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JUN 24 2019

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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)

DISTRICT II-ARTESIA O.C.D.

Well Reference:

15, 24S, 29E, Eddy NM
N 32.21389 W -103.96511

I, Jody Bare certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of December 08, 2018 through February 11, 2019, conduct or supervise the taking of the SlimPulse & Third party corrected surveys from a depth of 613.00 feet to a depth of 16771.00 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 Refried Beans CC 15 16 State Com 14H Well (Original Hole) API No. 30-015-45217 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
Jody Bare
FE

Jody Bare

Subscribed and Sworn to before me this 20th day of May (month) 2019 (yr)

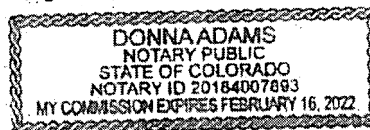
My Commission expires:

2-16-2022

D Adams
Notary Public

Adams County Colorado
(County State)

(signature)

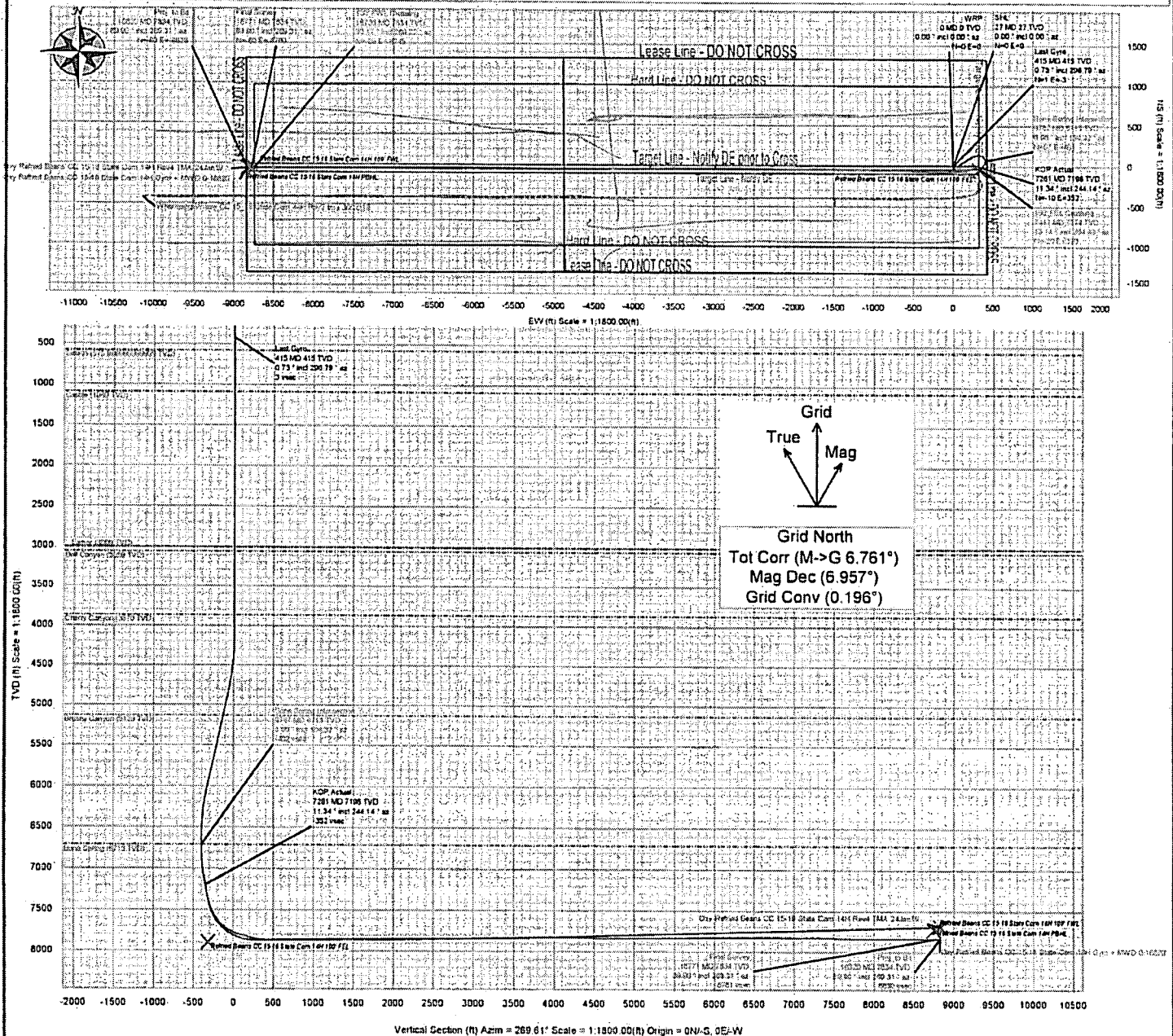


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Oxy



Borehole:			Well:		Field:		Structure:	
Original Borehole			Refried Beans CC 15-16 State Com 14H		NM Eddy County (NAD 83)		Oxy Refried Beans CC 15-16 State Com 14H	
Gravity & Magnetic Parameters					Surface Location		Miscellaneous	
Model:	FR1	Dip: 89.967°	Date:	04-Jan-2019	NAD83 New Mexico State Plane, Eastern Zone, US Feet		Station:	Beans CC 15-16
MagDec:	6.957°	FS: 47948 Sat	Gravity FS:	988.47mg (9.80665 Based)	Lat:	N 31 12 42.81	Grid Conv:	0.1962°
					Lon:	W 103 07 04.39	Scale Fact:	0.99982184
							Plan:	Oxy Refried Beans CC 15-16 State Com 14H Gyo + MWD 0-16227
Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)S(-)	E(+)W(-)	DL5
WRP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
GHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00
Last Gyo	415.00	0.73	296.79	414.98	3.38	0.60	-3.38	0.20
Bone Spring Intersection:	6766.52	6.98	184.32	6713.00	-401.78	67.16	401.33	1.61
KOP Actual	7281.00	11.34	244.14	7197.97	-351.85	-10.00	351.73	4.62
100' FEL Crossing	7440.50	13.14	264.49	7374.38	-320.17	-19.91	320.31	9.94
100' FWL Crossing	16736.00	90.17	269.22	7833.83	-8745.67	-59.27	-8745.47	0.81
Final Survey	16771.00	89.90	269.31	7833.81	-8780.67	-59.71	-8780.47	0.81
Proj. to Bit	16820.00	89.90	269.31	7833.89	-8829.67	-60.30	-8829.46	0.00



Comments	MD (ft)	Incl (°)	Azin Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
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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 Refried Beans CC 15-16 State Com 14H Gyro + MWD 0-16820'
	1	26.500	26.500	Act Sns	30.000	30.000 NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Refried Beans CC 15-16 State Com 14H Gyro + MWD 0-16820'
	1	26.500	415.000	Act Sns	30.000	30.000 NAL_NSG+MSHOT	Original Borehole / Oxy Refried Beans CC 15-16 State Com 14H
	1	415.000	6537.000	Act Sns	30.000	30.000 NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Refried Beans CC 15-16 State Com 14H
	1	6537.000	10112.000	Act Sns	30.000	30.000 NAL_MWD_FR1+MS	Original Borehole / Oxy Refried Beans CC 15-16 State Com 14H
	1	10112.000	10874.000	Act Sns	30.000	30.000 NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Refried Beans CC 15-16 State Com 14H
	1	10874.000	16820.000	Act Sns	30.000	30.000 NAL_MWD_FR1+MS	Original Borehole / Oxy Refried Beans CC 15-16 State Com 14H

Original Borehole/Oxy Refried Beans CC 15-16 State Com 14H Gyro + MWD 0-16820'