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

January 18, 2013

Occidental Permian Ltd
5 Greenway Plaza Suite 110
Houston, Texas77046

Attention: Anthony T Tschacher

Re:

CLIENT: Occidental Permian Ltd
WELL: Chris Robin Fed #8
FIELD: YESO (NAD27 New Mexico Eastern)
RIG: Savanna 415
COUNTY: Eddy
API NO: 30-015-40673
JOB NO: NM-OXY-0036

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.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Michael Putnam FST-T	Chris Robin Fed #8 Original Hole	91.05 Ft to 4803.98 Ft	January 11, 2013 to January 18, 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,

Mike Johns
Field Service Manager

CC: Occidental Permian Ltd
Enclosures: [2]
County of Eddy
State of New Mexico

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Drilling & Measurements (Extreme Engineering)
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I, Michael Putnam certify that; I am employed by Drilling & Measurements (formerly Extreme), a division of Schlumberger Technology Corporation; that I did on the day(s) of January 11, 2013 through January 18, 2013, conduct or supervise the taking of the SlimPulse surveys from a depth of 91.05.00 feet to a depth of 4803.98.00 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 Permian Ltd for the Chris Robin Fed #8 Well (Original Hole) API No. 30-015-40673 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.

Michael Putnam
FST-T

Before me, Brittany N. Peck, on this day personally appeared Michael Putnam 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 18 Jan day of 2013, (year).

Brittany N. Peck
Notary Public

OFFICIAL SEAL
BRITTANY N. PECK
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 10/12/16

CHRIS ROBIN FED #8 MWD 0' to 4803.98' Survey Report

(Def Survey)

Report Date:	January 18, 2013 - 10:17 PM	**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 (CHRIS ROBIN FED #8) SAVANNA 415 / CHRIS ROBIN FED #8	**TVD Reference Datum:**	RKB
Well:	CHRIS ROBIN FED #8	**TVD Reference Elevation:**	3640.000 ft above MSL
Borehole:	Original Hole	**Seabed / Ground Elevation:**	3626.000 ft above MSL
UWI / API#:	Unknown / 30-015-40673	**Magnetic Declination:**	7.883 °
Survey Name:	CHRIS ROBIN FED #8 MWD 0' to 4803.98'	**Total Field Strength:**	48725.148 nT
Survey Date:	January 18, 2013	**Magnetic Dip Angle:**	60.559 °
Tort / AHD / DDI / ERD Ratio:	24.021 ° / 55.049 ft / 3.121 / 0.011	**Declination Date:**	January 18, 2013
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Declination Model:**	BGGM 2012
Location Lat / Long:	N 32° 49' 32.52000", W 104° 11' 44.88000"	**North Reference:**	Grid North
Location Grid N/E Y/X:	N 664128.258 ftUS, E 542248.144 ftUS	**Grid Convergence Used:**	0.075 °
CRS Grid Convergence Angle:	0.07455489 °	**Total Corr Mag North->Grid North:**	7.809 °
Grid Scale Factor:	0.99991113	**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	664128.26	542248.14	N 32 49 32.52	W 104 11 44.88
Assumed Vertical	80.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00	664128.26	542248.14	N 32 49 32.52	W 104 11 44.88
Begin MWD Surveys	91.05	0.79	326.18	91.05	0.06	0.06	-0.04	7.15	664128.32	542248.10	N 32 49 32.52	W 104 11 44.88
	199.41	2.02	326.18	199.37	2.27	2.27	-1.52	1.14	664130.53	542246.62	N 32 49 32.54	W 104 11 44.90
	259.09	1.71	86.90	259.04	3.19	3.19	-1.22	5.44	664131.45	542246.93	N 32 49 32.55	W 104 11 44.89
	271.01	1.89	210.08	270.95	3.03	3.03	-1.14	26.58	664131.29	542247.01	N 32 49 32.55	W 104 11 44.89
	292.34	1.89	245.10	292.27	2.58	2.58	-1.63	5.33	664130.84	542246.51	N 32 49 32.55	W 104 11 44.90
	321.38	1.89	230.69	321.30	2.07	2.07	-2.44	1.63	664130.33	542245.71	N 32 49 32.54	W 104 11 44.91
	427.58	1.89	211.40	427.45	-0.53	-0.53	-4.71	0.60	664127.73	542243.44	N 32 49 32.51	W 104 11 44.94
	489.38	1.80	190.83	489.21	-2.35	-2.35	-5.42	1.08	664125.90	542242.72	N 32 49 32.50	W 104 11 44.94
	549.85	1.71	188.63	549.66	-4.18	-4.18	-5.73	0.19	664124.08	542242.41	N 32 49 32.48	W 104 11 44.95
	639.19	1.58	234.60	638.96	-6.21	-6.21	-6.94	1.44	664122.05	542241.21	N 32 49 32.46	W 104 11 44.96
	669.47	1.49	237.81	669.23	-6.66	-6.66	-7.61	0.41	664121.60	542240.53	N 32 49 32.45	W 104 11 44.97
	760.53	1.58	237.68	760.25	-7.96	-7.96	-9.67	0.10	664120.29	542238.47	N 32 49 32.44	W 104 11 44.99
	822.64	1.32	243.70	822.35	-8.74	-8.74	-11.04	0.48	664119.52	542237.11	N 32 49 32.43	W 104 11 45.01
	853.36	1.32	243.00	853.06	-9.05	-9.05	-11.67	0.05	664119.20	542236.47	N 32 49 32.43	W 104 11 45.02
	884.26	1.19	236.49	883.95	-9.39	-9.39	-12.26	0.62	664118.86	542235.89	N 32 49 32.43	W 104 11 45.02
	946.54	1.01	235.39	946.22	-10.06	-10.06	-13.25	0.29	664118.20	542234.90	N 32 49 32.42	W 104 11 45.04
	977.44	1.01	233.11	977.11	-10.38	-10.38	-13.69	0.13	664117.88	542234.48	N 32 49 32.42	W 104 11 45.04
	1052.26	0.79	231.48	1051.92	-11.10	-11.10	-14.62	0.30	664117.16	542233.53	N 32 49 32.41	W 104 11 45.05
	1220.00	0.70	255.70	1219.65	-12.07	-12.07	-16.52	0.19	664116.19	542231.63	N 32 49 32.40	W 104 11 45.07
	1404.59	0.50	257.81	1404.23	-12.52	-12.52	-18.40	0.11	664115.74	542229.75	N 32 49 32.40	W 104 11 45.10
	1522.25	0.79	198.63	1521.89	-13.43	-13.43	-19.02	0.65	664114.83	542229.12	N 32 49 32.39	W 104 11 45.10
	1652.64	0.79	213.33	1652.27	-15.07	-15.07	-19.65	0.26	664113.19	542228.50	N 32 49 32.37	W 104 11 45.11
	1739.95	0.88	290.50	1739.57	-15.34	-15.34	-20.61	1.20	664112.92	542227.54	N 32 49 32.37	W 104 11 45.12
	1782.99	0.79	287.12	1782.60	-15.13	-15.13	-21.20	0.24	664113.12	542226.94	N 32 49 32.37	W 104 11 45.13
	1957.87	0.70	243.00	1957.47	-15.26	-15.26	-23.31	0.32	664112.99	542224.84	N 32 49 32.37	W 104 11 45.15
	2131.61	0.62	304.52	2131.20	-15.21	-15.21	-25.03	0.39	664113.04	542223.12	N 32 49 32.37	W 104 11 45.17
	2218.08	0.62	296.78	2217.66	-14.74	-14.74	-25.83	0.10	664113.52	542222.32	N 32 49 32.37	W 104 11 45.18
	2262.22	0.48	301.62	2261.80	-14.53	-14.53	-26.20	0.33	664113.72	542221.95	N 32 49 32.38	W 104 11 45.19
	2305.30	0.62	300.70	2304.88	-14.32	-14.32	-26.55	0.33	664113.94	542221.59	N 32 49 32.38	W 104 11 45.19
	2348.91	0.62	292.79	2348.49	-14.11	-14.11	-26.97	0.20	664114.15	542221.17	N 32 49 32.38	W 104 11 45.20
	2478.64	0.62	214.91	2478.21	-14.41	-14.41	-28.02	0.60	664113.85	542220.12	N 32 49 32.38	W 104 11 45.21
	2648.42	0.62	236.10	2647.98	-15.68	-15.68	-29.31	0.13	664112.58	542218.84	N 32 49 32.37	W 104 11 45.22
	2822.68	0.62	321.61	2822.24	-15.46	-15.46	-30.68	0.48	664112.79	542217.47	N 32 49 32.37	W 104 11 45.24
	2996.02	0.48	310.10	2995.57	-14.26	-14.26	-31.82	0.10	664114.00	542216.33	N 32 49 32.38	W 104 11 45.25
	3083.20	0.40	188.63	3082.74	-14.33	-14.33	-32.14	0.88	664113.93	542216.01	N 32 49 32.38	W 104 11 45.26
	3168.65	0.40	213.33	3168.20	-14.87	-14.87	-32.35	0.20	664113.39	542215.80	N 32 49 32.37	W 104 11 45.26
	3351.05	0.31	290.50	3350.59	-15.23	-15.23	-33.16	0.25	664113.03	542214.98	N 32 49 32.37	W 104 11 45.27
	3379.71	0.22	294.10	3379.25	-15.18	-15.18	-33.28	0.32	664113.08	542214.88	N 32 49 32.37	W 104 11 45.27
	3509.60	0.31	213.46	3509.14	-15.37	-15.37	-33.71	0.27	664112.89	542214.44	N 32 49 32.37	W 104 11 45.28
	3597.04	0.40	306.50	3596.57	-15.39	-15.39	-34.08	0.59	664112.87	542214.06	N 32 49 32.37	W 104 11 45.28
	3815.44	0.40	304.52	3814.97	-14.50	-14.50	-35.32	0.01	664113.76	542212.82	N 32 49 32.38	W 104 11 45.29
	3945.72	0.40	301.62	3945.25	-14.01	-14.01	-36.09	0.02	664114.25	542212.06	N 32 49 32.38	W 104 11 45.30
	4089.99	0.40	292.79	4089.52	-13.55	-13.55	-36.98	0.04	664114.71	542211.17	N 32 49 32.39	W 104 11 45.31
	4276.45	0.10	325.80	4275.97	-13.16	-13.16	-37.67	0.17	664115.10	542210.48	N 32 49 32.39	W 104 11 45.32
	4463.72	0.09	314.41	4463.24	-12.92	-12.92	-37.87	0.01	664115.34	542210.28	N 32 49 32.39	W 104 11 45.32
	4590.74	0.40	261.80	4590.26	-12.92	-12.92	-38.38	0.28	664115.34	542209.77	N 32 49 32.39	W 104 11 45.33
	4634.34	0.22	266.99	4633.86	-12.94	-12.94	-38.61	0.42	664115.32	542209.54	N 32 49 32.39	W 104 11 45.33
	4670.82	0.22	267.30	4670.34	-12.95	-12.95	-38.75	0.00	664115.31	542209.40	N 32 49 32.39	W 104 11 45.33
	4677.88	0.22	256.62	4677.40	-12.95	-12.95	-38.78	0.58	664115.31	542209.37	N 32 49 32.39	W 104 11 45.33
	4800.12	0.22	276.90	4799.64	-12.97	-12.97	-39.24	0.07	664115.29	542208.91	N 32 49 32.39	W 104 11 45.34
End MWD Surveys	4803.98	0.09	311.99	4803.50	-12.97	-12.97	-39.25	3.96	664115.29	542208.90	N 32 49 32.39	W 104 11 45.34

Survey Type: Def Survey

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 ° ' ")

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_BLIND+TREND-Depth Only	Original Hole / CHRIS ROBIN FED #8 MWD 0' to 4803.98'
	14.000	14.000	Act Stns	SLB_BLIND+TREND-Depth Only	Original Hole / CHRIS ROBIN FED #8 MWD 0' to 4803.98'
	14.000	80.000	Act Stns	SLB_BLIND+TREND	Original Hole / CHRIS ROBIN FED #8 MWD 0' to 4803.98'
	80.000	4803.980	Act Stns	SLB_MWD-STD	Original Hole / CHRIS ROBIN FED #8 MWD 0' to 4803.98'