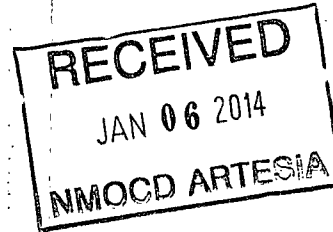




RYAN DIRECTIONAL SERVICES, INC.
A NABORS COMPANY

19510 Oil Center Blvd
Houston, TX 77073
Bus 281.443.1414
Fax 281.443.1676



Tuesday, December 10, 2013

Other

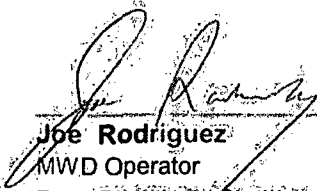
Subject: **Survey Certification Letter**

Re: **OXY, USA**
Yeso Viking Federal #2
Eddy, NM
A.P.I. No: 30-015-41339

I, Joe Rodriguez, certify that; I am employed by Ryan Directional Services, Inc.; that I did on the conduct or supervise the taking of the following MWD surveys:

on the day(s) of 11/6/2013 thru 11/13/2013 from a depth of 419' MD to a depth of 4443' MD and Straight line projection to TD 4503' MD;

that the data is true, correct, complete, and within the limitations of the tool as set forth by Ryan Directional Services, Inc.; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY, USA for the Yeso Viking Federal #2; Well API No: A.P.I. No: 30-015-41339 in Eddy, NM.


Joe Rodriguez
MWD Operator

Ryan Directional Services, Inc.



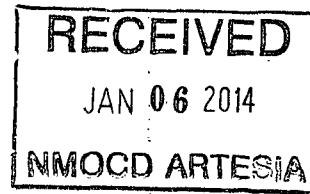
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Tuesday, December 10, 2013

Other



Subject: **Surveys**

Re: **OXY, USA**
Yeso Viking Federal #2
Eddy, NM
A.P.I. No: 30-015-41339

Enclosed, please find the original and one copy of the survey performed on the above-referenced well by Ryan Directional Services, Inc. (Operator #:). Other information required by your office is as follows:

Surveyor Name	Surveyor Title	Borehole Number	Start Depth	End Depth	Start Date	End Date	Type of	TD Straight Line Projection
Rodriguez, Joe	MWD Operator	O.H.	419'	4443'	11/06/13	11/13/13	MWD	4503'

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required please contact the undersigned at the letterhead address or phone number.

Alex Karpiuk
Coordinator

Report #: 1
Date: 13-Nov-13



RYAN DIRECTIONAL SERVICES, INC.
A NABORS COMPANY

Ryan Job # 6921
Kit #

SURVEY REPORT

Customer: Oxy, USA
Well Name & No.: YESO VIKING FEDERAL #2
County, State: Eddy Co, Texas
Rig Contractor & No.: Savannah 415
Surface Location: Y or Lat: 32°49'06.784N
X or Long: 104°15'22.626W
NAD27 or NAD83: NAD27
Survey Corrected To: True North

MWD Operator: Joe Rodriguez
RKB: 14.0
Ground Elevation: 3554.9
Vertical Section Direction: 0.00
Magnetic Declination: 7.61
Convergence: 0.04
API Number: 30-015-41339

Minimum Curvature Calculation

Sur #	Meas. Depth	Inc.	Azm.	Course Len.	TVD	Ver. Sect.	+N / -S	+E / -W	DLS	Cls Dir	Cls Azm
Tie in to Gyro Surveys											
Tie In	0.0	0.00	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	419.0	0.31	227.2	419.00	419.00	-0.77	-0.77	-0.83	0.07	1.13	227.20
2	473.3	0.22	266.9	54.30	473.30	-0.88	-0.88	-1.04	0.37	1.36	230.00
3	595.9	0.31	254.1	122.60	595.90	-0.98	-0.98	-1.60	0.09	1.87	238.49
4	687.4	0.79	244.5	91.50	687.39	-1.32	-1.32	-2.40	0.53	2.74	241.27
5	806.4	1.27	252.2	119.00	806.37	-2.07	-2.07	-4.40	0.42	4.87	244.76
6	836.4	1.23	247.7	30.00	836.36	-2.30	-2.30	-5.02	0.35	5.52	245.38
7	958.5	1.71	245.4	122.10	958.42	-3.55	-3.55	-7.88	0.40	8.65	245.73
8	1061.3	1.67	243.3	102.80	1061.18	-4.87	-4.87	-10.62	0.07	11.68	245.38
9	1105.6	1.45	240.9	44.30	1105.46	-5.43	-5.43	-11.68	0.52	12.88	245.08
10	1148.8	1.36	240.4	43.20	1148.65	-5.95	-5.95	-12.61	0.21	13.94	244.74
11	1191.1	1.27	249.4	42.30	1190.94	-6.36	-6.36	-13.48	0.53	14.91	244.74
12	1234.6	1.41	241.8	43.50	1234.43	-6.78	-6.78	-14.41	0.52	15.92	244.79
13	1277.4	1.54	253.6	42.80	1277.21	-7.19	-7.19	-15.42	0.77	17.02	244.99
14	1319.9	1.71	266.3	42.50	1319.70	-7.40	-7.40	-16.60	0.93	18.17	245.99
15	1362.6	1.80	279.5	42.70	1362.38	-7.33	-7.33	-17.90	0.97	19.34	247.74
16	1405.8	1.76	279.9	43.20	1405.56	-7.10	-7.10	-19.22	0.10	20.49	249.72
17	1491.3	1.41	278.9	85.50	1491.02	-6.71	-6.71	-21.55	0.41	22.58	252.70
18	1534.7	1.49	278.6	43.40	1534.41	-6.55	-6.55	-22.64	0.19	23.57	253.88
19	1582.6	1.23	275.1	47.90	1582.30	-6.41	-6.41	-23.77	0.57	24.62	254.91
20	1754.1	1.19	284.1	171.50	1753.76	-5.81	-5.81	-27.33	0.11	27.94	258.00
21	1841.0	1.27	282.2	86.90	1840.64	-5.39	-5.39	-29.14	0.10	29.64	259.53
22	1882.4	1.23	282.9	41.40	1882.03	-5.19	-5.19	-30.03	0.10	30.47	260.19
23	2013.9	1.19	278.4	131.50	2013.50	-4.67	-4.67	-32.75	0.08	33.08	261.88
24	2186.0	0.83	274.9	172.10	2185.57	-4.31	-4.31	-35.76	0.21	36.02	263.13
25	2229.5	0.97	282.0	43.50	2229.07	-4.20	-4.20	-36.44	0.41	36.68	263.42
26	2272.5	0.88	275.4	43.00	2272.06	-4.10	-4.10	-37.12	0.32	37.35	263.70
27	2315.3	0.92	280.9	42.80	2314.85	-4.00	-4.00	-37.79	0.22	38.00	263.96
28	2358.1	0.83	280.4	42.80	2357.65	-3.88	-3.88	-38.43	0.21	38.62	264.23
29	2400.9	0.75	284.9	42.80	2400.45	-3.75	-3.75	-39.00	0.24	39.18	264.50
30	2443.6	0.66	286.6	42.70	2443.14	-3.61	-3.61	-39.51	0.22	39.67	264.78
31	2486.3	0.44	281.7	42.70	2485.84	-3.51	-3.51	-39.91	0.53	40.06	264.98
32	2622.9	0.50	274.7	136.60	2622.44	-3.35	-3.35	-41.01	0.06	41.15	265.33
33	2661.2	0.53	271.1	38.30	2660.73	-3.33	-3.33	-41.36	0.12	41.49	265.39
34	2705.0	0.57	254.0	43.80	2704.53	-3.39	-3.39	-41.77	0.38	41.91	265.36
35	2748.1	0.62	249.7	43.10	2747.63	-3.53	-3.53	-42.19	0.16	42.34	265.22
36	2791.1	0.53	240.8	43.00	2790.63	-3.71	-3.71	-42.59	0.29	42.75	265.02
37	2833.6	0.57	249.0	42.50	2833.13	-3.88	-3.88	-42.95	0.21	43.13	264.84
38	2876.8	0.48	258.9	43.20	2876.32	-3.99	-3.99	-43.33	0.30	43.52	264.74
39	2919.8	0.40	280.2	43.00	2919.32	-4.00	-4.00	-43.66	0.42	43.84	264.77
40	2962.8	0.57	273.8	43.00	2962.32	-3.96	-3.96	-44.02	0.41	44.20	264.86
41	3005.8	0.57	273.0	43.00	3005.32	-3.93	-3.93	-44.45	0.02	44.62	264.94
42	3048.4	0.53	276.3	42.60	3047.92	-3.90	-3.90	-44.85	0.12	45.02	265.03
43	3091.6	0.40	268.5	43.20	3091.12	-3.88	-3.88	-45.20	0.33	45.37	265.09
44	3134.8	0.26	251.8	43.20	3134.32	-3.92	-3.92	-45.45	0.39	45.61	265.07
45	3221.2	0.22	251.1	86.40	3220.71	-4.03	-4.03	-45.79	0.05	45.97	264.97
46	3264.0	0.18	241.4	42.80	3263.51	-4.09	-4.09	-45.93	0.12	46.11	264.91
47	3349.9	0.31	273.3	85.90	3349.41	-4.14	-4.14	-46.28	0.21	46.46	264.88
48	3392.7	0.31	278.7	42.80	3392.21	-4.12	-4.12	-46.51	0.07	46.69	264.94
49	3479.0	0.22	334.1	86.30	3478.51	-3.93	-3.93	-46.81	0.30	46.97	265.20
50	3522.0	0.18	308.1	43.00	3521.51	-3.82	-3.82	-46.90	0.23	47.05	265.35
51	3565.2	0.18	280.8	43.20	3564.71	-3.76	-3.76	-47.02	0.20	47.17	265.42

[illegible]