

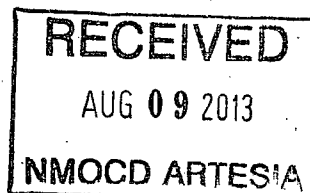
A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

30-015-40779

April 1, 2013

Devon Energy Production Co., LP
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010



Attn: Patti Riechers

Re: **Peridot 13 State No 005H**

Please find enclosed a copy of the survey from 0' to 6,476' ran on the above referenced well.

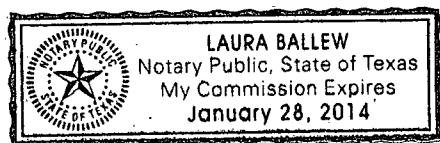
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 1st day of April, A.D., 2013, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas



Company: Devon Energy Production Co., LP
Lease/Well: Peridot 13 State/No 005H

Rig Name: H&P #223
State/County: New Mexico/Eddy
Latitude: 32.67, Longitude: -104.03
GRID North is 0.16 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB=25 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: ...t 13 state #5h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 4/1/2013 / 14:46

Vaughn Energy Services
Midland, Texas
432-563-5444

Surveyor: Logan Henry
Peridot 13 State No 005H / API 30-015-40779



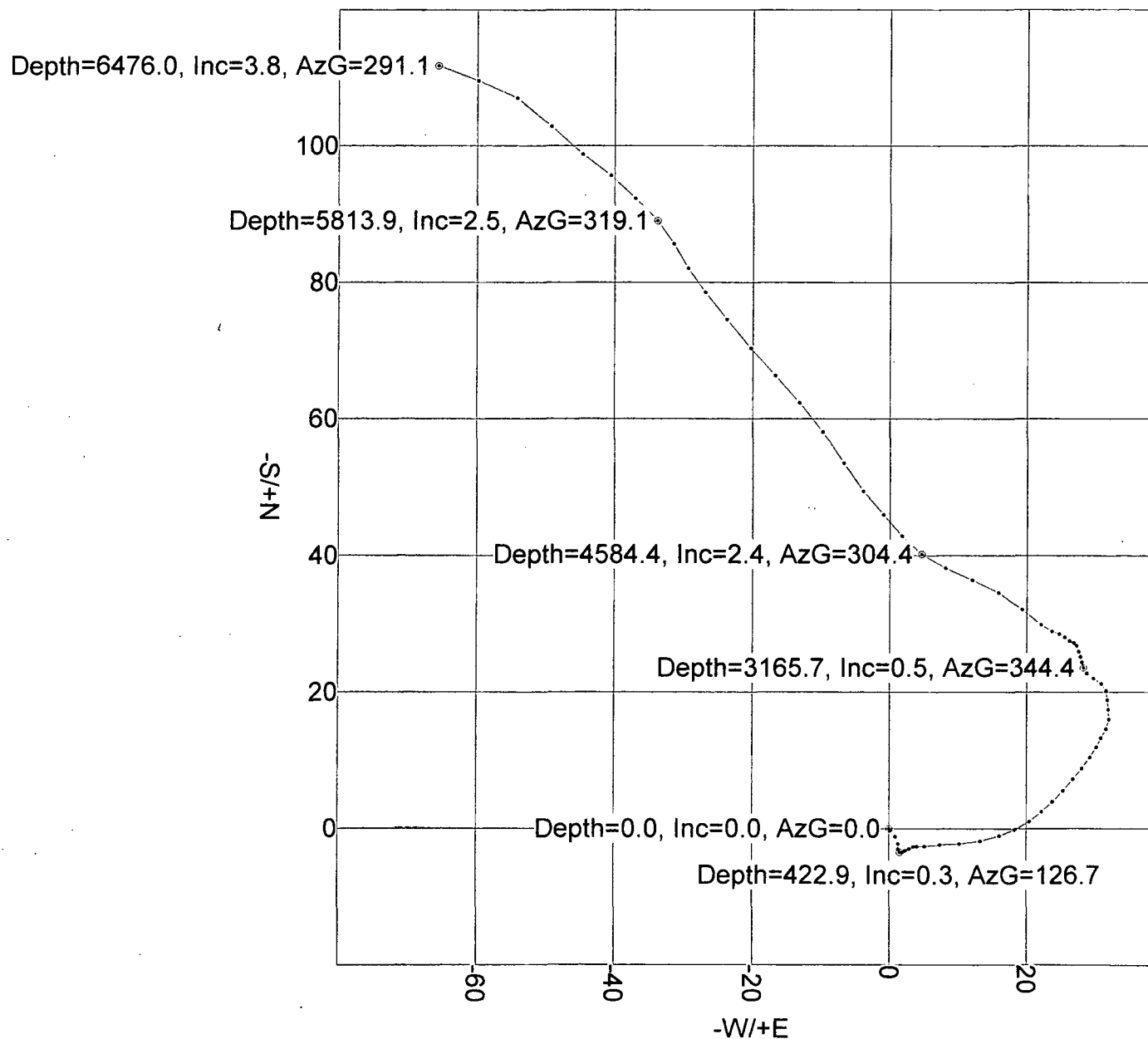
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
44.56	0.63	149.54	44.56	-0.21	0.12	-0.21	0.25	149.54	1.42
139.14	0.86	137.07	139.13	-1.18	0.87	-1.18	1.47	143.53	0.30
233.72	0.63	189.22	233.70	-2.22	1.28	-2.22	2.56	150.05	0.73
328.30	0.37	165.84	328.28	-3.02	1.27	-3.02	3.28	157.23	0.34
422.88	0.26	126.73	422.86	-3.44	1.51	-3.44	3.76	156.29	0.25
517.46	0.27	63.71	517.44	-3.47	1.88	-3.47	3.95	151.60	0.29
612.04	0.32	56.58	612.02	-3.23	2.29	-3.23	3.96	144.63	0.07
706.62	0.47	67.67	706.59	-2.94	2.87	-2.94	4.11	135.71	0.18
801.20	0.36	62.43	801.17	-2.66	3.49	-2.66	4.39	127.28	0.12
895.78	0.34	111.43	895.75	-2.62	4.01	-2.62	4.79	123.14	0.31
990.36	1.04	80.09	990.32	-2.57	5.12	-2.57	5.73	116.71	0.81
1084.94	1.68	87.44	1084.88	-2.37	7.35	-2.37	7.72	107.85	0.70
1179.52	1.75	86.54	1179.41	-2.22	10.17	-2.22	10.41	102.30	0.08
1274.10	1.93	79.23	1273.95	-1.83	13.17	-1.83	13.30	97.92	0.31
1368.68	1.64	69.23	1368.48	-1.06	16.00	-1.06	16.04	93.77	0.45
1463.26	1.47	67.08	1463.03	-0.11	18.38	-0.11	18.38	90.33	0.19
1557.84	1.42	55.57	1557.58	1.03	20.46	1.03	20.49	87.12	0.31
1652.42	1.36	46.74	1652.13	2.46	22.25	2.46	22.38	83.69	0.24

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1747.00	1.29	47.78	1746.68	3.94	23.85	3.94	24.17	80.61	0.07
1841.58	1.44	39.24	1841.24	5.58	25.39	5.58	25.99	77.61	0.27
1936.16	1.28	41.30	1935.79	7.29	26.84	7.29	27.81	74.80	0.17
2030.74	1.18	40.04	2030.35	8.83	28.16	8.83	29.51	72.59	0.11
2125.32	1.23	32.68	2124.91	10.43	29.33	10.43	31.13	70.43	0.17
2219.90	0.93	29.94	2219.47	11.94	30.26	11.94	32.53	68.46	0.32
2314.48	0.92	23.04	2314.04	13.31	30.94	13.31	33.68	66.73	0.12
2409.06	0.90	36.31	2408.61	14.60	31.68	14.60	34.88	65.25	0.22
2503.64	0.98	0.34	2503.17	16.01	32.12	16.01	35.89	63.52	0.62
2598.22	0.81	351.83	2597.74	17.47	32.03	17.47	36.49	61.39	0.22
2692.80	0.88	353.76	2692.31	18.86	31.86	18.86	37.02	59.37	0.08
2787.38	0.79	350.99	2786.88	20.23	31.68	20.23	37.59	57.43	0.11
2881.96	0.85	302.78	2881.45	21.26	30.98	21.26	37.57	55.55	0.71
2976.54	0.84	303.21	2976.02	22.02	29.81	22.02	37.06	53.56	0.02
3071.12	0.66	314.57	3070.59	22.78	28.85	22.78	36.76	51.71	0.25
3165.70	0.55	344.38	3165.17	23.59	28.34	23.59	36.88	50.23	0.35
3260.28	0.47	342.24	3259.75	24.40	28.10	24.40	37.21	49.04	0.09
3354.86	0.50	348.41	3354.32	25.17	27.90	25.17	37.58	47.95	0.06
3449.44	0.51	336.76	3448.90	25.96	27.65	25.96	37.93	46.80	0.11
3544.02	0.53	340.91	3543.48	26.76	27.34	26.76	38.26	45.61	0.04
3638.60	0.38	278.61	3638.05	27.22	26.89	27.22	38.27	44.65	0.51
3733.18	0.46	308.46	3732.63	27.51	26.28	27.51	38.05	43.69	0.25
3827.76	0.62	310.38	3827.21	28.08	25.59	28.08	37.99	42.35	0.16
3922.34	0.55	285.18	3921.78	28.53	24.77	28.53	37.78	40.96	0.28
4016.92	0.80	292.51	4016.35	28.90	23.72	28.90	37.38	39.37	0.28
4111.50	1.52	305.51	4110.91	29.88	22.08	29.88	37.16	36.46	0.81
4206.08	2.80	310.69	4205.43	32.12	19.31	32.12	37.48	31.01	1.37
4300.66	2.44	298.01	4299.91	34.57	15.77	34.57	38.00	24.52	0.72
4395.24	2.69	293.09	4394.39	36.39	11.96	36.39	38.30	18.19	0.35
4489.82	2.49	295.88	4488.88	38.16	8.07	38.16	39.00	11.94	0.25
4584.40	2.40	304.42	4583.37	40.18	4.58	40.18	40.44	6.50	0.40
4678.98	2.36	322.23	4677.87	42.83	1.75	42.83	42.87	2.34	0.78
4773.56	2.66	316.59	4772.36	45.96	-0.94	45.96	45.97	358.82	0.41
4868.14	2.85	321.89	4866.83	49.41	-3.90	49.41	49.56	355.49	0.34
4962.72	3.24	327.89	4961.28	53.52	-6.77	53.52	53.95	352.79	0.53
5057.30	3.40	325.14	5055.70	58.09	-9.80	58.09	58.91	350.43	0.24
5151.88	3.22	317.48	5150.12	62.35	-13.20	62.35	63.73	348.05	0.50
5246.46	3.23	318.77	5244.55	66.31	-16.75	66.31	68.40	345.82	0.08
5341.04	3.25	317.70	5338.98	70.30	-20.31	70.30	73.18	343.88	0.07

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5435.62	3.40	322.97	5433.40	74.52	-23.80	74.52	78.23	342.28	0.36
5530.20	2.74	321.05	5527.84	78.52	-26.91	78.52	83.00	341.08	0.70
5624.78	2.47	328.31	5622.33	82.01	-29.41	82.01	87.13	340.27	0.45
5719.36	2.55	331.47	5716.82	85.59	-31.48	85.59	91.20	339.81	0.17
5813.94	2.50	319.11	5811.30	89.00	-33.84	89.00	95.22	339.18	0.58
5908.52	2.99	312.97	5905.78	92.24	-37.00	92.24	99.39	338.15	0.60
6003.10	2.96	314.33	6000.23	95.63	-40.55	95.63	103.87	337.02	0.08
6097.68	3.32	300.17	6094.67	98.72	-44.66	98.72	108.35	335.66	0.90
6192.26	4.24	321.05	6189.04	102.81	-49.23	102.81	113.99	334.41	1.73
6286.84	3.85	298.15	6283.40	107.03	-54.23	107.03	119.99	333.13	1.74
6381.42	3.66	290.23	6377.77	109.58	-59.87	109.58	124.86	331.35	0.58
6476.00	3.83	291.14	6472.15	111.76	-65.65	111.76	129.62	329.57	0.19



Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Logan Henry
Peridot 13 State No 005H / API 30-015-40779



VES Survey Date: 03/25/2013

Devon

Eddy County, NM (NAD 83)

Peridot 13 State

Peridot 13 State 5H

API# 30-015-40779 / JOB# 900301706 / HP 223

Wellbore #1

Design: Wellbore #1

Sperry Drilling Services Combo Report

08 April, 2013

Surface UWI : API# 30-015-40779 / JOB# 900301706 / HP 223

Well Coordinates: 608,894.64 N, 633,835.04 E (32° 40' 24.73" N, 104° 01' 57.81" W)

Ground Level: 3,375.00 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Peridot 13 State 5H
WELL @ 3400.00ft (Original Well Elev+25')

N
Grid
API US Survey Feet

Version: 2003.21 Build: 43

HALLIBURTON

Design Report for Peridot 13 State 5H - Wellbore #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (ft)	Easting (ft)			
0.00	0.00	0.00	-3,400.00	0.00	0.00 N	0.00 E	608,894.64	633,835.04	0.00	0.00	
305.00	0.62	0.00	-3,095.01	304.99	1.65 N	0.00 E	608,896.29	633,835.04	0.20	-1.64	First Teledrift Survey
575.00	0.03	16.00	-2,825.01	574.99	3.18 N	0.02 E	608,897.82	633,835.06	0.22	-3.15	
932.00	0.00	98.00	-2,468.01	931.99	3.27 N	0.05 E	608,897.91	633,835.09	0.01	-3.25	
1,115.00	1.40	80.40	-2,285.03	1,114.97	3.64 N	2.25 E	608,898.28	633,837.29	0.77	-3.91	
1,285.00	1.90	72.00	-2,115.10	1,284.90	4.86 N	6.98 E	608,899.50	633,842.02	0.33	-5.75	
1,479.00	1.30	76.00	-1,921.18	1,478.82	6.39 N	12.17 E	608,901.03	633,847.21	0.31	-7.95	
1,668.00	1.30	62.00	-1,732.23	1,667.77	7.91 N	16.14 E	608,902.55	633,851.18	0.17	-9.99	
1,857.00	1.60	39.00	-1,543.28	1,856.72	10.97 N	19.70 E	608,905.61	633,854.74	0.34	-13.50	
2,137.00	1.20	21.00	-1,263.37	2,136.63	16.74 N	23.21 E	608,911.38	633,858.25	0.21	-19.69	
2,324.00	0.80	20.00	-1,076.40	2,323.60	19.80 N	24.36 E	608,914.44	633,859.40	0.21	-22.87	
2,520.00	0.80	6.00	-880.41	2,519.59	22.44 N	24.97 E	608,917.08	633,860.01	0.10	-25.58	
2,706.00	1.00	3.00	-694.44	2,705.56	25.36 N	25.19 E	608,920.00	633,860.23	0.11	-28.49	
2,895.00	0.60	350.00	-505.46	2,894.54	27.98 N	25.10 E	608,922.62	633,860.14	0.23	-31.08	
3,082.00	0.70	359.00	-318.47	3,081.53	30.08 N	24.91 E	608,924.72	633,859.95	0.08	-33.14	
3,271.00	0.06	330.00	-129.47	3,270.53	31.32 N	24.84 E	608,925.96	633,859.88	0.34	-34.36	
3,455.00	0.06	324.40	54.53	3,454.53	31.49 N	24.74 E	608,926.13	633,859.78	0.00	-34.51	
3,652.00	0.07	329.00	251.53	3,651.53	31.67 N	24.62 E	608,926.31	633,859.66	0.01	-34.68	
3,932.00	0.07	238.00	531.53	3,931.53	31.73 N	24.38 E	608,926.37	633,859.42	0.04	-34.70	
4,120.00	1.80	304.00	719.49	4,119.49	33.32 N	21.84 E	608,927.96	633,856.88	0.94	-35.94	
4,309.00	2.60	291.00	908.35	4,308.35	36.52 N	15.38 E	608,931.16	633,850.42	0.50	-38.24	
4,403.00	2.60	292.00	1,002.26	4,402.26	38.08 N	11.41 E	608,932.72	633,846.45	0.05	-39.26	
4,488.00	2.40	314.00	1,087.18	4,487.18	40.04 N	8.34 E	608,934.68	633,843.38	1.15	-40.79	
4,583.00	2.40	316.00	1,182.10	4,582.10	42.85 N	5.53 E	608,937.49	633,840.57	0.09	-43.20	
4,771.00	2.80	326.00	1,369.90	4,769.90	49.49 N	0.23 E	608,944.13	633,835.27	0.32	-49.08	
4,866.00	2.90	332.00	1,464.79	4,864.79	53.53 N	2.20 W	608,948.17	633,832.84	0.33	-52.76	
4,963.00	3.10	333.00	1,561.65	4,961.65	58.04 N	4.54 W	608,952.68	633,830.50	0.21	-56.91	
5,153.00	3.20	326.00	1,751.37	5,151.37	67.01 N	9.84 W	608,961.65	633,825.20	0.21	-65.10	
5,267.00	3.30	321.00	1,865.18	5,265.18	72.20 N	13.68 W	608,966.84	633,821.36	0.26	-69.73	
5,342.00	3.30	39.00	1,940.09	5,340.09	75.56 N	13.68 W	608,970.20	633,821.36	5.54	-73.05	
5,445.00	3.30	328.00	2,042.96	5,442.96	80.37 N	13.39 W	608,975.01	633,821.65	3.72	-77.87	
5,543.00	2.70	329.00	2,140.82	5,540.82	84.75 N	16.07 W	608,979.39	633,818.97	0.61	-81.84	
5,634.00	2.40	330.00	2,231.73	5,631.73	88.23 N	18.13 W	608,982.87	633,816.91	0.33	-85.02	
5,729.00	2.50	329.00	2,326.65	5,726.65	91.73 N	20.19 W	608,986.37	633,814.85	0.11	-88.22	
5,814.00	2.50	325.00	2,411.57	5,811.57	94.84 N	22.21 W	608,989.48	633,812.83	0.21	-91.03	
5,909.00	2.90	320.00	2,506.46	5,906.46	98.38 N	24.94 W	608,993.02	633,810.10	0.49	-94.17	
6,003.00	2.50	304.00	2,600.36	6,000.36	101.35 N	28.17 W	608,995.99	633,806.87	0.90	-96.68	
6,106.00	3.30	300.00	2,703.23	6,103.23	104.08 N	32.60 W	608,998.72	633,802.44	0.80	-98.80	
6,201.00	4.20	300.00	2,798.02	6,198.02	107.19 N	37.98 W	609,001.83	633,797.06	0.95	-101.16	

Design Report for Peridot 13 State 5H - Wellbore #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (ft)	Easting (ft)			
6,295.00	3.90	287.00	2,891.79	6,291.79	109.85 N	44.02 W	609,004.49	633,791.02	1.02	-102.99	
6,381.00	3.60	298.00	2,977.60	6,377.60	111.97 N	49.20 W	609,006.61	633,785.84	0.90	-104.40	
6,570.00	3.70	300.00	3,166.22	6,566.22	117.80 N	59.72 W	609,012.44	633,775.32	0.09	-108.78	Final Teledrift Survey
6,604.00	5.07	232.02	3,200.14	6,600.14	117.43 N	61.86 W	609,012.07	633,773.18	14.79	-108.12	First Sperry MWD Survey
6,635.00	8.64	213.96	3,230.92	6,630.92	114.65 N	64.24 W	609,009.29	633,770.80	13.32	-105.05	
6,667.00	14.10	208.62	3,262.28	6,662.28	109.23 N	67.45 W	609,003.87	633,767.59	17.36	-99.25	
6,698.00	17.80	203.79	3,292.08	6,692.08	101.58 N	71.17 W	608,996.22	633,763.87	12.67	-91.17	
6,730.00	20.48	200.19	3,322.31	6,722.31	91.85 N	75.08 W	608,986.49	633,759.96	9.15	-81.01	
6,761.00	23.02	194.78	3,351.10	6,751.10	80.89 N	78.50 W	608,975.53	633,756.54	10.43	-69.69	
6,793.00	25.73	191.42	3,380.25	6,780.25	68.03 N	81.47 W	608,962.67	633,753.57	9.51	-56.55	
6,824.00	28.41	189.56	3,407.85	6,807.85	54.16 N	84.03 W	608,948.80	633,751.01	9.07	-42.46	
6,856.00	30.96	186.63	3,435.65	6,835.65	38.48 N	86.24 W	608,933.12	633,748.80	9.17	-26.62	
6,887.00	31.51	186.76	3,462.16	6,862.16	22.51 N	88.12 W	608,917.15	633,746.92	1.79	-10.55	
6,919.00	32.68	184.88	3,489.27	6,889.27	5.60 N	89.84 W	608,900.24	633,745.21	4.81	6.44	
6,950.00	34.07	182.57	3,515.16	6,915.16	11.42 S	90.94 W	608,883.22	633,744.10	6.07	23.45	
6,982.00	35.73	178.60	3,541.40	6,941.40	29.72 S	91.11 W	608,864.92	633,743.93	8.79	41.61	
7,013.00	37.97	174.88	3,566.21	6,966.21	48.27 S	90.04 W	608,846.37	633,745.00	10.20	59.85	
7,045.00	40.24	173.86	3,591.04	6,991.04	68.35 S	88.05 W	608,826.29	633,746.99	7.37	79.49	
7,076.00	42.29	174.57	3,614.34	7,014.34	88.69 S	86.00 W	608,805.95	633,749.04	6.78	99.38	
7,108.00	44.08	177.60	3,637.68	7,037.68	110.54 S	84.51 W	608,784.10	633,750.53	8.56	120.83	
7,140.00	46.74	179.28	3,660.14	7,060.14	133.31 S	83.90 W	608,761.33	633,751.14	9.11	143.32	
7,171.00	50.15	179.20	3,680.70	7,080.70	156.50 S	83.59 W	608,738.14	633,751.45	11.00	166.26	
7,203.00	53.46	177.44	3,700.49	7,100.49	181.64 S	82.84 W	608,713.00	633,752.20	11.21	191.07	
7,234.00	56.46	175.74	3,718.28	7,118.28	206.97 S	81.33 W	608,687.67	633,753.71	10.67	215.97	
7,266.00	59.20	176.04	3,735.32	7,135.32	233.98 S	79.39 W	608,660.66	633,755.65	8.60	242.49	
7,297.00	61.73	177.04	3,750.60	7,150.60	260.90 S	77.76 W	608,633.74	633,757.28	8.63	268.95	
7,329.00	64.74	178.16	3,765.01	7,165.01	289.45 S	76.57 W	608,605.19	633,758.47	9.91	297.08	
7,360.00	66.99	181.16	3,777.69	7,177.69	317.73 S	76.41 W	608,576.91	633,758.63	11.43	325.09	
7,392.00	68.09	183.08	3,789.91	7,189.91	347.28 S	77.50 W	608,547.36	633,757.54	6.52	354.52	
7,423.00	70.00	185.27	3,801.00	7,201.00	376.15 S	79.62 W	608,518.49	633,755.43	9.03	383.41	
7,455.00	72.65	186.49	3,811.25	7,211.25	406.30 S	82.72 W	608,488.34	633,752.32	9.03	413.71	
7,486.00	75.63	187.60	3,819.72	7,219.72	435.89 S	86.38 W	608,458.75	633,748.66	10.21	443.52	
7,518.00	78.03	187.71	3,827.01	7,227.01	466.77 S	90.53 W	608,427.87	633,744.51	7.51	474.68	
7,550.00	80.23	187.52	3,833.04	7,233.04	497.92 S	94.70 W	608,396.72	633,740.34	6.90	506.10	
7,581.00	82.79	187.01	3,837.62	7,237.62	528.33 S	98.57 W	608,366.31	633,736.47	8.42	536.76	
7,613.00	85.61	186.89	3,840.85	7,240.85	559.93 S	102.42 W	608,334.71	633,732.62	8.82	568.59	
7,636.00	87.11	186.69	3,842.31	7,242.31	582.72 S	105.14 W	608,311.92	633,729.90	6.58	591.54	
7,668.00	89.29	186.44	3,843.32	7,243.32	614.49 S	108.79 W	608,280.15	633,726.25	6.86	623.52	
7,699.00	91.14	186.58	3,843.20	7,243.20	645.29 S	112.31 W	608,249.35	633,722.73	5.98	654.51	

Design Report for Peridot 13 State 5H - Wellbore #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (ft)	Easting (ft)			
7,731.00	92.41	186.49	3,842.21	7,242.21	677.07 S	115.95 W	608,217.57	633,719.09	3.98	686.49	
7,762.00	92.59	186.91	3,840.86	7,240.86	707.83 S	119.56 W	608,186.82	633,715.48	1.47	717.45	
7,794.00	92.25	186.90	3,839.51	7,239.51	739.57 S	123.41 W	608,155.08	633,711.63	1.06	749.42	
7,826.00	91.70	187.25	3,838.40	7,238.40	771.30 S	127.35 W	608,123.34	633,707.69	2.04	781.40	
7,857.00	92.69	187.95	3,837.22	7,237.22	802.01 S	131.44 W	608,092.63	633,703.60	3.91	812.38	
7,889.00	92.90	188.11	3,835.66	7,235.66	833.66 S	135.91 W	608,060.99	633,699.13	0.82	844.34	
7,983.00	89.26	189.47	3,833.88	7,233.88	926.52 S	150.27 W	607,968.12	633,684.77	4.13	938.28	
8,078.00	89.29	187.51	3,835.09	7,235.09	1,020.46 S	164.29 W	607,874.18	633,670.75	2.06	1,033.26	
8,173.00	91.20	187.65	3,834.68	7,234.68	1,114.63 S	176.82 W	607,780.01	633,658.22	2.02	1,128.26	
8,267.00	87.16	187.81	3,836.03	7,236.03	1,207.75 S	189.46 W	607,686.90	633,645.58	4.30	1,222.23	
8,362.00	89.23	189.11	3,839.02	7,239.02	1,301.66 S	203.43 W	607,592.98	633,631.61	2.57	1,317.16	
8,457.00	87.56	187.75	3,841.68	7,241.68	1,395.59 S	217.35 W	607,499.05	633,617.69	2.27	1,412.11	
8,551.00	90.43	187.91	3,843.33	7,243.33	1,488.69 S	230.15 W	607,405.95	633,604.89	3.06	1,506.09	
8,646.00	91.32	187.96	3,841.88	7,241.88	1,582.77 S	243.27 W	607,311.88	633,591.77	0.94	1,601.08	
8,741.00	90.98	188.10	3,839.97	7,239.97	1,676.82 S	256.53 W	607,217.83	633,578.51	0.39	1,696.05	
8,836.00	91.27	187.32	3,838.10	7,238.10	1,770.94 S	269.28 W	607,123.70	633,565.76	0.88	1,791.03	
8,930.00	90.62	187.28	3,836.55	7,236.55	1,864.16 S	281.22 W	607,030.48	633,553.82	0.69	1,885.02	
9,025.00	90.43	185.49	3,835.68	7,235.68	1,958.57 S	291.78 W	606,936.08	633,543.26	1.89	1,979.99	
9,119.00	86.91	185.05	3,837.87	7,237.87	2,052.13 S	300.41 W	606,842.51	633,534.63	3.77	2,073.87	
9,214.00	88.89	185.98	3,841.35	7,241.35	2,146.62 S	309.54 W	606,748.02	633,525.50	2.30	2,168.73	
9,309.00	90.19	186.51	3,842.11	7,242.11	2,241.05 S	319.87 W	606,653.59	633,515.17	1.48	2,263.69	
9,403.00	89.02	187.23	3,842.76	7,242.76	2,334.37 S	331.11 W	606,560.27	633,503.93	1.46	2,357.68	
9,498.00	89.94	187.42	3,843.62	7,243.62	2,428.59 S	343.23 W	606,466.05	633,491.81	0.99	2,452.67	
9,592.00	90.68	187.28	3,843.11	7,243.11	2,521.82 S	355.25 W	606,372.83	633,479.79	0.80	2,546.67	
9,687.00	91.51	188.14	3,841.30	7,241.30	2,615.94 S	367.99 W	606,278.71	633,467.05	1.26	2,641.65	
9,782.00	90.77	187.46	3,839.41	7,239.41	2,710.04 S	380.88 W	606,184.60	633,454.16	1.06	2,736.63	
9,876.00	91.64	187.95	3,837.43	7,237.43	2,803.17 S	393.48 W	606,091.48	633,441.56	1.06	2,830.61	
9,971.00	91.17	188.43	3,835.10	7,235.10	2,897.17 S	407.01 W	605,997.47	633,428.03	0.71	2,925.58	
10,066.00	91.81	188.65	3,832.63	7,232.63	2,991.09 S	421.12 W	605,903.56	633,413.92	0.71	3,020.53	
10,160.00	92.04	188.46	3,829.47	7,229.47	3,083.99 S	435.09 W	605,810.66	633,399.95	0.32	3,114.47	
10,255.00	92.07	189.15	3,826.06	7,226.06	3,177.81 S	449.62 W	605,716.84	633,385.42	0.73	3,209.39	
10,350.00	91.45	189.00	3,823.15	7,223.15	3,271.57 S	464.60 W	605,623.07	633,370.44	0.67	3,304.31	
10,444.00	90.12	188.02	3,821.86	7,221.86	3,364.53 S	478.51 W	605,530.12	633,356.53	1.76	3,398.29	
10,539.00	91.35	188.56	3,820.64	7,220.64	3,458.52 S	492.21 W	605,436.12	633,342.84	1.41	3,493.28	
10,633.00	92.13	186.84	3,817.79	7,217.79	3,551.63 S	504.79 W	605,343.02	633,330.25	2.01	3,587.23	
10,728.00	91.44	186.10	3,814.83	7,214.83	3,645.98 S	515.49 W	605,248.67	633,319.55	1.06	3,682.16	
10,823.00	88.55	186.67	3,814.83	7,214.83	3,740.38 S	526.06 W	605,154.27	633,308.98	3.10	3,777.13	
10,917.00	89.63	188.17	3,816.33	7,216.33	3,833.58 S	538.19 W	605,061.07	633,296.85	1.97	3,871.11	
11,012.00	90.28	189.41	3,816.40	7,216.40	3,927.46 S	552.71 W	604,967.19	633,282.33	1.47	3,966.09	

Design Report for Peridot 13 State 5H - Wellbore #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100ft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (ft)	Easting (ft)			
11,107.00	89.54	188.50	3,816.55	7,216.55	4,021.30 S	567.50 W	604,873.35	633,267.54	1.23	4,061.06	
11,201.00	89.63	189.06	3,817.23	7,217.23	4,114.19 S	581.85 W	604,780.46	633,253.19	0.60	4,155.04	
11,296.00	89.48	188.10	3,817.97	7,217.97	4,208.13 S	596.02 W	604,686.52	633,239.02	1.02	4,250.03	
11,390.00	89.29	186.66	3,818.98	7,218.98	4,301.34 S	608.09 W	604,593.31	633,226.95	1.55	4,344.02	
11,485.00	89.04	187.43	3,820.36	7,220.36	4,395.61 S	619.74 W	604,499.04	633,215.30	0.85	4,439.00	
11,580.00	88.83	186.14	3,822.13	7,222.13	4,489.93 S	630.96 W	604,404.72	633,204.08	1.38	4,533.97	
11,674.00	89.60	185.77	3,823.42	7,223.42	4,583.41 S	640.72 W	604,311.24	633,194.33	0.91	4,627.92	
11,769.00	88.33	185.46	3,825.13	7,225.13	4,677.94 S	650.01 W	604,216.71	633,185.03	1.38	4,722.84	
11,864.00	86.67	185.67	3,829.28	7,229.28	4,772.40 S	659.21 W	604,122.25	633,175.83	1.76	4,817.68	
11,958.00	87.16	186.39	3,834.34	7,234.34	4,865.74 S	669.07 W	604,028.91	633,165.97	0.93	4,911.51	
12,053.00	87.16	187.36	3,839.04	7,239.04	4,959.94 S	680.43 W	603,934.71	633,154.61	1.02	5,006.38	
12,148.00	86.46	187.53	3,844.33	7,244.33	5,053.99 S	692.72 W	603,840.66	633,142.32	0.76	5,101.23	
12,242.00	86.76	188.39	3,849.89	7,249.89	5,146.92 S	705.71 W	603,747.73	633,129.33	0.97	5,195.06	
12,337.00	87.16	189.17	3,854.93	7,254.93	5,240.68 S	720.20 W	603,653.97	633,114.85	0.92	5,289.91	
12,431.00	86.58	188.57	3,860.06	7,260.06	5,333.41 S	734.67 W	603,561.24	633,100.37	0.89	5,383.75	
12,526.00	86.98	187.84	3,865.40	7,265.40	5,427.29 S	748.20 W	603,467.36	633,086.84	0.88	5,478.60	
12,621.00	87.14	187.27	3,870.27	7,270.27	5,521.34 S	760.68 W	603,373.31	633,074.36	0.62	5,573.47	
12,715.00	86.76	187.50	3,875.27	7,275.27	5,614.43 S	772.74 W	603,280.22	633,062.30	0.47	5,667.34	
12,810.00	86.72	186.86	3,880.67	7,280.67	5,708.53 S	784.60 W	603,186.12	633,050.44	0.67	5,762.18	
12,905.00	86.17	187.39	3,886.56	7,286.56	5,802.62 S	796.36 W	603,092.04	633,038.68	0.80	5,856.99	
12,999.00	86.14	187.19	3,892.87	7,292.87	5,895.65 S	808.26 W	602,999.01	633,026.78	0.21	5,950.78	
13,094.00	86.58	186.69	3,898.90	7,298.90	5,989.76 S	819.71 W	602,904.89	633,015.33	0.70	6,045.58	
13,188.00	85.10	185.69	3,905.72	7,305.72	6,082.96 S	829.82 W	602,811.69	633,005.22	1.90	6,139.29	
13,283.00	85.38	185.82	3,913.60	7,313.60	6,177.16 S	839.32 W	602,717.50	632,995.72	0.32	6,233.91	
13,378.00	85.96	185.95	3,920.77	7,320.77	6,271.39 S	849.03 W	602,623.27	632,986.01	0.63	6,328.60	
13,472.00	86.18	186.91	3,927.21	7,327.21	6,364.57 S	859.53 W	602,530.08	632,975.51	1.05	6,422.35	
13,567.00	85.55	184.63	3,934.07	7,334.07	6,458.84 S	869.06 W	602,435.81	632,965.98	2.48	6,517.04	
13,662.00	85.50	184.70	3,941.48	7,341.48	6,553.24 S	876.76 W	602,341.42	632,958.28	0.09	6,611.62	
13,756.00	86.91	185.30	3,947.70	7,347.70	6,646.67 S	884.94 W	602,247.98	632,950.11	1.63	6,705.31	
13,851.00	87.65	186.24	3,952.21	7,352.21	6,741.08 S	894.48 W	602,153.57	632,940.57	1.26	6,800.15	
13,946.00	87.22	187.08	3,956.46	7,356.46	6,835.34 S	905.48 W	602,059.31	632,929.56	0.99	6,895.04	
14,040.00	86.76	188.29	3,961.40	7,361.40	6,928.37 S	918.04 W	601,966.28	632,917.01	1.38	6,988.91	
14,059.00	87.07	188.73	3,962.42	7,362.42	6,947.13 S	920.84 W	601,947.52	632,914.20	2.83	7,007.88	Final Sperry MWD Survey
14,120.00	87.07	188.73	3,965.54	7,365.54	7,007.35 S	930.09 W	601,887.31	632,904.95	0.00	7,068.79	Projection to TD

Design Report for Peridot 13 State 5H - Wellbore #1

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
305.00	304.99	1.65	0.00	First Teledrift Survey
6,570.00	6,566.22	117.80	-59.72	Final Teledrift Survey
6,604.00	6,600.14	117.43	-61.86	First Sperry MWD Survey
14,059.00	7,362.42	-6,947.13	-920.84	Final Sperry MWD Survey
14,120.00	7,365.54	-7,007.35	-930.09	Projection to TD

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	Origin +E/-W (ft)	Start TVD (ft)
User	No Target (Freehand)	187.67	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
305.00	6,570.00	Teledrift Surveys	Dipmeter
6,604.00	14,120.00	Sperry MWD Surveys	MWD

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (°)	+N/-S (°)	+E/-W (°)	Northing (°)	Easting (°)	Latitude	Longitude
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Directional Difficulty Index

Average Dogleg over Survey:	1.54 °/100ft	Maximum Dogleg over Survey:	17.36 °/100ft at 6,667.00 ft
Net Tortousity applicable to Plans:	0.25 °/100ft	Directional Difficulty Index:	6.487

Audit Info

North Reference Sheet for Peridot 13 State - Peridot 13 State 5H - Wellbore #1

All data is in Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to WELL @ 3400.00ft (Original Well Elev+25'). Northing and Easting are relative to Peridot 13 State 5H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is 104° 20' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:0° 0' 0.000 N°

False Easting: 541,337.50ft, False Northing: 0.00ft, Scale Reduction: 0.99991889

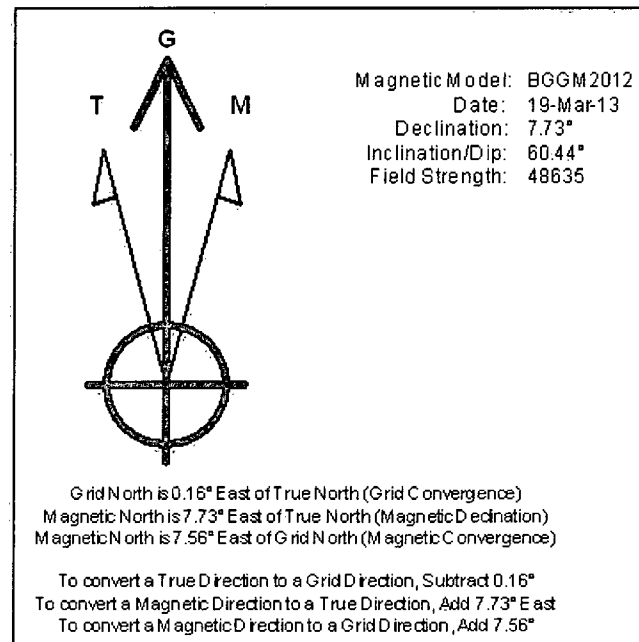
Grid Coordinates of Well: 608,894.64 ft N, 633,835.04 ft E

Geographical Coordinates of Well: 32° 40' 24.73" N, 104° 01' 57.81" W

Grid Convergence at Surface is: 0.16°

Based upon Minimum Curvature type calculations, at a Measured Depth of 14,120.00ft
the Bottom Hole Displacement is 7,068.80ft in the Direction of 187.56° (Grid).

Magnetic Convergence at surface is: -7.56° (19 March 2013, , BGGM2012)



Devon

Project: Eddy County, NM (NAD 83)
 Site: Peridot 13 State
 Well: Peridot 13 State 5H
 Wellbore: Wellbore #1
 Plan: Plan #4 040213 (Peridot 13 State 5H/Wellbore #1)
 Original Well Elev+25'

HALLIBURTON

Sperry Drilling

WELL DETAILS: Peridot 13 State 5H

Ground Level: 3375.00			
Northing	Easting	Latitude	Longitude
608894.64	633835.04	32° 40' 24.731 N	104° 1' 57.810 W

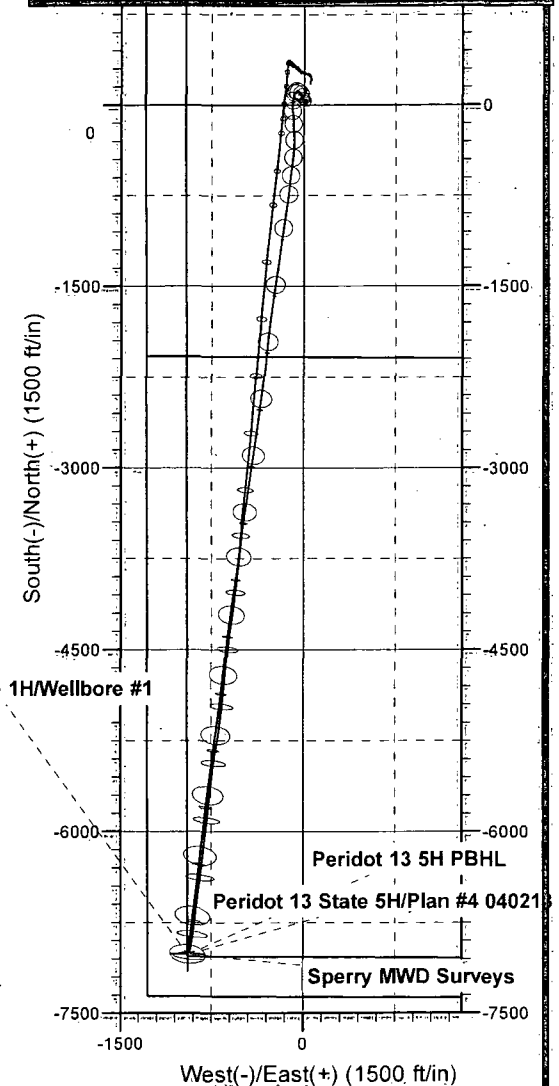
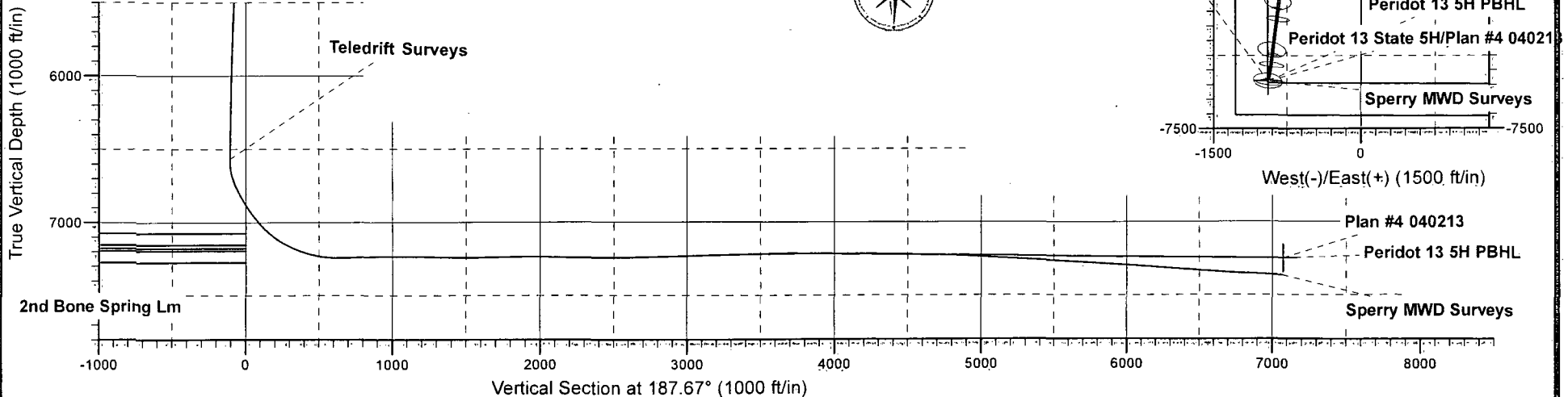
devon

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Peridot 13 5H PBHL	7250.00	-7009.57	-943.93	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
10633.00	92.13	186.84	7217.79	-3551.63	-504.79	0.00	0.00	3587.23	
10817.16	89.40	187.25	7215.33	-3734.36	-527.37	1.50	171.50	3771.34	Peridot 13 5H PBHL
14118.93	89.40	187.25	7250.02	-7009.57	-943.93	0.00	0.00	7072.84	Peridot 13 5H PBHL



Devon

Eddy County, NM (NAD 83)

Peridot 13 State

Peridot 13 State 5H

API# 30-015-40779 / JOB# 900301706 / HP 223

Wellbore #1

Wellbore #1

Sperry Drilling Services Ellipse Separation Anticollision Report

08 April, 2013

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Reference Design: Peridot 13 State - Peridot 13 State 5H - Wellbore #1 - Wellbore #1

Well Coordinates: 608,894.64 N, 633,835.04 E (32° 40' 24.73" N, 104° 01' 57.81" W).

Datum Height: WELL @ 3400.00ft (Original Well Elev+25')

Scan Range: 0.00 to 14,120.00 ft. Measured Depth.

Scan Radius is 10,000.00 ft . Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Version: 2003.21 Build: 43

HALLIBURTON

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Peridot 13 State - Peridot 13 State 1H - Wellbore #1 - Wellbore #1

Scan Range: 0.00 to 14,120.00 ft. Measured Depth.

Scan Radius is 10,000.00 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids (ft)	Relative Highside Bearing	Clearance Factor
100.00	100.00	0.18	0.00	0.50	111.86	111.85	175.69	50.12	0.20	182.55	181.86	15.94	261.172
200.00	200.00	0.71	0.00	1.16	211.55	211.53	177.50	50.60	0.46	183.92	182.31	15.97	113.701
300.00	299.99	1.60	0.00	1.83	311.94	311.90	179.47	50.31	0.71	184.87	182.34	15.79	72.944
400.00	399.99	2.51	0.00	3.11	412.47	412.40	181.22	49.77	0.97	185.53	181.46	15.16	45.545
500.00	499.99	3.03	0.01	4.43	511.96	511.88	182.91	49.21	1.22	186.51	180.86	13.53	33.027
600.00	599.99	3.19	0.02	5.67	611.38	611.28	184.90	48.79	1.48	188.18	181.03	-0.98	26.312
700.00	699.99	3.23	0.03	6.69	711.96	711.84	186.85	48.63	1.75	189.97	181.53	-1.18	22.507
800.00	799.99	3.26	0.04	7.72	812.46	812.32	188.46	48.53	2.02	191.46	181.74	-1.33	19.680
900.00	899.99	3.27	0.05	8.74	912.69	912.55	189.83	48.55	2.28	192.78	181.76	14.57	17.500
1,000.00	999.99	3.32	0.35	9.75	1,012.66	1,012.51	191.09	48.69	2.55	193.91	181.61	-65.96	15.771
1,100.00	1,099.97	3.58	1.90	10.76	1,112.50	1,112.35	192.43	48.89	2.81	194.62	181.05	-66.42	14.344
1,200.00	1,199.94	4.12	4.46	11.94	1,212.52	1,212.35	193.61	49.36	3.06	194.75	179.76	-62.22	12.987
1,203.04	1,202.98	4.14	4.54	11.98	1,215.53	1,215.36	193.65	49.38	3.07	194.75	179.71	-62.13	12.949
1,300.00	1,299.89	5.01	7.45	13.15	1,311.72	1,311.54	195.03	50.19	3.31	194.80	178.35	-59.52	11.841
1,400.00	1,399.85	5.87	10.28	14.40	1,411.64	1,411.44	196.57	51.23	3.56	195.08	177.12	-61.86	10.867
1,500.00	1,499.82	6.51	12.63	15.66	1,511.39	1,511.17	198.19	52.15	3.81	195.75	176.29	-62.79	10.058
1,600.00	1,599.79	7.25	14.76	16.95	1,610.64	1,610.40	200.03	53.15	4.06	196.61	175.61	-55.75	9.361
1,700.00	1,699.77	8.28	16.78	18.25	1,709.88	1,709.61	202.27	54.38	4.32	197.66	175.11	-46.46	8.765
1,800.00	1,799.74	9.83	18.68	19.55	1,810.30	1,810.00	204.68	55.62	4.58	198.39	174.27	-34.17	8.226
1,900.00	1,899.70	11.89	20.42	20.85	1,910.53	1,910.20	206.84	56.38	4.84	198.28	172.61	-26.41	7.724
1,959.13	1,958.81	13.14	21.31	21.60	1,969.59	1,969.24	208.15	56.76	5.00	198.25	171.68	-23.29	7.459
2,000.00	1,999.67	13.99	21.84	22.12	2,010.46	2,010.10	209.06	56.98	5.11	198.26	171.06	-20.89	7.288
2,100.00	2,099.64	16.01	22.91	23.39	2,110.57	2,110.19	211.32	57.35	5.37	198.37	169.63	-14.01	6.903
2,200.00	2,199.62	17.91	23.65	24.64	2,210.87	2,210.46	213.52	57.46	5.64	198.55	168.30	-10.94	6.563
2,300.00	2,299.61	19.47	24.24	25.89	2,311.01	2,310.58	215.66	57.14	5.90	198.97	167.21	-10.66	6.266
2,400.00	2,399.60	20.81	24.67	27.11	2,411.02	2,410.56	217.83	56.35	6.14	199.60	166.38	-5.44	6.008
2,500.00	2,499.59	22.17	24.94	28.32	2,510.60	2,510.11	220.14	55.36	6.39	200.34	165.67	1.32	5.777
2,600.00	2,599.58	23.62	25.08	29.51	2,610.12	2,609.60	222.62	54.67	6.64	201.25	165.14	3.91	5.572
2,700.00	2,699.56	25.25	25.18	30.69	2,710.20	2,709.64	225.22	54.00	6.90	202.09	164.54	5.12	5.382
2,800.00	2,799.55	26.83	25.21	31.83	2,810.73	2,810.13	227.64	53.26	7.15	202.81	163.86	9.79	5.207
2,900.00	2,899.54	28.03	25.09	32.97	2,910.74	2,910.12	229.94	52.55	7.41	203.82	163.47	17.46	5.052

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Peridot 13 State - Peridot 13 State 1H - Wellbore #1 - Wellbore #1

Scan Range: 0.00 to 14,120.00 ft. Measured Depth.

Scan Radius is 10,000.00 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited.

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N-S (ft)	Ellipse Centre +E-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N-S (ft)	Ellipse Centre +E-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids (ft)	Relative Highside Bearing	Clearance Factor
3,000.00	2,999.54	29.12	24.96	34.12	3,010.63	3,009.97	232.22	51.75	7.66	204.92	163.17	12.12	4.908
3,100.00	3,099.53	30.29	24.91	35.26	3,110.38	3,109.69	234.70	50.90	7.92	206.10	162.96	8.49	4.777
3,200.00	3,199.53	31.11	24.88	36.34	3,210.41	3,209.69	237.08	50.15	8.17	207.58	163.10	11.51	4.667
3,300.00	3,299.53	31.35	24.83	37.39	3,310.43	3,309.68	239.60	49.41	8.43	209.75	163.97	36.73	4.582
3,400.00	3,399.53	31.44	24.77	38.35	3,410.92	3,410.13	241.87	48.57	8.69	211.82	164.82	40.38	4.507
3,500.00	3,499.53	31.53	24.71	39.32	3,511.27	3,510.46	244.04	47.26	8.93	213.75	165.53	40.47	4.433
3,600.00	3,599.53	31.62	24.65	40.32	3,611.63	3,610.78	246.01	45.78	9.17	215.47	166.02	37.71	4.357
3,700.00	3,699.53	31.72	24.59	41.12	3,711.46	3,710.59	247.90	44.30	9.41	217.12	166.63	47.94	4.300
3,800.00	3,799.53	31.76	24.51	41.72	3,811.02	3,810.12	249.93	42.89	9.65	218.99	167.66	84.64	4.266
3,900.00	3,899.53	31.75	24.42	42.32	3,911.91	3,910.98	251.96	41.28	9.89	220.89	168.72	119.01	4.234
4,000.00	3,999.52	31.91	24.01	42.87	4,013.27	4,012.30	253.45	39.00	10.11	222.06	169.12	63.36	4.195
4,100.00	4,099.50	32.99	22.33	43.41	4,114.72	4,113.69	254.36	35.71	10.28	221.78	168.13	59.71	4.134
4,200.00	4,199.45	34.70	19.48	44.18	4,215.39	4,214.26	254.82	31.39	10.44	220.44	165.86	65.80	4.039
4,300.00	4,299.36	36.37	15.75	45.01	4,315.07	4,313.80	255.21	26.20	10.60	219.09	163.52	71.31	3.943
4,400.00	4,399.26	38.03	11.53	45.82	4,413.02	4,411.59	256.24	20.53	10.77	218.42	161.88	70.38	3.863
4,500.00	4,499.17	40.39	7.98	46.76	4,512.95	4,511.31	257.73	14.27	10.95	217.46	159.79	47.41	3.771
4,600.00	4,599.08	43.37	5.04	47.84	4,612.79	4,610.94	259.23	8.02	11.14	215.90	156.97	43.76	3.664
4,700.00	4,698.98	46.75	2.19	48.96	4,712.26	4,710.22	260.86	2.08	11.34	214.14	153.90	37.39	3.555
4,800.00	4,798.87	50.68	-0.55	50.11	4,811.28	4,809.04	262.75	-3.79	11.54	212.15	150.57	31.25	3.445
4,900.00	4,898.74	55.07	-3.01	51.31	4,910.37	4,907.95	265.22	-9.36	11.76	210.32	147.35	25.90	3.340
5,000.00	4,998.60	59.81	-5.47	52.53	5,011.26	5,008.64	267.66	-15.16	11.98	208.13	143.73	25.73	3.232
5,100.00	5,098.45	64.54	-8.23	53.74	5,110.88	5,108.05	269.58	-21.29	12.19	205.52	139.70	28.45	3.123
5,200.00	5,198.29	69.17	-11.36	54.94	5,207.98	5,204.97	272.39	-26.68	12.41	203.96	136.73	31.76	3.034
5,240.25	5,238.48	71.00	-12.46	55.42	5,246.85	5,243.76	273.97	-28.49	12.51	203.84	136.03	21.00	3.006
5,300.00	5,298.14	73.68	-14.35	56.12	5,305.90	5,302.69	276.72	-30.98	12.66	203.99	135.33	0.87	2.971
5,400.00	5,398.02	78.22	-12.67	57.31	5,406.07	5,402.66	281.57	-35.05	12.92	204.85	134.76	-4.63	2.923
5,500.00	5,497.88	82.93	-14.97	58.52	5,507.55	5,503.96	285.93	-39.19	13.18	204.63	133.08	24.66	2.860
5,563.80	5,561.60	85.61	-16.60	59.30	5,571.54	5,567.86	288.36	-41.62	13.35	204.47	131.97	23.78	2.820
5,600.00	5,597.77	86.97	-17.40	59.75	5,607.51	5,603.79	289.76	-42.91	13.44	204.59	131.55	23.21	2.801
5,700.00	5,697.67	90.65	-19.55	60.98	5,706.94	5,703.08	293.89	-46.18	13.70	205.20	130.68	23.21	2.754
5,800.00	5,797.58	94.34	-21.86	62.21	5,807.84	5,803.84	298.10	-49.14	13.96	205.77	129.76	26.69	2.707
5,900.00	5,897.47	98.03	-24.65	63.42	5,909.20	5,905.10	301.77	-51.70	14.23	205.66	128.19	32.00	2.655

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Peridot 13 State - Peridot 13 State 1H - Wellbore #1 - Wellbore #1

Scan Range: 0.00 to 14,120.00 ft. Measured Depth.

Scan Radius is 10,000.00 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)				
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids (ft)	Relative Highside Bearing	Clearance Factor	
5,948.44	5,945.85	99.73	-26.24	63.97	5,957.34	5,953.20	303.36	-52.97	14.36	205.52	127.37	39.22	2.630	
6,000.00	5,997.36	101.27	-28.06	64.56	6,007.59	6,003.39	305.08	-54.63	14.49	205.73	126.86	47.94	2.608	
6,100.00	6,097.23	103.91	-32.30	65.64	6,106.15	6,101.75	308.91	-59.59	14.74	207.07	126.89	52.15	2.583	
6,200.00	6,197.02	107.15	-37.92	66.70	6,206.43	6,201.72	313.06	-66.28	14.98	208.11	126.64	52.07	2.554	
6,300.00	6,296.78	109.95	-44.34	67.72	6,306.85	6,301.82	316.99	-73.18	15.23	209.28	126.55	64.37	2.530	
6,400.00	6,396.57	112.53	-50.25	68.75	6,406.46	6,401.16	320.98	-79.43	15.47	210.73	126.73	53.74	2.509	
6,500.00	6,496.37	115.58	-55.81	69.84	6,506.32	6,500.77	325.29	-84.95	15.73	211.99	126.66	52.73	2.484	
6,600.00	6,596.16	117.62	-61.58	70.80	6,607.28	6,601.51	329.35	-90.35	15.98	213.89	127.51	115.00	2.476	
6,700.00	6,693.98	101.02	-71.42	70.97	6,704.88	6,698.91	333.03	-95.37	16.23	233.46	149.90	148.92	2.794	
6,800.00	6,786.54	65.02	-82.07	71.11	6,796.14	6,790.00	336.63	-99.61	16.47	272.42	193.44	163.38	3.449	
6,900.00	6,873.21	15.71	-88.87	71.24	6,881.89	6,875.60	339.92	-103.36	16.69	324.78	249.62	169.71	4.321	
7,000.00	6,955.90	-40.38	-90.64	71.37	6,963.86	6,957.45	342.81	-106.72	16.90	383.76	312.60	-178.45	5.393	
7,100.00	7,031.91	-105.00	-84.78	71.51	7,039.11	7,032.61	345.19	-109.56	17.09	451.09	385.50	179.98	6.877	
7,200.00	7,098.69	-179.23	-82.95	71.68	7,106.79	7,100.22	347.00	-111.98	17.26	527.21	470.79	178.70	9.344	
7,300.00	7,152.02	-263.55	-77.63	71.88	7,159.77	7,153.16	348.14	-113.83	17.40	612.91	565.75	178.81	12.997	
7,400.00	7,192.87	-354.70	-77.94	72.11	7,198.13	7,191.49	348.94	-115.13	17.49	704.82	657.08	161.18	14.763	
7,500.00	7,223.07	-449.37	-88.19	72.37	7,226.12	7,219.46	349.56	-116.05	17.56	799.62	737.35	140.67	12.841	
7,600.00	7,239.73	-547.07	-100.87	72.68	8,866.27	8,131.29	-564.17	-220.13	25.58	884.80	848.11	172.38	24.112	
7,700.00	7,243.18	-646.28	-112.42	73.02	8,977.21	8,126.64	-674.38	-232.00	26.93	877.10	840.03	172.43	23.657	
7,800.00	7,239.28	-745.52	-124.13	73.40	9,076.23	8,121.75	-772.54	-244.07	28.15	876.14	837.87	172.41	22.895	
7,884.15	7,235.92	-828.88	-135.13	73.74	9,153.42	8,118.06	-848.89	-254.77	29.11	875.58	836.42	172.41	22.355	
7,900.00	7,235.14	-844.53	-137.47	73.81	9,165.66	8,117.58	-861.01	-256.44	29.26	875.71	836.40	172.43	22.274	
8,000.00	7,234.10	-943.29	-153.01	74.26	9,245.95	8,115.78	-940.68	-266.19	30.24	874.04	834.37	172.62	22.034	
8,100.00	7,235.27	-1,042.27	-167.17	74.75	9,340.93	8,114.93	-1,035.02	-277.13	31.41	871.65	830.83	172.75	21.351	
8,123.58	7,235.37	-1,065.65	-170.27	74.89	9,363.99	8,114.81	-1,057.95	-279.64	31.71	871.37	830.26	172.79	21.196	
8,200.00	7,234.39	-1,141.39	-180.43	75.32	9,447.63	8,114.48	-1,141.20	-287.60	32.81	871.71	829.66	173.00	20.733	
8,300.00	7,237.45	-1,240.39	-194.07	75.91	9,567.11	8,111.11	-1,260.02	-299.61	34.52	865.34	821.98	173.24	19.956	
8,400.00	7,239.75	-1,339.20	-209.27	76.55	9,655.79	8,108.14	-1,348.09	-309.59	35.80	859.31	814.75	173.45	19.285	
8,500.00	7,243.02	-1,438.17	-223.17	77.24	9,746.49	8,107.07	-1,438.41	-317.85	37.10	854.32	808.47	173.70	18.635	
8,598.15	7,243.25	-1,535.39	-236.63	77.97	9,844.05	8,105.87	-1,535.51	-327.15	38.53	852.43	805.09	173.96	18.004	
8,600.00	7,242.76	-1,537.22	-236.91	77.98	9,845.78	8,105.85	-1,537.24	-327.31	38.55	852.89	805.52	173.97	18.003	
8,700.00	7,240.72	-1,636.23	-250.78	78.76	9,949.32	8,104.99	-1,640.41	-335.89	40.08	853.53	804.72	174.37	17.487	

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Peridot 13 State - Peridot 13 State 1H - Wellbore #1 - Wellbore #1

Scan Range: 0.00 to 14,120.00 ft. Measured Depth.

Scan Radius is 10,000.00 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids (ft)	Relative Highside Bearing	Clearance Factor
8,800.00	7,238.87	-1,735.25	-264.60	79.55	10,052.41	8,103.37	-1,743.24	-343.12	41.62	853.16	802.92	174.84	16.981
8,900.00	7,236.93	-1,834.41	-277.42	80.38	10,177.38	8,099.85	-1,867.74	-353.19	43.57	851.94	800.06	175.22	16.419
9,000.00	7,235.88	-1,933.69	-289.29	81.24	10,270.00	8,095.23	-1,959.80	-362.32	45.05	847.91	794.46	175.27	15.866
9,100.00	7,236.96	-2,033.23	-298.73	82.14	10,365.00	8,092.09	-2,054.32	-371.21	46.51	843.52	788.46	175.21	15.321
9,200.00	7,241.04	-2,132.70	-308.10	83.09	10,449.45	8,090.92	-2,138.47	-378.24	47.82	837.84	781.24	175.26	14.802
9,300.00	7,242.13	-2,232.11	-318.86	84.10	10,552.40	8,089.25	-2,240.97	-387.66	49.48	835.01	776.62	175.37	14.301
9,400.00	7,242.71	-2,331.40	-330.74	85.12	10,663.59	8,086.48	-2,351.76	-396.53	51.27	831.63	771.53	175.67	13.837
9,500.00	7,243.62	-2,430.57	-343.48	86.16	10,768.29	8,083.20	-2,456.04	-405.32	52.95	827.28	765.40	175.97	13.370
9,600.00	7,243.01	-2,529.75	-356.27	87.27	10,882.13	8,077.57	-2,569.39	-414.20	54.78	822.56	758.79	176.35	12.900
9,700.00	7,240.96	-2,628.81	-369.82	88.40	10,989.62	8,071.64	-2,676.38	-422.76	56.51	818.78	753.17	176.79	12.481
9,800.00	7,239.14	-2,727.88	-383.24	89.54	11,101.72	8,063.49	-2,787.71	-432.90	58.38	813.08	745.65	177.08	12.059
9,900.00	7,236.77	-2,826.93	-396.83	90.71	11,185.59	8,057.37	-2,870.95	-441.17	59.76	808.03	738.89	177.32	11.688
9,999.80	7,234.25	-2,925.66	-411.20	91.89	11,254.57	8,054.32	-2,939.47	-448.45	60.85	806.04	735.40	177.53	11.410
10,000.00	7,234.46	-2,925.85	-411.28	91.90	11,254.69	8,054.31	-2,939.59	-448.46	60.85	805.83	735.18	177.53	11.406
10,100.00	7,231.53	-3,024.69	-426.21	93.12	11,312.00	8,054.26	-2,996.57	-454.60	61.74	808.71	736.57	177.71	11.209
10,200.00	7,228.04	-3,123.51	-441.07	94.38	11,382.89	8,057.32	-3,067.01	-461.84	62.85	816.50	742.76	177.95	11.074
10,300.00	7,224.55	-3,222.21	-456.75	95.63	11,460.93	8,063.79	-3,144.39	-469.58	64.09	828.00	752.66	178.26	10.990
10,400.00	7,222.19	-3,320.98	-472.20	96.89	11,554.83	8,072.91	-3,237.18	-480.76	65.62	839.96	762.91	178.57	10.901
10,500.00	7,221.39	-3,419.96	-486.48	98.18	11,667.88	8,083.34	-3,348.93	-494.26	67.49	849.96	770.89	178.78	10.750
10,600.00	7,218.93	-3,518.91	-500.69	99.51	11,798.73	8,091.91	-3,478.92	-506.44	69.63	858.92	777.59	179.27	10.561
10,700.00	7,215.58	-3,618.15	-512.47	100.86	11,930.43	8,094.85	-3,610.32	-514.74	71.84	864.31	780.77	179.79	10.347
10,800.00	7,214.39	-3,717.54	-523.41	102.20	12,037.03	8,095.36	-3,716.67	-521.97	73.65	865.97	780.59	-179.91	10.142
10,900.00	7,216.19	-3,816.74	-535.82	103.56	12,139.92	8,095.25	-3,819.16	-530.99	75.40	864.08	776.71	-179.66	9.890
10,958.15	7,216.54	-3,874.28	-544.20	104.39	12,194.64	8,095.18	-3,873.56	-536.83	76.32	863.67	775.17	-179.52	9.759
11,000.00	7,216.45	-3,915.62	-550.77	104.98	12,231.87	8,095.34	-3,910.57	-540.97	76.93	863.96	774.67	-179.41	9.676
11,100.00	7,216.50	-4,014.38	-566.46	106.40	12,323.36	8,096.49	-4,001.39	-551.93	78.44	865.21	774.06	-179.18	9.492
11,200.00	7,217.23	-4,113.21	-581.69	107.82	12,440.95	8,097.77	-4,117.92	-567.58	80.40	865.67	772.37	-179.03	9.279
11,300.00	7,218.01	-4,212.09	-596.58	109.27	12,537.12	8,097.58	-4,213.25	-580.31	82.01	864.72	769.50	-178.92	9.081
11,372.80	7,218.77	-4,284.24	-606.17	110.32	12,600.53	8,097.99	-4,276.03	-589.16	83.05	864.42	767.87	-178.95	8.953
11,400.00	7,219.11	-4,311.27	-609.26	110.72	12,624.06	8,098.33	-4,299.31	-592.54	83.44	864.46	767.42	-178.99	8.908
11,500.00	7,220.62	-4,410.49	-621.66	112.18	12,715.22	8,100.32	-4,389.58	-605.09	84.92	865.12	766.21	-179.09	8.747
11,600.00	7,222.51	-4,509.81	-633.09	113.66	12,809.70	8,103.13	-4,483.39	-615.98	86.45	866.19	765.37	-179.06	8.591

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Peridot 13 State - Peridot 13 State 1H - Wellbore #1 - Wellbore #1

Scan Range: 0.00 to 14,120.00 ft. Measured Depth.

Scan Radius is 10,000.00 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids (ft)	Relative Highside Bearing	Clearance Factor
11,700.00	7,223.68	-4,609.28	-643.31	115.16	12,908.86	8,106.42	-4,581.98	-626.09	88.10	868.35	765.55	-179.05	8.447
11,800.00	7,226.18	-4,708.78	-652.97	116.66	13,001.61	8,109.85	-4,674.19	-635.49	89.64	869.53	764.89	-179.07	8.309
11,900.00	7,231.31	-4,808.15	-662.85	118.17	13,141.02	8,112.83	-4,812.97	-648.21	91.98	866.66	759.67	-179.00	8.100
12,000.00	7,236.42	-4,907.41	-673.90	119.71	13,258.50	8,110.50	-4,929.86	-659.72	93.99	859.49	750.31	-178.88	7.872
12,100.00	7,241.51	-5,006.48	-686.48	121.26	13,342.53	8,108.94	-5,013.30	-669.48	95.41	852.63	741.62	-178.81	7.681
12,200.00	7,247.47	-5,105.42	-699.74	122.81	13,429.47	8,109.58	-5,099.65	-679.47	96.86	847.38	734.49	-178.70	7.507
12,300.00	7,253.04	-5,204.18	-714.40	124.39	13,548.16	8,109.66	-5,217.30	-695.13	98.89	841.94	726.83	-178.56	7.314
12,400.00	7,258.26	-5,302.82	-730.00	125.98	13,650.39	8,107.93	-5,318.12	-711.90	100.64	835.00	717.89	-178.61	7.130
12,500.00	7,264.00	-5,401.58	-744.62	127.56	13,738.08	8,107.20	-5,404.60	-726.45	102.11	828.41	709.45	-178.72	6.964
12,600.00	7,269.21	-5,500.54	-758.00	129.15	13,843.89	8,107.21	-5,509.56	-739.77	103.87	823.25	702.22	-178.66	6.802
12,700.00	7,274.43	-5,599.58	-770.79	130.75	13,945.16	8,106.06	-5,610.17	-751.18	105.56	816.94	693.88	-178.54	6.639
12,800.00	7,280.10	-5,698.62	-783.40	132.34	14,041.59	8,105.28	-5,705.98	-762.14	107.17	810.49	685.46	-178.44	6.482
12,900.00	7,286.23	-5,797.67	-795.72	133.95	14,136.98	8,104.96	-5,800.70	-773.39	108.76	804.05	677.08	-178.39	6.333
13,000.00	7,292.93	-5,896.64	-808.38	135.57	14,242.14	8,104.65	-5,905.08	-786.21	110.54	797.07	668.04	-178.34	6.177
13,100.00	7,299.26	-5,995.71	-820.41	137.21	14,340.00	8,103.89	-6,002.30	-797.32	112.17	790.00	658.95	-178.28	6.028
13,200.00	7,306.74	-6,094.86	-831.01	138.86	14,434.00	8,103.87	-6,095.63	-808.54	113.75	782.46	649.59	-178.35	5.889
13,300.00	7,314.95	-6,194.02	-841.04	140.52	14,529.00	8,104.63	-6,189.95	-819.82	115.34	774.98	640.15	-178.47	5.748
13,400.00	7,322.31	-6,293.21	-851.35	142.20	14,631.30	8,105.31	-6,291.56	-831.63	117.07	768.25	631.35	-178.55	5.612
13,500.00	7,329.13	-6,392.32	-862.73	143.88	14,728.79	8,106.05	-6,388.29	-843.74	118.74	762.17	623.29	-178.61	5.488
13,600.00	7,336.63	-6,491.63	-871.72	145.55	14,836.25	8,106.32	-6,494.91	-857.13	120.58	754.84	613.97	-178.87	5.358
13,700.00	7,344.27	-6,591.00	-879.95	147.22	14,938.57	8,105.95	-6,596.32	-870.81	122.33	746.76	603.83	-179.26	5.225
13,800.00	7,349.94	-6,690.41	-889.16	148.92	15,037.34	8,105.34	-6,694.18	-884.13	124.01	740.42	595.43	-179.58	5.106
13,900.00	7,354.31	-6,789.73	-899.98	150.63	15,132.09	8,105.34	-6,788.02	-897.26	125.61	736.03	589.07	-179.80	5.008
14,000.00	7,359.20	-6,888.82	-912.45	152.32	15,234.62	8,105.65	-6,889.55	-911.54	127.33	731.45	582.47	-179.92	4.910
14,100.00	7,364.51	-6,987.61	-927.06	154.02	15,338.97	8,105.06	-6,992.73	-927.06	129.11	725.57	574.51	-179.94	4.803
14,120.00	7,365.54	-7,007.35	-930.09	154.37	15,358.94	8,104.92	-7,012.46	-930.16	129.45	724.41	572.94	-179.94	4.783

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
305.00	6,570.00	Teledrift Surveys	Dipmeter
6,604.00	14,120.00	Sperry MWD Surveys	MWD

Anticollision Info

Error Model: ISCWSA
Scan Method: Closest Approach 3D

Output errors are at 2.00 sigma

Ellipse error terms are correlated across survey tool tie-on points.

Calculated ellipses incorporate surface errors.

Separation is the actual distance between ellipsoids.

Distance Between centres is the straight line distance between wellbore centres.

Clearance Factor = Distance Between Profiles / (Distance Between Profiles - Ellipse Separation).

All station coordinates were calculated using the Minimum Curvature method.

Anticollision Report for Peridot 13 State 5H - Wellbore #1

Direction and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to WELL @ 3400.00ft (Original Well Elev+25'). Northing and Easting are relative to Peridot 13 State 5H.

Coordinate System is US State Plane 1983, New Mexico Eastern Zone.

Central Meridian is -104.00°, Grid Convergence at Surface is: 0.16°.

