



Reservoir Development

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

3001541338

September 18, 2013

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

Attention: Anthony Tschacher

Re:

CLIENT: OXY
WELL: Artesia Yeso Fed Unit #29
FIELD: Glorieta
RIG: Savanna 415
COUNTY: Eddy
API NO: 30-015-41338
JOB NO: NM-OXY-0084

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 EST-2	Artesia Yeso Fed Unit #29 Original Hole	443.00 Ft to 4825.00 Ft	September 8, 2013 to September 13, 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,

Joey 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 September 08, 2013 through September 13, 2013, conduct or supervise the taking of the SlimPulse surveys from a depth of 443.00 feet to a depth of 4825.00 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 Artesia Yeso Fed Unit #29 Well (Original Hole) API No. 30-015-41338 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

Troy Miller
FST-2

Before me, Esperanza A Munoz, 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 18th day of September, 2013 (year).

Esperanza A Munoz

Notary Public



OFFICIAL SEAL
ESPERANZA A MUNOZ
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: July 12, 2017

Artesia Yeso Fed Unit #29 MWD 0' to 4825' Survey Report

(Def Survey)

Report Date:	September 14, 2013 - 09:55 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	OXY	Vertical Section Azimuth:	0.000 ° (Grid North)
Field:	NM, Eddy (NAD 27 EZ) 2012	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	OXY (Artesia Yeso Fed Unit #29) Savanna 415 / Artesia Yeso Fed Unit #29	TVD Reference Datum:	RKB
Well:	Artesia Yeso Fed Unit #29	TVD Reference Elevation:	3626.000 ft above Unknown
Borehole:	Original Hole	Seabed / Ground Elevation:	3612.000 ft above Unknown
UWI / API#:	NM-OXY-0084 / 30-015-41338	Magnetic Declination:	7.795 °
Survey Name:	Artesia Yeso Fed Unit #29 MWD 0' to 4825'	Total Field Strength:	48682.110 nT
Survey Date:	September 14, 2013	Magnetic Dip Angle:	60.578 °
Tort / AHD / DDI / ERD Ratio:	9.032 ° / 43.934 ft / 2.599 / 0.009	Declination Date:	September 14, 2013
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Declination Model:	IGRF2010/IGRF-11
Location Lat / Long:	N 32° 49' 31.44000", W 104° 12' 15.84000"	North Reference:	Grid North
Location Grid N/E Y/X:	N 664015.785 ftUS, E 539606.486 ftUS	Grid Convergence Used:	0.070 °
CRS Grid Convergence Angle:	0.06989237 °	Total Corr Mag North-Grid North:	7.725 °
Grid Scale Factor:	0.99991069	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	664015.78	539606.49	N 32 49 31.44	W 104 12 15.84
Begin MWD Surveys	443.00	1.71	307.11	442.93	3.99	3.99	-5.27	0.39	664019.77	539601.21	N 32 49 31.43	W 104 12 15.90
	621.00	1.41	299.82	620.87	6.68	6.68	-9.29	0.20	664022.46	539597.20	N 32 49 31.51	W 104 12 15.95
	803.00	0.88	294.41	802.83	8.37	8.37	-12.50	0.30	664024.15	539593.98	N 32 49 31.52	W 104 12 15.99
	1062.00	0.79	260.40	1061.81	8.89	8.89	-16.08	0.19	664024.68	539590.41	N 32 49 31.53	W 104 12 16.03
	1167.00	0.62	307.89	1166.80	9.12	9.12	-17.24	0.56	664024.91	539589.25	N 32 49 31.53	W 104 12 16.04
	1364.00	0.48	298.92	1363.79	10.15	10.15	-18.82	0.09	664025.94	539587.67	N 32 49 31.54	W 104 12 16.06
	1537.00	0.70	269.01	1536.78	10.82	10.82	-20.46	0.14	664026.61	539586.03	N 32 49 31.55	W 104 12 16.08
	1801.00	0.48	297.62	1800.77	11.86	11.86	-22.97	0.09	664027.65	539583.52	N 32 49 31.56	W 104 12 16.11
	1969.00	0.48	230.30	1968.76	11.74	11.74	-24.13	0.32	664027.52	539582.36	N 32 49 31.56	W 104 12 16.12
	2185.00	0.40	324.11	2184.76	11.77	11.77	-25.27	0.30	664027.55	539581.22	N 32 49 31.56	W 104 12 16.14
	2451.00	0.48	298.98	2450.75	13.06	13.06	-26.79	0.08	664028.85	539579.70	N 32 49 31.57	W 104 12 16.15
	2574.00	0.62	337.21	2573.74	13.93	13.93	-27.50	0.31	664029.71	539578.99	N 32 49 31.58	W 104 12 16.16
	2788.00	0.22	292.61	2787.74	15.15	15.15	-28.32	0.23	664030.94	539578.16	N 32 49 31.59	W 104 12 16.17
	3094.00	0.31	281.49	3093.74	15.43	15.43	-29.26	0.05	664031.21	539577.21	N 32 49 31.59	W 104 12 16.18
	3220.00	0.40	296.61	3219.73	15.88	15.88	-30.53	0.06	664031.67	539575.96	N 32 49 31.60	W 104 12 16.20
	3469.00	0.09	320.61	3468.73	16.42	16.42	-31.43	0.13	664032.21	539575.06	N 32 49 31.60	W 104 12 16.21
	3738.00	0.22	319.20	3737.73	16.98	16.98	-31.90	0.05	664032.76	539574.59	N 32 49 31.61	W 104 12 16.21
	3843.00	0.31	320.98	3842.73	17.35	17.35	-32.21	0.09	664033.13	539574.28	N 32 49 31.61	W 104 12 16.22
	4084.00	0.31	263.78	4083.72	17.79	17.79	-33.27	0.12	664033.57	539573.22	N 32 49 31.62	W 104 12 16.23
	4257.00	0.22	288.48	4256.72	17.84	17.84	-34.05	0.08	664033.62	539572.44	N 32 49 31.62	W 104 12 16.24
	4429.00	0.48	266.51	4428.72	17.90	17.90	-35.08	0.17	664033.68	539571.41	N 32 49 31.62	W 104 12 16.25
	4606.00	0.40	209.90	4605.71	17.32	17.32	-36.13	0.24	664033.10	539570.39	N 32 49 31.61	W 104 12 16.26
End MWD Surveys	4825.00	0.48	280.48	4824.71	16.82	16.82	-37.41	0.23	664032.61	539569.08	N 32 49 31.61	W 104 12 16.28

Survey Type: Def Survey

Survey Error Model: ISOWSA 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_UNKNOWN-Depth Only	Original Hole / Artesia Yeso Fed Unit #29 MWD 0' to 4825'
	14.000	443.000	1/58.425	SLB_UNKNOWN	Original Hole / Artesia Yeso Fed Unit #29 MWD 0' to 4825'
	443.000	621.000	1/176.000	SLB_UNKNOWN	Original Hole / Artesia Yeso Fed Unit #29 MWD 0' to 4825'
	621.000	803.000	1/182.000	ZERO	Original Hole / Artesia Yeso Fed Unit #29 MWD 0' to 4825'
	803.000	4825.000	1/4022.000	SLB_MWD-STD	Original Hole / Artesia Yeso Fed Unit #29 MWD 0' to 4825'