

EE3

Well Name: **PETERSON RIDGE 1-20H**

Surface Location: PETERSON RIDGE 01-20H PAD
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 8113.0

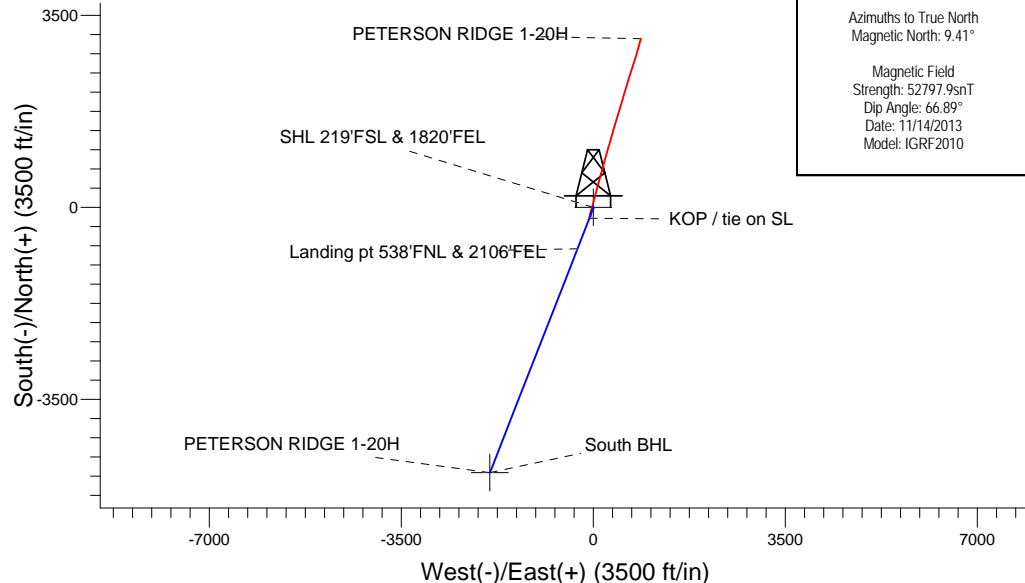
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1478916.85	2751784.13	40.644586	-106.394469	

Ensign 12 RKB - 12' WELL @ 8125.0ft (Ensign 12 RKB - 12')

WELLBORE TARGET DETAILS (LAT/LONG)

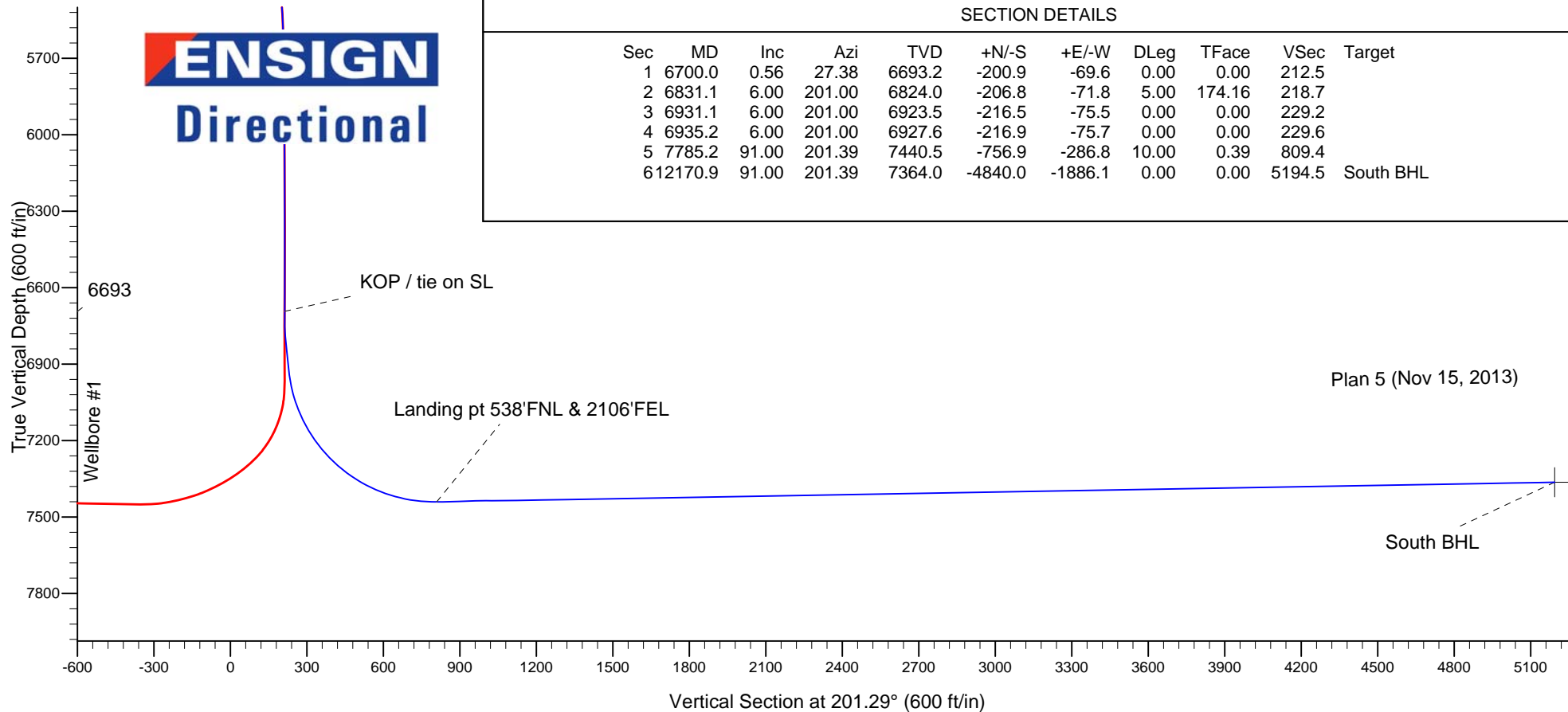
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
SHL 219'FSL & 1820'FEL	1.0	0.0	0.0	40.644586	-106.394469
South BHL	7364.0	-4840.0	-1886.1	40.631301	-106.401264

PETERSON RIDGE 01-20H PAD
PETERSON RIDGE 1-20H
Plan 5 (Nov 15, 2013)
10:10, November 15 2013



Azimuths to True North
Magnetic North: 9.41°

Magnetic Field
Strength: 52797.9nT
Dip Angle: 66.89°
Date: 11/14/2013
Model: IGRF2010





Directional

EE3

**NORTH PARK
PETERSON RIDGE 01-20H PAD
PETERSON RIDGE 1-20H**

Wellbore #2 South Sidetrack

Plan: Plan 5 (Nov 15, 2013)

Standard Planning Report

15 November, 2013



Database:	Landmark	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Company:	EE3	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Project:	NORTH PARK	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site:	PETERSON RIDGE 01-20H PAD	North Reference:	True
Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

Project	NORTH PARK		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Well	PETERSON RIDGE 1-20H				
Well Position	+N/-S	0.0 ft	Northing:	1,478,916.85 ft	Latitude: 40.644586
	+E/-W	0.0 ft	Easting:	2,751,784.13 ft	Longitude: -106.394469
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 8,113.0 ft

Wellbore	Wellbore #2 South Sidetrack				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/14/2013	9.41	66.89	52,798

Design	Plan 5 (Nov 15, 2013)				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	6,700.0	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	201.29	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
6,700.0	0.56	27.38	6,693.2	-200.9	-69.6	0.00	0.00	0.00	0.00	
6,831.1	6.00	201.00	6,824.0	-206.8	-71.8	5.00	4.15	132.45	174.16	
6,931.1	6.00	201.00	6,923.5	-216.5	-75.5	0.00	0.00	0.00	0.00	
6,935.2	6.00	201.00	6,927.6	-216.9	-75.7	0.00	0.00	0.00	0.00	
7,785.2	91.00	201.39	7,440.5	-756.9	-286.8	10.00	10.00	0.05	0.39	
12,170.9	91.00	201.39	7,364.0	-4,840.0	-1,886.1	0.00	0.00	0.00	0.00	South BHL

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Project:	NORTH PARK	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site:	PETERSON RIDGE 01-20H PAD	North Reference:	True
Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
0.8	0.01	136.20	0.8	0.0	0.0	0.0	0.69	0.69	0.00
HARDLINE 600'FNL & 600'FEL									
1.0	0.01	136.20	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 219'FSL & 1820'FEL - HARDLINE 600'FSL									
1.1	0.01	136.20	1.1	0.0	0.0	0.0	1.18	1.18	0.00
Hardline 600' FNL									
50.0	0.34	136.20	50.0	-0.1	0.1	0.1	0.69	0.69	0.00
100.0	0.69	136.20	100.0	-0.4	0.4	0.3	0.69	0.69	0.00
150.0	0.59	157.89	150.0	-0.9	0.8	0.6	0.52	-0.20	43.38
200.0	0.57	208.16	200.0	-1.4	0.8	1.0	0.98	-0.05	100.55
250.0	0.81	200.39	250.0	-1.9	0.5	1.6	0.52	0.49	-15.55
300.0	1.10	190.90	300.0	-2.7	0.3	2.4	0.66	0.58	-18.98
350.0	0.42	180.67	350.0	-3.4	0.2	3.1	1.38	-1.36	-20.46
400.0	0.19	62.05	400.0	-3.5	0.3	3.1	1.08	-0.46	-237.24
450.0	0.23	105.67	450.0	-3.4	0.4	3.0	0.32	0.07	87.24
500.0	0.29	140.02	500.0	-3.6	0.6	3.1	0.33	0.12	68.70
550.0	0.40	181.51	550.0	-3.8	0.7	3.3	0.53	0.21	82.99
600.0	0.39	200.13	600.0	-4.2	0.6	3.7	0.26	-0.01	37.24
650.0	0.22	236.81	650.0	-4.4	0.5	3.9	0.51	-0.35	73.35
700.0	0.29	178.89	700.0	-4.5	0.4	4.1	0.51	0.15	-115.83
750.0	0.78	155.39	750.0	-5.0	0.5	4.4	1.04	0.97	-47.00
800.0	0.77	149.63	800.0	-5.6	0.9	4.9	0.16	-0.01	-11.51
850.0	0.62	141.98	850.0	-6.1	1.2	5.3	0.37	-0.32	-15.30
900.0	0.34	195.10	900.0	-6.5	1.4	5.5	0.99	-0.54	106.24
950.0	0.57	249.29	950.0	-6.7	1.1	5.9	0.93	0.46	108.37
1,000.0	0.33	205.86	1,000.0	-6.9	0.8	6.2	0.81	-0.49	-86.85
1,050.0	0.34	148.17	1,050.0	-7.2	0.8	6.4	0.64	0.02	-115.38
1,100.0	0.25	73.16	1,100.0	-7.3	1.0	6.4	0.72	-0.18	-150.03
1,150.0	0.39	22.74	1,150.0	-7.1	1.2	6.2	0.60	0.28	-100.85
1,200.0	0.56	342.11	1,200.0	-6.7	1.2	5.8	0.73	0.34	-81.25
1,250.0	0.65	344.38	1,249.9	-6.2	1.0	5.4	0.19	0.19	4.53
1,300.0	0.66	11.97	1,299.9	-5.6	0.9	4.9	0.63	0.02	55.20
1,350.0	0.49	27.15	1,349.9	-5.1	1.1	4.4	0.45	-0.34	30.35
1,400.0	0.23	60.38	1,399.9	-4.9	1.3	4.1	0.66	-0.53	66.47
1,450.0	0.53	100.78	1,449.9	-4.9	1.6	4.0	0.77	0.60	80.79
1,500.0	0.96	107.26	1,499.9	-5.0	2.2	3.9	0.87	0.86	12.96
1,550.0	1.07	123.95	1,549.9	-5.4	3.0	4.0	0.63	0.22	33.38
1,600.0	1.13	135.68	1,599.9	-6.1	3.8	4.3	0.46	0.12	23.47
1,650.0	0.64	119.09	1,649.9	-6.6	4.4	4.5	1.10	-0.98	-33.19
1,700.0	0.49	85.58	1,699.9	-6.6	4.8	4.5	0.71	-0.30	-67.02
1,750.0	0.76	85.05	1,749.9	-6.6	5.3	4.2	0.54	0.54	-1.06
1,800.0	0.70	88.36	1,799.9	-6.5	6.0	3.9	0.15	-0.12	6.62
1,850.0	0.30	110.16	1,849.9	-6.6	6.4	3.8	0.86	-0.79	43.60
1,900.0	0.00	291.23	1,899.9	-6.7	6.5	3.8	0.61	-0.60	-357.87
1,950.0	0.33	319.16	1,949.9	-6.6	6.4	3.8	0.65	0.65	55.87
2,000.0	0.62	295.12	1,999.9	-6.3	6.1	3.7	0.70	0.59	-48.09
2,050.0	0.98	282.76	2,049.9	-6.1	5.5	3.7	0.78	0.71	-24.72
2,100.0	0.64	261.42	2,099.9	-6.0	4.7	3.9	0.89	-0.67	-42.67
2,150.0	0.49	216.59	2,149.9	-6.3	4.3	4.3	0.91	-0.30	-89.67
2,200.0	0.44	207.78	2,199.9	-6.6	4.1	4.7	0.18	-0.12	-17.62
2,250.0	0.45	199.45	2,249.9	-6.9	4.0	5.0	0.13	0.03	-16.65
2,300.0	0.67	199.34	2,299.9	-7.4	3.8	5.5	0.43	0.43	-0.23

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Site:	PETERSON RIDGE 01-20H PAD	North Reference:	True
Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

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)
2,350.0	1.15	205.43	2,349.9	-8.1	3.6	6.2	0.98	0.96	12.19
2,400.0	2.05	211.42	2,399.9	-9.3	2.9	7.6	1.82	1.79	11.98
2,450.0	2.71	212.12	2,449.8	-11.1	1.7	9.7	1.33	1.33	1.39
2,500.0	3.14	211.04	2,499.7	-13.3	0.4	12.2	0.86	0.85	-2.17
2,550.0	3.10	208.46	2,549.7	-15.7	-1.0	15.0	0.29	-0.08	-5.16
2,600.0	2.78	204.18	2,599.6	-18.0	-2.1	17.5	0.77	-0.63	-8.57
2,650.0	2.74	204.07	2,649.5	-20.2	-3.1	19.9	0.09	-0.09	-0.22
2,700.0	2.79	205.77	2,699.5	-22.4	-4.1	22.3	0.20	0.11	3.40
2,750.0	2.75	208.26	2,749.4	-24.5	-5.2	24.7	0.25	-0.08	4.99
2,800.0	2.70	210.99	2,799.4	-26.6	-6.4	27.1	0.28	-0.10	5.45
2,850.0	3.40	218.21	2,849.3	-28.7	-7.9	29.6	1.59	1.39	14.45
2,900.0	4.06	222.29	2,899.2	-31.2	-10.0	32.7	1.42	1.32	8.15
2,950.0	3.56	216.39	2,949.1	-33.8	-12.1	35.9	1.26	-0.99	-11.81
3,000.0	3.14	210.14	2,999.0	-36.2	-13.7	38.7	1.12	-0.85	-12.50
3,050.0	2.82	208.65	3,048.9	-38.5	-15.0	41.3	0.65	-0.63	-2.97
3,100.0	2.74	205.81	3,098.9	-40.6	-16.1	43.7	0.32	-0.16	-5.69
3,150.0	3.21	201.52	3,148.8	-43.0	-17.1	46.2	1.04	0.94	-8.59
3,200.0	3.75	201.92	3,198.7	-45.8	-18.2	49.3	1.08	1.08	0.80
3,250.0	4.39	206.73	3,248.6	-49.0	-19.7	52.8	1.46	1.29	9.63
3,300.0	4.87	207.23	3,298.4	-52.6	-21.6	56.9	0.95	0.95	1.00
3,350.0	5.18	205.10	3,348.2	-56.6	-23.5	61.2	0.73	0.63	-4.26
3,400.0	5.37	204.05	3,398.0	-60.8	-25.4	65.8	0.41	0.37	-2.10
3,450.0	5.47	203.53	3,447.8	-65.1	-27.3	70.6	0.23	0.21	-1.04
3,500.0	4.77	200.12	3,497.6	-69.3	-29.0	75.1	1.52	-1.40	-6.82
3,550.0	3.83	193.75	3,547.4	-72.9	-30.1	78.8	2.12	-1.89	-12.74
3,600.0	3.33	192.88	3,597.3	-75.9	-30.8	81.9	0.99	-0.99	-1.74
3,650.0	2.91	193.29	3,647.3	-78.5	-31.4	84.6	0.85	-0.85	0.82
3,700.0	3.31	197.08	3,697.2	-81.1	-32.2	87.3	0.90	0.81	7.58
3,750.0	3.67	199.05	3,747.1	-84.1	-33.1	90.4	0.76	0.72	3.94
3,800.0	3.43	190.93	3,797.0	-87.0	-33.9	93.4	1.11	-0.48	-16.25
3,850.0	3.29	183.68	3,846.9	-89.9	-34.3	96.3	0.90	-0.29	-14.49
3,900.0	3.24	183.57	3,896.8	-92.8	-34.5	99.0	0.11	-0.11	-0.21
3,950.0	3.25	186.82	3,946.8	-95.6	-34.7	101.6	0.37	0.03	6.50
4,000.0	3.45	195.92	3,996.7	-98.4	-35.2	104.5	1.14	0.41	18.19
4,050.0	3.69	200.37	4,046.6	-101.4	-36.3	107.6	0.73	0.48	8.91
4,100.0	3.90	200.11	4,096.5	-104.5	-37.4	110.9	0.42	0.42	-0.53
4,150.0	4.00	200.86	4,146.3	-107.7	-38.6	114.4	0.22	0.19	1.50
4,200.0	4.00	202.46	4,196.2	-111.0	-39.9	117.9	0.22	0.00	3.19
4,250.0	4.05	199.28	4,246.1	-114.2	-41.2	121.4	0.46	0.11	-6.36
4,300.0	4.17	193.85	4,296.0	-117.7	-42.2	125.0	0.81	0.23	-10.84
4,350.0	4.04	193.74	4,345.8	-121.2	-43.0	128.5	0.26	-0.26	-0.23
4,400.0	3.83	195.39	4,395.7	-124.5	-43.9	131.9	0.48	-0.42	3.30
4,450.0	3.85	194.52	4,445.6	-127.7	-44.8	135.3	0.12	0.04	-1.74
4,500.0	3.90	193.32	4,495.5	-131.0	-45.6	138.6	0.19	0.11	-2.39
4,550.0	3.74	193.50	4,545.4	-134.2	-46.3	141.9	0.31	-0.31	0.35
4,600.0	3.63	193.56	4,595.3	-137.3	-47.1	145.1	0.22	-0.22	0.12
4,650.0	3.95	192.27	4,645.2	-140.6	-47.8	148.3	0.66	0.64	-2.58
4,700.0	4.20	191.93	4,695.1	-144.1	-48.6	151.9	0.50	0.50	-0.69
4,750.0	4.20	194.32	4,744.9	-147.6	-49.4	155.5	0.35	0.00	4.78
4,800.0	4.12	196.67	4,794.8	-151.1	-50.4	159.1	0.38	-0.16	4.70
4,850.0	3.91	199.12	4,844.7	-154.5	-51.4	162.6	0.54	-0.42	4.90
4,900.0	3.85	200.79	4,894.5	-157.6	-52.6	166.0	0.25	-0.11	3.35
4,950.0	3.96	201.38	4,944.4	-160.8	-53.8	169.4	0.23	0.21	1.17
5,000.0	4.00	199.96	4,994.3	-164.0	-55.1	172.8	0.21	0.08	-2.84

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Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

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)
5,050.0	4.00	197.21	5,044.2	-167.3	-56.2	176.3	0.38	0.00	-5.49
5,100.0	3.94	192.20	5,094.1	-170.7	-57.1	179.8	0.70	-0.11	-10.02
5,150.0	3.90	186.24	5,144.0	-174.1	-57.6	183.1	0.82	-0.08	-11.92
5,200.0	3.76	187.54	5,193.8	-177.4	-58.0	186.3	0.33	-0.29	2.60
5,250.0	3.60	190.24	5,243.7	-180.6	-58.5	189.5	0.47	-0.31	5.40
5,300.0	3.55	189.79	5,293.6	-183.6	-59.0	192.5	0.12	-0.11	-0.90
5,350.0	3.46	189.18	5,343.5	-186.7	-59.6	195.5	0.19	-0.17	-1.22
5,400.0	2.99	187.47	5,393.5	-189.4	-60.0	198.3	0.97	-0.95	-3.43
5,450.0	2.57	186.91	5,443.4	-191.8	-60.2	200.6	0.83	-0.83	-1.13
5,500.0	2.45	194.62	5,493.4	-194.0	-60.6	202.8	0.72	-0.24	15.42
5,550.0	2.20	201.74	5,543.3	-196.0	-61.3	204.8	0.77	-0.51	14.24
5,600.0	1.56	208.65	5,593.3	-197.4	-62.0	206.5	1.37	-1.29	13.81
5,650.0	1.26	219.57	5,643.3	-198.4	-62.6	207.6	0.79	-0.59	21.84
5,700.0	1.42	226.75	5,693.3	-199.2	-63.4	208.7	0.47	0.32	14.36
5,750.0	1.17	233.86	5,743.2	-200.0	-64.4	209.7	0.59	-0.50	14.22
5,800.0	0.64	252.96	5,793.2	-200.4	-65.0	210.3	1.22	-1.08	38.21
5,850.0	0.86	270.43	5,843.2	-200.4	-65.6	210.6	0.64	0.46	34.94
5,900.0	1.40	272.12	5,893.2	-200.4	-66.6	210.9	1.08	1.08	3.39
5,950.0	1.22	254.99	5,943.2	-200.5	-67.8	211.4	0.86	-0.38	-34.26
6,000.0	1.10	225.22	5,993.2	-201.0	-68.6	212.2	1.21	-0.24	-59.55
6,050.0	0.75	226.33	6,043.2	-201.6	-69.2	212.9	0.69	-0.69	2.23
6,100.0	0.38	237.79	6,093.2	-201.9	-69.6	213.4	0.78	-0.75	22.92
6,150.0	0.24	10.38	6,143.2	-201.9	-69.7	213.4	1.13	-0.29	265.18
6,200.0	0.64	34.32	6,193.2	-201.5	-69.5	213.0	0.87	0.81	47.87
6,250.0	0.41	90.94	6,243.2	-201.3	-69.2	212.6	1.08	-0.46	113.25
6,300.0	0.51	142.99	6,293.2	-201.5	-68.8	212.7	0.82	0.20	104.10
6,350.0	0.47	208.51	6,343.2	-201.8	-68.8	213.0	1.07	-0.07	131.03
6,400.0	0.64	238.14	6,393.2	-202.2	-69.2	213.5	0.66	0.33	59.27
6,450.0	0.53	257.51	6,443.2	-202.4	-69.6	213.9	0.45	-0.23	38.73
6,500.0	0.42	278.42	6,493.2	-202.4	-70.0	214.0	0.41	-0.22	41.81
6,550.0	0.31	307.85	6,543.2	-202.3	-70.3	214.0	0.42	-0.21	58.87
6,600.0	0.45	15.92	6,593.2	-202.0	-70.4	213.8	0.88	0.27	136.14
6,650.0	0.96	39.76	6,643.2	-201.5	-70.1	213.2	1.15	1.02	47.68
6,700.0	0.56	27.38	6,693.2	-200.9	-69.6	212.5	0.86	-0.80	-24.76
KOP / tie on SL									
6,750.0	1.95	199.87	6,743.2	-201.5	-69.8	213.1	5.00	2.78	344.99
6,800.0	4.45	200.81	6,793.1	-204.1	-70.8	215.9	5.00	5.00	1.88
6,831.1	6.00	201.00	6,824.0	-206.8	-71.8	218.7	5.00	5.00	0.61
6,850.0	6.00	201.00	6,842.8	-208.6	-72.5	220.7	0.00	0.00	0.00
6,900.0	6.00	201.00	6,892.6	-213.5	-74.4	225.9	0.00	0.00	0.00
6,931.1	6.00	201.00	6,923.5	-216.5	-75.5	229.2	0.00	0.00	0.00
6,935.2	6.00	201.00	6,927.6	-216.9	-75.7	229.6	0.00	0.00	0.00
6,950.0	7.48	201.08	6,942.3	-218.5	-76.3	231.3	10.00	10.00	0.52
7,000.0	12.48	201.20	6,991.5	-226.6	-79.4	240.0	10.00	10.00	0.25
7,050.0	17.48	201.26	7,039.8	-238.7	-84.1	252.9	10.00	10.00	0.11
7,100.0	22.48	201.29	7,086.8	-254.6	-90.3	270.0	10.00	10.00	0.06
7,150.0	27.48	201.31	7,132.1	-274.3	-98.0	291.1	10.00	10.00	0.04
7,200.0	32.48	201.32	7,175.4	-297.5	-107.1	316.1	10.00	10.00	0.03
7,250.0	37.48	201.34	7,216.3	-324.2	-117.5	344.8	10.00	10.00	0.02
7,300.0	42.48	201.34	7,254.6	-354.1	-129.2	376.9	10.00	10.00	0.02
7,350.0	47.48	201.35	7,290.0	-387.0	-142.0	412.2	10.00	10.00	0.01
7,400.0	52.48	201.36	7,322.1	-422.7	-156.0	450.5	10.00	10.00	0.01
7,450.0	57.48	201.36	7,350.8	-460.8	-170.9	491.4	10.00	10.00	0.01

Database:	Landmark	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Company:	EE3	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Project:	NORTH PARK	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site:	PETERSON RIDGE 01-20H PAD	North Reference:	True
Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

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)
7,500.0	62.48	201.37	7,375.8	-501.1	-186.7	534.7	10.00	10.00	0.01
7,550.0	67.48	201.37	7,396.9	-543.3	-203.2	580.0	10.00	10.00	0.01
7,600.0	72.48	201.38	7,414.1	-587.0	-220.3	627.0	10.00	10.00	0.01
7,650.0	77.48	201.38	7,427.0	-632.0	-237.9	675.2	10.00	10.00	0.01
7,700.0	82.48	201.38	7,435.7	-677.8	-255.8	724.5	10.00	10.00	0.01
7,750.0	87.48	201.39	7,440.1	-724.2	-274.0	774.2	10.00	10.00	0.01
7,785.0	90.98	201.39	7,440.5	-756.8	-286.7	809.2	10.00	10.00	0.01
Landing pt 538'FNL & 2106'FEL									
7,785.2	91.00	201.39	7,440.5	-756.9	-286.8	809.4	10.00	10.00	0.01
7,800.0	91.00	201.39	7,440.3	-770.7	-292.2	824.2	0.00	0.00	0.00
7,850.0	91.00	201.39	7,439.4	-817.3	-310.4	874.2	0.00	0.00	0.00
7,900.0	91.00	201.39	7,438.5	-863.8	-328.7	924.2	0.00	0.00	0.00
7,950.0	91.00	201.39	7,437.7	-910.4	-346.9	974.2	0.00	0.00	0.00
8,000.0	91.00	201.39	7,436.8	-956.9	-365.1	1,024.2	0.00	0.00	0.00
8,050.0	91.00	201.39	7,435.9	-1,003.5	-383.4	1,074.2	0.00	0.00	0.00
8,100.0	91.00	201.39	7,435.0	-1,050.0	-401.6	1,124.2	0.00	0.00	0.00
8,150.0	91.00	201.39	7,434.2	-1,096.6	-419.8	1,174.2	0.00	0.00	0.00
8,200.0	91.00	201.39	7,433.3	-1,143.1	-438.1	1,224.2	0.00	0.00	0.00
8,250.0	91.00	201.39	7,432.4	-1,189.7	-456.3	1,274.2	0.00	0.00	0.00
8,300.0	91.00	201.39	7,431.6	-1,236.2	-474.5	1,324.2	0.00	0.00	0.00
8,350.0	91.00	201.39	7,430.7	-1,282.8	-492.8	1,374.2	0.00	0.00	0.00
8,400.0	91.00	201.39	7,429.8	-1,329.3	-511.0	1,424.1	0.00	0.00	0.00
8,450.0	91.00	201.39	7,428.9	-1,375.9	-529.2	1,474.1	0.00	0.00	0.00
8,500.0	91.00	201.39	7,428.1	-1,422.4	-547.5	1,524.1	0.00	0.00	0.00
8,550.0	91.00	201.39	7,427.2	-1,469.0	-565.7	1,574.1	0.00	0.00	0.00
8,600.0	91.00	201.39	7,426.3	-1,515.5	-583.9	1,624.1	0.00	0.00	0.00
8,650.0	91.00	201.39	7,425.4	-1,562.1	-602.2	1,674.1	0.00	0.00	0.00
8,700.0	91.00	201.39	7,424.6	-1,608.6	-620.4	1,724.1	0.00	0.00	0.00
8,750.0	91.00	201.39	7,423.7	-1,655.2	-638.6	1,774.1	0.00	0.00	0.00
8,800.0	91.00	201.39	7,422.8	-1,701.7	-656.9	1,824.1	0.00	0.00	0.00
8,850.0	91.00	201.39	7,422.0	-1,748.3	-675.1	1,874.1	0.00	0.00	0.00
8,900.0	91.00	201.39	7,421.1	-1,794.8	-693.3	1,924.1	0.00	0.00	0.00
8,950.0	91.00	201.39	7,420.2	-1,841.4	-711.6	1,974.1	0.00	0.00	0.00
9,000.0	91.00	201.39	7,419.3	-1,887.9	-729.8	2,024.1	0.00	0.00	0.00
9,050.0	91.00	201.39	7,418.5	-1,934.5	-748.0	2,074.0	0.00	0.00	0.00
9,100.0	91.00	201.39	7,417.6	-1,981.0	-766.2	2,124.0	0.00	0.00	0.00
9,150.0	91.00	201.39	7,416.7	-2,027.6	-784.5	2,174.0	0.00	0.00	0.00
9,200.0	91.00	201.39	7,415.8	-2,074.1	-802.7	2,224.0	0.00	0.00	0.00
9,250.0	91.00	201.39	7,415.0	-2,120.7	-820.9	2,274.0	0.00	0.00	0.00
9,300.0	91.00	201.39	7,414.1	-2,167.2	-839.2	2,324.0	0.00	0.00	0.00
9,350.0	91.00	201.39	7,413.2	-2,213.8	-857.4	2,374.0	0.00	0.00	0.00
9,400.0	91.00	201.39	7,412.4	-2,260.3	-875.6	2,424.0	0.00	0.00	0.00
9,450.0	91.00	201.39	7,411.5	-2,306.9	-893.9	2,474.0	0.00	0.00	0.00
9,500.0	91.00	201.39	7,410.6	-2,353.4	-912.1	2,524.0	0.00	0.00	0.00
9,550.0	91.00	201.39	7,409.7	-2,400.0	-930.3	2,574.0	0.00	0.00	0.00
9,600.0	91.00	201.39	7,408.9	-2,446.5	-948.6	2,624.0	0.00	0.00	0.00
9,650.0	91.00	201.39	7,408.0	-2,493.1	-966.8	2,674.0	0.00	0.00	0.00
9,700.0	91.00	201.39	7,407.1	-2,539.6	-985.0	2,723.9	0.00	0.00	0.00
9,750.0	91.00	201.39	7,406.3	-2,586.2	-1,003.3	2,773.9	0.00	0.00	0.00
9,800.0	91.00	201.39	7,405.4	-2,632.7	-1,021.5	2,823.9	0.00	0.00	0.00
9,850.0	91.00	201.39	7,404.5	-2,679.3	-1,039.7	2,873.9	0.00	0.00	0.00
9,900.0	91.00	201.39	7,403.6	-2,725.8	-1,058.0	2,923.9	0.00	0.00	0.00
9,950.0	91.00	201.39	7,402.8	-2,772.4	-1,076.2	2,973.9	0.00	0.00	0.00
10,000.0	91.00	201.39	7,401.9	-2,818.9	-1,094.4	3,023.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Company:	EE3	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Project:	NORTH PARK	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site:	PETERSON RIDGE 01-20H PAD	North Reference:	True
Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

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)
10,050.0	91.00	201.39	7,401.0	-2,865.4	-1,112.7	3,073.9	0.00	0.00	0.00
10,100.0	91.00	201.39	7,400.1	-2,912.0	-1,130.9	3,123.9	0.00	0.00	0.00
10,150.0	91.00	201.39	7,399.3	-2,958.5	-1,149.1	3,173.9	0.00	0.00	0.00
10,200.0	91.00	201.39	7,398.4	-3,005.1	-1,167.4	3,223.9	0.00	0.00	0.00
10,250.0	91.00	201.39	7,397.5	-3,051.6	-1,185.6	3,273.9	0.00	0.00	0.00
10,300.0	91.00	201.39	7,396.7	-3,098.2	-1,203.8	3,323.9	0.00	0.00	0.00
10,350.0	91.00	201.39	7,395.8	-3,144.7	-1,222.1	3,373.8	0.00	0.00	0.00
10,400.0	91.00	201.39	7,394.9	-3,191.3	-1,240.3	3,423.8	0.00	0.00	0.00
10,450.0	91.00	201.39	7,394.0	-3,237.8	-1,258.5	3,473.8	0.00	0.00	0.00
10,500.0	91.00	201.39	7,393.2	-3,284.4	-1,276.8	3,523.8	0.00	0.00	0.00
10,550.0	91.00	201.39	7,392.3	-3,330.9	-1,295.0	3,573.8	0.00	0.00	0.00
10,600.0	91.00	201.39	7,391.4	-3,377.5	-1,313.2	3,623.8	0.00	0.00	0.00
10,650.0	91.00	201.39	7,390.5	-3,424.0	-1,331.5	3,673.8	0.00	0.00	0.00
10,700.0	91.00	201.39	7,389.7	-3,470.6	-1,349.7	3,723.8	0.00	0.00	0.00
10,750.0	91.00	201.39	7,388.8	-3,517.1	-1,367.9	3,773.8	0.00	0.00	0.00
10,800.0	91.00	201.39	7,387.9	-3,563.7	-1,386.2	3,823.8	0.00	0.00	0.00
10,850.0	91.00	201.39	7,387.1	-3,610.2	-1,404.4	3,873.8	0.00	0.00	0.00
10,900.0	91.00	201.39	7,386.2	-3,656.8	-1,422.6	3,923.8	0.00	0.00	0.00
10,950.0	91.00	201.39	7,385.3	-3,703.3	-1,440.8	3,973.8	0.00	0.00	0.00
11,000.0	91.00	201.39	7,384.4	-3,749.9	-1,459.1	4,023.7	0.00	0.00	0.00
11,050.0	91.00	201.39	7,383.6	-3,796.4	-1,477.3	4,073.7	0.00	0.00	0.00
11,100.0	91.00	201.39	7,382.7	-3,843.0	-1,495.5	4,123.7	0.00	0.00	0.00
11,150.0	91.00	201.39	7,381.8	-3,889.5	-1,513.8	4,173.7	0.00	0.00	0.00
11,200.0	91.00	201.39	7,380.9	-3,936.1	-1,532.0	4,223.7	0.00	0.00	0.00
11,250.0	91.00	201.39	7,380.1	-3,982.6	-1,550.2	4,273.7	0.00	0.00	0.00
11,300.0	91.00	201.39	7,379.2	-4,029.2	-1,568.5	4,323.7	0.00	0.00	0.00
11,350.0	91.00	201.39	7,378.3	-4,075.7	-1,586.7	4,373.7	0.00	0.00	0.00
11,400.0	91.00	201.39	7,377.5	-4,122.3	-1,604.9	4,423.7	0.00	0.00	0.00
11,450.0	91.00	201.39	7,376.6	-4,168.8	-1,623.2	4,473.7	0.00	0.00	0.00
11,500.0	91.00	201.39	7,375.7	-4,215.4	-1,641.4	4,523.7	0.00	0.00	0.00
11,550.0	91.00	201.39	7,374.8	-4,261.9	-1,659.6	4,573.7	0.00	0.00	0.00
11,600.0	91.00	201.39	7,374.0	-4,308.5	-1,677.9	4,623.7	0.00	0.00	0.00
11,650.0	91.00	201.39	7,373.1	-4,355.0	-1,696.1	4,673.6	0.00	0.00	0.00
11,700.0	91.00	201.39	7,372.2	-4,401.6	-1,714.3	4,723.6	0.00	0.00	0.00
11,750.0	91.00	201.39	7,371.3	-4,448.1	-1,732.6	4,773.6	0.00	0.00	0.00
11,800.0	91.00	201.39	7,370.5	-4,494.7	-1,750.8	4,823.6	0.00	0.00	0.00
11,850.0	91.00	201.39	7,369.6	-4,541.2	-1,769.0	4,873.6	0.00	0.00	0.00
11,900.0	91.00	201.39	7,368.7	-4,587.8	-1,787.3	4,923.6	0.00	0.00	0.00
11,950.0	91.00	201.39	7,367.9	-4,634.3	-1,805.5	4,973.6	0.00	0.00	0.00
12,000.0	91.00	201.39	7,367.0	-4,680.9	-1,823.7	5,023.6	0.00	0.00	0.00
12,050.0	91.00	201.39	7,366.1	-4,727.4	-1,842.0	5,073.6	0.00	0.00	0.00
12,100.0	91.00	201.39	7,365.2	-4,774.0	-1,860.2	5,123.6	0.00	0.00	0.00
12,150.0	91.00	201.39	7,364.4	-4,820.5	-1,878.4	5,173.6	0.00	0.00	0.00
12,170.9	91.00	201.39	7,364.0	-4,840.0	-1,886.1	5,194.5	0.00	0.00	0.00
South BHL									

Database:	Landmark	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Company:	EE3	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Project:	NORTH PARK	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site:	PETERSON RIDGE 01-20H PAD	North Reference:	True
Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 South Sidetrack		
Design:	Plan 5 (Nov 15, 2013)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Hardline 600' FNL	0.00	0.00	1.0	-819.0	-800.0	1,478,105.98	2,750,975.93	40.642338	-106.397352
- plan misses target center by 1144.9ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,478,105.98	2,750,975.93		
Point 2			1.0	0.0	1,300.0	1,478,092.87	2,752,275.84		
HARDLINE 600'FNL ξ	0.00	0.00	1.0	4,447.0	1,204.5	1,483,351.41	2,753,033.36	40.656792	-106.390128
- plan misses target center by 4607.3ft at 0.8ft MD (0.8 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,483,351.41	2,753,033.36		
Point 2			1.0	0.0	-500.0	1,483,356.45	2,752,533.40		
Point 3			1.0	0.0	0.0	1,483,351.41	2,753,033.36		
Point 4			1.0	-500.0	0.0	1,482,851.45	2,753,028.32		
SHL 219'FSL & 1820'I	0.00	0.00	1.0	0.0	0.0	1,478,916.86	2,751,784.13	40.644586	-106.394469
- plan hits target center									
- Point									
HARDLINE 600'FSL	0.00	0.00	1.0	381.0	-200.0	1,479,299.84	2,751,587.99	40.645632	-106.395190
- plan misses target center by 430.3ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,479,299.84	2,751,587.99		
Point 2			1.0	0.0	700.0	1,479,292.78	2,752,287.94		
South BHL	0.00	0.00	7,364.0	-4,840.0	-1,886.1	1,474,096.23	2,749,849.39	40.631301	-106.401264
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
6,700.0	6,693.2	-200.9	-69.6	KOP / tie on SL
7,785.0	7,440.5	-756.8	-286.7	Landing pt 538'FNL & 2106'FEL



Directional

EE3

**NORTH PARK
PETERSON RIDGE 01-20H PAD
PETERSON RIDGE 1-20H**

**Wellbore #2 South Sidetrack
Plan 5 (Nov 15, 2013)**

Anticollision Report

15 November, 2013



Company:	EE3	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Project:	NORTH PARK	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Reference Site:	PETERSON RIDGE 01-20H PAD	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #2 South Sidetrack	Database:	Landmark
Reference Design:	Plan 5 (Nov 15, 2013)	Offset TVD Reference:	Offset Datum

Reference	Plan 5 (Nov 15, 2013)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 20.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 200.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 11/15/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
116.0	6,700.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard
6,700.0	12,170.9	Plan 5 (Nov 15, 2013) (Wellbore #2 South	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
PETERSON RIDGE 01-20H PAD						
PETERSON RIDGE 1-20H - Wellbore #1 - Wellbore #1	6,700.0	6,700.0	0.0	0.0	0.000	Level 1, CC, SF
PETERSON RIDGE 1-20H - Wellbore #1 - Wellbore #1	6,707.9	6,707.9	0.0	0.0	0.635	Level 1, ES

Offset Design		PETERSON RIDGE 01-20H PAD - PETERSON RIDGE 1-20H - Wellbore #1 - Wellbore #1											Offset Site Error:		0.0 ft	
Survey Program: 116-MWD, 6816-MWD														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
6,700.0	6,693.2	6,700.0	6,693.2	0.0	0.0	0.00	-200.9	-69.6	0.0	0.0	0.00	0.000	Level 1, CC, SF			
6,707.9	6,701.1	6,707.9	6,701.1	0.0	0.0	-33.28	-200.9	-69.6	0.0	0.0	0.03	0.635	Level 1, ES			
6,720.0	6,713.2	6,720.0	6,713.2	0.0	0.0	173.71	-200.8	-69.6	0.1	0.1	0.08	1.600				
6,740.0	6,733.2	6,740.0	6,733.2	0.1	0.1	168.70	-200.7	-69.6	0.5	0.4	0.17	3.201				
6,760.0	6,753.2	6,760.0	6,753.2	0.1	0.1	167.80	-200.7	-69.8	1.2	1.0	0.25	4.842				
6,780.0	6,773.1	6,780.0	6,773.1	0.2	0.1	169.09	-200.7	-69.9	2.2	1.8	0.32	6.826				
6,800.0	6,793.1	6,799.9	6,793.1	0.2	0.2	171.06	-200.7	-70.1	3.4	3.1	0.40	8.672				
6,820.0	6,813.0	6,819.9	6,813.0	0.3	0.2	172.83	-200.8	-70.2	5.1	4.6	0.48	10.513				
6,840.0	6,832.9	6,839.8	6,832.9	0.3	0.2	174.45	-200.9	-70.3	7.0	6.5	0.53	13.264				
6,860.0	6,852.8	6,859.6	6,852.8	0.4	0.2	175.79	-200.9	-70.3	9.0	8.5	0.57	15.827				
6,880.0	6,872.7	6,879.6	6,872.7	0.4	0.2	176.84	-201.0	-70.2	11.1	10.4	0.61	17.982				
6,900.0	6,892.6	6,899.5	6,892.6	0.5	0.2	177.71	-201.1	-70.2	13.0	12.4	0.66	19.826				
6,920.0	6,912.5	6,919.3	6,912.5	0.5	0.2	178.48	-201.2	-70.1	15.1	14.4	0.70	21.497				
6,940.0	6,932.4	6,939.2	6,932.4	0.6	0.2	179.07	-201.3	-70.0	17.1	16.4	0.75	22.891				
6,960.0	6,952.2	6,959.0	6,952.1	0.6	0.2	179.49	-201.4	-69.9	19.7	18.9	0.81	24.386				
6,980.0	6,971.9	6,978.5	6,971.7	0.7	0.2	179.85	-201.4	-69.7	23.1	22.2	0.87	26.592				
7,000.0	6,991.5	6,997.5	6,990.6	0.7	0.2	179.85	-201.0	-69.6	27.5	26.5	0.94	29.350				
7,020.0	7,011.0	7,015.8	7,009.0	0.8	0.2	179.43	-200.2	-69.5	33.0	32.0	1.01	32.719				
7,040.0	7,030.2	7,033.3	7,026.4	0.9	0.2	178.74	-198.7	-69.5	39.8	38.7	1.09	36.595				
7,060.0	7,049.3	7,049.9	7,042.8	1.0	0.2	177.97	-196.7	-69.4	48.0	46.8	1.17	40.945				
7,080.0	7,068.2	7,065.5	7,058.3	1.1	0.2	177.26	-194.2	-69.3	57.5	56.2	1.26	45.675				
7,100.0	7,086.8	7,080.1	7,072.6	1.1	0.2	176.64	-191.3	-69.2	68.2	66.8	1.34	50.722				
7,120.0	7,105.1	7,093.8	7,085.8	1.2	0.2	176.14	-188.2	-69.0	80.0	78.6	1.43	56.138				
7,140.0	7,123.2	7,104.0	7,095.7	1.3	0.2	175.79	-185.6	-68.7	93.0	91.5	1.50	62.057				

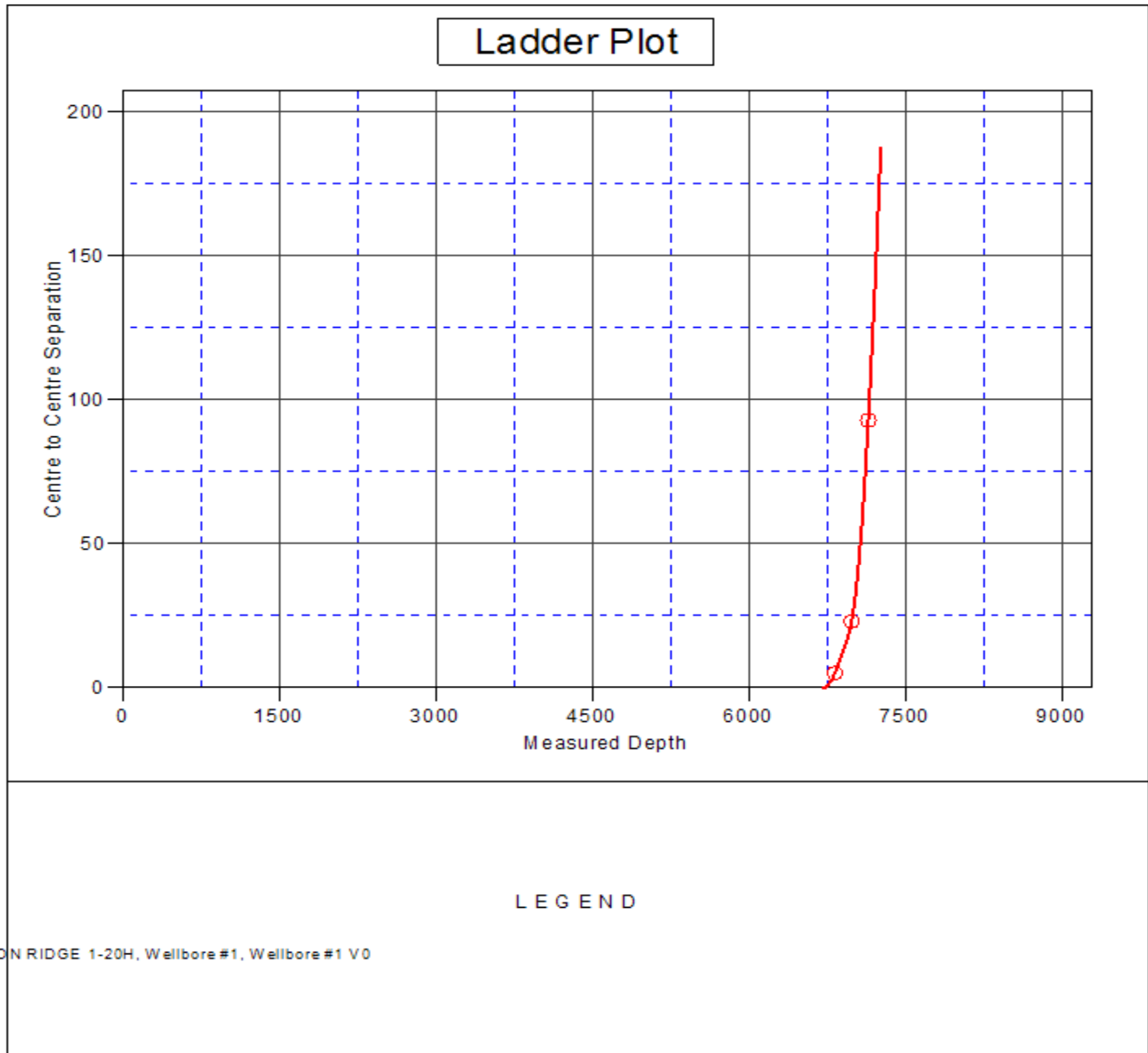
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	EE3	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Project:	NORTH PARK	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Reference Site:	PETERSON RIDGE 01-20H PAD	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #2 South Sidetrack	Database:	Landmark
Reference Design:	Plan 5 (Nov 15, 2013)	Offset TVD Reference:	Offset Datum

Offset Design PETERSON RIDGE 01-20H PAD - PETERSON RIDGE 1-20H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 116-MWD, 6816-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,160.0	7,140.9	7,117.8	7,109.0	1.5	0.2	175.41	-181.6	-68.2	106.8	105.3	1.58	67.776	
7,180.0	7,158.3	7,128.3	7,119.0	1.6	0.2	175.12	-178.3	-67.8	121.6	120.0	1.64	74.065	
7,200.0	7,175.4	7,135.0	7,125.2	1.7	0.2	174.85	-176.1	-67.5	137.2	135.5	1.70	80.879	
7,220.0	7,192.0	7,146.7	7,136.2	1.8	0.3	174.54	-172.0	-66.9	153.4	151.6	1.76	87.275	
7,240.0	7,208.3	7,154.6	7,143.5	2.0	0.3	174.22	-169.1	-66.4	170.2	168.4	1.81	93.975	
7,260.0	7,224.2	7,166.0	7,153.9	2.1	0.3	173.88	-164.6	-65.7	187.6	185.7	1.87	100.079	

Company:	EE3	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
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Reference Well:	PETERSON RIDGE 1-20H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #2 South Sidetrack	Database:	Landmark
Reference Design:	Plan 5 (Nov 15, 2013)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 8125.0ft (Ensign 12 RKB - 1 Coordinates are relative to: PETERSON RIDGE 1-20H
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -0.58°



Company:	EE3	Local Co-ordinate Reference:	Well PETERSON RIDGE 1-20H
Project:	NORTH PARK	TVD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
Reference Site:	PETERSON RIDGE 01-20H PAD	MD Reference:	WELL @ 8125.0ft (Ensign 12 RKB - 12')
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