

Oilfield Services. Central U.S. Land
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)

RECEIVED

Schlumberger

NOV 27 2019

DISTRICT II-ARTESIA O.C.D.

Well Reference:
S6, T24S, R29E, EDDY NM
32.25362 104.02450

I, J. Estrada certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of April 10, 2019 through April 21, 2019, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 566.00 feet to a depth of 18826.00 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 Length CC 6-7 Federal Com 24H Well (Original Hole) API No. 30-015-45552 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. Estrada
FS



Subscribed and Sworn to before me this 30th day of April (month) 2019 (yr)

My Commission expires:

2-16-2022

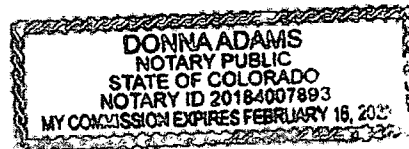
Notary Public

D. Adams

(County State)

Adams County Colorado

(signature)



Oxy Length CC 6-7 Federal Com 24H Gyro + MWD 0-18869 MD Survey

Geodetic Report

(Def Survey)



Report Date: April 23, 2019 - 12:45 PM
 Client: OXY
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Length CC 6-7 Federal Com 24H / Oxy Length CC 6-7 Federal Com 24H
 Well: Oxy Length CC 6-7 Federal Com 24H
 Borehole: Original Borehole
 UWI / API#: H&P636 / 30-015-45552
 Survey Name: Oxy Length CC 6-7 Federal Com 24H Gyro + MWD 0-18869 MD
 Survey Date: March 21, 2019
 Tort / AHD / DDI / ERD Ratio: 261.767' / 11190.304 ft / 6.812' / 1.314
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 15' 13.04428", W 104° 1' 28.20889"
 Location Grid N/E Y/X: N 456138.790 RUS, E 636807.120 ftUS
 CRS Grid Convergence Angle: 0.1648°
 Grid Scale Factor: 0.99991953
 Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 176.388° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=26.5'
 TVD Reference Elevation: 2985.200 ft above MSL
 Seabed / Ground Elevation: 2958.700 ft above MSL
 Magnetic Declination: 7.037°
 Total Gravity Field Strength: 998.4714mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47931.700 nT
 Magnetic Dip Angle: 60.023°
 Declination Date: April 08, 2019
 Magnetic Declination Model: IFR1
 North Reference: Grid North
 Grid Convergence Used: 0.1648°
 Total Corr Mag North->Grid: 6.8722°
 North: 6.8722°
 Local Coord Referenced To: Well Head

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 ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	456138.79	636807.12	N 32 15 13.04 W 104	1 28 21
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	456138.79	636807.12	N 32 15 13.04 W 104	1 28 21
	117.80	0.64	226.56	117.80	0.33	-0.35	-0.37	0.70	456138.44	636806.75	N 32 15 13.04 W 104	1 28 21
	162.80	0.67	184.54	162.80	0.75	-0.79	-0.57	1.05	456138.00	636806.55	N 32 15 13.04 W 104	1 28 22
	250.00	1.04	215.16	249.99	1.87	-1.94	-1.07	0.66	456136.85	636806.05	N 32 15 13.03 W 104	1 28 22
	339.90	0.85	222.16	339.87	2.97	-3.10	-1.99	0.25	456135.69	636805.13	N 32 15 13.01 W 104	1 28 23
Last Gyro	430.50	1.08	253.30	430.46	3.63	-3.85	-3.26	0.62	456134.94	636803.86	N 32 15 13.01 W 104	1 28 25
	566.00	1.21	269.03	565.93	3.86	-4.24	-5.91	0.25	456134.55	636801.21	N 32 15 13.00 W 104	1 28 28
	660.00	1.62	310.48	659.91	2.89	-3.39	-7.91	1.14	456135.40	636799.21	N 32 15 13.01 W 104	1 28 30
	754.00	2.61	304.75	753.84	0.63	-1.31	-10.68	1.08	456137.48	636796.44	N 32 15 13.03 W 104	1 28 33
	842.00	3.38	318.57	841.72	-2.66	1.78	-14.04	1.19	456140.57	636793.08	N 32 15 13.06 W 104	1 28 37
	936.00	3.25	347.47	935.57	-7.48	6.46	-16.46	1.76	456145.25	636790.66	N 32 15 13.11 W 104	1 28 40
	1030.00	-3.28	6.45	1029.42	-12.76	11.73	-16.73	1.15	456150.52	636790.39	N 32 15 13.16 W 104	1 28 40
	1124.00	0.30	19.88	1123.37	-15.64	14.64	-16.35	3.18	456153.42	636790.77	N 32 15 13.19 W 104	1 28 40
	1218.00	0.32	142.85	1217.37	-15.64	14.66	-16.10	0.58	456153.45	636791.02	N 32 15 13.19 W 104	1 28 40
	1313.00	0.11	113.40	1312.37	-15.38	14.41	-15.86	0.24	456153.20	636791.26	N 32 15 13.19 W 104	1 28 39
	1407.00	0.31	298.09	1406.36	-15.47	14.49	-16.00	0.45	456153.28	636791.12	N 32 15 13.19 W 104	1 28 39
	1595.00	0.13	302.30	1594.36	-15.87	14.85	-16.63	0.10	456153.64	636790.49	N 32 15 13.19 W 104	1 28 40
	1696.00	0.18	322.33	1695.36	-16.06	15.03	-16.82	0.07	456153.82	636790.30	N 32 15 13.19 W 104	1 28 40
	1790.00	0.17	326.32	1789.36	-16.31	15.27	-16.99	0.02	456154.06	636790.13	N 32 15 13.20 W 104	1 28 41
	1979.00	0.12	265.82	1978.36	-16.55	15.49	-17.35	0.08	456154.27	636789.78	N 32 15 13.20 W 104	1 28 41
	2073.00	0.17	319.38	2072.36	-16.66	15.58	-17.53	0.15	456154.37	636789.59	N 32 15 13.20 W 104	1 28 41
	2168.00	0.32	247.37	2167.36	-16.68	15.59	-17.87	0.33	456154.38	636789.25	N 32 15 13.20 W 104	1 28 42
	2262.00	0.19	183.32	2261.36	-16.44	15.33	-18.12	0.31	456154.12	636789.00	N 32 15 13.20 W 104	1 28 42
	2356.00	0.27	220.79	2355.36	-16.13	15.01	-18.28	0.18	456153.80	636788.85	N 32 15 13.19 W 104	1 28 42
	2450.00	0.14	253.09	2449.36	-15.95	14.81	-18.53	0.18	456153.60	636788.59	N 32 15 13.19 W 104	1 28 43
	2546.00	0.15	228.91	2545.36	-15.84	14.69	-18.74	0.06	456153.48	636788.38	N 32 15 13.19 W 104	1 28 43
	2641.00	0.22	34.91	2640.36	-15.91	14.76	-18.73	0.39	456153.55	636788.39	N 32 15 13.19 W 104	1 28 43
	2736.00	0.16	119.18	2735.36	-15.98	14.84	-18.51	0.27	456153.63	636788.61	N 32 15 13.19 W 104	1 28 42
	2830.00	0.19	242.76	2829.36	-15.85	14.71	-18.53	0.33	456153.50	636788.59	N 32 15 13.19 W 104	1 28 42
	2931.00	0.24	215.35	2930.36	-15.62	14.46	-18.80	0.11	456153.25	636788.32	N 32 15 13.19 W 104	1 28 43
	3026.00	0.18	170.35	3025.36	-15.31	14.15	-18.89	0.18	456152.94	636788.23	N 32 15 13.18 W 104	1 28 43
	3120.00	0.15	136.42	3119.36	-15.07	13.92	-18.78	0.11	456152.70	636788.34	N 32 15 13.18 W 104	1 28 43
	3215.00	0.18	345.48	3214.36	-15.12	13.97	-18.73	0.34	456152.76	636788.39	N 32 15 13.18 W 104	1 28 43
	3310.00	0.20	282.97	3309.36	-15.32	14.15	-18.93	0.21	456152.94	636788.39	N 32 15 13.18 W 104	1 28 43
	3404.00	0.11	315.59	3403.36	-15.43	14.25	-19.16	0.13	456153.04	636787.97	N 32 15 13.19 W 104	1 28 43
	3500.00	0.10	250.01	3499.36	-15.48	14.29	-19.30	0.12	456153.08	636787.82	N 32 15 13.19 W 104	1 28 43
	3595.00	0.11	185.09	3594.35	-15.36	14.17	-19.39	0.12	456152.96	636787.74	N 32 15 13.19 W 104	1 28 43
	3689.00	0.18	185.81	3688.35	-15.13	13.93	-19.41	0.07	456152.72	636787.71	N 32 15 13.18 W 104	1 28 43
	3784.00	0.20	260.27	3783.35	-14.96	13.76	-19.59	0.24	456152.55	636787.53	N 32 15 13.18 W 104	1 28 44
	3878.00	0.10	318.60	3877.35	-15.01	13.79	-19.80	0.18	456152.58	636787.32	N 32 15 13.18 W 104	1 28 44
	3973.00	0.09	70.92	3972.35	-15.10	13.88	-19.79	0.17	456152.67	636787.33	N 32 15 13.18 W 104	1 28 44
	4067.00	0.41	204.59	4066.35	-14.82	13.60	-19.86	0.51	456152.39	636787.26	N 32 15 13.18 W 104	1 28 44
	4162.00	1.34	179.44	4161.34	-13.41	12.18	-19.99	1.04	456150.97	636787.13	N 32 15 13.17 W 104	1 28 44
	4256.00	2.24	138.68	4255.30	-10.86	9.70	-18.76	1.60	456148.49	636786.36	N 32 15 13.14 W 104	1 28 43
	4350.00	2.90	128.39	4349.20	-7.82	6.84	-15.69	0.85	456145.63	636785.43	N 32 15 13.11 W 104	1 28 39
	4446.00	3.69	120.66	4445.04	-4.45	3.76	-11.13	0.94	456142.55	636785.99	N 32 15 13.08 W 104	1 28 34
	4541.00	4.66	116.14	4539.79	-0.81	0.50	-5.03	1.08	456139.29	636802.09	N 32 15 13.05 W 104	1 28 27
	4635.00	5.82	104.74	4633.40	2.58	-2.40	3.01	1.65	456136.39	636801.12	N 32 15 13.02 W 104	1 28 17
	4730.00	6.59	95.67	4727.84	4.98	-4.16	13.09	1.31	456134.63	636800.21	N 32 15 13.00 W 104	1 28 06
	4824.00	7.96	88.43	4821.09	6.08	-4.52	24.96	1.75	456134.28	636800.08	N 32 15 13.00 W 104	1 27 52
	4919.00	8.20	80.76	4915.15	5.65	-3.25	38.23	1.16	456135.54	636845.34	N 32 15 13.01 W 104	1 27 76
	5013.00	8.49	75.74	5008.15	3.71	-0.46	51.57	0.83	456138.33	636858.58	N 32 15 13.04 W 104	1 27 61
	5108.00	8.44	66.96	5102.12	0.09	3.99	64.78	1.36	456142.78	636871.89	N 32 15 13.08 W 104	1 27 45
	5202.00	8.68	61.38	5195.08	-5.20	10.09	77.36	0.92	456148.88	636884.47	N 32 15 13.14 W 104	1 27 31
	5297.00	9.92	63.29	5288.93	-11.44	17.20	90.96	1.34	456155.99	636898.07	N 32 15 13.21 W 104	1 27 15
	5392.00	10.09	62.25	5382.38	-18.05	24.76	105.63	0.26	456163.55	636912.74	N 32 15 13.29 W 104	1 26 58
	5487.00	9.75	61.73	5475.96	-24.81	32.44	120.08	0.37	456171.23	636927.19	N 32 15 13.36 W 104	1 26 41
	5581.00	9.90	62.02	5568.58	-31.47	40.00	134.23	0.17	456178.79	636941.34	N 32 15 13.44 W 104	1 26 24
	5675.00	9.81	61.61	5661.20	-38.16	47.60	148.41	0.12	456186.39	636955.52	N 32 15 13.51 W 104	1 26 08
	5770.00	10.30	59.32	5754.74	-45.41	55.73	162.83	0.67	456194.57	636969.94	N 32 15 13.59 W 104	1 26 01
	5864.00	10.14	59.73	5847.24	-52.95	64.24	177.21	0.19	456203.03	636984.31	N 32 15 13.67 W 104	1 26 14
	5959.00	10.14	61.17	5940.76	-60.27	72.49	191.76	0.27	456211.27	636998.86	N 32 15 13.76 W 104	1 25 57
	6053.00	9.82	64.85	6033.34	-66.73	79.89	206.26	0.76	456218.67	637013.36	N 32 15 13.83 W 104	1 25 40
	6147.00	9.92	69.54	6125.95	-72.02	86.12	221.10	0.86	456224.91	637028.20	N 32 15 13.89 W 104	1 25 23
	6242.00	9.79	73.75	6218.55	-76.16	91.24	236.52	0.77	456230.03	637043.62	N 32 15 13.94 W 104	1 25 05
	6337.00	9.99	73.23	6313.14	-79.81	95.88	252.17	0.23	456234.66	637059.27	N 32 15 13.99 W 104	1 25 27
	6426.00	9.55	73.69	6409.40	-86.98	105.02	282.91	0.24	456243.80	637090.01	N 32 15 14.08 W 104	1 24 51
	6520.00	9.78	82.18	6502.07	-89.28	108.29	298.31	1.53	456247.07	637105.40	N 32 15 14.11 W 104	1 24 73
	6615.00	9.69	85.37	6585.70	-90.02	110.03	314.27	0.58	456248.82	637121.36	N 32 15 14.12 W 104	1 24 55
	6709.00	9.77	73.79	6778.36	-91.90	112.90	329.81	2.08	456251.68	637136.91	N 32 15 14.15 W 104	1 24 36
	6803.00	9.48	64.77	6871.04	-96.49	118.43	344.48	1.63	456257.21	637151.57	N 32 15 14.21 W 104	1 24 19
	6898.00	9.69	64.69	6964.71	-102.33	125.18	358.78	0.22	456263.96	637165.87	N 32 15 14.27 W 104	1 24 03
	6993.00	9.73	55.87	7057.37	-109.29	133.02	372.51	1.58	456271.80	637179.60	N 32 15 14.35 W 104	1 23 87
	7187.00	9.17	53.96	7151.08	-117.42	141.98	385.27	0.68	456280.75	637192.36	N 32 15 14.44 W 10	

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 ° ' ")
KOP Actual	7565.00	9.75	85.05	7523.72	-138.82	167.02	442.44	1.64	456305.80	637249.52	N 32 15 14.68 W 104	1 23 05
	7659.00	9.41	94.75	7616.42	-137.88	167.07	458.03	1.75	456305.85	637265.11	N 32 15 14.68 W 104	1 22 87
	7754.00	9.80	102.66	7710.12	-134.53	164.69	473.50	1.39	456303.47	637280.58	N 32 15 14.66 W 104	1 22 69
	7848.00	9.53	104.73	7802.81	-129.89	161.00	488.67	0.37	456299.77	637295.75	N 32 15 14.62 W 104	1 22 51
	7947.00	10.42	105.57	7900.31	-124.37	156.51	505.22	0.91	456295.29	637312.30	N 32 15 14.58 W 104	1 22 32
100' FNL Crossed	8042.00	12.21	126.27	7993.50	-115.10	148.26	521.60	4.64	456287.03	637328.68	N 32 15 14.50 W 104	1 22 13
	8137.00	20.05	153.66	8084.81	-93.58	127.66	536.97	11.29	456266.44	637344.05	N 32 15 14.29 W 104	1 21 95
2nd Bone Spring Intersection	8142.00	20.30	154.65	8089.51	-91.98	126.11	537.73	8.44	456264.89	637344.80	N 32 15 14.28 W 104	1 21 94
	8231.00	25.44	168.85	8171.55	-58.64	93.35	548.05	8.44	456232.14	637355.12	N 32 15 13.95 W 104	1 21 82
	8326.00	33.22	174.16	8254.32	-12.33	47.37	554.65	8.63	456186.15	637361.73	N 32 15 13.50 W 104	1 21 75
	8421.00	42.18	177.39	8329.42	45.69	-10.50	558.76	9.86	456128.29	637365.83	N 32 15 12.92 W 104	1 21 70
	8484.00	44.69	180.05	8375.16	88.95	-53.80	559.70	4.93	456085.00	637366.78	N 32 15 12.50 W 104	1 21 69
Exit Target Box	8493.72	45.90	179.96	8382.00	95.84	-60.70	559.70	12.51	456078.09	637366.78	N 32 15 12.43 W 104	1 21 69
	8579.00	56.56	179.28	8435.32	162.14	-127.10	560.17	12.51	456011.70	637367.25	N 32 15 11.77 W 104	1 21 69
	8674.00	71.42	177.94	8476.87	247.21	-212.21	562.30	15.89	455926.60	637369.38	N 32 15 10.93 W 104	1 21 67
	8768.00	88.08	175.18	8493.54	339.38	-304.20	567.89	17.96	455834.61	637374.97	N 32 15 10.02 W 104	1 21 61
	8818.00	90.24	175.58	8494.27	389.36	-354.03	571.92	4.39	455784.79	637378.99	N 32 15 9.52 W 104	1 21 56
Enter Target Box	8920.00	91.45	175.70	8492.77	491.34	-455.73	579.67	1.19	455683.10	637386.74	N 32 15 8.52 W 104	1 21 47
	9013.00	91.10	175.36	8490.70	584.31	-548.42	586.92	0.52	455590.42	637393.99	N 32 15 7.60 W 104	1 21 39
	9106.00	88.97	176.56	8490.64	677.30	-641.18	593.47	2.53	455497.66	637400.54	N 32 15 6.68 W 104	1 21 32
	9200.00	89.14	176.43	8492.19	771.28	-734.99	599.22	0.23	455403.86	637406.29	N 32 15 5.75 W 104	1 21 26
	9293.00	89.11	176.20	8493.61	864.27	-827.79	605.19	0.25	455311.07	637412.26	N 32 15 4.84 W 104	1 21 19
100' FNL Crossed	9386.00	89.24	175.59	8494.95	957.26	-920.54	611.85	0.67	455218.33	637418.92	N 32 15 3.92 W 104	1 21 12
	9479.00	89.38	175.76	8496.07	1050.24	-1013.27	618.86	0.24	455125.60	637425.93	N 32 15 3.00 W 104	1 21 04
	9572.00	89.45	177.74	8497.02	1143.23	-1106.11	624.13	2.13	455032.77	637431.20	N 32 15 2.08 W 104	1 20 98
	9666.00	89.86	180.50	8497.59	1237.12	-1200.09	626.58	2.37	454938.80	637432.65	N 32 15 1.15 W 104	1 20 96
	9759.00	89.42	182.46	8498.17	1329.74	-1293.05	623.18	1.74	454845.85	637430.24	N 32 15 0.23 W 104	1 21 00
100' FNL Crossed	9853.00	89.83	184.04	8498.79	1423.06	-1386.89	617.85	1.74	454752.01	637424.92	N 32 14 59.30 W 104	1 21 06
	9946.00	89.42	184.70	8499.40	1515.16	-1479.62	610.76	0.84	454659.29	637417.83	N 32 14 58.39 W 104	1 21 15
	10039.00	89.86	184.51	8499.98	1607.20	-1572.32	603.29	0.52	454566.60	637410.36	N 32 14 57.47 W 104	1 21 24
	10133.00	89.24	182.08	8500.72	1700.51	-1666.15	597.89	2.67	454472.77	637404.96	N 32 14 56.54 W 104	1 21 30
	10227.00	89.79	180.13	8501.51	1794.18	-1760.13	596.08	2.16	454378.81	637403.15	N 32 14 55.61 W 104	1 21 33
Exit Target Box	10322.00	89.97	181.93	8501.71	1888.87	-1855.11	594.37	1.90	454283.84	637401.44	N 32 14 54.67 W 104	1 21 35
	10417.00	89.24	181.50	8502.37	1983.45	-1950.06	591.53	0.89	454188.99	637398.60	N 32 14 53.73 W 104	1 21 39
	10477.00	89.37	181.56	8502.09	2043.21	-2010.04	589.92	0.25	454128.92	637397.00	N 32 14 53.14 W 104	1 21 41
	10511.00	89.45	181.60	8503.44	2077.07	-2044.02	588.99	0.25	454094.94	637396.06	N 32 14 52.80 W 104	1 21 42
	10606.00	90.10	184.16	8503.82	2171.45	-2138.89	584.21	2.78	454000.07	637391.29	N 32 14 51.86 W 104	1 21 48
100' FNL Crossed	10700.00	89.45	184.30	8504.19	2264.57	-2232.63	577.28	0.71	453906.34	637384.35	N 32 14 50.94 W 104	1 21 56
	10795.00	89.76	184.07	8504.84	2358.69	-2327.38	570.35	0.41	453811.60	637377.42	N 32 14 50.00 W 104	1 21 65
	10890.00	89.62	184.01	8505.35	2452.84	-2422.14	563.65	0.16	453716.85	637370.73	N 32 14 49.06 W 104	1 21 65
	10984.00	88.76	180.76	8506.68	2546.30	-2516.04	559.74	3.58	453622.96	637366.82	N 32 14 48.13 W 104	1 21 78
	11079.00	88.11	177.11	8509.28	2641.16	-2610.97	561.51	3.90	453528.04	637368.58	N 32 14 47.19 W 104	1 21 76
Enter Target Box	11174.00	88.42	176.59	8512.16	2736.11	-2705.78	566.73	0.64	453433.23	637373.80	N 32 14 46.25 W 104	1 21 70
	11268.00	89.24	176.68	8514.07	2830.09	-2799.60	572.24	0.88	453339.42	637379.31	N 32 14 45.33 W 104	1 21 64
	11363.00	90.17	176.56	8514.56	2925.09	-2894.43	577.84	0.99	453244.60	637384.92	N 32 14 44.39 W 104	1 21 58
	11457.00	90.21	176.77	8514.25	3019.08	-2988.27	583.31	0.23	453150.76	637390.38	N 32 14 43.46 W 104	1 21 52
	11552.00	90.52	177.57	8513.65	3114.07	-3083.15	588.00	0.90	453055.89	637395.07	N 32 14 42.52 W 104	1 21 47
100' FNL Crossed	11646.00	90.86	178.33	8512.52	3208.03	-3177.09	591.36	0.89	452961.97	637398.43	N 32 14 41.59 W 104	1 21 43
	11741.00	90.79	178.87	8511.15	3302.95	-3272.05	593.68	0.57	452867.01	637400.76	N 32 14 40.65 W 104	1 21 41
	11836.00	90.21	178.50	8510.32	3397.87	-3367.02	595.86	0.72	452772.05	637402.94	N 32 14 39.71 W 104	1 21 38
	11861.00	90.47	178.40	8510.17	3422.85	-3392.01	596.54	1.10	452747.06	637403.61	N 32 14 39.46 W 104	1 21 38
	11930.00	91.17	178.11	8509.19	3491.81	-3460.97	598.64	1.10	452678.11	637405.72	N 32 14 38.78 W 104	1 21 35
100' FNL Crossed	12025.00	91.07	177.98	8507.33	3586.75	-3555.89	601.88	0.17	452583.19	637408.96	N 32 14 37.84 W 104	1 21 32
	12119.00	91.03	178.53	8505.61	3680.68	-3649.84	604.75	0.59	452489.26	637411.82	N 32 14 36.91 W 104	1 21 29
	12214.00	91.24	178.45	8503.73	3775.60	-3744.78	607.25	0.24	452394.32	637414.32	N 32 14 35.97 W 104	1 21 26
	12309.00	90.90	178.97	8501.95	3870.51	-3839.74	609.39	0.65	452299.36	637416.46	N 32 14 35.03 W 104	1 21 24
	12403.00	91.24	178.95	8500.20	3964.39	-3933.71	611.09	0.36	452205.40	637418.16	N 32 14 34.10 W 104	1 21 23
100' FNL Crossed	12498.00	90.86	179.23	8498.45	4059.27	-4028.68	612.60	0.50	452110.44	637419.67	N 32 14 33.16 W 104	1 21 21
	12593.00	90.62	178.51	8496.00	4249.08	-4218.63	616.35	0.40	451920.51	637423.42	N 32 14 31.28 W 104	1 21 17
	12688.00	90.89	178.64	8494.76	4343.00	-4312.59	618.69	0.32	451826.56	637425.76	N 32 14 30.35 W 104	1 21 15
	12782.00	90.72	177.90	8492.11	4531.88	-4501.48	624.39	0.40	451637.68	637431.46	N 32 14 28.48 W 104	1 21 09
	12877.00	90.79	178.30	8490.86	4626.83	-4596.42	627.54	0.43	451542.75	637434.61	N 32 14 27.54 W 104	1 21 06
100' FNL Crossed	12971.00	91.07	179.72	8487.79	4815.60	-4785.37	630.81	0.77	451353.82	637437.87	N 32 14 25.67 W 104	1 21 02
	13066.00	89.83	180.34	8487.04	4910.40	-4880.36	630.76	1.46	451258.83	637437.82	N 32 14 24.73 W 104	1 21 03
	13161.00	89.14	180.93	8487.90	5005.14	-4975.35	629.70	0.96	451163.85	637436.77	N	

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 ° ' ")
	17326.00	91.96	177.98	8493.92	8874.64	-8851.58	645.22	1.41	447287.94	637452.29	N 32 13 45.44 W 104	120.99
	17421.00	91.86	177.56	8490.75	8969.56	-8946.45	648.92	0.45	447193.08	637455.99	N 32 13 44.50 W 104	120.95
	17515.00	91.48	177.59	8488.01	9063.50	-9040.33	652.81	0.43	447099.20	637459.88	N 32 13 43.57 W 104	120.91
	17609.00	91.00	178.16	8485.98	9157.44	-9134.25	656.22	0.71	447005.30	637463.28	N 32 13 42.64 W 104	120.88
	17704.00	90.38	179.29	8484.84	9252.36	-9229.22	658.33	1.36	446910.34	637465.39	N 32 13 41.70 W 104	120.85
	17799.00	89.86	180.13	8484.64	9347.20	-9324.21	658.81	1.04	446815.35	637465.88	N 32 13 40.76 W 104	120.85
	17893.00	89.28	181.33	8485.34	9440.92	-9418.20	657.61	1.42	446721.37	637464.68	N 32 13 39.83 W 104	120.87
	17988.00	90.14	182.26	8485.82	9535.50	-9513.15	654.64	1.33	446626.42	637461.70	N 32 13 38.89 W 104	120.91
	18083.00	89.24	182.25	8486.34	9630.00	-9608.07	650.90	0.95	446531.51	637457.97	N 32 13 37.95 W 104	120.95
	18177.00	89.28	182.36	8487.55	9723.49	-9701.99	647.12	0.12	446437.60	637454.19	N 32 13 37.02 W 104	121.00
	18272.00	87.94	181.49	8489.86	9818.01	-9796.81	643.93	1.68	446342.69	637451.00	N 32 13 36.08 W 104	121.04
	18367.00	89.45	181.31	8492.02	9912.62	-9891.85	641.61	1.60	446247.76	637448.68	N 32 13 35.15 W 104	121.07
	18462.00	90.07	180.96	8492.42	10007.29	-9986.83	639.30	0.75	446152.78	637446.79	N 32 13 34.21 W 104	121.10
	18557.00	90.31	179.55	8492.10	10102.08	-10081.83	639.30	1.51	446057.80	637446.37	N 32 13 33.27 W 104	121.10
	18651.00	89.49	177.73	8492.27	10196.00	-10175.79	641.53	2.12	445963.83	637448.60	N 32 13 32.34 W 104	121.08
	18746.00	89.83	177.49	8492.83	10290.97	-10270.71	645.50	0.44	445868.93	637452.56	N 32 13 31.40 W 104	121.04
100' FSL												
Crossed	18790.00	89.94	177.32	8492.92	10334.97	-10314.67	647.49	0.46	445824.98	637454.55	N 32 13 30.96 W 104	121.02
Final MWD	18826.00	90.03	177.18	8492.93	10370.96	-10350.62	649.22	0.46	445789.02	637456.28	N 32 13 30.61 W 104	121.00
Proj to TD	18869.00	90.03	177.18	8492.90	10413.96	-10393.57	651.33	0.00	445746.08	637458.40	N 32 13 30.18 W 104	120.97

Survey Type: Def Survey

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

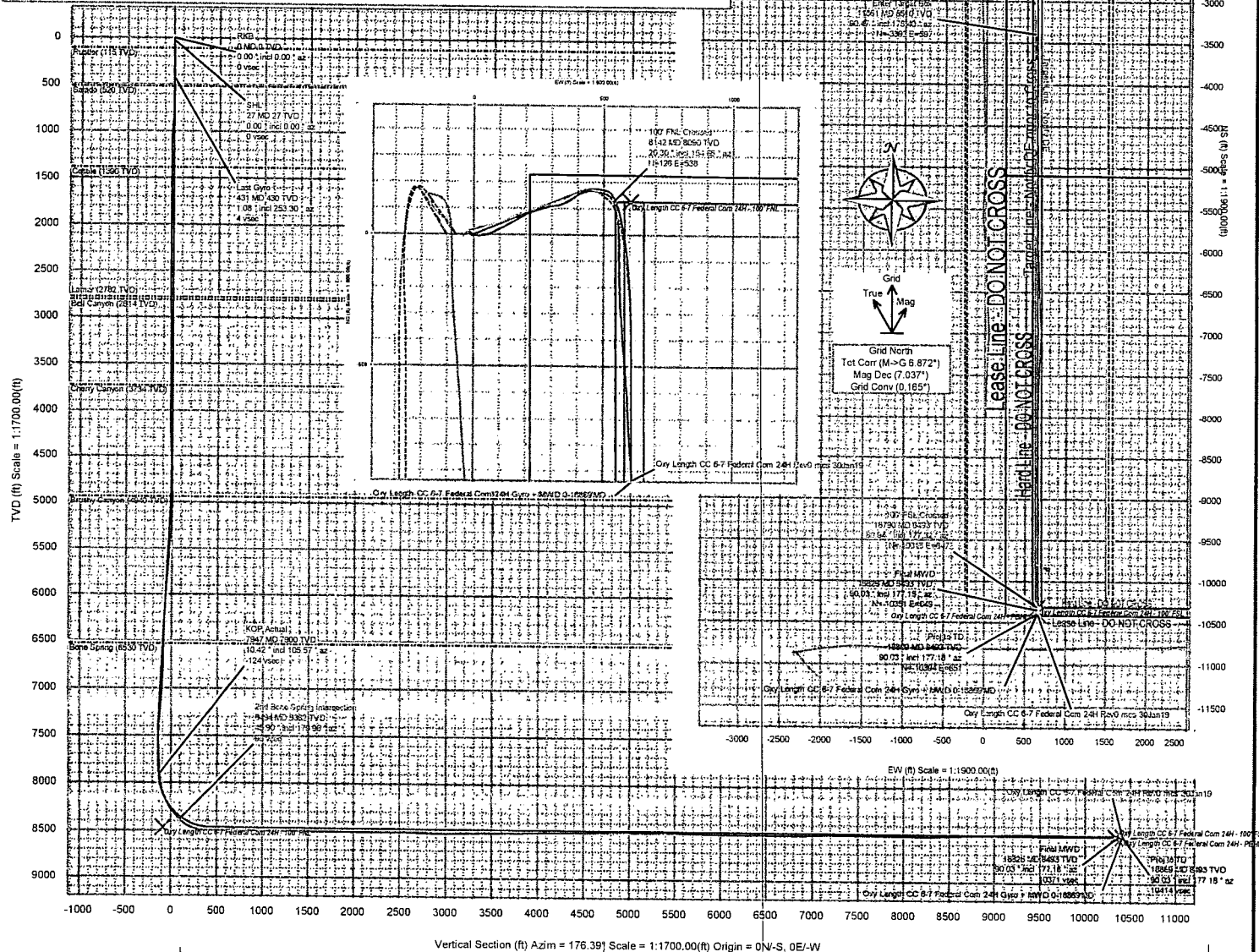
Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Length CC 6-7 Federal Com 24H Gyro + MWD 0-18869'MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Length CC 6-7 Federal Com 24H Gyro + MWD 0-18869'MD
	1	26.500	430.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Length CC 6-7 Federal Com 24H Gyro + Original Borehole / Oxy Length
	1	430.500	1030.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	CC 6-7 Federal Com 24H Gyro + Original Borehole / Oxy Length
	1	1030.000	18869.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Length CC 6-7 Federal Com 24H Gyro +

...Original Borehole/Oxy Length CC 6-7 Federal Com 24H Gyro + MWD 0-18869'MD

OXY



Gravity & Magnetic Parameters				Surface Location	NAD83 New Mexico State Plane, Eastern Zone,	US Feet	Miscellaneous								
Model:	IFR1	Dip:	69.023°	Date:	08-Apr-2019	Lat:	N 32 15 13.94	Northing:	456138.79ftUS	Grid Conv:	0.1548°	Slot:	Oxy Length CC 6- 7 Federal Conn	TVD Ref:	RKB+25.5'(2986.2ft above MSL)
MagDec:	7.037°	FS:	47931.7nT	Gravity FS:	958.471mgN (9.80665 Based)	Lon:	W 104 1 28.21	Eastng:	636807.12ftUS	Scale Fact:	0.99991953	Plan:	24H Oxy Length CC 6-7 Federal Conn 24H Gyro + MWD 0-18963 MD		

[illegible]

OXY USA Inc.
Length CC 6-7 Federal Com 24H
API No. 30-015-45552

14-3/4" hole @ 410'
10-3/4" csg @ 400'
w/ 460sx-TOC-Surf Circ.

9-7/8" hole @ 7900'
7-5/8" csg @ 7900'
w/ 1867sx-TOC-Surf Circ.

6-3/4" hole @ 18869'
5-1/2" csg @ 18869'
w/ 830sx-TOC-7380'

2-7/8" tbg w/ESP @ 7969'

Perfs @ 8360-18778'

TD- 18869'M 8493'V