

Reservoir Development

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

July 2, 2013

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

Attention: Luis Tarazona

Re:

CLIENT: OXY
WELL: Roo 22 State 16
FIELD: Glorieta-YESO
RIG: Savana 415
COUNTY: Eddy
API NO: 30-015-40857
JOB NO: NM-OXY-0074

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>
Lance Brown FST-1	Roo 22 State 16 Original Hole	198.00 Ft to 4936.00 Ft	June 20, 2013 to June 26, 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



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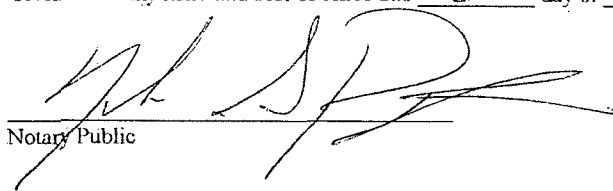
I, Lance Brown certify that; I am employed by Drilling & Measurements (formerly Extreme); a division of Schlumberger Technology Corporation; that I did on the day(s) of June 20, 2013 through June 26, 2013, conduct or supervise the taking of the SlimPulse surveys from a depth of 198.00 feet to a depth of 4936.00 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 16 Well (Original Hole) API No. 30-015-40857 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.



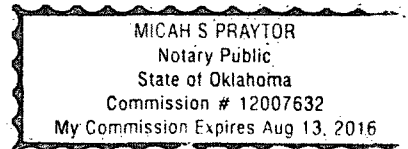
Lance Brown
FST-1

Before me, MICAH S PRAYTOR, on this day personally appeared LANCE BROWN, 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 2ND day of JULY, ²⁰¹³(year).



Notary Public



Roo 22 State 16 MWD 0' to 4936' Survey Report

(Def Survey)

Report Date: June 26, 2013 - 02:27 PM
 Client: OXY
 Field: NM, Eddy Co. (NAD27) 2011
 Structure / Slot: OXY (Roo 22 State 16) Savana 415 / Roo 22 State 16
 Well: Roo 22 State 16
 Borehole: Original Hole
 UWI / API#: Unknown / 30-015-40857
 Survey Name: Roo 22 State 16 MWD 0' to 4936'
 Survey Date: June 26, 2013
 Tort / AHD / DDI / ERD Ratio: 12.897' / 73.690 ft / 2.978 / 0.015
 Coordinate Reference System: NAD27 North Dakota State Plane, Northern Zone, US Feet
 Location Lat / Long: N 32° 49' 1.20000", W 104° 10' 5.18000"
 Location Grid N/E Y/X: S 5200827.180 RUS, E 835931.127 RUS
 CRS Grid Convergence Angle: -2.72955575°
 Grid Scale Factor: 1.03328588

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 Unknown
 Seabed / Ground Elevation: 3597.000 ft above Unknown
 Magnetic Declination: 7.852°
 Total Field Strength: 48667.699 nT
 Magnetic Dip Angle: 60.541°
 Declination Date: June 26, 2013
 Magnetic Declination Model: BGGM 2012
 North Reference: Grid North
 Grid Convergence Used: 0.089°
 Total Corr Mag North->Grid North: 7.763°
 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 ° ° ' '')
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	-5200827.18	835931.13	N 32 49 1.20	W 104 10 5.16
Begin MWD Surveys	198.00	2.79	255.45	197.92	-1.21	-1.21	-4.67	1.41	-5200828.43	835926.31	N 32 49 1.19	W 104 10 5.21
	394.00	2.81	250.95	393.69	-3.98	-3.98	-13.82	0.11	-5200831.29	835916.84	N 32 49 1.15	W 104 10 5.32
	422.00	2.59	244.36	421.66	-4.48	-4.48	-15.04	1.36	-5200831.80	835915.58	N 32 49 1.15	W 104 10 5.33
	583.00	2.11	242.34	582.52	-7.43	-7.43	-20.95	0.30	-5200834.85	835909.48	N 32 49 1.12	W 104 10 5.40
	676.00	1.71	236.28	675.47	-8.99	-8.99	-23.62	0.48	-5200836.47	835906.72	N 32 49 1.10	W 104 10 5.43
	875.00	1.80	237.56	874.38	-12.31	-12.31	-28.73	0.05	-5200839.91	835901.45	N 32 49 1.06	W 104 10 5.49
	1073.00	1.10	234.98	1072.31	-15.07	-15.07	-32.91	0.35	-5200842.76	835897.13	N 32 49 1.04	W 104 10 5.54
	1144.00	1.01	235.97	1143.30	-15.82	-15.82	-33.98	0.13	-5200843.52	835896.01	N 32 49 1.03	W 104 10 5.55
	1274.00	0.88	6.76	1273.29	-15.46	-15.46	-34.82	1.32	-5200843.16	835895.15	N 32 49 1.03	W 104 10 5.56
	1333.00	0.88	207.67	1332.29	-15.42	-15.42	-34.97	2.93	-5200843.11	835894.99	N 32 49 1.03	W 104 10 5.56
	1531.00	1.10	191.28	1530.26	-18.63	-18.63	-36.05	0.18	-5200846.43	835893.88	N 32 49 1.00	W 104 10 5.57
	1705.00	0.70	196.07	1704.24	-21.29	-21.29	-36.67	0.23	-5200849.17	835893.24	N 32 49 0.97	W 104 10 5.58
	1879.00	0.70	202.48	1878.22	-23.29	-23.29	-37.37	0.04	-5200851.24	835892.51	N 32 49 0.95	W 104 10 5.58
	2003.00	0.62	189.78	2002.22	-24.65	-24.65	-37.78	0.13	-5200852.65	835892.09	N 32 49 0.94	W 104 10 5.59
	2152.00	0.48	206.35	2151.21	-26.00	-26.00	-38.19	0.14	-5200854.05	835891.67	N 32 49 0.92	W 104 10 5.59
	2350.00	0.48	197.16	2349.20	-27.54	-27.54	-38.80	0.04	-5200855.64	835891.03	N 32 49 0.91	W 104 10 5.60
	2548.00	0.62	180.77	2547.19	-29.40	-29.40	-39.06	0.11	-5200857.56	835890.77	N 32 49 0.89	W 104 10 5.60
	2739.00	0.70	185.87	2738.18	-31.60	-31.60	-39.19	0.05	-5200859.83	835890.63	N 32 49 0.87	W 104 10 5.60
	2802.00	0.70	178.46	2801.18	-32.36	-32.36	-39.22	0.14	-5200860.62	835890.60	N 32 49 0.86	W 104 10 5.60
	2956.00	0.79	170.75	2955.16	-34.35	-34.35	-39.03	0.09	-5200862.68	835890.80	N 32 49 0.84	W 104 10 5.60
	3068.00	0.62	185.42	3067.16	-35.72	-35.72	-38.96	0.22	-5200864.09	835890.67	N 32 49 0.83	W 104 10 5.60
	3261.00	0.40	191.67	3260.15	-37.42	-37.42	-39.20	0.12	-5200865.84	835890.63	N 32 49 0.81	W 104 10 5.60
	3456.00	0.40	157.59	3455.14	-38.71	-38.71	-39.07	0.12	-5200867.18	835890.75	N 32 49 0.80	W 104 10 5.60
	3648.00	0.22	147.15	3647.14	-39.64	-39.64	-38.62	0.10	-5200868.14	835891.22	N 32 49 0.79	W 104 10 5.59
	3844.00	0.31	128.96	3843.14	-40.29	-40.29	-38.00	0.06	-5200868.81	835891.86	N 32 49 0.78	W 104 10 5.58
	3999.00	0.40	149.57	3998.13	-41.02	-41.02	-37.40	0.10	-5200869.57	835892.48	N 32 49 0.78	W 104 10 5.57
	4195.00	0.62	212.81	4194.13	-42.50	-42.50	-37.63	0.29	-5200871.10	835892.24	N 32 49 0.76	W 104 10 5.58
	4340.00	0.46	208.79	4339.12	-43.70	-43.70	-38.35	0.10	-5200872.33	835891.50	N 32 49 0.75	W 104 10 5.58
	4483.00	0.48	201.78	4482.12	-44.78	-44.78	-38.86	0.04	-5200873.45	835890.98	N 32 49 0.74	W 104 10 5.59
	4681.00	0.40	190.08	4680.11	-46.23	-46.23	-39.28	0.06	-5200874.95	835890.53	N 32 49 0.72	W 104 10 5.59
	4879.00	0.31	185.67	4878.11	-47.44	-47.44	-39.46	0.05	-5200876.20	835890.35	N 32 49 0.71	W 104 10 5.60
End MWD Surveys	4936.00	0.07	170.76	4935.11	-47.63	-47.63	-39.47	0.43	-5200876.39	835890.34	N 32 49 0.71	W 104 10 5.60

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 Freq (ft)	Survey Tool Type	Borehole / Survey
	0.000	14.000	Act Stns	SLB_MWD-STD-Depth Only	Original Hole / Roo 22 State 16 MWD 0' to 4936'
	14.000	14.000	Act Stns	SLB_MWD-STD-Depth Only	Original Hole / Roo 22 State 16 MWD 0' to 4936'
	14.000	4936.000	Act Stns	SLB_MWD-STD	Original Hole / Roo 22 State 16 MWD 0' to 4936'