

Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

30. 015- 44474

February 13, 2018

Oxy USA Inc.
5 Greenway Plaza, Suite 110
Houston, TX, 77046

Re:

8, 24S, 31E, Eddy NM
32.25578 103.80127

CLIENT: Oxy USA Inc.
WELL: Sunrise MDP1 8-5 Federal Com 3H
FIELD: Cotton Draw; Bone Spring

RIG: H&P 657
COUNTY: Eddy
API NO: 30-015-44474
JOB NO: 17MLD2556

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, 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>
J. Vargas	Sunrise MDP1 8-5			
FE	Federal Com 3H	9375.00 Ft to	January 20, 2018 to	TelePacer
	Original Hole	20580.00 Ft	January 28, 2018	SlimPulse

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

Field Service Manager

Schlumberger Drilling and Measurements
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Well Reference:

8, 24S, 31E, Eddy NM
32.25578 103.80127

I, J. Vargas certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of January 20, 2018 through January 28, 2018, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 9375.00 feet to a depth of 20580.00 feet referenced to driller's depth; 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 USA Inc. for the Sunrise MDPI 8-5 Federal Com 3H Well (Original Hole) API No. 30-015-44474 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.

By
J. Vargas
FE

Subscribed and Sworn to before me this 22nd day of February (month) 2018 (yr)

My Commission expires:

12-20-2020

J. Allemand
Notary Public

Adams County Colorado
(County State)

JENNIFER ALLEMAND signature) Notary Public State of Colorado Notary ID # 20164047962 My Commission Expires 12-20-2020

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	19734.00	89.59	359.79	10046.90	9046.89	9047.01	-11.83	0.30	455326.60	705854.84	N 32 15 2.33	W 103 48 4.18
	19828.00	89.93	0.96	10047.30	9140.98	9141.00	-11.21	1.30	455420.59	705855.55	N 32 15 3.26	W 103 48 4.17
	19923.00	90.17	0.48	10047.21	9235.97	9235.99	-10.02	0.56	455515.57	705856.74	N 32 15 4.20	W 103 48 4.15
	20017.00	89.31	0.02	10047.64	9329.96	9329.99	-9.61	1.04	455609.56	705857.15	N 32 15 5.13	W 103 48 4.14
	20112.00	89.90	0.26	10048.29	9424.96	9424.99	-9.37	0.67	455704.55	705857.39	N 32 15 6.07	W 103 48 4.13
	20206.00	89.76	0.34	10048.57	9518.95	9518.99	-8.88	0.17	455798.55	705857.68	N 32 15 7.00	W 103 48 4.12
	20300.00	89.76	0.74	10048.97	9612.94	9612.98	-8.00	0.43	455892.54	705858.76	N 32 15 7.93	W 103 48 4.11
	20395.00	89.76	0.36	10049.37	9707.93	9707.98	-7.08	0.40	455987.52	705859.68	N 32 15 8.87	W 103 48 4.09
	20489.00	90.17	359.16	10049.42	9801.93	9801.97	-7.48	1.35	456081.52	705859.28	N 32 15 9.80	W 103 48 4.08
Final MWD	20580.00	89.31	1.21	10049.84	9892.92	9892.97	-7.18	2.44	456172.50	705859.58	N 32 15 10.70	W 103 48 4.08
Survey												
Proj. to Bit	20620.00	89.31	1.21	10050.32	9932.91	9932.95	-6.34	0.00	456212.49	705860.42	N 32 15 11.10	W 103 48 4.07

Survey Type: Def Survey

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

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 3H Gyro+MWD 0-20,620'
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 3H Gyro+MWD 0-20,620'
	1	26.500	9217.740	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 3H
	1	9217.740	20620.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 3H