0.00
10,000.00	90.21	268.88	7,121.84	-61.10	-3,288.89	3,289.46	0.00	0.00	0.00
10,100.00	90.21	268.88	7,121.48	-63.06	-3,388.88	3,389.46	0.00	0.00	0.00
10,200.00	90.21	268.88	7,121.11	-65.01	-3,488.86	3,489.46	0.00	0.00	0.00
10,300.00	90.21	268.88	7,120.74	-66.97	-3,588.84	3,589.46	0.00	0.00	0.00
10,400.00	90.21	268.88	7,120.38	-68.93	-3,688.82	3,689.46	0.00	0.00	0.00
10,500.00	90.21	268.88	7,120.01	-70.88	-3,788.80	3,789.46	0.00	0.00	0.00
10,600.00	90.21	268.88	7,119.64	-72.84	-3,888.78	3,889.46	0.00	0.00	0.00
10,700.00	90.21	268.88	7,119.28	-74.79	-3,988.76	3,989.46	0.00	0.00	0.00
10,800.00	90.21	268.88	7,118.91	-76.75	-4,088.74	4,089.46	0.00	0.00	0.00
10,900.00	90.21	268.88	7,118.55	-78.70	-4,188.72	4,189.45	0.00	0.00	0.00
11,000.00	90.21	268.88	7,118.18	-80.66	-4,288.70	4,289.45	0.00	0.00	0.00
11,100.00	90.21	268.88	7,117.81	-82.61	-4,388.68	4,389.45	0.00	0.00	0.00
11,200.00	90.21	268.88	7,117.45	-84.57	-4,488.66	4,489.45	0.00	0.00	0.00
11,300.00	90.21	268.88	7,117.08	-86.53	-4,588.64	4,589.45	0.00	0.00	0.00
11,400.00	90.21	268.88	7,116.72	-88.48	-4,688.62	4,689.45	0.00	0.00	0.00
11,500.00	90.21	268.88	7,116.35	-90.44	-4,788.60	4,789.45	0.00	0.00	0.00
11,600.00	90.21	268.88	7,115.98	-92.39	-4,888.58	4,889.45	0.00	0.00	0.00
11,700.00	90.21	268.88	7,115.62	-94.35	-4,988.56	4,989.45	0.00	0.00	0.00
11,800.00	90.21	268.88	7,115.25	-96.30	-5,088.54	5,089.45	0.00	0.00	0.00
11,900.00	90.21	268.88	7,114.88	-98.26	-5,188.52	5,189.45	0.00	0.00	0.00
12,000.00	90.21	268.88	7,114.52	-100.21	-5,288.50	5,289.45	0.00	0.00	0.00
12,100.00	90.21	268.88	7,114.15	-102.17	-5,388.48	5,389.45	0.00	0.00	0.00
12,200.00	90.21	268.88	7,113.79	-104.13	-5,488.46	5,489.45	0.00	0.00	0.00
12,300.00	90.21	268.88	7,113.42	-106.08	-5,588.44	5,589.45	0.00	0.00	0.00
12,400.00	90.21	268.88	7,113.05	-108.04	-5,688.42	5,689.44	0.00	0.00	0.00
12,500.00	90.21	268.88	7,112.69	-109.99	-5,788.40	5,789.44	0.00	0.00	0.00
12,600.00	90.21	268.88	7,112.32	-111.95	-5,888.38	5,889.44	0.00	0.00	0.00
12,700.00	90.21	268.88	7,111.96	-113.90	-5,988.36	5,989.44	0.00	0.00	0.00
12,800.00	90.21	268.88	7,111.59	-115.86	-6,088.34	6,089.44	0.00	0.00	0.00
12,900.00	90.21	268.88	7,111.22	-117.81	-6,188.32	6,189.44	0.00	0.00	0.00
13,000.00	90.21	268.88	7,110.86	-119.77	-6,288.30	6,289.44	0.00	0.00	0.00
13,100.00	90.21	268.88	7,110.49	-121.73	-6,388.28	6,389.44	0.00	0.00	0.00
13,200.00	90.21	268.88	7,110.12	-123.68	-6,488.26	6,489.44	0.00	0.00	0.00
13,300.00	90.21	268.88	7,109.76	-125.64	-6,588.24	6,589.44	0.00	0.00	0.00
13,400.00	90.21	268.88	7,109.39	-127.59	-6,688.22	6,689.44	0.00	0.00	0.00
13,500.00	90.21	268.88	7,109.03	-129.55	-6,788.20	6,789.44	0.00	0.00	0.00
13,600.00	90.21	268.88	7,108.66	-131.50	-6,888.18	6,889.44	0.00	0.00	0.00
13,700.00	90.21	268.88	7,108.29	-133.46	-6,988.16	6,989.44	0.00	0.00	0.00
13,800.00	90.21	268.88	7,107.93	-135.41	-7,088.14	7,089.44	0.00	0.00	0.00
13,900.00	90.21	268.88	7,107.56	-137.37	-7,188.12	7,189.43	0.00	0.00	0.00
14,000.00	90.21	268.88	7,107.19	-139.33	-7,288.10	7,289.43	0.00	0.00	0.00
14,100.00	90.21	268.88	7,106.83	-141.28	-7,388.08	7,389.43	0.00	0.00	0.00
14,200.00	90.21	268.88	7,106.46	-143.24	-7,488.06	7,489.43	0.00	0.00	0.00
14,300.00	90.21	268.88	7,106.10	-145.19	-7,588.04	7,589.43	0.00	0.00	0.00
14,400.00	90.21	268.88	7,105.73	-147.15	-7,688.02	7,689.43	0.00	0.00	0.00
14,500.00	90.21	268.88	7,105.36	-149.10	-7,788.00	7,789.43	0.00	0.00	0.00
14,600.00	90.21	268.88	7,105.00	-151.06	-7,887.98	7,889.43	0.00	0.00	0.00
14,700.00	90.21	268.88	7,104.63	-153.01	-7,987.96	7,989.43	0.00	0.00	0.00
14,800.00	90.21	268.88	7,104.27	-154.97	-8,087.94	8,089.43	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HARVESTERS STATE 5N-16C-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	KB @ 4821.00ft
<b>Project:</b>	SECTION 15, T6N, R66W	<b>MD Reference:</b>	KB @ 4821.00ft
<b>Site:</b>	HARVESTERS STATE 7-15 PAD	<b>North Reference:</b>	True
<b>Well:</b>	HARVESTERS STATE 5N-16C-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)
14,872.41	90.21	268.88	7,104.00	-156.39	-8,160.34	8,161.84	0.00	0.00	0.00
TD at 14872.41 - PBHL_HARVESTERS STATE 5N-16C-M(1842 FNL 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	7,104.00	-156.39	-8,160.34	1,422,264.34	3,196,962.14	40.4903580	-104.7918500
- plan hits target center									
- Point									
TOP_HARVESTERS ST	0.00	0.00	7,131.00	-100.89	-787.97	1,422,381.14	3,204,333.78	40.4905140	-104.7653440
- plan misses target center by 88.69ft at 7500.31ft MD (7130.99 TVD, -12.22 N, -789.70 E)									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,750.38	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)	
500.00	500.00	0.00	0.00	Start Build 2.00
571.59	571.58	0.00	-0.89	Start 5940.56 hold at 571.59 MD
6,512.15	6,510.29	0.00	-149.33	Start DLS 9.00 TFO -1.12
7,498.58	7,131.00	-12.19	-787.97	LP(1771 FNL 2221 FWL)
14,872.41	7,104.00	-156.39	-8,160.34	TD at 14872.41