



End of Well Report for Devon Energy

Rig : H&P223
Well Name : Peridot 13 State 6H
Field Name : Permian Basin
Country : USA
Job Number : OK-XX-0900441955
Job Start Date : 12-Sep-13
API Number : 30-015-40780



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GENERAL INFORMATION

Company	: Devon Energy
Rig	: H&P223
Well	: Peridot 13 State 6H
Field	: Permian Basin
State	: New Mexico
County	: Eddy
Country	: USA
API Number	: 30-015-40780
Sperry Drilling Job Number	: OK-XX-0900441955
Job Start Date	: 12-Sep-13
Job End Date	: 29-Sep-13
North Reference	: Grid
Total Correction (deg)	: 7.512
Dip Angle (deg)	: 60.457
Total Magnetic Field (nT)	: 48621
Date of Magnetic Data	: 11 September, 2013
Well Head coordinates N	: 32 deg. 40 min 24.72 sec North
Well Head coordinates E	: 104 deg. 1 min 55.76 sec West
Vertical section direction (deg)	: 175.68
Unit Number	: PP40
MWD Engineers	: Eiron Ledesma, Mark Mendez
Company Representatives	: John Holmquist
Company Geologist:	:

**OPERATIONAL OVERVIEW**

SPERRY DRILLING WAS CONTRACTED TO DRILL THE PERIDOT 13 STATE 6H WELL FOR DEVON ENERGY PROVIDED WERE REAL TIME AND RECORDED GAMMA AS WELL AS DIRECTIONAL DRILLING SERVICES. CREWS ARRIVED ON 9/11/13 AND RIGGED UP ACCORDINGLY.

RUN 100: GOOD MWD RUN FROM 326 MD TO 3752 MD. POOH TO RUN CASING.

RUN 200: GOOD MWD RUN FROM 3752'MD TO 5584'MD. POOH TO CHANGE BIT AND MOTOR .

RUN 300: GOOD MWD RUN FROM 5584'MD TO 6700'MD. POOH TO PICK UP DIRECTIONAL TOOLS TO START CURVE.

RUN 400: GOOD MWD RUN FROM 6700'MD TO 9715'MD. POOH TO MOVE HEAVY WEIGHT FURTHER UP THE DRILL STRING.

RUN 500: GOOD MWD RUN FROM 9715 'MD TO A TD DEPTH OF 14064 'MD. POOH TO LAY DOWN DIRECTIONAL TOOLS



SUMMARY OF MWD RUNS

Run No.	Rig Run No.	Hole Size (in)	MWD Service	Start Depth (ft)	End Depth (ft)	Drill/Wipe Distance (ft)	Run Start Date Time	Run End Date Time	BRT Hrs	Oper. Hrs	Circ. Hrs	Max Temp. (degF)	Serv Int.	Trip for MWD	Failure Type
100	100	12.25	D/GWD	326.00	3752.00	3426.00	12-Sep-13 16:30	15-Sep-13 23:00	78.50	78.500	65.000	124.00	No	No	
200	200	8.75	D/GWD	3752.00	5584.00	1832.00	17-Sep-13 11:00	19-Sep-13 00:30	37.50	37.500	24.000	125.00	No	No	
300	300	8.75	D/GWD	5584.00	6700.00	1116.00	19-Sep-13 01:30	21-Sep-13 02:30	49.00	49.000	33.000	129.00	No	No	
400	400	8.75	D/GWD	6700.00	9715.00	3015.00	21-Sep-13 03:30	24-Sep-13 19:00	87.50	87.500	66.000	141.00	No	No	
500	500	8.75	D/GWD	9715.00	14064.00	4349.00	24-Sep-13 20:00	29-Sep-13 04:00	104.00	104.000	65.000	154.00	No	No	



SURVEY HEADER

SURVEYS FROM 391' MD TO 14000' MD PROVIDED BY HALLIBURTON SPERRY SERVICES. FINAL SURVEY AT 14064' MD IS A STRAIGHT LINE PROJECTION TO THE BIT.

DIRECTIONAL SURVEY DATA

Tie-in

0.00

0.00

0.00

0.00

0.00 N

0.00 E

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (°/100)
391.00	1.43	297.55	390.96	2.25 N	4.32 W	-2.57	0.37
422.00	1.62	303.04	421.95	2.67 N	5.03 W	-3.04	0.78
516.00	0.89	309.73	515.93	3.86 N	6.70 W	-4.36	0.79
607.00	0.82	58.13	606.92	4.66 N	6.70 W	-5.15	1.52
699.00	1.50	88.71	698.90	5.03 N	4.93 W	-5.39	0.98
795.00	1.61	98.41	794.87	4.86 N	2.34 W	-5.02	0.30
984.00	2.10	91.58	983.77	4.38 N	3.76 E	-4.08	0.28
1079.00	1.71	110.42	1,078.71	3.83 N	6.83 E	-3.31	0.77
1174.00	1.78	160.29	1,173.68	1.95 N	8.66 E	-1.29	1.55
1268.00	1.83	179.61	1,267.63	0.93 S	9.16 E	1.62	0.65
1362.00	0.71	185.35	1,361.61	3.01 S	9.12 E	3.69	1.20
1457.00	0.35	280.94	1,456.60	3.54 S	8.78 E	4.19	0.86
1551.00	0.41	316.38	1,550.60	3.24 S	8.26 E	3.86	0.25
1646.00	0.29	346.50	1,645.60	2.76 S	7.97 E	3.35	0.23
1835.00	0.38	28.14	1,834.60	1.75 S	8.15 E	2.35	0.13
2024.00	0.74	5.99	2,023.59	0.02 N	8.57 E	0.63	0.22
2213.00	0.61	6.28	2,212.57	2.24 N	8.81 E	-1.57	0.07
2402.00	0.48	5.89	2,401.56	4.03 N	9.00 E	-3.34	0.07
2591.00	0.56	9.09	2,590.56	5.73 N	9.23 E	-5.01	0.05
2781.00	0.68	352.87	2,780.55	7.77 N	9.24 E	-7.05	0.11
2970.00	0.68	358.99	2,969.53	10.01 N	9.08 E	-9.30	0.04
3159.00	0.51	21.24	3,158.52	11.92 N	9.36 E	-11.18	0.15
3348.00	0.64	349.86	3,347.51	13.73 N	9.48 E	-12.98	0.18
3538.00	1.42	178.94	3,537.50	12.42 N	9.34 E	-11.68	1.08
3686.00	0.93	237.94	3,685.47	9.95 N	8.36 E	-9.29	0.83
3874.00	1.24	174.11	3,873.44	7.11 N	7.28 E	-6.54	0.63
4064.00	1.37	196.61	4,063.40	2.89 N	6.84 E	-2.36	0.28
4253.00	0.99	242.29	4,252.36	0.03 S	4.76 E	0.39	0.52
4442.00	1.41	251.07	4,441.32	1.54 S	1.11 E	1.62	0.24
4631.00	2.03	269.81	4,630.23	2.31 S	4.43 W	1.97	0.44
4821.00	2.42	287.58	4,820.09	1.10 S	11.61 W	0.23	0.42
5010.00	2.88	21.63	5,008.96	4.51 N	13.68 W	-5.53	2.06
5199.00	2.72	358.46	5,197.74	13.41 N	12.05 W	-14.28	0.60
5388.00	3.43	1.41	5,386.47	23.55 N	12.03 W	-24.39	0.39
5578.00	1.10	71.68	5,576.33	29.81 N	10.16 W	-30.49	1.70
5767.00	1.27	2.59	5,765.30	32.48 N	8.34 W	-33.01	0.72
5956.00	0.80	341.77	5,954.27	35.83 N	8.66 W	-36.38	0.31
6146.00	1.29	158.15	6,144.26	35.10 N	8.28 W	-35.63	1.10
6335.00	1.77	167.17	6,333.19	30.28 N	6.84 W	-30.71	0.28



DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100)
6524.00	0.77	214.06	6,522.14	26.40 N	6.90 W	-26.84	0.72
6636.00	1.58	189.89	6,634.12	24.26 N	7.58 W	-24.76	0.83
6720.00	3.33	170.39	6,718.04	20.71 N	7.37 W	-21.21	2.29
6752.00	8.24	168.87	6,749.87	17.55 N	6.77 W	-18.01	15.35
6783.00	12.11	168.98	6,780.37	12.17 N	5.72 W	-12.57	12.48
6815.00	16.33	171.50	6,811.39	4.42 N	4.42 W	-4.74	13.33
6846.00	21.69	170.63	6,840.69	5.55 S	2.84 W	5.32	17.31
6878.00	26.32	171.78	6,869.91	18.41 S	0.86 W	18.30	14.53
6909.00	31.03	174.30	6,897.10	33.18 S	0.92 E	33.15	15.69
6941.00	33.93	174.62	6,924.09	50.28 S	2.58 E	50.33	9.08
6972.00	36.54	175.20	6,949.41	68.09 S	4.16 E	68.21	8.47
7004.00	38.73	175.34	6,974.75	87.57 S	5.77 E	87.75	6.87
7036.00	40.93	177.15	6,999.32	108.02 S	7.10 E	108.24	7.77
7067.00	43.25	176.24	7,022.32	128.76 S	8.31 E	129.02	7.73
7099.00	45.47	176.02	7,045.20	151.08 S	9.82 E	151.39	6.95
7131.00	47.72	176.65	7,067.19	174.28 S	11.30 E	174.64	7.18
7162.00	49.85	177.24	7,087.61	197.56 S	12.54 E	197.95	7.03
7194.00	53.46	177.18	7,107.46	222.63 S	13.76 E	223.03	11.27
7226.00	56.45	176.88	7,125.83	248.79 S	15.12 E	249.22	9.39
7258.00	58.58	176.86	7,143.02	275.74 S	16.59 E	276.21	6.64
7289.00	60.54	177.31	7,158.73	302.43 S	17.95 E	302.92	6.44
7321.00	62.45	177.49	7,174.00	330.52 S	19.23 E	331.03	6.00
7353.00	64.65	175.58	7,188.25	359.12 S	20.96 E	359.67	8.71
7384.00	66.29	177.62	7,201.12	387.27 S	22.63 E	387.87	7.97
7416.00	68.49	177.39	7,213.42	416.78 S	23.92 E	417.39	6.91
7448.00	70.75	176.91	7,224.57	446.73 S	25.41 E	447.38	7.18
7479.00	73.56	177.35	7,234.06	476.20 S	26.89 E	476.88	9.19
7511.00	76.76	176.87	7,242.26	507.09 S	28.45 E	507.79	10.09
7542.00	80.16	176.37	7,248.46	537.41 S	30.24 E	538.16	11.10
7574.00	82.98	175.49	7,253.15	568.98 S	32.49 E	569.81	9.21
7605.00	85.68	175.17	7,256.21	599.72 S	35.00 E	600.65	8.77
7637.00	86.95	175.01	7,258.27	631.54 S	37.73 E	632.59	4.00
7668.00	87.90	175.02	7,259.66	662.39 S	40.43 E	663.55	3.08
7700.00	88.80	175.47	7,260.58	694.27 S	43.08 E	695.54	3.13
7762.00	89.14	175.74	7,261.70	756.07 S	47.83 E	757.53	0.70
7857.00	89.54	176.01	7,262.80	850.82 S	54.67 E	852.52	0.51
7952.00	89.82	175.39	7,263.33	945.55 S	61.79 E	947.52	0.71
8046.00	90.15	176.12	7,263.35	1,039.29 S	68.76 E	1041.52	0.85
8141.00	89.94	176.32	7,263.28	1,134.08 S	75.02 E	1136.51	0.31
8236.00	88.98	176.22	7,264.17	1,228.88 S	81.21 E	1231.50	1.01
8330.00	88.92	175.84	7,265.89	1,322.64 S	87.71 E	1325.49	0.41
8425.00	89.11	176.68	7,267.53	1,417.42 S	93.91 E	1420.47	0.90
8519.00	89.10	177.40	7,269.00	1,511.28 S	98.76 E	1514.43	0.77
8614.00	88.79	178.04	7,270.74	1,606.19 S	102.54 E	1609.35	0.75
8708.00	89.90	176.89	7,271.82	1,700.09 S	106.70 E	1703.30	1.70



DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100')
8803.00	89.75	174.29	7,272.10	1,794.80 S	114.00 E	1798.29	2.74
8897.00	88.92	172.50	7,273.19	1,888.16 S	124.81 E	1892.20	2.10
8992.00	89.29	172.81	7,274.67	1,982.37 S	136.95 E	1987.06	0.50
9086.00	87.93	171.98	7,276.95	2,075.51 S	149.39 E	2080.87	1.69
9181.00	88.05	172.65	7,280.28	2,169.60 S	162.09 E	2175.65	0.72
9276.00	88.37	172.91	7,283.25	2,263.80 S	174.02 E	2270.48	0.43
9371.00	88.09	171.06	7,286.19	2,357.83 S	187.26 E	2365.23	1.97
9465.00	87.63	171.52	7,289.71	2,450.68 S	201.49 E	2458.89	0.69
9560.00	88.70	171.77	7,292.75	2,544.62 S	215.29 E	2553.61	1.16
9654.00	88.83	172.31	7,294.77	2,637.69 S	228.31 E	2647.39	0.59
9766.00	89.57	172.19	7,296.34	2,748.65 S	243.41 E	2759.18	0.67
9861.00	90.65	172.86	7,296.16	2,842.85 S	255.77 E	2854.04	1.34
9955.00	89.97	172.64	7,295.65	2,936.09 S	267.63 E	2947.91	0.76
10050.00	89.01	172.69	7,296.50	3,030.31 S	279.75 E	3042.77	1.01
10145.00	87.63	172.39	7,299.28	3,124.46 S	292.07 E	3137.59	1.50
10239.00	88.03	172.76	7,302.85	3,217.61 S	304.21 E	3231.38	0.58
10333.00	89.26	173.52	7,305.07	3,310.91 S	315.43 E	3325.26	1.54
10428.00	88.46	173.75	7,306.96	3,405.30 S	325.96 E	3420.18	0.87
10523.00	89.38	174.56	7,308.75	3,499.79 S	335.64 E	3515.13	1.30
10617.00	88.89	174.53	7,310.17	3,593.35 S	344.57 E	3609.10	0.53
10712.00	88.27	173.87	7,312.52	3,687.84 S	354.17 E	3704.04	0.95
10807.00	89.01	174.50	7,314.77	3,782.32 S	363.78 E	3798.98	1.02
10901.00	89.51	174.72	7,315.98	3,875.90 S	372.61 E	3892.95	0.58
10995.00	90.09	175.40	7,316.31	3,969.55 S	380.70 E	3986.95	0.95
11090.00	90.15	175.90	7,316.11	4,064.27 S	387.91 E	4081.95	0.54
11184.00	90.59	176.07	7,315.50	4,158.04 S	394.49 E	4175.94	0.49
11279.00	89.07	176.27	7,315.78	4,252.83 S	400.83 E	4270.94	1.60
11373.00	89.48	177.11	7,316.97	4,346.66 S	406.25 E	4364.91	0.98
11468.00	88.61	177.01	7,318.56	4,441.52 S	411.12 E	4459.87	0.91
11562.00	88.77	177.12	7,320.70	4,535.37 S	415.93 E	4553.82	0.20
11657.00	88.80	177.34	7,322.72	4,630.24 S	420.52 E	4648.76	0.23
11751.00	88.30	177.34	7,325.09	4,724.11 S	424.88 E	4742.69	0.53
11846.00	88.58	177.55	7,327.67	4,818.98 S	429.12 E	4837.61	0.37
11940.00	88.89	178.45	7,329.75	4,912.90 S	432.40 E	4931.51	1.01
12035.00	88.49	178.39	7,331.92	5,007.84 S	435.02 E	5026.38	0.42
12129.00	88.52	176.93	7,334.37	5,101.72 S	438.85 E	5120.29	1.55
12224.00	88.95	177.65	7,336.46	5,196.59 S	443.33 E	5215.23	0.88
12319.00	89.48	177.17	7,337.77	5,291.49 S	447.62 E	5310.17	0.74
12413.00	89.91	176.77	7,338.27	5,385.36 S	452.59 E	5404.15	0.63
12508.00	89.66	177.02	7,338.63	5,480.22 S	457.73 E	5499.13	0.37
12602.00	89.72	177.28	7,339.14	5,574.10 S	462.41 E	5593.09	0.28
12697.00	90.12	177.60	7,339.27	5,669.00 S	466.65 E	5688.05	0.54
12792.00	89.91	177.49	7,339.24	5,763.92 S	470.71 E	5783.00	0.26
12887.00	89.91	177.24	7,339.39	5,858.82 S	475.07 E	5877.96	0.26
12981.00	89.57	177.34	7,339.82	5,952.71 S	479.51 E	5971.92	0.38



DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (°/100)
13075.00	89.69	176.98	7,340.43	6,046.59 S	484.17 E	6065.88	0.40
13170.00	89.69	176.97	7,340.94	6,141.46 S	489.17 E	6160.86	0.01
13265.00	88.67	176.51	7,342.30	6,236.29 S	494.57 E	6255.83	1.18
13359.00	88.83	176.97	7,344.35	6,330.12 S	499.91 E	6349.79	0.52
13454.00	88.73	176.79	7,346.37	6,424.96 S	505.08 E	6444.75	0.22
13548.00	88.67	176.85	7,348.49	6,518.79 S	510.29 E	6538.71	0.09
13642.00	89.04	177.16	7,350.36	6,612.64 S	515.20 E	6632.66	0.51
13737.00	89.17	177.36	7,351.85	6,707.52 S	519.75 E	6727.62	0.25
13831.00	89.22	177.05	7,353.17	6,801.40 S	524.33 E	6821.57	0.33
13926.00	89.13	176.83	7,354.53	6,896.25 S	529.39 E	6916.54	0.25
14000.00	89.29	176.91	7,355.55	6,970.14 S	533.43 E	6990.52	0.23
14064.00	89.29	176.91	7,356.34	7,034.04 S	536.88 E	7054.50	0.00

DIRECTIONAL SURVEY DATA NOTES

- Calculation based on minimum curvature method.
- Survey coordinates relative to well system reference point.
- TVD values given relative to drilling measurement point.
- Vertical section relative to well head.
- Vertical section is computed along a direction of 175.68 degrees (Grid)
- A total correction of 7.51 deg from Magnetic north to Grid north has been applied
- Horizontal displacement is relative to the well head.
- Horizontal displacement (closure) at 14,064.00 feet is 7,054.50 feet along 175.64 degrees (Grid)

WARRANTY

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HALLIBURTON

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