

Oilfield Services, Central U.S. Land

Schlumberger

Reservoir Development

Drilling & Measurements (Extreme Engineering)

6724 Corporation Pkwy Suite 100

Fort Worth, TX 76126

Phone: (817) 717-1820

Fax: (817) 546-7551

June 18, 2013

Occidental Permian Ltd

5 Greenway Plaza Suite 110

Houston, Texas 77046

Attention: Anthony Tschacher

Re:

CLIENT: OXY
WELL: Roo 22 State 14
FIELD: Yeso
RIG: Savanna 415
COUNTY: Eddy
API NO: 30-015-40855
JOB NO: NM-OXY-0072

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-S 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 14 Original Hole	77.00 Ft to 4859.00 Ft	June 6, 2013 to June 10, 2013	SlimPulse

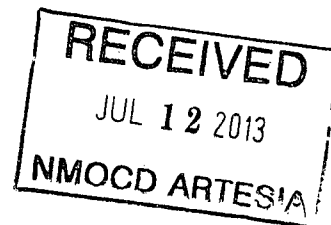
A plat of the bottom hole location is oriented both to the surface location and to the lease lines (or until line in case of pooling), is attached to the survey report.

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

Sincerely,

Joseph Stewart
Field Service Manager

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



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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 June 06, 2013 through June 10, 2013, conduct or supervise the taking of the SlimPulse surveys from a depth of 77.00 feet to a depth of 4859.00 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 14 Well (Original Hole) API No. 30-015-40855 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 Jaelyn D. Frenz on this day personally appeared Troy D. 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 19th day of June 2013 (year).

Jaelyn D. Frenz
Notary Public

my commission expires
July 18, 2015



Roo 22 State 14 MWD 0' to 4859' Survey Report

(Def Survey)

Report Date: June 10, 2013 - 05:50 PM
 Client: Oxy
 Field: NM, Eddy (NAD 27 EZ) 2012
 Structure / Slot: OXY (Roo 22 State 14) Savanna 415 / Roo 22 State 14
 Well: Roo 22 State 14
 Borehole: Original Hole
 UWI / API#: Unknown / 30-015-40855
 Survey Name: Roo 22 State 14 MWD 0' to 4859'
 Survey Date: June 10, 2013
 Tort / AHD / DDI / ERO Ratio: 10.713 / 31.827 / 12.533 / 0.007
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 49' 25.68000" W 104° 10' 15.60000"
 Location Grid NE Y/X: N 663447.833 RUS, E 549867.395 RUS
 CRS Grid Convergence Angle: 0.08799414°
 Grid Scale Factor: 0.99991194

Survey / DLS Computation:
 Vertical Section Azimuth: Minimum Curvature / Lubinski
 Vertical Section Origin: 0.000' (Grid North)
 TVD Reference Datum: 0.000' h, 0.000' h
 TVD Reference Elevation: 3576.000 ft above Unknown
 Seabed / Ground Elevation: 3562.000 ft above Unknown
 Magnetic Declination: 7.810°
 Total Field Strength: 48677.310 nT
 Magnetic Dip Angle: 60.548°
 Declination Date: June 10, 2013
 Magnetic Declination Model: BGMN 2012
 North Reference: Grid North
 Grid Convergence Used: 0.139°
 Total Corr Mag North-to-Grid North: 7.671°
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/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	663447.83	549867.40	N 32° 49' 25.68" W 104° 10' 15.60"	
Begin MWD Surveys	77.78	0.48	78.93	77.78	0.06	0.06	0.32	0.62	663447.69	549867.72	N 32° 49' 25.68" W 104° 10' 15.60"	
	371.54	0.48	299.57	371.53	0.88	0.88	0.46	0.31	663448.71	549867.86	N 32° 49' 25.69" W 104° 10' 15.59"	
	466.07	0.79	350.37	466.06	1.72	1.72	0.01	0.65	663449.55	549867.40	N 32° 49' 25.70" W 104° 10' 15.60"	
	586.93	0.62	6.95	586.91	3.19	3.19	-0.05	0.22	663451.02	549867.34	N 32° 49' 25.71" W 104° 10' 15.60"	
	733.00	0.48	351.47	732.97	4.58	4.58	-0.05	0.14	663452.41	549867.35	N 32° 49' 25.73" W 104° 10' 15.60"	
	832.51	0.31	349.76	832.49	5.25	5.25	-0.16	0.17	663453.09	549867.24	N 32° 49' 25.73" W 104° 10' 15.60"	
	1058.15	0.31	6.95	1058.12	6.46	6.46	-0.19	0.04	663454.29	549867.20	N 32° 49' 25.74" W 104° 10' 15.60"	
	1264.33	0.48	225.06	1264.30	6.41	6.41	-0.74	0.36	663454.24	549866.65	N 32° 49' 25.74" W 104° 10' 15.61"	
	1404.69	0.62	215.15	1404.65	5.38	5.38	-1.60	0.12	663453.21	549865.80	N 32° 49' 25.73" W 104° 10' 15.62"	
	1578.47	0.70	195.94	1578.42	3.61	3.61	-2.48	0.12	663451.44	549864.91	N 32° 49' 25.72" W 104° 10' 15.63"	
	1763.00	0.62	214.93	1762.94	1.72	1.72	-3.42	0.11	663449.56	549863.97	N 32° 49' 25.70" W 104° 10' 15.64"	
	1936.00	0.40	201.13	1935.93	0.39	0.39	-4.18	0.14	663448.22	549863.22	N 32° 49' 25.68" W 104° 10' 15.65"	
	2139.47	0.22	214.67	2139.40	-0.59	-0.59	-4.65	0.09	663447.24	549862.74	N 32° 49' 25.67" W 104° 10' 15.65"	
	2312.72	0.09	211.07	2312.65	-0.98	-0.98	-4.91	0.08	663446.85	549862.48	N 32° 49' 25.67" W 104° 10' 15.66"	
	2496.00	0.22	198.37	2495.92	-1.44	-1.44	-5.10	0.07	663446.39	549862.30	N 32° 49' 25.67" W 104° 10' 15.66"	
	2648.00	0.22	220.47	2647.92	-1.93	-1.93	-5.36	0.06	663445.90	549862.02	N 32° 49' 25.66" W 104° 10' 15.66"	
	2831.28	0.09	156.17	2831.20	-2.33	-2.33	-5.55	0.11	663445.50	549861.85	N 32° 49' 25.66" W 104° 10' 15.67"	
	3003.87	0.31	133.63	3003.79	-2.78	-2.78	-5.15	0.13	663445.05	549862.24	N 32° 49' 25.65" W 104° 10' 15.66"	
	3134.96	0.40	154.64	3134.88	-3.44	-3.44	-4.70	-0.12	663444.40	549862.70	N 32° 49' 25.65" W 104° 10' 15.66"	
	3222.54	0.31	147.34	3222.45	-3.91	-3.91	-4.44	0.11	663443.92	549862.96	N 32° 49' 25.64" W 104° 10' 15.65"	
	3308.52	0.31	131.83	3308.44	-4.27	-4.27	-4.14	0.10	663443.57	549863.25	N 32° 49' 25.64" W 104° 10' 15.65"	
	3352.84	0.22	98.57	3352.75	-4.36	-4.36	-3.97	0.39	663443.48	549863.43	N 32° 49' 25.64" W 104° 10' 15.65"	
	3439.00	0.31	142.55	3438.91	-4.57	-4.57	-3.66	0.25	663443.27	549863.73	N 32° 49' 25.63" W 104° 10' 15.64"	
	3700.93	0.09	38.76	3700.84	-4.97	-4.97	-3.10	0.13	663442.86	549864.29	N 32° 49' 25.63" W 104° 10' 15.64"	
	3744.87	0.31	53.35	3744.58	-4.87	-4.87	-2.99	0.51	663442.96	549864.41	N 32° 49' 25.63" W 104° 10' 15.64"	
	3998.44	0.48	35.06	3998.35	-3.59	-3.59	-1.82	0.08	663444.24	549865.57	N 32° 49' 25.64" W 104° 10' 15.62"	
	4182.00	0.79	133.63	4181.90	-3.84	-3.84	-0.47	0.54	663444.00	549865.93	N 32° 49' 25.64" W 104° 10' 15.61"	
	4313.00	0.70	166.33	4312.89	-5.24	-5.24	-0.38	0.33	663442.80	549867.77	N 32° 49' 25.63" W 104° 10' 15.60"	
	4519.87	0.79	355.47	4519.75	-5.04	-5.04	0.56	0.72	663442.79	549867.96	N 32° 49' 25.63" W 104° 10' 15.59"	
	4649.90	0.70	6.95	4649.78	-3.36	-3.36	0.59	0.13	663444.47	549867.08	N 32° 49' 25.65" W 104° 10' 15.59"	
	4692.63	0.62	329.54	4692.50	-2.60	-2.60	0.50	1.01	663444.93	549867.90	N 32° 49' 25.65" W 104° 10' 15.59"	
	4727.77	0.31	326.95	4727.64	-2.66	-2.66	0.35	0.88	663445.17	549867.75	N 32° 49' 25.65" W 104° 10' 15.60"	
End MWD Surveys	4859.35	0.22	307.35	4859.22	-2.21	-2.21	-0.04	0.10	663445.63	549867.35	N 32° 49' 25.66" W 104° 10' 15.60"	

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 Req (ft)	Survey Tool Type	Borehole / Survey
0.000	14.000	14.000	Act Sits	SLB MWD-STD-Depth Only	Original Hole / Roo 22 State 14 MWD 0' to 4859'
14.000	14.000	14.000	Act Sits	SLB MWD-STD-Depth Only	Original Hole / Roo 22 State 14 MWD 0' to 4859'
14.000	4859.353	4859.353	Act Sits	SLB MWD-STD	Original Hole / Roo 22 State 14 MWD 0' to 4859'