

# **SRC ENERGY**

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

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

**SANFORD 4N-30B-M**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

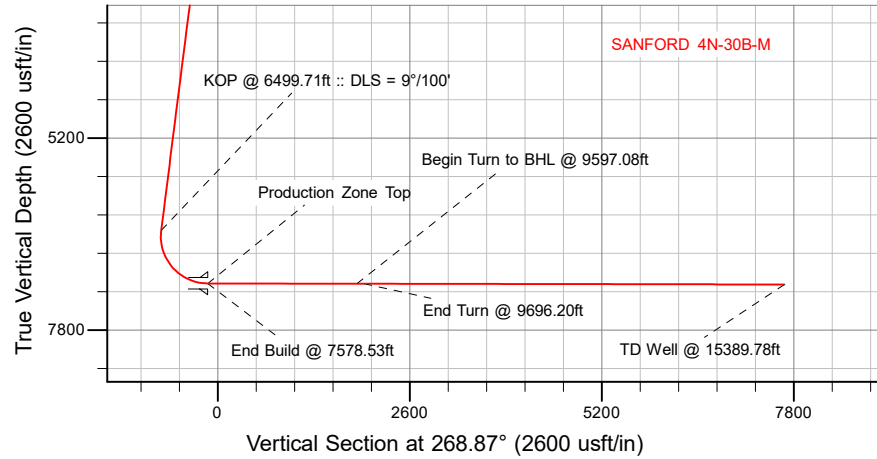
**25 October, 2018**

Project: WELD COUNTY (NAD83, TRUE NORTH)  
Site: 5N-66W-29 SANFORD 21-29 PAD  
Well: SANFORD 4N-30B-M  
Wellbore: Wellbore #1  
Design: Design #1

# SRC ENERGY

## CASING DETAILS

TVD	MD	Name
1800.00	1810.86	9 5/8"
7168.00	7578.53	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	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	561.00	7.22	92.50	560.05	-0.99	22.69	2.00	92.50	-22.67	
4	6499.71	7.22	92.50	6451.67	-33.55	768.36	0.00	0.00	-767.54	
5	7578.53	89.90	267.90	7168.00	-63.94	138.59	9.00	175.36	-137.29	
6	9597.08	89.90	267.90	7171.62	-138.00	-1878.60	0.00	0.00	1880.96	SANFORD 4N-30B-M_target
7	9696.20	89.90	269.88	7171.80	-139.92	-1977.70	2.00	90.00	1980.08	
8	15389.78	89.90	269.88	7182.00	-151.86	-7671.26	0.00	0.00	7672.76	SANFORD 4N-30B-M_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
SANFORD 4N-30B-M_BPZ	0.00	-151.90	-7571.24	40.375438	-104.831549
SANFORD 4N-30B-M_SHL	0.00	0.00	0.00	40.375858	-104.804374
SANFORD 4N-30B-M_BHL	7182.00	-151.86	-7671.26	40.375438	-104.831908

## WELL DETAILS: SANFORD 4N-30B-M

GL = 4904'

RKB = 4' @ 4908.00usft (RIG)

Plan: Design #1 (SANFORD 4N-30B-M/Wellbore #1)

Date: 10/25/2015

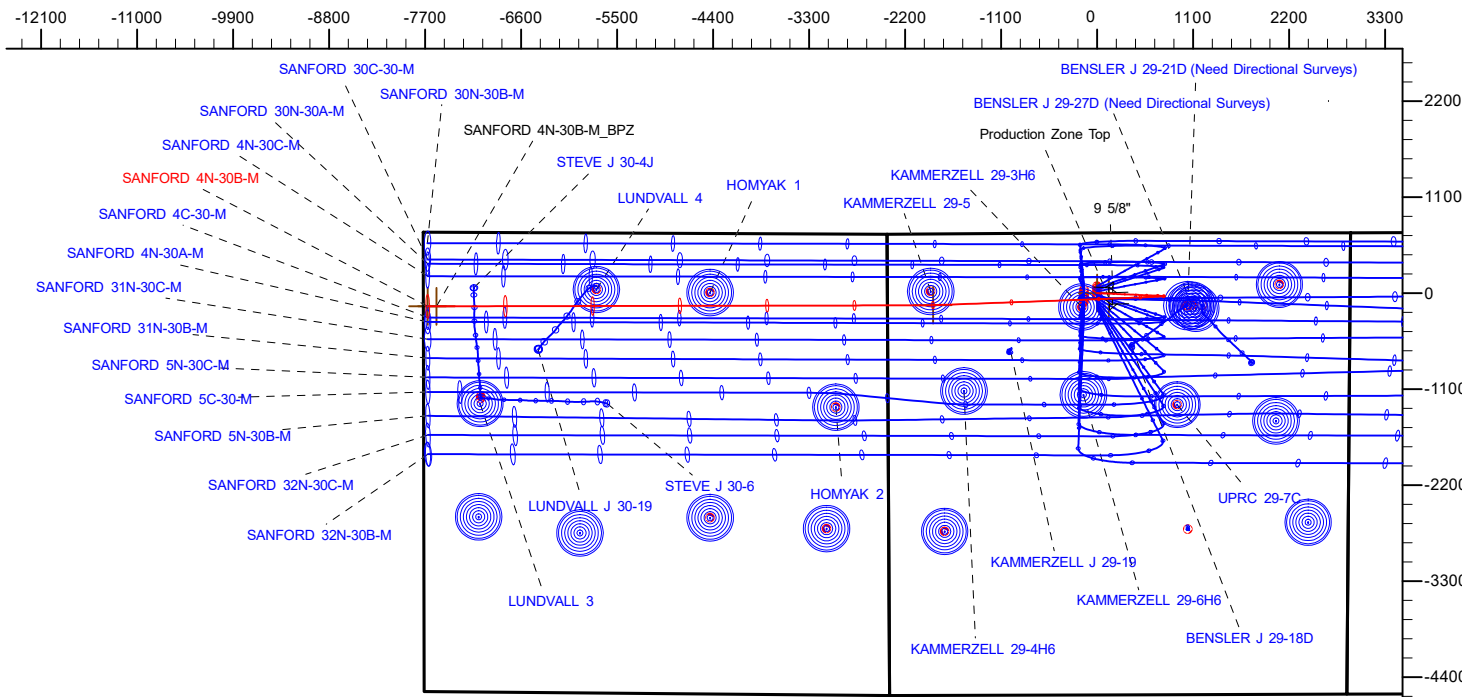
**SHL**  
691' FNL  
2394' FWL

**LP**  
752' FNL  
2527' FWL  
40.375682° Lat  
-104.803891° Long

**BPZ**  
850' FNL  
150' FWL

**BHL**  
850' FNL  
50' FWL

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



**T** Azimuths to True North  
**M** Magnetic North: 8.09°  
Magnetic Field  
Strength: 52222.0nT  
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 4N-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 4N-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 4N-30B-M			
<b>Well Position</b>	<b>+N/-S</b>	-79.06 usft	<b>Northing:</b>	1,380,525.73 usft
	<b>+E/-W</b>	150.45 usft	<b>Easting:</b>	3,193,806.05 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 40.375858
				<b>Longitude:</b> -104.804374
				<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	52,221.96326460

<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	268.87

<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	15,389.78	Design #1 (Wellbore #1)	SRC Energy_ISCWSA REV 2
				Fixed:v2:Rockies, crustal dec +

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 4N-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 4N-30B-M	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
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	
561.00	7.22	92.50	560.05	-0.99	22.69	2.00	2.00	0.00	92.50	
6,499.71	7.22	92.50	6,451.67	-33.55	768.36	0.00	0.00	0.00	0.00	
7,578.53	89.90	267.90	7,168.00	-63.94	138.59	9.00	7.66	16.26	175.36	
9,597.08	89.90	267.90	7,171.62	-138.00	-1,878.60	0.00	0.00	0.00	0.00	SANFORD 4N-30B-M
9,696.20	89.90	269.88	7,171.80	-139.92	-1,977.70	2.00	0.00	2.00	90.00	
15,389.78	89.90	269.88	7,182.00	-151.86	-7,671.26	0.00	0.00	0.00	0.00	SANFORD 4N-30B-M

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SANFORD 4N-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 4N-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
Begin Nudge @ 200.00ft									
300.00	2.00	92.50	299.98	-0.08	1.74	-1.74	2.00	2.00	0.00
400.00	4.00	92.50	399.84	-0.30	6.97	-6.96	2.00	2.00	0.00
500.00	6.00	92.50	499.45	-0.68	15.68	-15.66	2.00	2.00	0.00
561.00	7.22	92.50	560.05	-0.99	22.69	-22.67	2.00	2.00	0.00
Hold Tangent @ 561.00ft									
600.00	7.22	92.50	598.74	-1.20	27.59	-27.56	0.00	0.00	0.00
700.00	7.22	92.50	697.94	-1.75	40.15	-40.10	0.00	0.00	0.00
800.00	7.22	92.50	797.15	-2.30	52.70	-52.65	0.00	0.00	0.00
900.00	7.22	92.50	896.36	-2.85	65.26	-65.19	0.00	0.00	0.00
1,000.00	7.22	92.50	995.56	-3.40	77.81	-77.73	0.00	0.00	0.00
1,100.00	7.22	92.50	1,094.77	-3.95	90.37	-90.27	0.00	0.00	0.00
1,200.00	7.22	92.50	1,193.98	-4.49	102.93	-102.82	0.00	0.00	0.00
1,300.00	7.22	92.50	1,293.19	-5.04	115.48	-115.36	0.00	0.00	0.00
1,400.00	7.22	92.50	1,392.39	-5.59	128.04	-127.90	0.00	0.00	0.00
1,500.00	7.22	92.50	1,491.60	-6.14	140.59	-140.45	0.00	0.00	0.00
1,600.00	7.22	92.50	1,590.81	-6.69	153.15	-152.99	0.00	0.00	0.00
1,700.00	7.22	92.50	1,690.01	-7.23	165.71	-165.53	0.00	0.00	0.00
1,800.00	7.22	92.50	1,789.22	-7.78	178.26	-178.07	0.00	0.00	0.00
1,810.86	7.22	92.50	1,800.00	-7.84	179.63	-179.44	0.00	0.00	0.00
9 5/8"									
1,900.00	7.22	92.50	1,888.43	-8.33	190.82	-190.62	0.00	0.00	0.00
2,000.00	7.22	92.50	1,987.64	-8.88	203.37	-203.16	0.00	0.00	0.00
2,100.00	7.22	92.50	2,086.84	-9.43	215.93	-215.70	0.00	0.00	0.00
2,200.00	7.22	92.50	2,186.05	-9.98	228.49	-228.24	0.00	0.00	0.00
2,300.00	7.22	92.50	2,285.26	-10.52	241.04	-240.79	0.00	0.00	0.00
2,400.00	7.22	92.50	2,384.46	-11.07	253.60	-253.33	0.00	0.00	0.00
2,500.00	7.22	92.50	2,483.67	-11.62	266.15	-265.87	0.00	0.00	0.00
2,600.00	7.22	92.50	2,582.88	-12.17	278.71	-278.41	0.00	0.00	0.00
2,700.00	7.22	92.50	2,682.09	-12.72	291.27	-290.96	0.00	0.00	0.00
2,800.00	7.22	92.50	2,781.29	-13.27	303.82	-303.50	0.00	0.00	0.00
2,900.00	7.22	92.50	2,880.50	-13.81	316.38	-316.04	0.00	0.00	0.00
3,000.00	7.22	92.50	2,979.71	-14.36	328.93	-328.59	0.00	0.00	0.00
3,100.00	7.22	92.50	3,078.91	-14.91	341.49	-341.13	0.00	0.00	0.00
3,200.00	7.22	92.50	3,178.12	-15.46	354.05	-353.67	0.00	0.00	0.00
3,300.00	7.22	92.50	3,277.33	-16.01	366.60	-366.21	0.00	0.00	0.00
3,400.00	7.22	92.50	3,376.53	-16.55	379.16	-378.76	0.00	0.00	0.00
3,500.00	7.22	92.50	3,475.74	-17.10	391.71	-391.30	0.00	0.00	0.00
3,600.00	7.22	92.50	3,574.95	-17.65	404.27	-403.84	0.00	0.00	0.00
3,700.00	7.22	92.50	3,674.16	-18.20	416.83	-416.38	0.00	0.00	0.00
3,800.00	7.22	92.50	3,773.36	-18.75	429.38	-428.93	0.00	0.00	0.00
3,900.00	7.22	92.50	3,872.57	-19.30	441.94	-441.47	0.00	0.00	0.00
4,000.00	7.22	92.50	3,971.78	-19.84	454.49	-454.01	0.00	0.00	0.00
4,100.00	7.22	92.50	4,070.98	-20.39	467.05	-466.56	0.00	0.00	0.00
4,200.00	7.22	92.50	4,170.19	-20.94	479.61	-479.10	0.00	0.00	0.00
4,300.00	7.22	92.50	4,269.40	-21.49	492.16	-491.64	0.00	0.00	0.00
4,400.00	7.22	92.50	4,368.61	-22.04	504.72	-504.18	0.00	0.00	0.00
4,500.00	7.22	92.50	4,467.81	-22.58	517.27	-516.73	0.00	0.00	0.00
4,600.00	7.22	92.50	4,567.02	-23.13	529.83	-529.27	0.00	0.00	0.00
4,700.00	7.22	92.50	4,666.23	-23.68	542.39	-541.81	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 4N-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 4N-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)
4,800.00	7.22	92.50	4,765.43	-24.23	554.94	-554.35	0.00	0.00	0.00
4,900.00	7.22	92.50	4,864.64	-24.78	567.50	-566.90	0.00	0.00	0.00
5,000.00	7.22	92.50	4,963.85	-25.33	580.05	-579.44	0.00	0.00	0.00
5,100.00	7.22	92.50	5,063.06	-25.87	592.61	-591.98	0.00	0.00	0.00
5,200.00	7.22	92.50	5,162.26	-26.42	605.17	-604.52	0.00	0.00	0.00
5,300.00	7.22	92.50	5,261.47	-26.97	617.72	-617.07	0.00	0.00	0.00
5,400.00	7.22	92.50	5,360.68	-27.52	630.28	-629.61	0.00	0.00	0.00
5,500.00	7.22	92.50	5,459.88	-28.07	642.83	-642.15	0.00	0.00	0.00
5,600.00	7.22	92.50	5,559.09	-28.61	655.39	-654.70	0.00	0.00	0.00
5,700.00	7.22	92.50	5,658.30	-29.16	667.95	-667.24	0.00	0.00	0.00
5,800.00	7.22	92.50	5,757.50	-29.71	680.50	-679.78	0.00	0.00	0.00
5,900.00	7.22	92.50	5,856.71	-30.26	693.06	-692.32	0.00	0.00	0.00
6,000.00	7.22	92.50	5,955.92	-30.81	705.61	-704.87	0.00	0.00	0.00
6,100.00	7.22	92.50	6,055.13	-31.36	718.17	-717.41	0.00	0.00	0.00
6,200.00	7.22	92.50	6,154.33	-31.90	730.73	-729.95	0.00	0.00	0.00
6,300.00	7.22	92.50	6,253.54	-32.45	743.28	-742.49	0.00	0.00	0.00
6,400.00	7.22	92.50	6,352.75	-33.00	755.84	-755.04	0.00	0.00	0.00
6,499.71	7.22	92.50	6,451.67	-33.55	768.36	-767.54	0.00	0.00	0.00
KOP @ 6499.71ft :: DLS = 9°/100'									
6,500.00	7.19	92.52	6,451.95	-33.55	768.39	-767.58	9.00	-8.97	5.81
6,600.00	1.92	250.25	6,551.74	-34.39	773.08	-772.25	9.00	-5.27	157.73
6,700.00	10.84	264.86	6,651.02	-35.80	762.11	-761.26	9.00	8.93	14.61
6,800.00	19.84	266.28	6,747.36	-37.75	735.76	-734.87	9.00	8.99	1.43
6,900.00	28.83	266.84	6,838.38	-40.18	694.66	-693.73	9.00	9.00	0.56
7,000.00	37.83	267.15	6,921.84	-43.04	639.84	-638.86	9.00	9.00	0.31
7,100.00	46.83	267.35	6,995.69	-46.26	572.64	-571.62	9.00	9.00	0.20
7,200.00	55.83	267.50	7,058.11	-49.76	494.73	-493.64	9.00	9.00	0.15
7,300.00	64.83	267.62	7,107.56	-53.44	408.00	-406.87	9.00	9.00	0.12
7,400.00	73.83	267.73	7,142.82	-57.23	314.61	-313.42	9.00	9.00	0.10
7,500.00	82.83	267.83	7,163.02	-61.02	216.85	-215.60	9.00	9.00	0.10
7,578.53	89.90	267.90	7,168.00	-63.94	138.59	-137.29	9.00	9.00	0.09
End Build @ 7578.53ft - Production Zone Top									
7,600.00	89.90	267.90	7,168.04	-64.73	117.13	-115.83	0.00	0.00	0.00
7,700.00	89.90	267.90	7,168.22	-68.40	17.20	-15.84	0.00	0.00	0.00
7,800.00	89.90	267.90	7,168.40	-72.07	-82.73	84.14	0.00	0.00	0.00
7,900.00	89.90	267.90	7,168.58	-75.74	-182.67	184.13	0.00	0.00	0.00
8,000.00	89.90	267.90	7,168.76	-79.41	-282.60	284.12	0.00	0.00	0.00
8,100.00	89.90	267.90	7,168.94	-83.07	-382.53	384.10	0.00	0.00	0.00
8,200.00	89.90	267.90	7,169.12	-86.74	-482.46	484.09	0.00	0.00	0.00
8,300.00	89.90	267.90	7,169.29	-90.41	-582.40	584.07	0.00	0.00	0.00
8,400.00	89.90	267.90	7,169.47	-94.08	-682.33	684.06	0.00	0.00	0.00
8,500.00	89.90	267.90	7,169.65	-97.75	-782.26	784.04	0.00	0.00	0.00
8,600.00	89.90	267.90	7,169.83	-101.42	-882.19	884.03	0.00	0.00	0.00
8,700.00	89.90	267.90	7,170.01	-105.09	-982.13	984.01	0.00	0.00	0.00
8,800.00	89.90	267.90	7,170.19	-108.76	-1,082.06	1,084.00	0.00	0.00	0.00
8,900.00	89.90	267.90	7,170.37	-112.43	-1,181.99	1,183.99	0.00	0.00	0.00
9,000.00	89.90	267.90	7,170.55	-116.09	-1,281.92	1,283.97	0.00	0.00	0.00
9,100.00	89.90	267.90	7,170.73	-119.76	-1,381.86	1,383.96	0.00	0.00	0.00
9,200.00	89.90	267.90	7,170.91	-123.43	-1,481.79	1,483.94	0.00	0.00	0.00
9,300.00	89.90	267.90	7,171.09	-127.10	-1,581.72	1,583.93	0.00	0.00	0.00
9,400.00	89.90	267.90	7,171.27	-130.77	-1,681.65	1,683.91	0.00	0.00	0.00
9,500.00	89.90	267.90	7,171.45	-134.44	-1,781.59	1,783.90	0.00	0.00	0.00
9,597.08	89.90	267.90	7,171.62	-138.00	-1,878.60	1,880.96	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 4N-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 4N-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)
<b>Begin Turn to BHL @ 9597.08ft</b>									
9,600.00	89.90	267.96	7,171.63	-138.11	-1,881.52	1,883.88	2.00	0.00	2.00
9,696.20	89.90	269.88	7,171.80	-139.92	-1,977.70	1,980.08	2.00	0.00	2.00
<b>End Turn @ 9696.20ft</b>									
9,700.00	89.90	269.88	7,171.80	-139.93	-1,981.50	1,983.88	0.00	0.00	0.00
9,800.00	89.90	269.88	7,171.98	-140.14	-2,081.50	2,083.86	0.00	0.00	0.00
9,900.00	89.90	269.88	7,172.16	-140.35	-2,181.50	2,183.85	0.00	0.00	0.00
10,000.00	89.90	269.88	7,172.34	-140.56	-2,281.50	2,283.83	0.00	0.00	0.00
10,100.00	89.90	269.88	7,172.52	-140.77	-2,381.50	2,383.82	0.00	0.00	0.00
10,200.00	89.90	269.88	7,172.70	-140.98	-2,481.50	2,483.80	0.00	0.00	0.00
10,300.00	89.90	269.88	7,172.88	-141.19	-2,581.50	2,583.78	0.00	0.00	0.00
10,400.00	89.90	269.88	7,173.06	-141.40	-2,681.50	2,683.77	0.00	0.00	0.00
10,500.00	89.90	269.88	7,173.24	-141.61	-2,781.49	2,783.75	0.00	0.00	0.00
10,600.00	89.90	269.88	7,173.42	-141.82	-2,881.49	2,883.74	0.00	0.00	0.00
10,700.00	89.90	269.88	7,173.60	-142.03	-2,981.49	2,983.72	0.00	0.00	0.00
10,800.00	89.90	269.88	7,173.78	-142.24	-3,081.49	3,083.71	0.00	0.00	0.00
10,900.00	89.90	269.88	7,173.95	-142.45	-3,181.49	3,183.69	0.00	0.00	0.00
11,000.00	89.90	269.88	7,174.13	-142.66	-3,281.49	3,283.67	0.00	0.00	0.00
11,100.00	89.90	269.88	7,174.31	-142.87	-3,381.49	3,383.66	0.00	0.00	0.00
11,200.00	89.90	269.88	7,174.49	-143.08	-3,481.49	3,483.64	0.00	0.00	0.00
11,300.00	89.90	269.88	7,174.67	-143.29	-3,581.49	3,583.63	0.00	0.00	0.00
11,400.00	89.90	269.88	7,174.85	-143.49	-3,681.49	3,683.61	0.00	0.00	0.00
11,500.00	89.90	269.88	7,175.03	-143.70	-3,781.49	3,783.59	0.00	0.00	0.00
11,600.00	89.90	269.88	7,175.21	-143.91	-3,881.49	3,883.58	0.00	0.00	0.00
11,700.00	89.90	269.88	7,175.39	-144.12	-3,981.49	3,983.56	0.00	0.00	0.00
11,800.00	89.90	269.88	7,175.57	-144.33	-4,081.49	4,083.55	0.00	0.00	0.00
11,900.00	89.90	269.88	7,175.75	-144.54	-4,181.49	4,183.53	0.00	0.00	0.00
12,000.00	89.90	269.88	7,175.93	-144.75	-4,281.49	4,283.52	0.00	0.00	0.00
12,100.00	89.90	269.88	7,176.11	-144.96	-4,381.49	4,383.50	0.00	0.00	0.00
12,200.00	89.90	269.88	7,176.28	-145.17	-4,481.49	4,483.48	0.00	0.00	0.00
12,300.00	89.90	269.88	7,176.46	-145.38	-4,581.49	4,583.47	0.00	0.00	0.00
12,400.00	89.90	269.88	7,176.64	-145.59	-4,681.49	4,683.45	0.00	0.00	0.00
12,500.00	89.90	269.88	7,176.82	-145.80	-4,781.49	4,783.44	0.00	0.00	0.00
12,600.00	89.90	269.88	7,177.00	-146.01	-4,881.49	4,883.42	0.00	0.00	0.00
12,700.00	89.90	269.88	7,177.18	-146.22	-4,981.49	4,983.40	0.00	0.00	0.00
12,800.00	89.90	269.88	7,177.36	-146.43	-5,081.49	5,083.39	0.00	0.00	0.00
12,900.00	89.90	269.88	7,177.54	-146.64	-5,181.49	5,183.37	0.00	0.00	0.00
13,000.00	89.90	269.88	7,177.72	-146.85	-5,281.49	5,283.36	0.00	0.00	0.00
13,100.00	89.90	269.88	7,177.90	-147.06	-5,381.48	5,383.34	0.00	0.00	0.00
13,200.00	89.90	269.88	7,178.08	-147.27	-5,481.48	5,483.33	0.00	0.00	0.00
13,300.00	89.90	269.88	7,178.26	-147.48	-5,581.48	5,583.31	0.00	0.00	0.00
13,400.00	89.90	269.88	7,178.43	-147.69	-5,681.48	5,683.29	0.00	0.00	0.00
13,500.00	89.90	269.88	7,178.61	-147.90	-5,781.48	5,783.28	0.00	0.00	0.00
13,600.00	89.90	269.88	7,178.79	-148.11	-5,881.48	5,883.26	0.00	0.00	0.00
13,700.00	89.90	269.88	7,178.97	-148.32	-5,981.48	5,983.25	0.00	0.00	0.00
13,800.00	89.90	269.88	7,179.15	-148.53	-6,081.48	6,083.23	0.00	0.00	0.00
13,900.00	89.90	269.88	7,179.33	-148.74	-6,181.48	6,183.21	0.00	0.00	0.00
14,000.00	89.90	269.88	7,179.51	-148.95	-6,281.48	6,283.20	0.00	0.00	0.00
14,100.00	89.90	269.88	7,179.69	-149.16	-6,381.48	6,383.18	0.00	0.00	0.00
14,200.00	89.90	269.88	7,179.87	-149.37	-6,481.48	6,483.17	0.00	0.00	0.00
14,300.00	89.90	269.88	7,180.05	-149.58	-6,581.48	6,583.15	0.00	0.00	0.00
14,400.00	89.90	269.88	7,180.23	-149.78	-6,681.48	6,683.14	0.00	0.00	0.00
14,500.00	89.90	269.88	7,180.41	-149.99	-6,781.48	6,783.12	0.00	0.00	0.00
14,600.00	89.90	269.88	7,180.58	-150.20	-6,881.48	6,883.10	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 4N-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 4N-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)
14,700.00	89.90	269.88	7,180.76	-150.41	-6,981.48	6,983.09	0.00	0.00	0.00
14,800.00	89.90	269.88	7,180.94	-150.62	-7,081.48	7,083.07	0.00	0.00	0.00
14,900.00	89.90	269.88	7,181.12	-150.83	-7,181.48	7,183.06	0.00	0.00	0.00
15,000.00	89.90	269.88	7,181.30	-151.04	-7,281.48	7,283.04	0.00	0.00	0.00
15,100.00	89.90	269.88	7,181.48	-151.25	-7,381.48	7,383.03	0.00	0.00	0.00
15,200.00	89.90	269.88	7,181.66	-151.46	-7,481.48	7,483.01	0.00	0.00	0.00
15,300.00	89.90	269.88	7,181.84	-151.67	-7,581.48	7,582.99	0.00	0.00	0.00
15,389.78	89.90	269.88	7,182.00	-151.86	-7,671.26	7,672.76	0.00	0.00	0.00
TD Well @ 15389.78ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,810.86	1,800.00	9 5/8"	9-5/8	13-1/2
7,578.53	7,168.00	Production Zone Top	5-1/2	8-1/2

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft
561.00	560.05	-0.99	22.69	Hold Tangent @ 561.00ft
6,499.71	6,451.67	-33.55	768.36	KOP @ 6499.71ft :: DLS = 9°/100'
7,578.53	7,168.00	-63.94	138.59	End Build @ 7578.53ft
9,597.08	7,171.62	-138.00	-1,878.60	Begin Turn to BHL @ 9597.08ft
9,696.20	7,171.80	-139.92	-1,977.70	End Turn @ 9696.20ft
15,389.78	7,182.00	-151.86	-7,671.26	TD Well @ 15389.78ft