

SRC ENERGY

WELD COUNTY (NAD83, TRUE NORTH)

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

SANFORD 8N-27C-XR

Wellbore #1

Plan: Design #1

Standard Planning Report

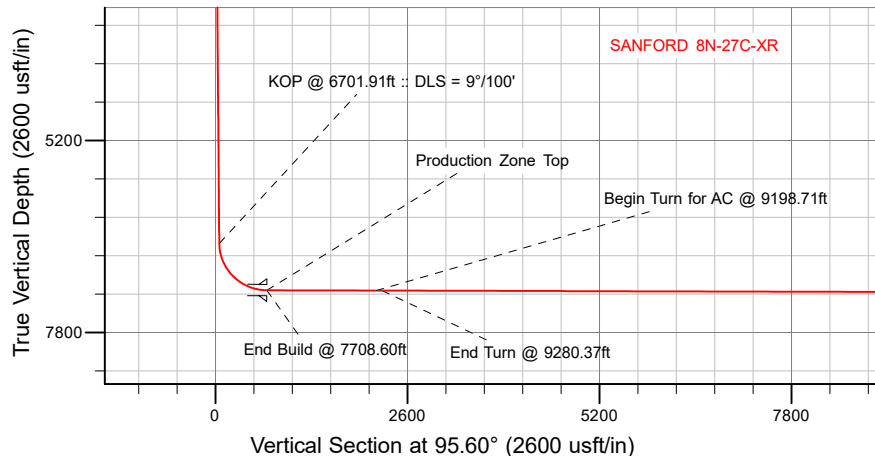
25 October, 2018

Project: WELD COUNTY (NAD83, TRUE NORTH)
Site: 5N-66W-29 SANFORD 21-29 PAD
Well: SANFORD 8N-27C-XR
Wellbore: Wellbore #1
Design: Design #1

SRC ENERGY

CASING DETAILS

TVD	MD	Name
1800.00	1822.00	9 5/8"
7229.00	7708.60	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	735.00	10.70	183.10	731.90	-49.74	-2.69	2.00	183.10	2.17	
4	6701.91	10.70	183.10	6595.06	-1155.97	-62.61	0.00	0.00	50.45	
5	7708.60	89.84	89.01	7229.00	-1264.15	574.18	9.00	-94.05	694.76	
6	9198.71	89.84	89.01	7233.14	-1238.45	2064.06	0.00	0.00	2175.02	Sanford 8N-27C-XR_target
7	9280.37	89.84	90.65	7233.37	-1238.21	2145.73	2.00	89.99	2256.27	
8	17199.18	89.84	90.65	7255.29	-1327.37	10064.00	0.00	0.00	10145.48	Sanford 8N-27C-XR_target2
9	17261.71	89.84	89.39	7255.46	-1327.39	10126.52	2.00	-90.00	10207.71	
10	20345.85	89.84	89.39	7264.00	-1294.81	13210.48	0.00	0.00	13273.79	Sanford 8N-27C-XR_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Sanford 8N-27C-XR_BPZ	0.00	-1294.50	13110.46	40.371908	-104.757855
Sanford 8N-27C-XR_SHL	0.00	0.00	0.00	40.375471	-104.804909
Sanford 8N-27C-XR_BHL	7264.00	-1294.81	13210.48	40.371907	-104.757496

WELL DETAILS: SANFORD 8N-27C-XR

GL = 4905'

RKB = 4' @ 4909.00usft (RIG)

Plan: Design #1 (SANFORD 8N-27C-XR/Wellbore #1)

Date: 10/25/2015

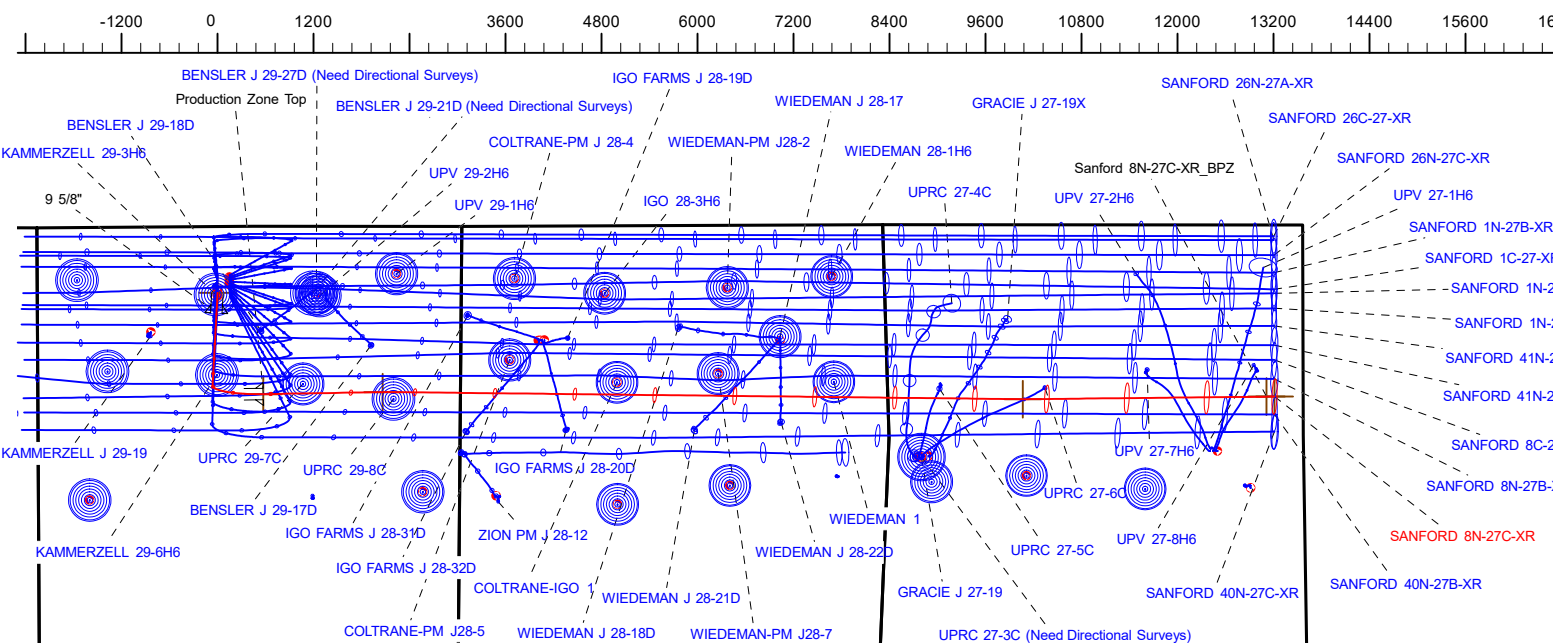
SHL
831' FNL
2242' FWL

LP
2099' FNL
2464' FEL
40.371999° Lat
-104.802859° Long

BPZ
2145' FNL
460' FEL

BHL
2145' FNL
360' FEL

West(-)/East(+) (2400 usft/in)



Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well SANFORD 8N-27C-XR
Company:	SRC ENERGY	TVD Reference:	RKB = 4' @ 4909.00usft (RIG)
Project:	WELD COUNTY (NAD83, TRUE NORTH)	MD Reference:	RKB = 4' @ 4909.00usft (RIG)
Site:	5N-66W-29 SANFORD 21-29 PAD	North Reference:	True
Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	WELD COUNTY (NAD83, TRUE NORTH)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	5N-66W-29 SANFORD 21-29 PAD			
Site Position:		Northing:	1,380,603.61 usft	Latitude: 40.376075
From:	Lat/Long	Easting:	3,193,654.99 usft	Longitude: -104.804914
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.45 °

Well	SANFORD 8N-27C-XR			
Well Position	+N/-S	-220.04 usft	Northing:	1,380,383.58 usft
	+E/-W	1.39 usft	Easting:	3,193,658.11 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	Latitude: 40.375471
				Longitude: -104.804909
				Ground Level: 4,905.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/20/2018	8.09	66.79	52,221.69871042

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	95.60

Plan Survey Tool Program	Date	10/25/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	1,800.00	Design #1 (Wellbore #1)	SRC Energy_ISCWSA REV 2
				Fixed:v2:crustal field declinatio
2	1,800.00	20,345.85	Design #1 (Wellbore #1)	SRC Energy_ISCWSA REV 2
				Fixed:v2:Rockies, crustal dec +

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Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	
735.00	10.70	183.10	731.90	-49.74	-2.69	2.00	2.00	0.00	183.10	
6,701.91	10.70	183.10	6,595.06	-1,155.97	-62.61	0.00	0.00	0.00	0.00	
7,708.60	89.84	89.01	7,229.00	-1,264.15	574.18	9.00	7.86	-9.35	-94.05	
9,198.71	89.84	89.01	7,233.14	-1,238.45	2,064.06	0.00	0.00	0.00	0.00	Sanford 8N-27C-XR_1
9,280.37	89.84	90.65	7,233.37	-1,238.21	2,145.73	2.00	0.00	2.00	89.99	
17,199.18	89.84	90.65	7,255.29	-1,327.37	10,064.00	0.00	0.00	0.00	0.00	Sanford 8N-27C-XR_1
17,261.71	89.84	89.39	7,255.46	-1,327.39	10,126.52	2.00	0.00	-2.00	-90.00	
20,345.85	89.84	89.39	7,264.00	-1,294.81	13,210.48	0.00	0.00	0.00	0.00	Sanford 8N-27C-XR_1

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Company:	SRC ENERGY	TVD Reference:	RKB = 4' @ 4909.00usft (RIG)
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Site:	5N-66W-29 SANFORD 21-29 PAD	North Reference:	True
Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	183.10	299.98	-1.74	-0.09	0.08	2.00	2.00	0.00
400.00	4.00	183.10	399.84	-6.97	-0.38	0.30	2.00	2.00	0.00
500.00	6.00	183.10	499.45	-15.67	-0.85	0.68	2.00	2.00	0.00
600.00	8.00	183.10	598.70	-27.84	-1.51	1.22	2.00	2.00	0.00
700.00	10.00	183.10	697.47	-43.46	-2.35	1.90	2.00	2.00	0.00
735.00	10.70	183.10	731.90	-49.74	-2.69	2.17	2.00	2.00	0.00
End Nudge @ 735.00ft									
800.00	10.70	183.10	795.77	-61.79	-3.35	2.70	0.00	0.00	0.00
900.00	10.70	183.10	894.03	-80.33	-4.35	3.51	0.00	0.00	0.00
1,000.00	10.70	183.10	992.29	-98.87	-5.35	4.32	0.00	0.00	0.00
1,100.00	10.70	183.10	1,090.55	-117.41	-6.36	5.12	0.00	0.00	0.00
1,200.00	10.70	183.10	1,188.81	-135.95	-7.36	5.93	0.00	0.00	0.00
1,300.00	10.70	183.10	1,287.07	-154.49	-8.37	6.74	0.00	0.00	0.00
1,400.00	10.70	183.10	1,385.33	-173.03	-9.37	7.55	0.00	0.00	0.00
1,500.00	10.70	183.10	1,483.59	-191.56	-10.37	8.36	0.00	0.00	0.00
1,600.00	10.70	183.10	1,581.86	-210.10	-11.38	9.17	0.00	0.00	0.00
1,700.00	10.70	183.10	1,680.12	-228.64	-12.38	9.98	0.00	0.00	0.00
1,800.00	10.70	183.10	1,778.38	-247.18	-13.39	10.79	0.00	0.00	0.00
1,822.00	10.70	183.10	1,800.00	-251.26	-13.61	10.97	0.00	0.00	0.00
9 5/8"									
1,900.00	10.70	183.10	1,876.64	-265.72	-14.39	11.60	0.00	0.00	0.00
2,000.00	10.70	183.10	1,974.90	-284.26	-15.40	12.41	0.00	0.00	0.00
2,100.00	10.70	183.10	2,073.16	-302.80	-16.40	13.22	0.00	0.00	0.00
2,200.00	10.70	183.10	2,171.42	-321.34	-17.40	14.03	0.00	0.00	0.00
2,300.00	10.70	183.10	2,269.68	-339.88	-18.41	14.83	0.00	0.00	0.00
2,400.00	10.70	183.10	2,367.95	-358.42	-19.41	15.64	0.00	0.00	0.00
2,500.00	10.70	183.10	2,466.21	-376.96	-20.42	16.45	0.00	0.00	0.00
2,600.00	10.70	183.10	2,564.47	-395.50	-21.42	17.26	0.00	0.00	0.00
2,700.00	10.70	183.10	2,662.73	-414.04	-22.42	18.07	0.00	0.00	0.00
2,800.00	10.70	183.10	2,760.99	-432.58	-23.43	18.88	0.00	0.00	0.00
2,900.00	10.70	183.10	2,859.25	-451.12	-24.43	19.69	0.00	0.00	0.00
3,000.00	10.70	183.10	2,957.51	-469.66	-25.44	20.50	0.00	0.00	0.00
3,100.00	10.70	183.10	3,055.78	-488.20	-26.44	21.31	0.00	0.00	0.00
3,200.00	10.70	183.10	3,154.04	-506.74	-27.44	22.12	0.00	0.00	0.00
3,300.00	10.70	183.10	3,252.30	-525.28	-28.45	22.93	0.00	0.00	0.00
3,400.00	10.70	183.10	3,350.56	-543.82	-29.45	23.74	0.00	0.00	0.00
3,500.00	10.70	183.10	3,448.82	-562.35	-30.46	24.54	0.00	0.00	0.00
3,600.00	10.70	183.10	3,547.08	-580.89	-31.46	25.35	0.00	0.00	0.00
3,700.00	10.70	183.10	3,645.34	-599.43	-32.46	26.16	0.00	0.00	0.00
3,800.00	10.70	183.10	3,743.60	-617.97	-33.47	26.97	0.00	0.00	0.00
3,900.00	10.70	183.10	3,841.87	-636.51	-34.47	27.78	0.00	0.00	0.00
4,000.00	10.70	183.10	3,940.13	-655.05	-35.48	28.59	0.00	0.00	0.00
4,100.00	10.70	183.10	4,038.39	-673.59	-36.48	29.40	0.00	0.00	0.00
4,200.00	10.70	183.10	4,136.65	-692.13	-37.48	30.21	0.00	0.00	0.00
4,300.00	10.70	183.10	4,234.91	-710.67	-38.49	31.02	0.00	0.00	0.00
4,400.00	10.70	183.10	4,333.17	-729.21	-39.49	31.83	0.00	0.00	0.00
4,500.00	10.70	183.10	4,431.43	-747.75	-40.50	32.64	0.00	0.00	0.00
4,600.00	10.70	183.10	4,529.69	-766.29	-41.50	33.45	0.00	0.00	0.00
4,700.00	10.70	183.10	4,627.96	-784.83	-42.50	34.25	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well SANFORD 8N-27C-XR
Company:	SRC ENERGY	TVD Reference:	RKB = 4' @ 4909.00usft (RIG)
Project:	WELD COUNTY (NAD83, TRUE NORTH)	MD Reference:	RKB = 4' @ 4909.00usft (RIG)
Site:	5N-66W-29 SANFORD 21-29 PAD	North Reference:	True
Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	10.70	183.10	4,726.22	-803.37	-43.51	35.06	0.00	0.00	0.00
4,900.00	10.70	183.10	4,824.48	-821.91	-44.51	35.87	0.00	0.00	0.00
5,000.00	10.70	183.10	4,922.74	-840.45	-45.52	36.68	0.00	0.00	0.00
5,100.00	10.70	183.10	5,021.00	-858.99	-46.52	37.49	0.00	0.00	0.00
5,200.00	10.70	183.10	5,119.26	-877.53	-47.53	38.30	0.00	0.00	0.00
5,300.00	10.70	183.10	5,217.52	-896.07	-48.53	39.11	0.00	0.00	0.00
5,400.00	10.70	183.10	5,315.78	-914.61	-49.53	39.92	0.00	0.00	0.00
5,500.00	10.70	183.10	5,414.05	-933.14	-50.54	40.73	0.00	0.00	0.00
5,600.00	10.70	183.10	5,512.31	-951.68	-51.54	41.54	0.00	0.00	0.00
5,700.00	10.70	183.10	5,610.57	-970.22	-52.55	42.35	0.00	0.00	0.00
5,800.00	10.70	183.10	5,708.83	-988.76	-53.55	43.16	0.00	0.00	0.00
5,900.00	10.70	183.10	5,807.09	-1,007.30	-54.55	43.97	0.00	0.00	0.00
6,000.00	10.70	183.10	5,905.35	-1,025.84	-55.56	44.77	0.00	0.00	0.00
6,100.00	10.70	183.10	6,003.61	-1,044.38	-56.56	45.58	0.00	0.00	0.00
6,200.00	10.70	183.10	6,101.87	-1,062.92	-57.57	46.39	0.00	0.00	0.00
6,300.00	10.70	183.10	6,200.14	-1,081.46	-58.57	47.20	0.00	0.00	0.00
6,400.00	10.70	183.10	6,298.40	-1,100.00	-59.57	48.01	0.00	0.00	0.00
6,500.00	10.70	183.10	6,396.66	-1,118.54	-60.58	48.82	0.00	0.00	0.00
6,600.00	10.70	183.10	6,494.92	-1,137.08	-61.58	49.63	0.00	0.00	0.00
6,700.00	10.70	183.10	6,593.18	-1,155.62	-62.59	50.44	0.00	0.00	0.00
6,701.91	10.70	183.10	6,595.06	-1,155.97	-62.61	50.45	0.00	0.00	0.00
KOP @ 6701.91ft :: DLS = 9°/100'									
6,800.00	13.35	141.57	6,691.16	-1,173.97	-56.05	58.74	9.00	2.70	-42.34
6,900.00	20.04	120.09	6,786.98	-1,191.64	-34.00	82.40	9.00	6.69	-21.48
7,000.00	28.02	109.72	6,878.28	-1,208.19	3.02	120.86	9.00	7.98	-10.37
7,100.00	36.45	103.76	6,962.81	-1,223.22	54.09	173.15	9.00	8.43	-5.96
7,200.00	45.08	99.81	7,038.49	-1,236.35	117.96	238.00	9.00	8.63	-3.95
7,300.00	53.81	96.91	7,103.45	-1,247.26	193.06	313.81	9.00	8.73	-2.91
7,400.00	62.59	94.59	7,156.11	-1,255.68	277.54	398.70	9.00	8.78	-2.32
7,500.00	71.40	92.62	7,195.15	-1,261.41	369.31	490.59	9.00	8.82	-1.97
7,600.00	80.24	90.84	7,219.62	-1,264.30	466.12	587.23	9.00	8.83	-1.78
7,700.00	89.08	89.16	7,228.92	-1,264.29	565.58	686.21	9.00	8.84	-1.68
7,708.60	89.84	89.01	7,229.00	-1,264.15	574.18	694.76	9.00	8.84	-1.67
End Build @ 7708.60ft - Production Zone Top									
7,800.00	89.84	89.01	7,229.26	-1,262.57	665.57	785.55	0.00	0.00	0.00
7,900.00	89.84	89.01	7,229.53	-1,260.85	765.55	884.89	0.00	0.00	0.00
8,000.00	89.84	89.01	7,229.81	-1,259.12	865.54	984.23	0.00	0.00	0.00
8,100.00	89.84	89.01	7,230.09	-1,257.40	965.52	1,083.57	0.00	0.00	0.00
8,200.00	89.84	89.01	7,230.37	-1,255.67	1,065.51	1,182.91	0.00	0.00	0.00
8,300.00	89.84	89.01	7,230.65	-1,253.95	1,165.49	1,282.25	0.00	0.00	0.00
8,400.00	89.84	89.01	7,230.92	-1,252.23	1,265.48	1,381.59	0.00	0.00	0.00
8,500.00	89.84	89.01	7,231.20	-1,250.50	1,365.46	1,480.93	0.00	0.00	0.00
8,600.00	89.84	89.01	7,231.48	-1,248.78	1,465.45	1,580.27	0.00	0.00	0.00
8,700.00	89.84	89.01	7,231.76	-1,247.05	1,565.43	1,679.61	0.00	0.00	0.00
8,800.00	89.84	89.01	7,232.03	-1,245.33	1,665.42	1,778.95	0.00	0.00	0.00
8,900.00	89.84	89.01	7,232.31	-1,243.60	1,765.40	1,878.29	0.00	0.00	0.00
9,000.00	89.84	89.01	7,232.59	-1,241.88	1,865.39	1,977.63	0.00	0.00	0.00
9,100.00	89.84	89.01	7,232.87	-1,240.15	1,965.37	2,076.97	0.00	0.00	0.00
9,198.71	89.84	89.01	7,233.14	-1,238.45	2,064.06	2,175.02	0.00	0.00	0.00
Begin Turn for AC @ 9198.71ft									
9,200.00	89.84	89.04	7,233.14	-1,238.43	2,065.35	2,176.31	2.00	0.00	2.00
9,280.37	89.84	90.65	7,233.37	-1,238.21	2,145.73	2,256.27	2.00	0.00	2.00
End Turn @ 9280.37ft									
9,300.00	89.84	90.65	7,233.42	-1,238.43	2,165.35	2,275.83	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well SANFORD 8N-27C-XR
Company:	SRC ENERGY	TVD Reference:	RKB = 4' @ 4909.00usft (RIG)
Project:	WELD COUNTY (NAD83, TRUE NORTH)	MD Reference:	RKB = 4' @ 4909.00usft (RIG)
Site:	5N-66W-29 SANFORD 21-29 PAD	North Reference:	True
Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
9,400.00	89.84	90.65	7,233.70	-1,239.55	2,265.34	2,375.45	0.00	0.00	0.00
9,500.00	89.84	90.65	7,233.97	-1,240.68	2,365.34	2,475.08	0.00	0.00	0.00
9,600.00	89.84	90.65	7,234.25	-1,241.80	2,465.33	2,574.71	0.00	0.00	0.00
9,700.00	89.84	90.65	7,234.53	-1,242.93	2,565.32	2,674.33	0.00	0.00	0.00
9,800.00	89.84	90.65	7,234.81	-1,244.06	2,665.32	2,773.96	0.00	0.00	0.00
9,900.00	89.84	90.65	7,235.08	-1,245.18	2,765.31	2,873.58	0.00	0.00	0.00
10,000.00	89.84	90.65	7,235.36	-1,246.31	2,865.30	2,973.21	0.00	0.00	0.00
10,100.00	89.84	90.65	7,235.64	-1,247.43	2,965.30	3,072.84	0.00	0.00	0.00
10,200.00	89.84	90.65	7,235.91	-1,248.56	3,065.29	3,172.46	0.00	0.00	0.00
10,300.00	89.84	90.65	7,236.19	-1,249.69	3,165.28	3,272.09	0.00	0.00	0.00
10,400.00	89.84	90.65	7,236.47	-1,250.81	3,265.28	3,371.72	0.00	0.00	0.00
10,500.00	89.84	90.65	7,236.74	-1,251.94	3,365.27	3,471.34	0.00	0.00	0.00
10,600.00	89.84	90.65	7,237.02	-1,253.06	3,465.26	3,570.97	0.00	0.00	0.00
10,700.00	89.84	90.65	7,237.30	-1,254.19	3,565.26	3,670.59	0.00	0.00	0.00
10,800.00	89.84	90.65	7,237.57	-1,255.32	3,665.25	3,770.22	0.00	0.00	0.00
10,900.00	89.84	90.65	7,237.85	-1,256.44	3,765.24	3,869.85	0.00	0.00	0.00
11,000.00	89.84	90.65	7,238.13	-1,257.57	3,865.24	3,969.47	0.00	0.00	0.00
11,100.00	89.84	90.65	7,238.40	-1,258.69	3,965.23	4,069.10	0.00	0.00	0.00
11,200.00	89.84	90.65	7,238.68	-1,259.82	4,065.22	4,168.73	0.00	0.00	0.00
11,300.00	89.84	90.65	7,238.96	-1,260.95	4,165.22	4,268.35	0.00	0.00	0.00
11,400.00	89.84	90.65	7,239.23	-1,262.07	4,265.21	4,367.98	0.00	0.00	0.00
11,500.00	89.84	90.65	7,239.51	-1,263.20	4,365.20	4,467.60	0.00	0.00	0.00
11,600.00	89.84	90.65	7,239.79	-1,264.32	4,465.20	4,567.23	0.00	0.00	0.00
11,700.00	89.84	90.65	7,240.07	-1,265.45	4,565.19	4,666.86	0.00	0.00	0.00
11,800.00	89.84	90.65	7,240.34	-1,266.58	4,665.18	4,766.48	0.00	0.00	0.00
11,900.00	89.84	90.65	7,240.62	-1,267.70	4,765.18	4,866.11	0.00	0.00	0.00
12,000.00	89.84	90.65	7,240.90	-1,268.83	4,865.17	4,965.74	0.00	0.00	0.00
12,100.00	89.84	90.65	7,241.17	-1,269.95	4,965.16	5,065.36	0.00	0.00	0.00
12,200.00	89.84	90.65	7,241.45	-1,271.08	5,065.16	5,164.99	0.00	0.00	0.00
12,300.00	89.84	90.65	7,241.73	-1,272.21	5,165.15	5,264.61	0.00	0.00	0.00
12,400.00	89.84	90.65	7,242.00	-1,273.33	5,265.14	5,364.24	0.00	0.00	0.00
12,500.00	89.84	90.65	7,242.28	-1,274.46	5,365.14	5,463.87	0.00	0.00	0.00
12,600.00	89.84	90.65	7,242.56	-1,275.58	5,465.13	5,563.49	0.00	0.00	0.00
12,700.00	89.84	90.65	7,242.83	-1,276.71	5,565.12	5,663.12	0.00	0.00	0.00
12,800.00	89.84	90.65	7,243.11	-1,277.84	5,665.11	5,762.75	0.00	0.00	0.00
12,900.00	89.84	90.65	7,243.39	-1,278.96	5,765.11	5,862.37	0.00	0.00	0.00
13,000.00	89.84	90.65	7,243.66	-1,280.09	5,865.10	5,962.00	0.00	0.00	0.00
13,100.00	89.84	90.65	7,243.94	-1,281.21	5,965.09	6,061.62	0.00	0.00	0.00
13,200.00	89.84	90.65	7,244.22	-1,282.34	6,065.09	6,161.25	0.00	0.00	0.00
13,300.00	89.84	90.65	7,244.50	-1,283.47	6,165.08	6,260.88	0.00	0.00	0.00
13,400.00	89.84	90.65	7,244.77	-1,284.59	6,265.07	6,360.50	0.00	0.00	0.00
13,500.00	89.84	90.65	7,245.05	-1,285.72	6,365.07	6,460.13	0.00	0.00	0.00
13,600.00	89.84	90.65	7,245.33	-1,286.84	6,465.06	6,559.76	0.00	0.00	0.00
13,700.00	89.84	90.65	7,245.60	-1,287.97	6,565.05	6,659.38	0.00	0.00	0.00
13,800.00	89.84	90.65	7,245.88	-1,289.10	6,665.05	6,759.01	0.00	0.00	0.00
13,900.00	89.84	90.65	7,246.16	-1,290.22	6,765.04	6,858.63	0.00	0.00	0.00
14,000.00	89.84	90.65	7,246.43	-1,291.35	6,865.03	6,958.26	0.00	0.00	0.00
14,100.00	89.84	90.65	7,246.71	-1,292.47	6,965.03	7,057.89	0.00	0.00	0.00
14,200.00	89.84	90.65	7,246.99	-1,293.60	7,065.02	7,157.51	0.00	0.00	0.00
14,300.00	89.84	90.65	7,247.26	-1,294.73	7,165.01	7,257.14	0.00	0.00	0.00
14,400.00	89.84	90.65	7,247.54	-1,295.85	7,265.01	7,356.77	0.00	0.00	0.00
14,500.00	89.84	90.65	7,247.82	-1,296.98	7,365.00	7,456.39	0.00	0.00	0.00
14,600.00	89.84	90.65	7,248.09	-1,298.10	7,464.99	7,556.02	0.00	0.00	0.00
14,700.00	89.84	90.65	7,248.37	-1,299.23	7,564.99	7,655.64	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well SANFORD 8N-27C-XR
Company:	SRC ENERGY	TVD Reference:	RKB = 4' @ 4909.00usft (RIG)
Project:	WELD COUNTY (NAD83, TRUE NORTH)	MD Reference:	RKB = 4' @ 4909.00usft (RIG)
Site:	5N-66W-29 SANFORD 21-29 PAD	North Reference:	True
Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
14,800.00	89.84	90.65	7,248.65	-1,300.36	7,664.98	7,755.27	0.00	0.00	0.00
14,900.00	89.84	90.65	7,248.92	-1,301.48	7,764.97	7,854.90	0.00	0.00	0.00
15,000.00	89.84	90.65	7,249.20	-1,302.61	7,864.97	7,954.52	0.00	0.00	0.00
15,100.00	89.84	90.65	7,249.48	-1,303.73	7,964.96	8,054.15	0.00	0.00	0.00
15,200.00	89.84	90.65	7,249.76	-1,304.86	8,064.95	8,153.78	0.00	0.00	0.00
15,300.00	89.84	90.65	7,250.03	-1,305.99	8,164.95	8,253.40	0.00	0.00	0.00
15,400.00	89.84	90.65	7,250.31	-1,307.11	8,264.94	8,353.03	0.00	0.00	0.00
15,500.00	89.84	90.65	7,250.59	-1,308.24	8,364.93	8,452.65	0.00	0.00	0.00
15,600.00	89.84	90.65	7,250.86	-1,309.36	8,464.93	8,552.28	0.00	0.00	0.00
15,700.00	89.84	90.65	7,251.14	-1,310.49	8,564.92	8,651.91	0.00	0.00	0.00
15,800.00	89.84	90.65	7,251.42	-1,311.62	8,664.91	8,751.53	0.00	0.00	0.00
15,900.00	89.84	90.65	7,251.69	-1,312.74	8,764.91	8,851.16	0.00	0.00	0.00
16,000.00	89.84	90.65	7,251.97	-1,313.87	8,864.90	8,950.79	0.00	0.00	0.00
16,100.00	89.84	90.65	7,252.25	-1,314.99	8,964.89	9,050.41	0.00	0.00	0.00
16,200.00	89.84	90.65	7,252.52	-1,316.12	9,064.89	9,150.04	0.00	0.00	0.00
16,300.00	89.84	90.65	7,252.80	-1,317.25	9,164.88	9,249.66	0.00	0.00	0.00
16,400.00	89.84	90.65	7,253.08	-1,318.37	9,264.87	9,349.29	0.00	0.00	0.00
16,500.00	89.84	90.65	7,253.35	-1,319.50	9,364.87	9,448.92	0.00	0.00	0.00
16,600.00	89.84	90.65	7,253.63	-1,320.62	9,464.86	9,548.54	0.00	0.00	0.00
16,700.00	89.84	90.65	7,253.91	-1,321.75	9,564.85	9,648.17	0.00	0.00	0.00
16,800.00	89.84	90.65	7,254.19	-1,322.88	9,664.85	9,747.80	0.00	0.00	0.00
16,900.00	89.84	90.65	7,254.46	-1,324.00	9,764.84	9,847.42	0.00	0.00	0.00
17,000.00	89.84	90.65	7,254.74	-1,325.13	9,864.83	9,947.05	0.00	0.00	0.00
17,100.00	89.84	90.65	7,255.02	-1,326.25	9,964.83	10,046.67	0.00	0.00	0.00
17,199.18	89.84	90.65	7,255.29	-1,327.37	10,064.00	10,145.48	0.00	0.00	0.00
Begin Turn to BHL @ 17199.18ft									
17,200.00	89.84	90.63	7,255.29	-1,327.38	10,064.82	10,146.30	2.00	0.00	-2.00
17,261.71	89.84	89.39	7,255.46	-1,327.39	10,126.52	10,207.71	2.00	0.00	-2.00
End Turn @ 17261.71ft									
17,300.00	89.84	89.39	7,255.57	-1,326.99	10,164.82	10,245.78	0.00	0.00	0.00
17,400.00	89.84	89.39	7,255.85	-1,325.93	10,264.81	10,345.20	0.00	0.00	0.00
17,500.00	89.84	89.39	7,256.12	-1,324.87	10,364.80	10,444.61	0.00	0.00	0.00
17,600.00	89.84	89.39	7,256.40	-1,323.82	10,464.80	10,544.02	0.00	0.00	0.00
17,700.00	89.84	89.39	7,256.68	-1,322.76	10,564.79	10,643.44	0.00	0.00	0.00
17,800.00	89.84	89.39	7,256.95	-1,321.70	10,664.79	10,742.85	0.00	0.00	0.00
17,900.00	89.84	89.39	7,257.23	-1,320.65	10,764.78	10,842.27	0.00	0.00	0.00
18,000.00	89.84	89.39	7,257.51	-1,319.59	10,864.77	10,941.68	0.00	0.00	0.00
18,100.00	89.84	89.39	7,257.78	-1,318.53	10,964.77	11,041.09	0.00	0.00	0.00
18,200.00	89.84	89.39	7,258.06	-1,317.48	11,064.76	11,140.51	0.00	0.00	0.00
18,300.00	89.84	89.39	7,258.34	-1,316.42	11,164.76	11,239.92	0.00	0.00	0.00
18,400.00	89.84	89.39	7,258.61	-1,315.37	11,264.75	11,339.34	0.00	0.00	0.00
18,500.00	89.84	89.39	7,258.89	-1,314.31	11,364.74	11,438.75	0.00	0.00	0.00
18,600.00	89.84	89.39	7,259.17	-1,313.25	11,464.74	11,538.17	0.00	0.00	0.00
18,700.00	89.84	89.39	7,259.44	-1,312.20	11,564.73	11,637.58	0.00	0.00	0.00
18,800.00	89.84	89.39	7,259.72	-1,311.14	11,664.73	11,736.99	0.00	0.00	0.00
18,900.00	89.84	89.39	7,260.00	-1,310.08	11,764.72	11,836.41	0.00	0.00	0.00
19,000.00	89.84	89.39	7,260.27	-1,309.03	11,864.71	11,935.82	0.00	0.00	0.00
19,100.00	89.84	89.39	7,260.55	-1,307.97	11,964.71	12,035.24	0.00	0.00	0.00
19,200.00	89.84	89.39	7,260.83	-1,306.91	12,064.70	12,134.65	0.00	0.00	0.00
19,300.00	89.84	89.39	7,261.11	-1,305.86	12,164.70	12,234.06	0.00	0.00	0.00
19,400.00	89.84	89.39	7,261.38	-1,304.80	12,264.69	12,333.48	0.00	0.00	0.00
19,500.00	89.84	89.39	7,261.66	-1,303.74	12,364.68	12,432.89	0.00	0.00	0.00
19,600.00	89.84	89.39	7,261.94	-1,302.69	12,464.68	12,532.31	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well SANFORD 8N-27C-XR
Company:	SRC ENERGY	TVD Reference:	RKB = 4' @ 4909.00usft (RIG)
Project:	WELD COUNTY (NAD83, TRUE NORTH)	MD Reference:	RKB = 4' @ 4909.00usft (RIG)
Site:	5N-66W-29 SANFORD 21-29 PAD	North Reference:	True
Well:	SANFORD 8N-27C-XR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)	
19,700.00	89.84	89.39	7,262.21	-1,301.63	12,564.67	12,631.72	0.00	0.00	0.00	
19,800.00	89.84	89.39	7,262.49	-1,300.57	12,664.67	12,731.13	0.00	0.00	0.00	
19,900.00	89.84	89.39	7,262.77	-1,299.52	12,764.66	12,830.55	0.00	0.00	0.00	
20,000.00	89.84	89.39	7,263.04	-1,298.46	12,864.65	12,929.96	0.00	0.00	0.00	
20,100.00	89.84	89.39	7,263.32	-1,297.40	12,964.65	13,029.38	0.00	0.00	0.00	
20,200.00	89.84	89.39	7,263.60	-1,296.35	13,064.64	13,128.79	0.00	0.00	0.00	
20,300.00	89.84	89.39	7,263.87	-1,295.29	13,164.64	13,228.21	0.00	0.00	0.00	
20,345.85	89.84	89.39	7,264.00	-1,294.81	13,210.48	13,273.79	0.00	0.00	0.00	
TD Well @ 20345.85ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,822.00	1,800.00	9 5/8"	9-5/8	13-1/2	
7,708.60	7,229.00	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	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft	
735.00	731.90	-49.74	-2.69	End Nudge @ 735.00ft	
6,701.91	6,595.06	-1,155.97	-62.61	KOP @ 6701.91ft :: DLS = 9°/100'	
7,708.60	7,229.00	-1,264.15	574.18	End Build @ 7708.60ft	
9,198.71	7,233.14	-1,238.45	2,064.06	Begin Turn for AC @ 9198.71ft	
9,280.37	7,233.37	-1,238.21	2,145.73	End Turn @ 9280.37ft	
17,199.18	7,255.29	-1,327.37	10,064.00	Begin Turn to BHL @ 17199.18ft	
17,261.71	7,255.46	-1,327.39	10,126.52	End Turn @ 17261.71ft	
20,345.85	7,264.00	-1,294.81	13,210.48	TD Well @ 20345.85ft	