

Oilfield Services, Central U.S. Land

NM OIL CONSERVATION

ARTESIA DISTRICT

DEC 21 2015

RECEIVED



Reservoir Development

Schlumberger Drilling and Measurements

9200 West Reno Avenue

Oklahoma City, Oklahoma 73127 USA

Phone: (405) 789-1515

Fax: (405) 789-1519

December 17, 2015

OXY USA WTP LP

5 Greenway Plaza Suite 110

Houston, TX 77046

Sec 35, T18S, R30E Eddy NM

N 32.70671 W 103.93381

Re:

CLIENT: OXY USA WTP LP

WELL: Ivore 35 Federal com2H

FIELD: LEO BONE SPRING, SOUTH

RIG: Can Elson #46

COUNTY: Eddy

API NO: 30-015-41409

JOB NO: 15MLD2651

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.

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>
Kurt Valentine MWD	Ivore 35 Federal com2H Original Hole	596.00 Ft to 13157.00 Ft	October 9, 2015 to October 27, 2015	SlimPulse/HDS1R

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

Field Service Manager

Reservoir Development
Schlumberger Drilling and Measurements
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519



Well Reference:
Sec 35, T18S, R30E Eddy NM
N 32.70671 W 103.93381

I, Kurt Valentine certify that: I am employed by Schlumberger Drilling and Measurements; that I did on the day(s) of October 09, 2015 through October 27, 2015, conduct or supervise the taking of the SlimPulse/HDS1R surveys from a depth of 596.00 feet to a depth of 13218.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Schlumberger Drilling and Measurements; that I am authorized and qualified to make this report; that this survey W71 request of OXY USA WTP LP for the Ivore 35 Federal com2H Well (Original Hole) API No. 30-015-41409 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Schlumberger Drilling and Measurements.

Kurt Valentine Signed By Emily Martin
on behalf of Kurt Valentine
By
Kurt Valentine
MWD

Subscribed and Sworn to before me this 16th day of December (month) 2015 (yr)

My Commission expires:

September 5, 2016
Michelle Ellwood
Notary Public
Midland, TX
(County State)



(signature)

Oxy Ivore 35 Federal 2H MWD+DMAG 0ft-13218ft Survey Geodetic Report



(Def Survey)

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 21 2015
RECEIVED

Report Date: October 28, 2015 - 02:05 PM
 Client: OXY
 Field: NM Eddy County (NAD 27)
 Structure / Slot: Oxy Ivore 35 Federal 2H / Oxy Ivore 35 Federal 2H
 Well: Oxy Ivore 35 Federal 2H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Oxy Ivore 35 Federal 2H MWD+DMAG 0ft-13218ft
 Survey Date: October 08, 2015
 Tort / AHD / DDI / ERD Ratio: 259 693 * / 5128 594 ft / 6.315 / 0.602
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 42' 24" 15985', W 103° 56' 1.69975'
 Location Grid N/E Y/X: N 621044 000 NUS, E 622892 600 NUS
 CRS Grid Convergence Angle: 0 2159 *
 Grid Scale Factor: 0.99992639
 Version / Patch: 2 8 572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 268.310 * (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3441.800 ft above MSL
 Seabed / Ground Elevation: 3424.300 ft above MSL
 Magnetic Declination: 7.676 °
 Total Gravity Field Strength: 998.5214mgals (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48509.431 nT
 Magnetic Dip Angle: 60.644 °
 Declination Date: October 08, 2015
 Magnetic Declination Model: HDGM 2015
 North Reference: Grid North
 Grid Convergence Used: 0 2159 *
 Total Corr Mag North->Grid North: 7.4603 *
 Local Coord Referenced To: Structure Reference Point

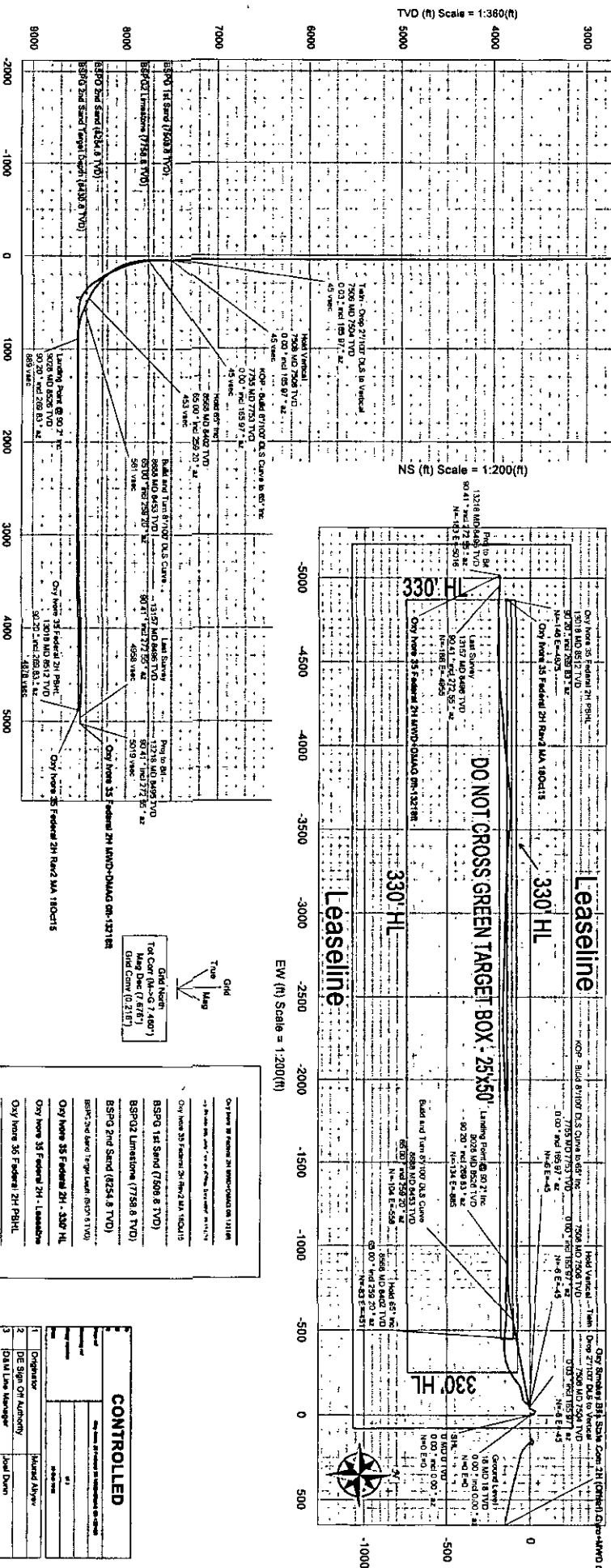
Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	621044.00	622892.60	N 32 42 24.16 W 103 56 1.70	
Ground Level	17.50	0.00	0.00	17.50	0.00	0.00	0.00	0.00	621044.00	622892.60	N 32 42 24.16 W 103 56 1.70	
Survey Inside Casing	200.00	0.21	331.06	200.00	0.15	0.29	-0.16	0.12	621044.29	622892.44	N 32 42 24.16 W 103 56 1.70	
Survey Inside Casing	400.00	0.51	331.06	400.00	0.73	1.39	-0.77	0.15	621045.39	622891.83	N 32 42 24.17 W 103 56 1.71	
	596.00	0.35	331.06	595.99	1.40	2.68	-1.48	0.08	621046.68	622891.12	N 32 42 24.19 W 103 56 1.72	
	782.00	0.79	234.85	781.98	2.73	2.44	-2.81	0.48	621046.44	622889.80	N 32 42 24.18 W 103 56 1.73	
	843.00	0.88	259.90	842.98	3.55	2.11	-3.61	0.81	621046.11	622888.99	N 32 42 24.18 W 103 56 1.74	
	936.00	1.06	253.00	935.96	5.08	1.74	-5.14	0.23	621045.74	622887.46	N 32 42 24.18 W 103 56 1.76	
	1092.00	0.88	261.94	1091.94	7.66	1.15	-7.70	0.15	621045.15	622884.90	N 32 42 24.17 W 103 56 1.79	
	1280.00	0.70	308.21	1279.92	9.98	1.66	-10.03	0.34	621045.66	622882.57	N 32 42 24.18 W 103 56 1.82	
	1470.00	1.06	348.65	1469.90	11.17	4.10	-11.29	0.37	621048.10	622881.31	N 32 42 24.20 W 103 56 1.83	
	1660.00	2.55	41.96	1659.81	8.54	8.96	-8.81	1.10	621052.96	622883.79	N 32 42 24.25 W 103 56 1.80	
	1723.00	2.90	47.40	1722.74	6.37	11.08	-6.70	0.69	621055.08	622885.90	N 32 42 24.27 W 103 56 1.78	
	1849.00	1.76	348.59	1848.65	4.35	15.12	-4.80	2.03	621059.12	622887.80	N 32 42 24.31 W 103 56 1.76	
	1912.00	2.20	321.29	1911.62	5.28	17.01	-5.78	1.54	621061.01	622886.82	N 32 42 24.33 W 103 56 1.77	
	2037.00	2.29	320.34	2036.52	8.26	20.80	-8.88	0.08	621064.80	622883.72	N 32 42 24.37 W 103 56 1.80	
	2100.00	2.37	315.07	2099.47	9.93	22.70	-10.60	0.36	621066.69	622882.00	N 32 42 24.38 W 103 56 1.82	
	2163.00	2.46	313.12	2162.41	11.78	24.54	-12.51	0.19	621068.54	622880.09	N 32 42 24.40 W 103 56 1.85	
	2226.00	2.55	311.36	2225.35	13.76	26.39	-14.55	0.19	621070.39	622878.05	N 32 42 24.42 W 103 56 1.87	
	2289.00	2.81	304.04	2288.28	16.04	28.18	-16.88	0.68	621072.18	622875.72	N 32 42 24.44 W 103 56 1.90	
	2352.00	3.08	305.58	2351.20	18.64	30.03	-19.53	0.45	621074.03	622873.07	N 32 42 24.46 W 103 56 1.93	
	2415.00	2.81	298.47	2414.12	21.32	31.75	-22.27	0.72	621075.75	622870.33	N 32 42 24.47 W 103 56 1.96	
	2478.00	1.93	236.58	2477.07	23.56	31.90	-24.51	4.05	621075.90	622868.09	N 32 42 24.48 W 103 56 1.99	
	2540.00	2.46	210.65	2539.03	25.16	30.18	-26.06	1.79	621074.18	622866.54	N 32 42 24.46 W 103 56 2.00	
	2603.00	2.55	202.72	2601.97	26.46	27.73	-27.29	0.57	621071.73	622865.31	N 32 42 24.44 W 103 56 2.02	
	2666.00	2.29	207.20	2664.91	27.65	25.32	-28.41	0.51	621069.31	622864.19	N 32 42 24.41 W 103 56 2.03	
	2727.00	2.20	201.80	2725.87	28.70	23.14	-29.40	0.39	621067.14	622863.21	N 32 42 24.39 W 103 56 2.04	
	2790.00	2.02	207.53	2788.82	29.72	21.03	-30.36	0.45	621065.03	622862.25	N 32 42 24.37 W 103 56 2.05	
	2915.00	1.85	209.48	2913.75	31.84	17.32	-32.37	0.15	621061.32	622860.24	N 32 42 24.33 W 103 56 2.08	
	2978.00	1.93	208.88	2976.72	32.91	15.51	-33.38	0.13	621059.51	622859.22	N 32 42 24.31 W 103 56 2.09	
	3041.00	2.02	205.59	3039.68	33.96	13.58	-34.37	0.23	621057.58	622858.23	N 32 42 24.30 W 103 56 2.10	
	3103.00	2.37	203.96	3101.63	35.01	11.42	-35.36	0.57	621055.42	622857.24	N 32 42 24.27 W 103 56 2.11	
	3229.00	2.29	204.39	3227.53	37.25	6.75	-37.46	0.06	621050.75	622855.14	N 32 42 24.23 W 103 56 2.14	
	3292.00	2.11	202.32	3290.48	38.27	4.53	-38.42	0.31	621048.53	622854.18	N 32 42 24.21 W 103 56 2.15	
	3355.00	2.02	205.12	3353.44	39.24	2.45	-39.33	0.21	621046.45	622853.27	N 32 42 24.19 W 103 56 2.16	
	3481.00	1.85	210.16	3479.37	41.32	-1.32	-41.30	0.19	621042.68	622851.31	N 32 42 24.15 W 103 56 2.18	
	3621.00	1.03	219.01	3619.33	43.33	-4.25	-43.23	0.61	621039.75	622849.38	N 32 42 24.12 W 103 56 2.21	
	3684.00	0.07	44.84	3682.32	43.67	-4.66	-43.55	1.75	621039.34	622849.05	N 32 42 24.12 W 103 56 2.21	
	3747.00	0.03	71.31	3745.32	43.63	-4.63	-43.51	0.07	621039.37	622849.05	N 32 42 24.12 W 103 56 2.21	
	3872.00	0.08	240.24	3870.32	43.68	-4.66	-43.56	0.09	621039.34	622849.05	N 32 42 24.12 W 103 56 2.21	
	4059.00	0.00	7.52	4057.32	43.79	-4.73	-43.67	0.04	621039.27	622848.93	N 32 42 24.11 W 103 56 2.21	
	4121.00	0.05	278.10	4119.32	43.82	-4.72	-43.70	0.08	621039.28	622848.91	N 32 42 24.11 W 103 56 2.21	
	4184.00	0.18	240.40	4182.32	43.93	-4.77	-43.81	0.23	621039.23	622848.79	N 32 42 24.11 W 103 56 2.21	
	4247.00	0.10	293.50	4245.32	44.07	-4.79	-43.95	0.23	621039.21	622848.66	N 32 42 24.11 W 103 56 2.21	
	4310.00	0.10	17.03	4308.32	44.10	-4.72	-43.98	0.21	621039.28	622848.62	N 32 42 24.11 W 103 56 2.21	
	4373.00	0.03	105.42	4371.32	44.07	-4.67	-43.95	0.16	621039.33	622848.65	N 32 42 24.12 W 103 56 2.21	
	4436.00	0.05	67.21	4434.32	44.07	-4.67	-43.91	0.05	621039.34	622848.70	N 32 42 24.12 W 103 56 2.21	
	4499.00	0.11	347.65	4497.32	44.01	-4.60	-43.90	0.18	621039.40	622848.71	N 32 42 24.12 W 103 56 2.21	
	4562.00	0.07	62.93	4560.32	43.99	-4.52	-43.87	0.18	621039.48	622848.73	N 32 42 24.12 W 103 56 2.21	
	4625.00	0.05	45.30	4623.32	43.93	-4.48	-43.82	0.04	621039.52	622848.78	N 32 42 24.12 W 103 56 2.21	
	4688.00	0.05	243.08	4686.32	43.94	-4.48	-43.83	0.16	621039.53	622848.78	N 32 42 24.12 W 103 56 2.21	
	4750.00	0.10	262.84	4748.32	44.02	-4.49	-43.90	0.09	621039.51	622848.70	N 32 42 24.12 W 103 56 2.21	
	4813.00	0.12	318.75	4811.32	44.11	-4.45	-44.00	0.17	621039.55	622848.60	N 32 42 24.12 W 103 56 2.21	
	4875.00	0.14	351.47	4873.32	44.16	-4.33	-44.05	0.12	621039.67	622848.55	N 32 42 24.12 W 103 56 2.22	
	5001.00	0.08	321.92	4999.32	44.23	-4.11	-44.13	0.06	621039.89	622848.47	N 32 42 24.12 W 103 56 2.22	
	5063.00	0.08	256.90	5061.32	44.30	-4.08	-44.20	0.14	621039.92	622848.40	N 32 42 24.12 W 103 56 2.22	
	5126.00	0.12	114.13	5124.32	44.29	-4.12	-44.18	0.30	621039.88	622848.42	N 32 42 24.12 W 103 56 2.22	
	5189.00	0.10	79.33	5187.32	44.17	-4.14	-44.07	0.11	621039.86	622848.53	N 32 42 24.12 W 103 56 2.22	
	5252.00	0.08	229.31	5250.32	44.15	-4.15	-44.05	0.28	621039.85	622848.55	N 32 42 24.12 W 103 56 2.22	
	5314.00	0.08	53.91	5312.32	44.15	-4.16	-44.05	0.26	621039.84	622848.56	N 32 42 24.12 W 103 56 2.22	
	5377.00	0.10	32.33	5375.32	44.08	-4.08	-43.98	0.06	621039.82	622848.62	N 32 42 24.12 W 103 56 2.21	
	5434.00	0.03	138.03	5432.32	44.05	-4.05	-43.94	0.20	621039.95	622848.65	N 32 42 24.12 W 103 56 2.21	
	5500.00	0.07	218.86	5558.32	44.07	-4.14	-43.97	0.06	621039.86	622848.63	N 32 42 24.12 W 103 56 2.21	
	5623.00	0.05	36.74	5621.32	44.08	-4.15	-43.98	0.19	621039.85	622848.62	N 32 42 24.12 W 103 56 2.21	
	5686.00	0.08	290.10	5684.32	44.11	-4.11	-44.00	0.17	621039.89	622848.60	N 32 42 24.12 W 103 56 2.21	
	5878.00	0.39	122.04	5876.32	43.89	-4.41	-43.58	0.24	621039.59	622849.03	N 32 42 24.12 W 103 56 2.21	
	5941.00	1.62	268.01	5939.31	44.40	-4.55	-44.28	3.10	621039.45	622848.32	N 32 42 24.12 W 103 56 2.22	
	6003.00	1.03	338.99	6001.30	45.46	-4.06	-45.36	2.60	621039.94	622847.24	N 32 42 24.12 W 103 56 2.23	
	6066.00	0.07	318.42	6064.30	45.67	-3.51	-45.59	1.53	621040.49	622847.02	N 32 42 24.13 W 103 56 2.23	
	6128.00	0.11	176.24	6126.30	45.69	-3.54	-45.61	0.28	621040.46	622846.99	N 32 42 24.13 W 103 56 2.23	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8316.00	0.45	68.91	6314.29	45.00	-3.43	-44.92	0.26	621040.57	622847.68	N 32 42 24.13 W 103 56 2.23	
	8504.00	0.89	134.31	6502.28	43.30	-4.16	-43.19	0.44	621039.84	622849.41	N 32 42 24.12 W 103 56 2.21	
	6567.00	0.24	274.02	6565.28	43.09	-4.49	-42.98	1.72	621039.51	622849.63	N 32 42 24.12 W 103 56 2.20	
	6629.00	0.61	155.03	6627.28	43.09	-4.78	-42.97	1.22	621039.22	622849.64	N 32 42 24.11 W 103 56 2.20	
	6661.00	0.55	267.11	6659.28	43.17	-4.94	-43.05	3.01	621039.06	622849.56	N 32 42 24.11 W 103 56 2.20	
	6754.00	0.80	241.77	6752.27	44.20	-5.27	-44.07	0.41	621038.73	622848.54	N 32 42 24.11 W 103 56 2.22	
	6816.00	0.08	182.79	6814.27	44.59	-5.52	-44.45	1.23	621038.48	622848.15	N 32 42 24.11 W 103 56 2.22	
	6879.00	0.47	299.62	6877.27	44.82	-5.44	-44.68	0.81	621038.56	622847.93	N 32 42 24.11 W 103 56 2.22	
	6941.00	0.66	333.76	6939.27	45.18	-4.99	-45.05	0.61	621039.01	622847.55	N 32 42 24.11 W 103 56 2.23	
	7004.00	0.37	352.22	7002.26	45.35	-4.46	-45.24	0.52	621039.54	622847.36	N 32 42 24.12 W 103 56 2.23	
	7067.00	0.35	324.31	7065.26	45.48	-4.11	-45.38	0.28	621039.89	622847.22	N 32 42 24.12 W 103 56 2.23	
	7130.00	0.18	286.95	7128.26	45.69	-3.92	-45.59	0.37	621040.08	622847.01	N 32 42 24.12 W 103 56 2.23	
	7193.00	0.31	166.27	7191.26	45.74	-4.06	-45.64	0.68	621039.94	622846.96	N 32 42 24.12 W 103 56 2.23	
	7255.00	0.18	192.53	7253.26	45.73	-4.32	-45.63	0.27	621039.68	622846.98	N 32 42 24.12 W 103 56 2.23	
	7318.00	0.26	162.69	7316.26	45.72	-4.55	-45.60	0.22	621039.45	622847.00	N 32 42 24.12 W 103 56 2.23	
	7443.00	0.11	101.81	7441.26	45.53	-4.84	-45.40	0.18	621039.16	622847.20	N 32 42 24.11 W 103 56 2.23	
	7506.00	0.03	165.97	7504.26	45.46	-4.87	-45.34	0.16	621039.13	622847.26	N 32 42 24.11 W 103 56 2.23	
	7572.00	0.07	326.22	7570.26	45.48	-4.86	-45.36	0.14	621039.14	622847.25	N 32 42 24.11 W 103 56 2.23	
	7634.00	0.01	239.07	7632.26	45.50	-4.83	-45.38	0.11	621039.17	622847.23	N 32 42 24.11 W 103 56 2.23	
	7697.00	1.37	276.81	7695.25	46.25	-4.74	-46.13	2.17	621039.26	622846.47	N 32 42 24.11 W 103 56 2.24	
	7760.00	8.59	250.23	7757.98	51.48	-6.25	-51.32	11.73	621037.75	622841.29	N 32 42 24.10 W 103 56 2.30	
	7823.00	14.74	225.42	7819.68	61.84	-13.48	-61.47	12.39	621030.52	622831.13	N 32 42 24.03 W 103 56 2.42	
	7886.00	17.92	221.49	7880.13	74.35	-26.37	-73.61	5.34	621017.63	622819.00	N 32 42 23.90 W 103 56 2.56	
	7949.00	17.37	237.45	7940.21	89.07	-38.70	-87.96	7.71	621005.31	622804.64	N 32 42 23.78 W 103 56 2.73	
	8012.00	20.57	257.13	7999.84	108.02	-46.23	-106.70	11.28	620997.78	622785.90	N 32 42 23.71 W 103 56 2.95	
	8076.00	24.59	261.19	8058.92	132.28	-50.77	-130.84	6.74	620993.23	622761.77	N 32 42 23.66 W 103 56 3.23	
	8138.00	24.60	254.25	8115.31	157.60	-56.25	-156.01	4.66	620987.75	622736.60	N 32 42 23.61 W 103 56 3.53	
	8200.00	24.78	235.86	8171.72	181.12	-67.07	-179.22	12.35	620976.84	622713.39	N 32 42 23.50 W 103 56 3.80	
	8263.00	33.11	229.28	8226.82	205.68	-85.74	-203.24	14.12	620958.27	622689.37	N 32 42 23.32 W 103 56 4.08	
	8326.00	41.10	239.69	8277.08	237.31	-107.47	-234.24	16.09	620936.54	622658.38	N 32 42 23.11 W 103 56 4.45	
	8383.00	33.51	241.27	8322.38	267.81	-124.51	-264.25	13.42	620919.50	622628.37	N 32 42 22.94 W 103 56 4.80	
	8445.00	39.73	249.56	8372.15	301.87	-139.68	-297.88	12.81	620904.33	622594.74	N 32 42 22.79 W 103 56 5.19	
	8508.00	47.36	259.89	8417.84	343.98	-150.81	-339.68	16.53	620893.20	622552.95	N 32 42 22.68 W 103 56 5.68	
	8571.00	56.62	267.06	8456.82	393.35	-156.25	-388.91	17.20	620887.76	622503.72	N 32 42 22.63 W 103 56 6.26	
	8634.00	67.32	273.01	8486.20	448.81	-156.07	-444.40	18.91	620887.94	622448.23	N 32 42 22.63 W 103 56 6.91	
	8665.00	71.91	275.30	8497.00	477.71	-153.96	-473.37	16.35	620890.05	622419.26	N 32 42 22.65 W 103 56 7.25	
	8697.00	76.07	276.52	8505.82	508.19	-150.79	-503.96	13.49	620893.22	622388.68	N 32 42 22.66 W 103 56 7.60	
	8731.00	80.46	275.65	8512.73	541.16	-147.27	-537.05	13.16	620896.74	622355.59	N 32 42 22.72 W 103 56 7.99	
	8768.00	86.18	271.74	8517.04	577.73	-144.91	-573.71	18.68	620899.10	622318.94	N 32 42 22.75 W 103 56 8.42	
	8831.00	88.59	271.29	8519.91	640.56	-143.25	-636.61	3.89	620900.77	622256.04	N 32 42 22.77 W 103 56 9.16	
	8894.00	90.34	271.54	8520.50	703.46	-141.69	-699.59	2.81	620902.32	622193.06	N 32 42 22.78 W 103 56 9.89	
	9020.00	90.07	271.72	8520.95	829.25	-138.11	-825.54	0.26	620905.90	622167.13	N 32 42 22.82 W 103 56 11.37	
	9145.00	90.03	270.05	8519.94	954.12	-136.18	-950.52	1.34	620907.84	621942.15	N 32 42 22.85 W 103 56 12.83	
	9270.00	89.97	269.57	8519.94	1079.08	-136.59	-1075.52	0.39	620907.42	621817.17	N 32 42 22.85 W 103 56 14.29	
	9395.00	90.14	269.50	8519.82	1204.05	-137.60	-1200.51	0.15	620906.41	621662.18	N 32 42 22.84 W 103 56 15.75	
	9457.00	90.28	269.89	8519.59	1266.03	-137.93	-1262.51	0.67	620906.08	621630.18	N 32 42 22.84 W 103 56 16.48	
	9582.00	90.03	269.72	8519.25	1390.99	-138.36	-1387.51	0.24	620905.65	621505.20	N 32 42 22.84 W 103 56 17.94	
	9645.00	90.48	269.90	8518.97	1453.96	-138.57	-1450.51	0.77	620905.44	621442.20	N 32 42 22.84 W 103 56 18.68	
	9769.00	90.55	270.15	8517.86	1577.90	-138.51	-1574.50	0.21	620905.50	621318.22	N 32 42 22.85 W 103 56 20.13	
	9831.00	90.31	269.80	8517.39	1639.88	-138.54	-1636.50	0.68	620905.47	621256.22	N 32 42 22.85 W 103 56 20.86	
	9894.00	90.45	268.42	8516.98	1702.87	-139.52	-1699.49	2.20	620904.49	621193.24	N 32 42 22.84 W 103 56 21.59	
	9956.00	90.31	267.85	8516.56	1764.86	-141.54	-1761.46	0.95	620902.47	621131.28	N 32 42 22.82 W 103 56 22.32	
	10019.00	90.03	267.39	8516.38	1827.86	-144.15	-1824.40	0.85	620899.86	621068.34	N 32 42 22.80 W 103 56 23.06	
	10081.00	90.28	267.68	8516.21	1889.85	-146.82	-1886.34	0.62	620897.19	621006.40	N 32 42 22.78 W 103 56 23.78	
	10144.00	90.24	267.86	8515.92	1952.85	-149.27	-1949.30	0.29	620894.74	620943.45	N 32 42 22.75 W 103 56 24.52	
	10207.00	90.07	267.43	8515.75	2015.84	-151.86	-2012.24	0.73	620892.15	620880.51	N 32 42 22.73 W 103 56 25.25	
	10395.00	90.03	267.24	8515.59	2203.82	-160.60	-2200.04	0.10	620883.41	620692.73	N 32 42 22.65 W 103 56 27.45	
	10457.00	89.50	267.10	8515.63	2265.81	-163.66	-2261.96	0.31	620880.35	620630.81	N 32 42 22.62 W 103 56 28.18	
	10520.00	90.28	269.19	8515.53	2328.80	-165.70	-2324.93	3.37	620878.31	620567.85	N 32 42 22.61 W 103 56 28.91	
	10583.00	90.10	270.97	8515.32	2391.77	-165.61	-2387.92	2.84	620878.40	620504.86	N 32 42 22.61 W 103 56 29.65	
	10645.00	89.66	271.55	8515.45	2453.69	-164.25	-2449.91	1.17	620879.76	620442.88	N 32 42 22.63 W 103 56 30.38	
	10763.00	90.31	271.69	8515.48	2571.49	-160.91	-2567.86	0.56	620883.10	620324.93	N 32 42 22.66 W 103 56 31.76	
	10894.00	91.41	271.36	8513.51	2702.26	-157.43	-2698.80	0.88	620886.58	620194.01	N 32 42 22.70 W 103 56 33.29	
	11020.00	91.99	271.08	8509.78	2828.05	-154.75	-2824.71	0.51	620889.26	620068.10	N 32 42 22.73 W 103 56 34.76	
	11083.00	92.27	271.13	8507.43	2890.93	-153.53	-2887.66	0.45	620890.48	620005.16	N 32 42 22.75 W 103 56 35.50	
	11146.00	92.20	271.37	8504.98	2953.80	-152.16	-2950.59	0.40	620891.85	619942.23	N 32 42 22.76 W 103 56 36.24	
	11271.00	91.48	271.81	8500.96	3078.53	-148.69	-3075.48	0.67	620895.32	619817.35	N 32 42 22.80 W 103 56 37.70	
	11396.00	90.21	271.75	8499.12	3203.28	-144.81	-3200.40	1.02	620899.20	619692.44	N 32 42 22.84 W 103 56 39.16	
	11522.00	89.17	272.92	8499.80	3328.96	-139.68	-3326.29	1.24	620904.33	619566.56	N 32 42 22.90 W 103 56 40.63	
	11584.00	88.24	273.82	8501.20	3390.71	-136.03	-3388.17	2.09	620907.98	619504.69	N 32 42 22.94 W 103 56 41.36	
	11645.00	88.31	274.75	8503.04	3451.35	-131.48	-3448.97	1.53	620912.53	619443.89	N 32 42 22.99 W 103 56 42.07	
	11696.00	90.03	276.11	8503.78	3501.95	-126.65	-3499.73	4.30	620917.36	619393.13	N 32 42 23.04 W 103 56 42.66	
	11759.00	92.68	273.49	8502.29	3564.51	-121.39	-3562.48	5.91	620922.62	619330.39	N 32 42 23.09 W 103 56 43.40	
	11822.00	94.89	270.98	8498.13	3627.22	-118.94	-3625.29	5.30	620925.07	619267.59	N 32 42 23.12 W 103 56 44.13	
	11882.00	94.44	265.03	8493.25	3686.99	-121.02	-3685.03	9.91	620922.99	619207.85	N 32 42 23.10 W 103 56 44.83	
	11948.00	89.82	262.99	8490.80	3752.74	-127.91	-3750.60	7.64	620916.10	619142.28	N 32 42 23.03 W 103 56 45.60	
	12011.00	90.37	263.35	8490.69	3815.49	-135.40	-3813.15	1.05	620908.61	619079.74	N 32 42 22.96 W 103 56 46.33	
	12073.00</											

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: Survey Program:	ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma											
Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey				
	1	0.000	17.500	1/98.425	30.000	30.000	SLB_MWD-STD_HDGM-Depth Only	Original Borehole / Oxy Ivore 35 Federal 2H MWD+DMAG 0ft- 13218ft				
	1	17.500	17.500	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM-Depth Only	Original Borehole / Oxy Ivore 35 Federal 2H MWD+DMAG 0ft- 13218ft				
	1	17.500	400.000	Act Stns	30.000	30.000	NAL_INC_ONLY	Original Borehole / Oxy Ivore 35 Federal 2H MWD+DMAG 0ft-				
	1	400.000	7506.000	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM	Original Borehole / Oxy Ivore 35 Federal 2H MWD+DMAG 0ft-				
	1	7506.000	13218.000	Act Stns	30.000	30.000	SLB_MWD+DMAG	Original Borehole / Oxy Ivore 35 Federal 2H MWD+DMAG 0ft-				



Cane/Elsion 46

[illegible]

CONTROLLED	
Do not use for anything but the following:	
1. _____ 2. _____ 3. _____ 4. _____	
1. Organizer	Initialed Above
2. DE Sign Off Authority	
3. DDM Line Manager	Joel Davis
4. Client	Dry
at the time of the visit	
Date: _____	

OXY USA WTP LP
Ivore 35 Federal Com 2H
API No. 30-015-41409

14-3/4" hole @ 535'
10-3/4" csg @ 535'
w/ 560sx-TOC-Surf-Circ.

9-7/8" hole @ 3600'
7-5/8" csg @ 3590'
w/ 990sx-TOC-Surf-Circ.

6-3/4" hole @ 13218'
5-1/2" X 4-1/2" csg @ 13208'
w/ 680sx-TOC-1710' CBL

2-7/8" tbg w/ ESP @ 7597'

Perfs @ 13001-8858'

TD- 13218' M 8495' V