

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: Anthony Tschacher

Re:

CLIENT: OXY
WELL: Roo 22 State 9
FIELD: Glorieta-YESO
RIG: Savanna415
COUNTY: Eddy
API NO: 30-015-40531
JOB NO: NM-OXY-0064

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.

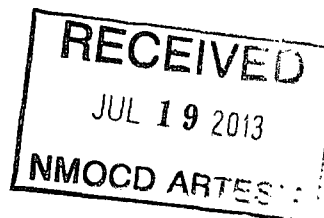
<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Troy Miller FST-1	Roo 22 State 9 Original Hole	355' to 4923'	April 30, 2013 to May 3, 2013	SlimPulse

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,

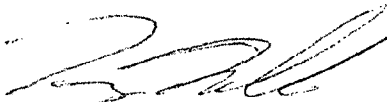
Nick Banschbach
Field Service Manager

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



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

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 30, 2013 through May 03, 2013, conduct or supervise the taking of the SlimPulse surveys from a depth of 3551.00 feet to a depth of 4923.00 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 Roo 22 State 9 Well (Original Hole) API No. 30-015-40531 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
FST-1

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

Roo 22 State 9 MWD 0' to 4923' Survey Report

(Def Survey)

Report Date: May 03, 2013 - 07:09 AM
 Client: OXY
 Field: NM, Eddy (NAD27) 2011
 Structure / Slot: OXY (Roo 22 State 9) Savanna 415 / Roo 22 State 9
 Well: Roo 22 State 9
 Borehole: Original Hole
 UWI / API#: Unknown / 30 015 40531
 Survey Name: Roo 22 State 9 MWD 0' to 4923'
 Survey Date: May 03, 2013
 Tort / AHD / DOI / ERD Ratio: 11.977' / 27.804 ft / 2.522 / 0.006
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 48' 48.96000", W 104° 10' 8.40000"
 Location Grid N/E Y/X: N 659737.975 RUS, E 550487.547 RUS
 CRS Grid Convergence Angle: 0.08905368 °
 Grid Scale Factor: 0.99991201

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: 3611.000 ft above MSL
 Seabed / Ground Elevation: 3597.000 ft above MSL
 Magnetic Declination: 7.860 °
 Total Field Strength: 48715.780 nT
 Magnetic Dip Angle: 60.582 °
 Declination Date: May 03, 2013
 Magnetic Declination Model: IGRF2010/IGRF-11
 North Reference: Grid North
 Grid Convergence Used: 0.089 °
 Total Corr Mag North->Grid North: 7.771 °
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	659737.97	550487.55	N 32 48 48.96	W 104 10 8.40
Begin MWD Surveys	335.32	0.70	242.01	335.31	-0.96	-0.96	-1.81	0.21	659737.01	550485.74	N 32 48 48.95	W 104 10 8.42
	411.44	0.70	293.34	411.43	-1.00	-1.00	-2.65	0.80	659738.98	550484.90	N 32 48 48.95	W 104 10 8.43
	497.43	0.40	356.32	497.41	-0.49	-0.49	-3.15	0.73	659737.49	550484.40	N 32 48 48.96	W 104 10 8.44
	583.40	0.31	240.43	583.38	-0.30	-0.30	-3.37	0.70	659737.67	550484.18	N 32 48 48.96	W 104 10 8.44
	678.39	0.22	349.33	678.38	-0.25	-0.25	-3.63	0.46	659737.72	550483.82	N 32 48 48.96	W 104 10 8.44
	708.10	0.09	336.63	708.08	-0.17	-0.17	-3.65	0.45	659737.80	550483.90	N 32 48 48.96	W 104 10 8.44
	821.00	0.09	348.72	820.98	0.00	0.00	-3.70	0.02	659737.97	550483.85	N 32 48 48.96	W 104 10 8.44
	1082.22	0.40	238.02	1082.20	-0.29	-0.29	-4.51	0.17	659737.69	550483.03	N 32 48 48.96	W 104 10 8.45
	1302.48	0.62	232.61	1302.45	-1.42	-1.42	6.11	0.10	659736.56	550481.44	N 32 48 48.95	W 104 10 8.47
	1474.61	0.31	195.61	1474.57	-2.43	-2.43	-6.98	0.24	659735.54	550480.57	N 32 48 48.94	W 104 10 8.48
	1601.86	0.22	135.14	1601.82	-2.94	-2.94	-6.90	0.22	659735.04	550480.65	N 32 48 48.93	W 104 10 8.48
	1862.05	0.22	302.53	1862.01	-3.02	-3.02	-6.97	0.17	659734.85	550480.58	N 32 48 48.93	W 104 10 8.48
	2078.56	0.09	296.73	2078.52	-2.72	-2.72	-7.47	0.06	659735.25	550480.08	N 32 48 48.93	W 104 10 8.49
	2234.07	0.22	164.70	2234.03	-2.95	-2.95	-7.50	0.19	659735.02	550480.05	N 32 48 48.93	W 104 10 8.49
	2451.90	0.31	302.53	2451.86	-3.04	-3.04	-7.88	0.23	659734.93	550479.66	N 32 48 48.93	W 104 10 8.49
	2667.48	0.31	296.73	2667.44	-2.47	-2.47	-8.90	0.01	659735.51	550478.65	N 32 48 48.94	W 104 10 8.50
	2873.58	0.48	207.52	2873.53	-2.98	-2.98	-9.79	0.28	659735.00	550477.75	N 32 48 48.93	W 104 10 8.51
	3073.38	0.40	202.55	3073.33	-4.37	-4.37	-10.45	0.04	659733.61	550477.10	N 32 48 48.92	W 104 10 8.52
	3287.33	0.62	202.24	3287.27	-6.13	-6.13	-11.17	0.10	659731.85	550476.37	N 32 48 48.90	W 104 10 8.53
	3462.30	0.62	207.34	3462.23	-7.84	-7.84	-11.97	0.03	659730.13	550475.58	N 32 48 48.88	W 104 10 8.54
	3633.61	0.31	214.55	3633.53	-9.05	-9.05	-12.05	0.18	659728.93	550474.89	N 32 48 48.87	W 104 10 8.55
	3807.02	0.09	267.72	3806.94	-9.44	-9.44	-13.06	0.15	659728.53	550474.49	N 32 48 48.87	W 104 10 8.55
	3937.32	0.22	281.13	3937.24	-9.40	-9.40	-13.40	0.10	659728.58	550474.14	N 32 48 48.87	W 104 10 8.56
	3980.76	0.31	318.63	3980.68	-9.29	-9.29	-13.56	0.44	659728.68	550473.98	N 32 48 48.87	W 104 10 8.56
	4155.33	0.31	341.65	4155.25	-8.49	-8.49	-14.02	0.07	659729.48	550473.53	N 32 48 48.88	W 104 10 8.56
	4353.00	0.48	202.82	4352.92	-8.74	-8.74	-14.51	0.38	659729.23	550473.04	N 32 48 48.87	W 104 10 8.57
	4588.43	0.79	320.72	4588.34	-8.40	-8.40	-15.92	0.47	659729.58	550471.63	N 32 48 48.88	W 104 10 8.59
	4627.55	0.22	147.31	4627.45	-8.25	-8.25	-16.05	2.58	659729.73	550471.50	N 32 48 48.88	W 104 10 8.59
	4714.41	0.40	139.71	4714.32	-8.62	-8.62	-15.78	0.21	659729.35	550471.79	N 32 48 48.87	W 104 10 8.58
	4801.15	0.22	143.45	4801.05	-8.59	-8.59	-15.47	0.21	659728.99	550472.08	N 32 48 48.87	W 104 10 8.58
End MWD Surveys	4923.48	1.10	179.22	4923.38	-10.35	-10.35	-15.31	0.76	659727.63	550472.24	N 32 48 48.86	W 104 10 8.58

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Survey Tool Type	Borehole / Survey
	0.000	14.000	1/14.000	SLB_MWD-STD Depth Only	Original Hole / Roo 22 State 9 MWD 0' to 4923'
	14.000	335.316	1/321.316	SLB_MWD-STD	Original Hole / Roo 22 State 9 MWD 0' to 4923'
	335.316	4923.480	1/4588.164	SLB_MWD-STD	Original Hole / Roo 22 State 9 MWD 0' to 4923'