

Reservoir Development
Drilling & Measurements (Extreme Engineering)
6724 Corporation Pkwy Suite 100
Fort Worth, TX 76126
Phone: (817) 717-1820
Fax: (817) 546-7551

May 8, 2013

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



Attention: Mark Tschacher

Re:

CLIENT: OXY
WELL: Piglet 21 Fed 19
FIELD: YESO
RIG: Savanna 415
COUNTY: Eddy
API NO: 30-015-40434
JOB NO: NM-OXY-0059

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>
Troy Miller FST1	Piglet 21 Fed 19 Original Hole	380' to 4774.00 Ft	April 14, 2013 to April 20, 2013	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,

Nick Baenschbach
Field Service Manager

CC: OXY
Enclosures: [2]
County of Eddy
State of New Mexico

Reservoir Development

Drilling & Measurements (Extreme Engineering)

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I, Troy Miller certify that; I am employed by Drilling & Measurements (formerly Extreme), a division of Schlumberger Technology Corporation; that I did on the day(s) of April 14, 2013 through April 20, 2013, conduct or supervise the taking of the SlimPulse surveys from a depth of 380.00 feet to a depth of 4774.00 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 OXY for the Piglet 21 Fed 19 Well (Original Hole) API No. 30-015-40434 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.



Troy Miller
FSTI

Before me, Dana M Rodriguez, on this day personally appeared Troy Miller, 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 8th day of May, (year) 2013

Dana M Rodriguez
Notary Public



OFFICIAL SEAL
Dana M Rodriguez
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 8/8/15

Piglet 21 Fed 19 MWD 0' to 4774' Survey Report (Def Survey)

Report Date: April 20, 2013 - 08:57 PM
Client: OXY
Field: NM, Eddy (NAD27) 2011
Structure / Slot: OXY (Piglet 21 Fed 19) Savanna 415 / Piglet 21 Fed 19
Well: Piglet 21 Fed 19
Borehole: Original Hole
UWI / API#: Unknown / 30-01540434
Survey Name: Piglet 21 Fed 19 MWD 0' to 4774'
Survey Date: April 20, 2013
Tort / AHJ / DOI / ERD Ratio: 10.183 / 40.823 R / 2.617 / 0.009
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 49' 5.88000", W 104° 10' 32.16000"
Location Grid N/E/X: N 881444 788 NUS, E 548457.289 NUS
CRS Grid Convergence Angle: 0.08548794 °
Grid Scale Factor: 0.99991178

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 0.000 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3639.000 ft above MSL
Seabed / Ground Elevation: 3623.000 ft above MSL
Magnetic Declination: 7.868 °
Total Field Strength: 48721.200 nT
Magnetic Dip Angle: 60.566 °
Declination Date: April 20, 2013
Magnetic Declination Model: IGRF2010/IGRF-11
North Reference: Grid North
Grid Convergence Used: 0.065 °
Total Corr Mag North -> Grid North: 7.781 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	881444.77	548457.30	N 32 49 5.88	W 104 10 32.16
Marker MudLine	18.00	0.12	8.81	18.00	0.02	0.02	0.00	0.75	881444.78	548457.30	N 32 49 5.88	W 104 10 32.16
Begin MWD Surveys	83.00	0.62	8.81	83.00	0.45	0.45	0.05	0.75	881445.21	548457.35	N 32 49 5.88	W 104 10 32.16
	380.00	1.10	218.83	379.88	-0.15	-0.15	-1.57	0.58	881444.81	548455.72	N 32 49 5.88	W 104 10 32.16
	585.00	0.70	228.81	584.96	-2.53	-2.53	-3.74	0.20	881442.24	548453.55	N 32 49 5.88	W 104 10 32.20
	708.00	0.88	188.42	705.85	-3.80	-3.83	-4.54	0.37	881440.84	548452.78	N 32 49 5.84	W 104 10 32.21
	826.00	0.82	193.81	825.84	-5.44	-5.44	-4.95	0.22	881439.32	548452.35	N 32 49 5.83	W 104 10 32.22
	1002.00	0.70	193.81	1001.92	-7.41	-7.41	-5.43	0.05	881437.35	548451.87	N 32 49 5.81	W 104 10 32.22
	1147.00	0.70	213.69	1146.91	-9.01	-9.01	-6.13	0.17	881435.78	548451.17	N 32 49 5.79	W 104 10 32.23
	1305.00	0.70	164.81	1304.90	-10.75	-10.75	-6.41	0.37	881434.02	548450.88	N 32 49 5.77	W 104 10 32.24
	1437.00	0.70	133.71	1436.89	-12.08	-12.08	-5.61	0.28	881432.89	548451.89	N 32 49 5.79	W 104 10 32.23
	1626.00	0.79	188.30	1625.88	-14.15	-14.15	-4.51	0.24	881430.81	548452.79	N 32 49 5.74	W 104 10 32.21
	1841.00	0.52	142.02	1840.88	-18.37	-18.37	-3.81	0.18	881428.39	548453.89	N 32 49 5.72	W 104 10 32.20
	2100.00	0.70	183.20	2099.85	-18.88	-18.88	-2.98	0.18	881425.89	548454.32	N 32 49 5.69	W 104 10 32.20
	2382.00	0.48	132.53	2381.84	-21.40	-21.40	-2.20	0.19	881423.37	548455.10	N 32 49 5.67	W 104 10 32.19
	2578.00	0.70	144.30	2575.83	-22.91	-22.91	-0.91	0.13	881421.86	548456.38	N 32 49 5.65	W 104 10 32.17
	2793.00	0.70	142.33	2792.81	-25.04	-25.04	0.87	0.01	881419.73	548457.97	N 32 49 5.63	W 104 10 32.15
	2968.00	0.79	188.69	2965.80	-27.07	-27.07	1.30	0.29	881417.70	548456.80	N 32 49 5.61	W 104 10 32.15
	3102.00	0.48	185.08	3101.78	-28.55	-28.55	1.44	0.28	881416.22	548458.74	N 32 49 5.60	W 104 10 32.14
	3208.00	0.48	145.01	3207.78	-29.35	-29.35	1.81	0.18	881415.42	548459.11	N 32 49 5.58	W 104 10 32.14
	3343.00	0.22	221.82	3342.78	-30.80	-30.80	1.96	0.38	881414.77	548459.28	N 32 49 5.58	W 104 10 32.14
	3552.00	0.09	123.52	3551.78	-30.39	-30.39	1.83	0.12	881414.38	548458.13	N 32 49 5.58	W 104 10 32.14
	3883.00	0.31	187.99	3882.78	-30.80	-30.80	1.99	0.19	881413.97	548458.29	N 32 49 5.58	W 104 10 32.14
	3884.00	0.09	274.80	3883.78	-31.52	-31.52	1.82	0.12	881413.25	548459.22	N 32 49 5.57	W 104 10 32.14
	4141.00	0.09	4.21	4140.78	-31.37	-31.37	1.80	0.07	881413.40	548459.10	N 32 49 5.57	W 104 10 32.14
	4337.00	0.09	195.80	4336.78	-31.37	-31.37	1.77	0.09	881413.40	548459.08	N 32 49 5.57	W 104 10 32.14
	4536.00	0.22	297.32	4535.78	-31.34	-31.34	1.38	0.13	881413.43	548458.68	N 32 49 5.57	W 104 10 32.14
End MWD Surveys	4774.00	0.48	219.83	4773.78	-31.90	-31.90	0.34	0.20	881412.87	548457.84	N 32 49 5.56	W 104 10 32.16

Survey Type: Def Survey

Survey Error Model: ISCWSA Row 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	18.000	1/18.000	SLB_MWD-STD-Depth Only	Original Hole / Piglet 21 Fed 19 MWD 0' to 4774'
	18.000	83.000	1/65.000	SLB_MWD-STD	Original Hole / Piglet 21 Fed 19 MWD 0' to 4774'
	83.000	380.000	1/297.000	SLB_MWD-STD	Original Hole / Piglet 21 Fed 19 MWD 0' to 4774'
	380.000	4774.000	1/4394.000	SLB_MWD-STD	Original Hole / Piglet 21 Fed 19 MWD 0' to 4774'