

Reservoir Development

Drilling & Measurements (Extreme Engineering)

6724 Corporation Pkwy Suite 100

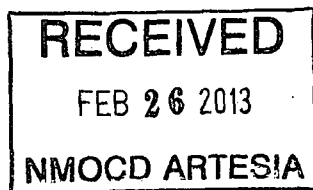
Fort Worth, TX 76126

Phone: (817) 717-1820

Fax: (817) 546-7551

December 17, 2012

Occidental Permian Ltd
5 Greenway Plaza Suite 110
Houston, Texas 77046



Attention: Anthony T Tschacher

Re:

CLIENT: Occidental Petroleum Corp
WELL: PIGLET 21 STATE #14
FIELD: YESO
RIG: SAVANNA 415
COUNTY: EDDY
API NO: 30-015-40432
JOB NO: NM-OXY-0028

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements (formerly Extreme), a division of Schlumberger Technology Corporation (P-5 No. 754900).

Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Ty McFarlin FST-T	PIGLET 21 STATE #14 Original Hole	198.00 Ft to 4700.00 Ft	December 6, 2012 to December 11, 2012	SlimPulse

A plat of the bottom hole location is oriented both to the surface location and to the lease lines (or until line in case of pooling), is attached to the survey report.

If any other information is required, please contact the undersigned at the above letterhead and phone number.

Sincerely,

Mike Johns
Field Service Manager

CC: Occidental Petroleum Corp
Enclosures: [2]
County of EDDY
State of New Mexico

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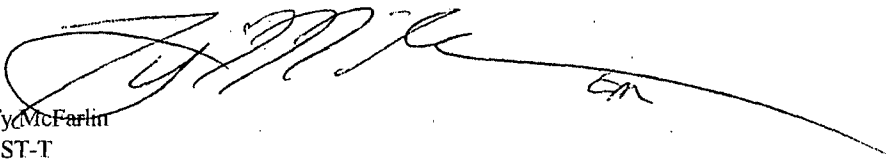
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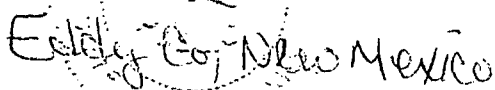
I, Ty McFarlin certify that; I am employed by Drilling & Measurements (formerly Extreme), a division of Schlumberger Technology Corporation; that I did on the day(s) of December 06, 2012 through December 11, 2012, conduct or supervise the taking of the SlimPulse surveys from a depth of 198.00 feet to a depth of 4700.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Occidental Petroleum Corp for the PIGLET 21 STATE #14 Well (Original Hole) API No. 30-015-40432 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.


Ty McFarlin
FST-T

Before me, Janna Martin, on this day personally appeared Ty McFarlin, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 18th day of December, 2012


Notary Public


Eddy Co, New Mexico

My Commission Expires 10-13-2015

PIGLET 21 STATE #14 MWD 0' to 4700' Survey Report

(Def Survey)

Report Date: December 11, 2012 - 02:01 AM Survey / DLS Computation: Minimum Curvature / Lubinski
 Client: Oxy Vertical Section Azimuth: 0.000 ° (Grid North)
 Field: NM, Eddy (NAD27) 2011 Vertical Section Origin: 0.000 ft, 0.000 ft
 Structure / Slot: OXY (PIGLET 21 STATE #14) SAVANNA 415 / PIGLET 21 STATE #14 TVD Reference Datum: RKB
 Well: PIGLET 21 STATE #14 TVD Reference Elevation: 3466.000 ft above MSL
 Borehole: Original Hole Seabed / Ground Elevation: 3452.000 ft above MSL
 UWI / API#: Unknown / 30-015-40432 Magnetic Declination: 8.005 °
 Survey Name: PIGLET 21 STATE #14 MWD 0' to 4700' Total Field Strength: 48736.300 nT
 Survey Date: December 11, 2012 Magnetic Dip Angle: 60.557 °
 Tort / AHD / DDI / ERD Ratio: 6.206 ° / 51.009 ft / 2.500 / 0.011 Declination Date: December 11, 2012

Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet Magnetic Declination Model: BGGM 2012
 Location Lat / Long: N 32° 49' 4.80000", W 104° 11' 8.88000" North Reference: Grid North
 Location Grid N/E Y/X: N 681331.102 RUS, E 545323.904 RUS Grid Convergence Used: 0.142 °
 CRS Grid Convergence Angle: 0.07995610 ° Total Corr Mag North→Grid North: 7.883 °
 Grid Scale Factor: 0.99991144 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	681331.10	545323.90	N 32 49 4.80	W 104 11 8.88
Assumed Vertical	80.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00	681331.10	545323.90	N 32 49 4.80	W 104 11 8.88
Begin MWD	198.00	1.50	356.43	197.99	1.54	1.54	-0.10	1.27	681332.64	545323.81	N 32 49 4.82	W 104 11 8.88
Surveys	388.00	1.58	352.09	387.92	8.62	8.62	-0.61	0.07	681337.72	545323.29	N 32 49 4.87	W 104 11 8.89
	498.00	1.49	351.61	497.88	9.53	9.53	-1.03	0.08	681340.64	545322.87	N 32 49 4.89	W 104 11 8.89
	547.00	1.49	347.61	546.86	10.79	10.79	-1.26	0.21	681341.89	545322.65	N 32 49 4.91	W 104 11 8.89
	610.00	1.32	345.81	609.84	12.29	12.29	-1.61	0.28	681343.39	545322.29	N 32 49 4.92	W 104 11 8.90
	675.00	1.10	344.49	674.83	13.62	13.62	-1.86	0.34	681344.72	545321.94	N 32 49 4.93	W 104 11 8.90
	735.00	1.01	348.71	734.82	14.69	14.69	-2.22	0.20	681345.79	545321.68	N 32 49 4.95	W 104 11 8.91
	796.00	0.88	343.30	795.81	15.67	15.67	-2.46	0.26	681346.77	545321.44	N 32 49 4.96	W 104 11 8.91
	858.00	0.79	337.11	857.80	16.52	16.52	-2.76	0.21	681347.62	545321.14	N 32 49 4.98	W 104 11 8.91
	1008.00	0.62	328.10	1007.79	18.16	18.16	-3.59	0.13	681349.26	545320.31	N 32 49 4.98	W 104 11 8.92
	1198.00	0.48	341.11	1197.78	19.78	19.78	-4.39	0.10	681350.88	545319.51	N 32 49 5.00	W 104 11 8.93
	1368.00	0.48	301.38	1367.78	20.83	20.83	-5.23	0.19	681351.93	545318.67	N 32 49 5.01	W 104 11 8.94
	1540.00	0.31	295.89	1539.77	21.41	21.41	-6.27	0.10	681352.51	545317.64	N 32 49 5.01	W 104 11 8.95
	1713.00	0.40	319.70	1712.77	22.07	22.07	-7.08	0.10	681353.17	545316.83	N 32 49 5.02	W 104 11 8.96
	1911.00	0.31	269.40	1910.77	22.86	22.86	-7.99	0.08	681353.96	545315.91	N 32 49 5.03	W 104 11 8.97
	2102.00	0.31	292.72	2101.76	23.32	23.32	-8.92	0.02	681354.42	545314.99	N 32 49 5.03	W 104 11 8.98
	2300.00	0.40	273.30	2299.76	23.56	23.56	-10.10	0.08	681354.66	545313.80	N 32 49 5.03	W 104 11 9.00
	2484.00	0.31	311.62	2483.76	23.93	23.93	-11.12	0.13	681355.03	545312.79	N 32 49 5.04	W 104 11 9.01
	2681.00	0.31	315.31	2680.75	24.66	24.66	-11.89	0.01	681355.76	545312.01	N 32 49 5.04	W 104 11 9.02
	2875.00	0.31	323.46	2874.75	25.46	25.46	-12.57	0.02	681356.56	545311.33	N 32 49 5.05	W 104 11 9.03
	3048.00	0.22	358.71	3047.75	26.17	26.17	-12.87	0.10	681357.26	545311.04	N 32 49 5.06	W 104 11 9.03
	3222.00	0.48	349.70	3221.75	27.22	27.22	-13.02	0.15	681358.32	545310.89	N 32 49 5.07	W 104 11 9.03
	3392.00	0.48	344.71	3391.74	28.60	28.60	-13.33	0.02	681359.70	545310.57	N 32 49 5.08	W 104 11 9.04
	3590.00	0.70	333.21	3589.73	30.48	30.48	-14.10	0.13	681361.58	545309.81	N 32 49 5.10	W 104 11 9.04
	3783.00	0.75	348.34	3782.71	32.77	32.77	-14.88	0.10	681363.87	545309.02	N 32 49 5.12	W 104 11 9.05
	3869.00	0.79	351.23	3868.71	33.91	33.91	-15.09	0.06	681365.01	545308.82	N 32 49 5.14	W 104 11 9.06
	3967.00	0.79	355.60	3966.70	35.25	35.25	-15.24	0.06	681366.35	545308.66	N 32 49 5.15	W 104 11 9.06
	4152.00	0.79	356.88	4151.68	37.80	37.80	-15.41	0.01	681368.89	545308.49	N 32 49 5.17	W 104 11 9.06
	4350.00	0.62	351.21	4349.66	40.22	40.22	-16.65	0.09	681371.32	545308.28	N 32 49 5.20	W 104 11 9.06
	4548.00	0.79	342.29	4547.85	42.58	42.58	-16.23	0.10	681373.67	545307.66	N 32 49 5.22	W 104 11 9.07
End MWD Surveys	4700.00	1.19	336.10	4699.63	45.02	45.02	-17.19	0.27	681376.12	545306.72	N 32 49 5.25	W 104 11 9.08

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7855 sigma
 Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Survey Tool Type	Borehole / Survey
	0.000	14.000	Act Stns	SLB_BLIND+TREND-Depth Only	Original Hole / PIGLET 21 STATE #14 MWD 0' to 4700'
	14.000	14.000	Act Stns	SLB_BLIND+TREND-Depth Only	Original Hole / PIGLET 21 STATE #14 MWD 0' to 4700'
	14.000	80.000	Act Stns	SLB_BLIND+TREND	Original Hole / PIGLET 21 STATE #14 MWD 0' to 4700'
	80.000	4700.000	Act Stns	SLB_MWD-STD	Original Hole / PIGLET 21 STATE #14 MWD 0' to 4700'