

# **SRC ENERGY**

**WELD COUNTY (NAD83, TRUE NORTH)**

**5N-66W-29 SANFORD 21-29 PAD**

**SANFORD 32N-30B-M**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

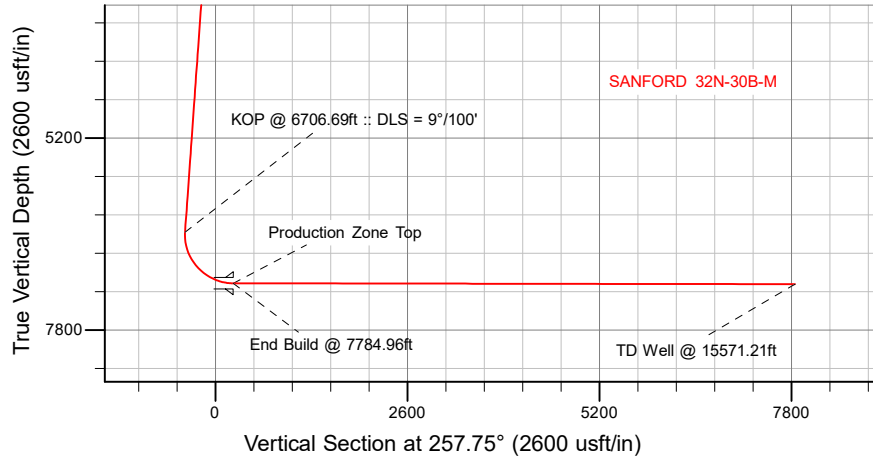
**25 October, 2018**

Project: WELD COUNTY (NAD83, TRUE NORTH)  
Site: 5N-66W-29 SANFORD 21-29 PAD  
Well: SANFORD 32N-30B-M  
Wellbore: Wellbore #1  
Design: Design #1

# SRC ENERGY

## CASING DETAILS

TVD	MD	Name
1800.00	1841.32	9 5/8"
7168.00	7784.96	Production Zone Top



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	1054.00	16.08	153.50	1043.49	-100.31	50.01	2.00	153.50	-27.58	
4	6706.69	16.08	153.50	6475.02	-1501.49	748.61	0.00	0.00	-412.85	
5	7784.96	89.92	270.10	7168.00	-1678.79	117.48	9.00	115.71	241.54	
6	15571.21	89.92	270.10	7179.00	-1665.82	-7668.74	0.00	0.00	7847.58	SANFORD 32N-30B-M_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
SANFORD 32N-30B-M_BPZ	0.00	-1666.21	-7568.72	40.370787	-104.831534
SANFORD 32N-30B-M_SHL	0.00	0.00	0.00	40.375364	-104.804370
SANFORD 32N-30B-M_BHL	7179.00	-1665.82	-7668.74	40.370788	-104.831893

## WELL DETAILS: SANFORD 32N-30B-M

GL = 4904'

RKB = 4' @ 4908.00usft (RIG)

Plan: Design #1 (SANFORD 32N-30B-M/Wellbore #1)

Date: 10/25/2015

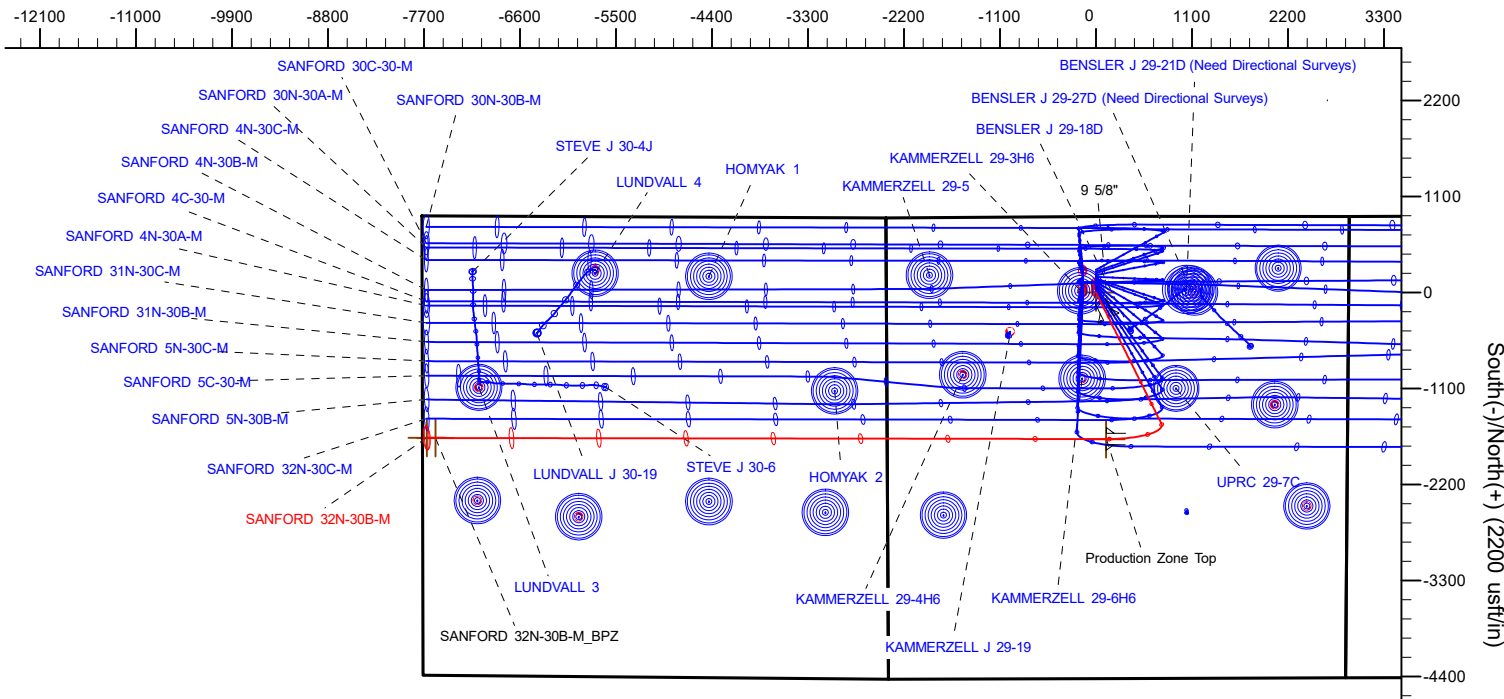
SHL  
871' FNL  
2392' FWL

LP  
2552' FNL  
2477' FWL  
40.370752° Lat  
-104.803951° Long

BPZ  
2544' FNL  
150' FWL

BHL  
2544' FNL  
50' FWL

West(-)/East(+) (2200 usft/in)



T M Azimuths to True North  
Magnetic North: 8.09°

Magnetic Field  
Strength: 52221.7snT  
Dip Angle: 66.79°  
Date: 10/20/2018  
Model: IGRF2015

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 32N-30B-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Project:</b>	WELD COUNTY (NAD83, TRUE NORTH)	<b>MD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Site:</b>	5N-66W-29 SANFORD 21-29 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SANFORD 32N-30B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	WELD COUNTY (NAD83, TRUE NORTH)		
<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>	5N-66W-29 SANFORD 21-29 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,380,603.61 usft	<b>Latitude:</b> 40.376075
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,193,654.99 usft	<b>Longitude:</b> -104.804914
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.45 °

<b>Well</b>	SANFORD 32N-30B-M			
<b>Well Position</b>	<b>+N/-S</b>	-259.02 usft	<b>Northing:</b>	1,380,345.79 usft
	<b>+E/-W</b>	151.56 usft	<b>Easting:</b>	3,193,808.58 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 40.375364
				<b>Longitude:</b> -104.804370
				<b>Ground Level:</b> 4,904.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	10/20/2018	8.09	66.79	52,221.70782246

<b>Design</b>	Design #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) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	257.75

<b>Plan Survey Tool Program</b>	<b>Date</b>	10/25/2018		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	1,800.00	Design #1 (Wellbore #1)	SRC Energy_ISCWSA REV 2
				Fixed:v2:crustal field declinatio
2	1,800.00	15,571.21	Design #1 (Wellbore #1)	SRC Energy_ISCWSA REV 2
				Fixed:v2:Rockies, crustal dec +

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,054.00	16.08	153.50	1,043.49	-100.31	50.01	2.00	2.00	0.00	153.50	
6,706.69	16.08	153.50	6,475.02	-1,501.49	748.61	0.00	0.00	0.00	0.00	
7,784.96	89.92	270.10	7,168.00	-1,678.79	117.48	9.00	6.85	10.81	115.71	
15,571.21	89.92	270.10	7,179.00	-1,665.82	-7,668.74	0.00	0.00	0.00	0.00	SANFORD 32N-30B-I

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 32N-30B-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Project:</b>	WELD COUNTY (NAD83, TRUE NORTH)	<b>MD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Site:</b>	5N-66W-29 SANFORD 21-29 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SANFORD 32N-30B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 250.00ft									
300.00	1.00	153.50	300.00	-0.39	0.19	-0.11	2.00	2.00	0.00
400.00	3.00	153.50	399.93	-3.51	1.75	-0.97	2.00	2.00	0.00
500.00	5.00	153.50	499.68	-9.76	4.86	-2.68	2.00	2.00	0.00
600.00	7.00	153.50	599.13	-19.11	9.53	-5.25	2.00	2.00	0.00
700.00	9.00	153.50	698.15	-31.56	15.74	-8.68	2.00	2.00	0.00
800.00	11.00	153.50	796.63	-47.10	23.49	-12.95	2.00	2.00	0.00
900.00	13.00	153.50	894.44	-65.71	32.76	-18.07	2.00	2.00	0.00
1,000.00	15.00	153.50	991.46	-87.36	43.56	-24.02	2.00	2.00	0.00
1,054.00	16.08	153.50	1,043.49	-100.31	50.01	-27.58	2.00	2.00	0.00
Hold Tangent @ 1054.00ft									
1,100.00	16.08	153.50	1,087.69	-111.71	55.70	-30.72	0.00	0.00	0.00
1,200.00	16.08	153.50	1,183.78	-136.50	68.05	-37.53	0.00	0.00	0.00
1,300.00	16.08	153.50	1,279.86	-161.28	80.41	-44.35	0.00	0.00	0.00
1,400.00	16.08	153.50	1,375.95	-186.07	92.77	-51.16	0.00	0.00	0.00
1,500.00	16.08	153.50	1,472.04	-210.86	105.13	-57.98	0.00	0.00	0.00
1,600.00	16.08	153.50	1,568.13	-235.65	117.49	-64.79	0.00	0.00	0.00
1,700.00	16.08	153.50	1,664.21	-260.44	129.85	-71.61	0.00	0.00	0.00
1,800.00	16.08	153.50	1,760.30	-285.22	142.21	-78.42	0.00	0.00	0.00
1,841.32	16.08	153.50	1,800.00	-295.46	147.31	-81.24	0.00	0.00	0.00
9 5/8"									
1,900.00	16.08	153.50	1,856.39	-310.01	154.57	-85.24	0.00	0.00	0.00
2,000.00	16.08	153.50	1,952.48	-334.80	166.92	-92.06	0.00	0.00	0.00
2,100.00	16.08	153.50	2,048.56	-359.59	179.28	-98.87	0.00	0.00	0.00
2,200.00	16.08	153.50	2,144.65	-384.37	191.64	-105.69	0.00	0.00	0.00
2,300.00	16.08	153.50	2,240.74	-409.16	204.00	-112.50	0.00	0.00	0.00
2,400.00	16.08	153.50	2,336.83	-433.95	216.36	-119.32	0.00	0.00	0.00
2,500.00	16.08	153.50	2,432.91	-458.74	228.72	-126.13	0.00	0.00	0.00
2,600.00	16.08	153.50	2,529.00	-483.53	241.08	-132.95	0.00	0.00	0.00
2,700.00	16.08	153.50	2,625.09	-508.31	253.44	-139.76	0.00	0.00	0.00
2,800.00	16.08	153.50	2,721.18	-533.10	265.79	-146.58	0.00	0.00	0.00
2,900.00	16.08	153.50	2,817.26	-557.89	278.15	-153.40	0.00	0.00	0.00
3,000.00	16.08	153.50	2,913.35	-582.68	290.51	-160.21	0.00	0.00	0.00
3,100.00	16.08	153.50	3,009.44	-607.47	302.87	-167.03	0.00	0.00	0.00
3,200.00	16.08	153.50	3,105.53	-632.25	315.23	-173.84	0.00	0.00	0.00
3,300.00	16.08	153.50	3,201.61	-657.04	327.59	-180.66	0.00	0.00	0.00
3,400.00	16.08	153.50	3,297.70	-681.83	339.95	-187.47	0.00	0.00	0.00
3,500.00	16.08	153.50	3,393.79	-706.62	352.31	-194.29	0.00	0.00	0.00
3,600.00	16.08	153.50	3,489.88	-731.40	364.66	-201.11	0.00	0.00	0.00
3,700.00	16.08	153.50	3,585.96	-756.19	377.02	-207.92	0.00	0.00	0.00
3,800.00	16.08	153.50	3,682.05	-780.98	389.38	-214.74	0.00	0.00	0.00
3,900.00	16.08	153.50	3,778.14	-805.77	401.74	-221.55	0.00	0.00	0.00
4,000.00	16.08	153.50	3,874.23	-830.56	414.10	-228.37	0.00	0.00	0.00
4,100.00	16.08	153.50	3,970.32	-855.34	426.46	-235.18	0.00	0.00	0.00
4,200.00	16.08	153.50	4,066.40	-880.13	438.82	-242.00	0.00	0.00	0.00
4,300.00	16.08	153.50	4,162.49	-904.92	451.18	-248.81	0.00	0.00	0.00
4,400.00	16.08	153.50	4,258.58	-929.71	463.53	-255.63	0.00	0.00	0.00
4,500.00	16.08	153.50	4,354.67	-954.49	475.89	-262.45	0.00	0.00	0.00
4,600.00	16.08	153.50	4,450.75	-979.28	488.25	-269.26	0.00	0.00	0.00

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## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 32N-30B-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Project:</b>	WELD COUNTY (NAD83, TRUE NORTH)	<b>MD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Site:</b>	5N-66W-29 SANFORD 21-29 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SANFORD 32N-30B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,700.00	16.08	153.50	4,546.84	-1,004.07	500.61	-276.08	0.00	0.00	0.00	
4,800.00	16.08	153.50	4,642.93	-1,028.86	512.97	-282.89	0.00	0.00	0.00	
4,900.00	16.08	153.50	4,739.02	-1,053.65	525.33	-289.71	0.00	0.00	0.00	
5,000.00	16.08	153.50	4,835.10	-1,078.43	537.69	-296.52	0.00	0.00	0.00	
5,100.00	16.08	153.50	4,931.19	-1,103.22	550.05	-303.34	0.00	0.00	0.00	
5,200.00	16.08	153.50	5,027.28	-1,128.01	562.40	-310.16	0.00	0.00	0.00	
5,300.00	16.08	153.50	5,123.37	-1,152.80	574.76	-316.97	0.00	0.00	0.00	
5,400.00	16.08	153.50	5,219.45	-1,177.59	587.12	-323.79	0.00	0.00	0.00	
5,500.00	16.08	153.50	5,315.54	-1,202.37	599.48	-330.60	0.00	0.00	0.00	
5,600.00	16.08	153.50	5,411.63	-1,227.16	611.84	-337.42	0.00	0.00	0.00	
5,700.00	16.08	153.50	5,507.72	-1,251.95	624.20	-344.23	0.00	0.00	0.00	
5,800.00	16.08	153.50	5,603.80	-1,276.74	636.56	-351.05	0.00	0.00	0.00	
5,900.00	16.08	153.50	5,699.89	-1,301.52	648.92	-357.86	0.00	0.00	0.00	
6,000.00	16.08	153.50	5,795.98	-1,326.31	661.27	-364.68	0.00	0.00	0.00	
6,100.00	16.08	153.50	5,892.07	-1,351.10	673.63	-371.50	0.00	0.00	0.00	
6,200.00	16.08	153.50	5,988.15	-1,375.89	685.99	-378.31	0.00	0.00	0.00	
6,300.00	16.08	153.50	6,084.24	-1,400.68	698.35	-385.13	0.00	0.00	0.00	
6,400.00	16.08	153.50	6,180.33	-1,425.46	710.71	-391.94	0.00	0.00	0.00	
6,500.00	16.08	153.50	6,276.42	-1,450.25	723.07	-398.76	0.00	0.00	0.00	
6,600.00	16.08	153.50	6,372.51	-1,475.04	735.43	-405.57	0.00	0.00	0.00	
6,700.00	16.08	153.50	6,468.59	-1,499.83	747.79	-412.39	0.00	0.00	0.00	
6,706.69	16.08	153.50	6,475.02	-1,501.49	748.61	-412.85	0.00	0.00	0.00	
KOP @ 6706.69ft :: DLS = 9°/100'										
6,800.00	14.51	185.19	6,565.18	-1,524.73	753.33	-412.52	9.00	-1.69	33.96	
6,900.00	17.67	216.10	6,661.43	-1,549.51	743.24	-397.40	9.00	3.16	30.91	
7,000.00	23.92	234.60	6,754.97	-1,573.57	717.72	-367.36	9.00	6.26	18.50	
7,100.00	31.48	245.22	6,843.50	-1,596.30	677.41	-323.14	9.00	7.56	10.63	
7,200.00	39.59	251.96	6,924.84	-1,617.15	623.30	-265.83	9.00	8.12	6.74	
7,300.00	47.98	256.69	6,996.99	-1,635.61	556.71	-196.85	9.00	8.39	4.73	
7,400.00	56.52	260.30	7,058.17	-1,651.22	479.30	-117.89	9.00	8.54	3.61	
7,500.00	65.14	263.26	7,106.87	-1,663.60	392.96	-30.89	9.00	8.62	2.96	
7,600.00	73.81	265.83	7,141.90	-1,672.44	299.83	62.00	9.00	8.67	2.57	
7,700.00	82.52	268.18	7,162.39	-1,677.52	202.19	158.49	9.00	8.70	2.35	
7,784.96	89.92	270.10	7,168.00	-1,678.79	117.49	241.54	9.00	8.71	2.26	
End Build @ 7784.96ft - Production Zone Top										
7,800.00	89.92	270.10	7,168.02	-1,678.77	102.45	256.23	0.00	0.00	0.00	
7,900.00	89.92	270.10	7,168.16	-1,678.60	2.45	353.91	0.00	0.00	0.00	
8,000.00	89.92	270.10	7,168.30	-1,678.43	-97.55	451.60	0.00	0.00	0.00	
8,100.00	89.92	270.10	7,168.44	-1,678.27	-197.55	549.29	0.00	0.00	0.00	
8,200.00	89.92	270.10	7,168.58	-1,678.10	-297.55	646.97	0.00	0.00	0.00	
8,300.00	89.92	270.10	7,168.72	-1,677.93	-397.55	744.66	0.00	0.00	0.00	
8,400.00	89.92	270.10	7,168.87	-1,677.77	-497.55	842.34	0.00	0.00	0.00	
8,500.00	89.92	270.10	7,169.01	-1,677.60	-597.55	940.03	0.00	0.00	0.00	
8,600.00	89.92	270.10	7,169.15	-1,677.43	-697.55	1,037.71	0.00	0.00	0.00	
8,700.00	89.92	270.10	7,169.29	-1,677.27	-797.55	1,135.40	0.00	0.00	0.00	
8,800.00	89.92	270.10	7,169.43	-1,677.10	-897.55	1,233.08	0.00	0.00	0.00	
8,900.00	89.92	270.10	7,169.57	-1,676.93	-997.55	1,330.77	0.00	0.00	0.00	
9,000.00	89.92	270.10	7,169.71	-1,676.77	-1,097.55	1,428.46	0.00	0.00	0.00	
9,100.00	89.92	270.10	7,169.86	-1,676.60	-1,197.55	1,526.14	0.00	0.00	0.00	
9,200.00	89.92	270.10	7,170.00	-1,676.43	-1,297.55	1,623.83	0.00	0.00	0.00	
9,300.00	89.92	270.10	7,170.14	-1,676.27	-1,397.55	1,721.51	0.00	0.00	0.00	
9,400.00	89.92	270.10	7,170.28	-1,676.10	-1,497.55	1,819.20	0.00	0.00	0.00	
9,500.00	89.92	270.10	7,170.42	-1,675.93	-1,597.55	1,916.88	0.00	0.00	0.00	
9,600.00	89.92	270.10	7,170.56	-1,675.77	-1,697.55	2,014.57	0.00	0.00	0.00	

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 32N-30B-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Project:</b>	WELD COUNTY (NAD83, TRUE NORTH)	<b>MD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Site:</b>	5N-66W-29 SANFORD 21-29 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SANFORD 32N-30B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,700.00	89.92	270.10	7,170.70	-1,675.60	-1,797.55	2,112.26	0.00	0.00	0.00	
9,800.00	89.92	270.10	7,170.84	-1,675.43	-1,897.55	2,209.94	0.00	0.00	0.00	
9,900.00	89.92	270.10	7,170.99	-1,675.27	-1,997.55	2,307.63	0.00	0.00	0.00	
10,000.00	89.92	270.10	7,171.13	-1,675.10	-2,097.55	2,405.31	0.00	0.00	0.00	
10,100.00	89.92	270.10	7,171.27	-1,674.93	-2,197.55	2,503.00	0.00	0.00	0.00	
10,200.00	89.92	270.10	7,171.41	-1,674.77	-2,297.55	2,600.68	0.00	0.00	0.00	
10,300.00	89.92	270.10	7,171.55	-1,674.60	-2,397.55	2,698.37	0.00	0.00	0.00	
10,400.00	89.92	270.10	7,171.69	-1,674.43	-2,497.55	2,796.06	0.00	0.00	0.00	
10,500.00	89.92	270.10	7,171.83	-1,674.27	-2,597.55	2,893.74	0.00	0.00	0.00	
10,600.00	89.92	270.10	7,171.97	-1,674.10	-2,697.55	2,991.43	0.00	0.00	0.00	
10,700.00	89.92	270.10	7,172.12	-1,673.93	-2,797.55	3,089.11	0.00	0.00	0.00	
10,800.00	89.92	270.10	7,172.26	-1,673.77	-2,897.55	3,186.80	0.00	0.00	0.00	
10,900.00	89.92	270.10	7,172.40	-1,673.60	-2,997.55	3,284.48	0.00	0.00	0.00	
11,000.00	89.92	270.10	7,172.54	-1,673.43	-3,097.55	3,382.17	0.00	0.00	0.00	
11,100.00	89.92	270.10	7,172.68	-1,673.27	-3,197.55	3,479.86	0.00	0.00	0.00	
11,200.00	89.92	270.10	7,172.82	-1,673.10	-3,297.55	3,577.54	0.00	0.00	0.00	
11,300.00	89.92	270.10	7,172.96	-1,672.93	-3,397.55	3,675.23	0.00	0.00	0.00	
11,400.00	89.92	270.10	7,173.11	-1,672.77	-3,497.55	3,772.91	0.00	0.00	0.00	
11,500.00	89.92	270.10	7,173.25	-1,672.60	-3,597.55	3,870.60	0.00	0.00	0.00	
11,600.00	89.92	270.10	7,173.39	-1,672.43	-3,697.55	3,968.28	0.00	0.00	0.00	
11,700.00	89.92	270.10	7,173.53	-1,672.27	-3,797.55	4,065.97	0.00	0.00	0.00	
11,800.00	89.92	270.10	7,173.67	-1,672.10	-3,897.55	4,163.66	0.00	0.00	0.00	
11,900.00	89.92	270.10	7,173.81	-1,671.94	-3,997.55	4,261.34	0.00	0.00	0.00	
12,000.00	89.92	270.10	7,173.95	-1,671.77	-4,097.54	4,359.03	0.00	0.00	0.00	
12,100.00	89.92	270.10	7,174.09	-1,671.60	-4,197.54	4,456.71	0.00	0.00	0.00	
12,200.00	89.92	270.10	7,174.24	-1,671.44	-4,297.54	4,554.40	0.00	0.00	0.00	
12,300.00	89.92	270.10	7,174.38	-1,671.27	-4,397.54	4,652.08	0.00	0.00	0.00	
12,400.00	89.92	270.10	7,174.52	-1,671.10	-4,497.54	4,749.77	0.00	0.00	0.00	
12,500.00	89.92	270.10	7,174.66	-1,670.94	-4,597.54	4,847.45	0.00	0.00	0.00	
12,600.00	89.92	270.10	7,174.80	-1,670.77	-4,697.54	4,945.14	0.00	0.00	0.00	
12,700.00	89.92	270.10	7,174.94	-1,670.60	-4,797.54	5,042.83	0.00	0.00	0.00	
12,800.00	89.92	270.10	7,175.08	-1,670.44	-4,897.54	5,140.51	0.00	0.00	0.00	
12,900.00	89.92	270.10	7,175.23	-1,670.27	-4,997.54	5,238.20	0.00	0.00	0.00	
13,000.00	89.92	270.10	7,175.37	-1,670.10	-5,097.54	5,335.88	0.00	0.00	0.00	
13,100.00	89.92	270.10	7,175.51	-1,669.94	-5,197.54	5,433.57	0.00	0.00	0.00	
13,200.00	89.92	270.10	7,175.65	-1,669.77	-5,297.54	5,531.25	0.00	0.00	0.00	
13,300.00	89.92	270.10	7,175.79	-1,669.60	-5,397.54	5,628.94	0.00	0.00	0.00	
13,400.00	89.92	270.10	7,175.93	-1,669.44	-5,497.54	5,726.63	0.00	0.00	0.00	
13,500.00	89.92	270.10	7,176.07	-1,669.27	-5,597.54	5,824.31	0.00	0.00	0.00	
13,600.00	89.92	270.10	7,176.21	-1,669.10	-5,697.54	5,922.00	0.00	0.00	0.00	
13,700.00	89.92	270.10	7,176.36	-1,668.94	-5,797.54	6,019.68	0.00	0.00	0.00	
13,800.00	89.92	270.10	7,176.50	-1,668.77	-5,897.54	6,117.37	0.00	0.00	0.00	
13,900.00	89.92	270.10	7,176.64	-1,668.60	-5,997.54	6,215.05	0.00	0.00	0.00	
14,000.00	89.92	270.10	7,176.78	-1,668.44	-6,097.54	6,312.74	0.00	0.00	0.00	
14,100.00	89.92	270.10	7,176.92	-1,668.27	-6,197.54	6,410.43	0.00	0.00	0.00	
14,200.00	89.92	270.10	7,177.06	-1,668.10	-6,297.54	6,508.11	0.00	0.00	0.00	
14,300.00	89.92	270.10	7,177.20	-1,667.94	-6,397.54	6,605.80	0.00	0.00	0.00	
14,400.00	89.92	270.10	7,177.35	-1,667.77	-6,497.54	6,703.48	0.00	0.00	0.00	
14,500.00	89.92	270.10	7,177.49	-1,667.60	-6,597.54	6,801.17	0.00	0.00	0.00	
14,600.00	89.92	270.10	7,177.63	-1,667.44	-6,697.54	6,898.85	0.00	0.00	0.00	
14,700.00	89.92	270.10	7,177.77	-1,667.27	-6,797.54	6,996.54	0.00	0.00	0.00	
14,800.00	89.92	270.10	7,177.91	-1,667.10	-6,897.54	7,094.23	0.00	0.00	0.00	
14,900.00	89.92	270.10	7,178.05	-1,666.94	-6,997.54	7,191.91	0.00	0.00	0.00	
15,000.00	89.92	270.10	7,178.19	-1,666.77	-7,097.54	7,289.60	0.00	0.00	0.00	

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 32N-30B-M
<b>Company:</b>	SRC ENERGY	<b>TVD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Project:</b>	WELD COUNTY (NAD83, TRUE NORTH)	<b>MD Reference:</b>	RKB = 4' @ 4908.00usft (RIG)
<b>Site:</b>	5N-66W-29 SANFORD 21-29 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SANFORD 32N-30B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,100.00	89.92	270.10	7,178.33	-1,666.60	-7,197.54	7,387.28	0.00	0.00	0.00
15,200.00	89.92	270.10	7,178.48	-1,666.44	-7,297.54	7,484.97	0.00	0.00	0.00
15,300.00	89.92	270.10	7,178.62	-1,666.27	-7,397.54	7,582.65	0.00	0.00	0.00
15,400.00	89.92	270.10	7,178.76	-1,666.10	-7,497.54	7,680.34	0.00	0.00	0.00
15,500.00	89.92	270.10	7,178.90	-1,665.94	-7,597.54	7,778.03	0.00	0.00	0.00
15,571.21	89.92	270.10	7,179.00	-1,665.82	-7,668.74	7,847.58	0.00	0.00	0.00
TD Well @ 15571.21ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,841.32	1,800.00	9 5/8"	9-5/8	13-1/2	
7,784.96	7,168.00	Production Zone Top	5-1/2	8-1/2	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
250.00	250.00	0.00	0.00	Begin Nudge @ 250.00ft
1,054.00	1,043.49	-100.31	50.01	Hold Tangent @ 1054.00ft
6,706.69	6,475.02	-1,501.49	748.61	KOP @ 6706.69ft :: DLS = 9°/100'
7,784.96	7,168.00	-1,678.79	117.48	End Build @ 7784.96ft
15,571.21	7,179.00	-1,665.82	-7,668.74	TD Well @ 15571.21ft