

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)

Schlumberger

30-05-44411

NM OIL CONSERVATION
ARTESIA DISTRICT

February 21, 2019

FEB 22 2019

OXY USA WTP Limited Partnership

RECEIVED

S4-T19S-R29E, Eddy, NM
32.6865022 -104.0871657

Re:

CLIENT: OXY USA WTP Limited Partnership
WELL: Turkey Track 4-3 State 33H
FIELD: Turkey Track, Bone Spring

RIG: H&P 617
COUNTY: Eddy
API NO: 30-015-44411
JOB NO: 18MLD3502

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>
Terron Mwata Andrews FE	Turkey Track 4-3 State 33H Original Hole	421.00 Ft to 18978.00 Ft	June 19, 2018 to July 25, 2018	TelePacer Third Party Corrected

Schlumberger-Private

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Schlumberger

Well Reference:
S4-T19S-R29E, Eddy, NM
32.6865022 -104.0871657

I, Terron Mwata Andrews certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of June 19, 2018 through July 25, 2018, conduct or supervise the taking of the TelePacer & Third Party Corrected surveys from a depth of 421.00 feet to a depth of 18978.00 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 WTP Limited Partnership for the Turkey Track 4-3 State 33H Well (Original Hole) API No. 30-015-44411 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 
Terron Mwata Andrews
FE

Subscribed and Sworn to before me this 21st day of February (month) 2019 (yr)

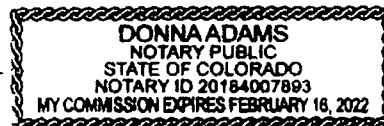
My Commission expires:

2-16-2022

Donna Adams
Notary Public

Adams County Colorado
(County State)

(signature)



Oxy Turkey Track 4-3 State 33H Gyro+MWD 0-19,061' MD Survey Geodetic Report (Def Survey)



Report Date: August 02, 2018 - 11:33 AM
 Client: OXY
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Turkey Track 4-3 State 33H / Oxy Turkey Track 4-3 State 33H
 Well: Oxy Turkey Track 4-3 State 33H
 Borehole: Original Borehole
 UWI / API#: Unknown / 30-015-44411
 Survey Name: Oxy Turkey Track 4-3 State 33H Gyro+MWD 0-19,061' MD
 Survey Date: June 14, 2018
 Tort / AKD / DDH / ERD Ratio: 271.290 * / 11118.184 ft / 6.806 / 1.236
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 41' 11.40788", W 104° 5' 13.79648"
 Location Grid N/E Y/X: N 613568.550 RUS, E 617072.590 RUS
 CRS Grid Convergence Angle: 0.1329 °
 Grid Scale Factor: 0.99991568
 Version / Patch: 2.10.740.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 87.543 ° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=26.5'
 TVD Reference Elevation: 3432.900 ft above MSL
 Seabed / Ground Elevation: 3406.400 ft above MSL
 Magnetic Declination: 7.398 °
 Total Gravity Field Strength: 998.5144mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48087.705 nT
 Magnetic Dip Angle: 60.486 °
 Declination Date: June 14, 2018
 Magnetic Declination Model: HDGM 2018
 North Reference: Grid North
 Grid Convergence Used: 0.1329 °
 Total Corr Mag North->Grid North: 7.2630 °
 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	613568.55	617072.59	N 32° 41' 11.41" W 104° 5' 13.80"	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	613568.55	617072.59	N 32° 41' 11.41" W 104° 5' 13.80"	
	99.00	0.10	350.97	99.00	-0.01	0.06	-0.01	0.14	613568.61	617072.58	N 32° 41' 11.41" W 104° 5' 13.80"	
	158.10	0.25	336.60	158.10	-0.06	0.23	-0.07	0.26	613568.78	617072.52	N 32° 41' 11.41" W 104° 5' 13.80"	
	218.30	0.50	205.49	216.30	-0.22	0.12	-0.23	1.19	613568.67	617072.36	N 32° 41' 11.41" W 104° 5' 13.80"	
Last Gyro	273.90	0.83	263.24	273.90	-0.68	-0.15	-0.65	0.07	613568.40	617071.94	N 32° 41' 11.41" W 104° 5' 13.80"	
	421.00	0.57	280.04	420.99	-2.18	-0.11	-2.18	0.13	613568.44	617070.42	N 32° 41' 11.41" W 104° 5' 13.82"	
	544.00	0.83	308.74	543.98	-3.28	0.42	-3.31	0.25	613568.97	617069.29	N 32° 41' 11.41" W 104° 5' 13.84"	
	669.00	0.54	308.90	668.98	-4.24	1.22	-4.30	0.07	613569.77	617068.29	N 32° 41' 11.42" W 104° 5' 13.85"	
	760.00	0.29	325.62	759.97	-4.69	1.68	-4.76	0.30	613570.23	617067.83	N 32° 41' 11.42" W 104° 5' 13.85"	
	853.00	0.27	349.60	852.97	-4.84	2.09	-4.94	0.13	613570.64	617067.65	N 32° 41' 11.43" W 104° 5' 13.85"	
	944.00	0.42	344.17	943.97	-4.95	2.62	-5.07	0.17	613571.17	617067.53	N 32° 41' 11.43" W 104° 5' 13.86"	
	1036.00	0.67	337.38	1035.97	-5.21	3.44	-5.36	0.28	613571.99	617067.23	N 32° 41' 11.44" W 104° 5' 13.86"	
	1128.00	0.91	324.49	1127.96	-5.80	4.53	-6.00	0.32	613573.08	617066.60	N 32° 41' 11.45" W 104° 5' 13.87"	
	1219.00	1.24	324.36	1218.94	-6.73	5.92	-6.99	0.36	613574.47	617065.60	N 32° 41' 11.47" W 104° 5' 13.88"	
1310.00	1.33	319.76	1309.92	-7.91	7.52	-8.24	0.15	613576.07	617064.35	N 32° 41' 11.48" W 104° 5' 13.89"		
1402.00	0.83	307.32	1401.90	-8.96	8.65	-9.34	0.79	613577.20	617063.25	N 32° 41' 11.49" W 104° 5' 13.91"		
1493.00	0.53	306.41	1492.90	-9.87	9.20	-10.07	0.11	613577.75	617062.52	N 32° 41' 11.50" W 104° 5' 13.91"		
1585.00	0.57	298.48	1584.90	-10.40	9.66	-10.83	0.11	613578.21	617061.77	N 32° 41' 11.50" W 104° 5' 13.92"		
1677.00	0.67	299.55	1676.89	-11.26	10.13	-11.70	0.11	613578.67	617060.89	N 32° 41' 11.51" W 104° 5' 13.93"		
1767.00	0.73	301.87	1766.88	-12.18	10.69	-12.65	0.07	613579.24	617059.94	N 32° 41' 11.51" W 104° 5' 13.94"		
1860.00	0.85	293.35	1859.88	-13.14	11.21	-13.64	0.14	613579.76	617058.96	N 32° 41' 11.52" W 104° 5' 13.96"		
1952.00	0.20	272.99	1951.87	-13.77	11.42	-14.27	0.51	613579.97	617058.32	N 32° 41' 11.52" W 104° 5' 13.96"		
2044.00	0.20	318.84	2043.87	-14.03	11.55	-14.54	0.17	613580.10	617058.05	N 32° 41' 11.52" W 104° 5' 13.97"		
2139.00	0.34	318.36	2138.87	-14.31	11.89	-14.84	0.15	613580.44	617057.75	N 32° 41' 11.53" W 104° 5' 13.97"		
2233.00	0.39	321.31	2232.87	-14.68	12.35	-15.22	0.06	613580.90	617057.37	N 32° 41' 11.53" W 104° 5' 13.97"		
2328.00	0.44	302.37	2327.87	-15.17	12.80	-15.73	0.15	613581.34	617056.86	N 32° 41' 11.53" W 104° 5' 13.98"		
2423.00	0.45	285.04	2422.87	-15.82	13.09	-16.40	0.14	613581.64	617056.19	N 32° 41' 11.54" W 104° 5' 13.99"		
2518.00	0.40	294.62	2517.86	-16.48	13.32	-17.06	0.09	613581.87	617055.53	N 32° 41' 11.54" W 104° 5' 14.00"		
2612.00	0.50	271.37	2611.86	-17.18	13.47	-17.77	0.22	613582.02	617054.82	N 32° 41' 11.54" W 104° 5' 14.00"		
2707.00	0.45	256.62	2706.86	-17.96	13.41	-18.55	0.12	613581.95	617054.04	N 32° 41' 11.54" W 104° 5' 14.01"		
2802.00	0.40	255.59	2801.85	-18.65	13.25	-19.24	0.06	613581.80	617053.35	N 32° 41' 11.54" W 104° 5' 14.02"		
2896.00	0.35	222.23	2895.85	-19.18	12.95	-19.75	0.23	613581.50	617052.84	N 32° 41' 11.54" W 104° 5' 14.03"		
2990.00	0.48	216.38	2989.85	-19.62	12.43	-20.18	0.15	613580.97	617052.42	N 32° 41' 11.53" W 104° 5' 14.03"		
3037.00	0.40	192.81	3036.85	-19.79	12.11	-20.33	0.42	613580.66	617052.26	N 32° 41' 11.53" W 104° 5' 14.03"		
3189.00	0.32	332.13	3188.85	-20.11	11.96	-20.64	0.44	613580.51	617051.95	N 32° 41' 11.53" W 104° 5' 14.04"		
3379.00	0.61	297.84	3378.84	-21.21	12.91	-21.79	0.21	613581.46	617050.81	N 32° 41' 11.54" W 104° 5' 14.05"		
3473.00	0.93	287.90	3472.83	-22.36	13.37	-22.96	0.37	613581.92	617049.64	N 32° 41' 11.54" W 104° 5' 14.06"		
3568.00	0.88	292.99	3567.82	-23.74	13.90	-24.36	0.10	613582.44	617048.23	N 32° 41' 11.55" W 104° 5' 14.08"		
3663.00	0.77	336.45	3662.81	-24.63	14.77	-25.29	0.65	613583.31	617047.31	N 32° 41' 11.55" W 104° 5' 14.09"		
3757.00	0.87	26.67	3756.80	-24.51	15.98	-25.22	0.75	613584.53	617047.37	N 32° 41' 11.57" W 104° 5' 14.09"		
3852.00	1.42	143.07	3851.79	-23.49	15.69	-24.19	2.07	613584.24	617046.40	N 32° 41' 11.56" W 104° 5' 14.08"		
3947.00	1.78	211.43	3946.76	-23.65	13.49	-24.25	1.92	613582.04	617048.34	N 32° 41' 11.54" W 104° 5' 14.08"		
4042.00	1.57	335.71	4041.74	-24.96	13.41	-25.56	3.12	613581.96	617047.04	N 32° 41' 11.54" W 104° 5' 14.10"		
4137.00	1.55	113.92	4136.73	-24.29	14.08	-24.92	3.07	613582.63	617047.68	N 32° 41' 11.54" W 104° 5' 14.09"		
4231.00	1.31	275.40	4230.72	-24.22	13.86	-24.82	3.00	613582.21	617047.77	N 32° 41' 11.54" W 104° 5' 14.09"		
4326.00	1.16	73.75	4325.71	-24.38	14.04	-24.98	2.55	613582.58	617047.61	N 32° 41' 11.55" W 104° 5' 14.09"		
4421.00	0.41	201.58	4420.70	-23.56	13.99	-24.18	1.52	613582.54	617048.41	N 32° 41' 11.55" W 104° 5' 14.08"		
4516.00	0.08	177.08	4515.70	-23.70	13.61	-24.30	0.36	613582.16	617048.29	N 32° 41' 11.54" W 104° 5' 14.08"		
4610.00	2.71	244.20	4609.67	-25.74	12.57	-26.30	2.85	613581.12	617046.28	N 32° 41' 11.53" W 104° 5' 14.10"		
4705.00	5.79	244.99	4704.40	-32.23	9.57	-32.67	3.24	613578.12	617039.92	N 32° 41' 11.50" W 104° 5' 14.18"		
4800.00	8.92	244.71	4798.60	-43.44	4.40	-43.67	3.29	613572.95	617028.92	N 32° 41' 11.45" W 104° 5' 14.31"		
4894.00	11.39	247.37	4891.12	-58.88	-2.29	-58.83	2.67	613566.26	617013.76	N 32° 41' 11.39" W 104° 5' 14.48"		
4988.00	11.79	262.97	4983.23	-77.17	-7.04	-76.93	3.35	613561.51	616995.68	N 32° 41' 11.34" W 104° 5' 14.70"		
5083.00	12.75	274.58	5078.07	-97.25	-7.39	-97.02	2.78	613561.16	616975.58	N 32° 41' 11.34" W 104° 5' 14.93"		
5177.00	14.58	284.78	5167.42	-116.85	-3.55	-116.81	3.21	613565.01	616953.79	N 32° 41' 11.38" W 104° 5' 15.19"		
5272.00	16.63	291.66	5258.92	-142.68	4.52	-143.01	2.91	613573.07	616929.59	N 32° 41' 11.46" W 104° 5' 15.47"		
5367.00	18.82	298.83	5349.91	-168.84	16.17	-167.69	2.18	613584.72	616904.92	N 32° 41' 11.57" W 104° 5' 15.76"		
5462.00	17.58	309.41	5450.50	-211.47	47.48	-213.71	1.70	613616.03	616858.90	N 32° 41' 11.88" W 104° 5' 16.30"		
5557.00	18.36	312.21	5620.87	-232.80	66.64	-235.87	1.22	613635.19	616836.74	N 32° 41' 12.07" W 104° 5' 16.55"		
5651.00	18.62	317.93	5710.03	-252.90	87.73	-256.90	1.95	613656.27	616815.72	N 32° 41' 12.28" W 104° 5' 16.80"		
5745.00	18.02	330.21	5800.24	-269.32	111.75	-274.37	4.10	613680.29	616798.25	N 32° 41' 12.52" W 104° 5' 17.00"		
5840.00	17.63	343.34	5890.72	-278.60	138.30	-285.79	4.24	613706.83	616786.82	N 32° 41' 12.78" W 104° 5' 17.14"		
5935.00	15.33	352.35	5980.87	-284.22	164.26	-291.53	3.65	613732.79	616781.08	N 32° 41' 13.04" W 104° 5' 17.20"		
6029.00	9.24	352.23	6072.67	-288.05	184.07	-294.21	6.48	613752.60	616778.41	N 32° 41' 13.24" W 104° 5' 17.23"		
6123.00	3.94	336.38	6167.02	-287.93	194.62	-296.55	5.85	613763.16	616776.07	N 32° 41' 13.34" W 104° 5' 17.26"		
6218.00	2.31	330.24	6260.87	-289.97	199.23	-298.78	1.77	613767.76	616773.83	N 32° 41' 13.39" W 104° 5' 17.29"		
6312.00	2.00	309.29	6355.81	-292.08	201.94	-301.02	0.88	613770.47	616771.60	N 32° 41' 13.41" W 104° 5' 17.31"		
6407.00	1.87	272.78	6449.78	-294.84	203.05	-303.82	1.30	613771.59	616768.80	N 32° 41' 13.42" W 104° 5' 17.35"		
6501.00	1.55	256.33	6544.72	-297.64	202.82	-306.62	0.61	613771.36	616766.00	N 32° 41' 13.42" W 104° 5' 17.38"		
6596.00	1.58	250.34	6638.68	-300.12	202.09	-309.07	0.18	613770.62	616763.55	N 32° 41' 13.41" W 104° 5' 17.41"		
6691.00	4.28	238.12	6733.55	-304.46	199.77	-313.32	2.90	613768.31	616759.30	N 32° 41' 13.39" W 104° 5' 17.46"		
6880.00	5.12	222.90	6828.23	-310.57	194.80	-319.21	1.58	613763.33	616753.41	N 32° 41' 13.34" W 104° 5' 17.53"		
6												

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	7541.00	6.71	68.34	7487.76	-304.93	177.63	-312.83	2.94	613748.17	618759.78	N 32 41 13.17 W 104 5 17.45	5 17.45
	7636.00	8.69	60.29	7581.90	-293.31	183.24	-301.44	2.37	613751.77	616771.18	N 32 41 13.23 W 104 5 17.32	5 17.32
	7730.00	11.64	55.04	7674.42	-279.00	192.20	-287.50	3.29	613760.73	616785.12	N 32 41 13.32 W 104 5 17.16	5 17.16
	7825.00	13.34	44.81	7767.18	-262.89	205.49	-271.94	2.97	613774.02	616800.67	N 32 41 13.45 W 104 5 16.97	5 16.97
	7920.00	14.52	27.46	7859.42	-248.92	223.87	-258.75	4.50	613792.40	616813.86	N 32 41 13.63 W 104 5 16.82	5 16.82
	8014.00	15.26	14.72	7950.29	-233.38	246.30	-250.17	3.56	613814.83	616822.44	N 32 41 13.85 W 104 5 16.72	5 16.72
	8109.00	16.48	5.60	8041.68	-233.80	271.80	-245.68	2.92	613840.33	616826.93	N 32 41 14.10 W 104 5 16.68	5 16.68
	8203.00	16.69	6.93	8131.77	-229.73	288.47	-242.75	0.46	613887.00	616829.88	N 32 41 14.37 W 104 5 16.63	5 16.63
	8309.00	16.91	7.02	8233.25	-224.71	328.88	-239.03	0.21	613897.40	616833.58	N 32 41 14.67 W 104 5 16.58	5 16.58
	8404.00	17.56	29.80	8324.08	-214.77	355.06	-230.21	7.09	613923.58	616842.40	N 32 41 14.93 W 104 5 16.48	5 16.48
	8498.00	22.73	57.70	8412.50	-191.39	377.14	-207.74	11.46	613945.65	616864.87	N 32 41 15.14 W 104 5 16.22	5 16.22
	8592.00	27.20	74.99	8497.81	-154.60	392.43	-171.57	9.06	613960.85	616901.03	N 32 41 15.29 W 104 5 15.79	5 15.79
	8687.00	36.87	76.73	8578.25	-105.29	404.63	-122.75	10.22	613973.14	616949.85	N 32 41 15.41 W 104 5 15.22	5 15.22
	8781.00	46.41	75.35	8648.42	-44.18	418.74	-62.22	10.20	613988.26	617010.37	N 32 41 15.56 W 104 5 14.51	5 14.51
	8876.00	54.81	76.41	8708.66	27.67	437.60	8.92	8.88	614006.11	617081.51	N 32 41 15.74 W 104 5 13.68	5 13.68
	8970.00	60.25	84.96	8759.17	106.29	450.24	87.07	9.60	614018.75	617159.65	N 32 41 15.86 W 104 5 12.77	5 12.77
	9065.00	67.19	90.36	8801.23	191.37	453.59	172.09	8.90	614022.10	617244.66	N 32 41 15.89 W 104 5 11.77	5 11.77
	9159.00	81.08	91.20	8826.86	281.42	452.34	262.27	14.80	614020.85	617334.84	N 32 41 15.88 W 104 5 10.72	5 10.72
	9254.00	90.02	90.58	8834.23	375.88	450.87	356.88	9.43	614019.38	617429.44	N 32 41 15.88 W 104 5 9.81	5 9.81
	9333.00	90.46	90.26	8833.90	454.78	450.29	435.88	0.69	614018.80	617508.43	N 32 41 15.85 W 104 5 8.86	5 8.86
	9428.00	90.46	90.34	8833.13	549.66	449.80	530.87	0.08	614018.31	617603.42	N 32 41 15.85 W 104 5 7.57	5 7.57
	9522.00	90.41	90.24	8832.42	643.55	449.32	624.87	0.12	614017.83	617697.40	N 32 41 15.84 W 104 5 6.47	5 6.47
	9617.00	90.35	90.54	8831.79	738.43	448.67	719.86	0.32	614017.18	617792.39	N 32 41 15.83 W 104 5 5.36	5 5.36
	9711.00	90.48	90.22	8831.13	832.32	448.05	813.88	0.36	614016.56	617886.38	N 32 41 15.82 W 104 5 4.26	5 4.26
	9806.00	90.46	90.30	8830.36	927.21	447.62	908.86	0.08	614016.13	617981.37	N 32 41 15.82 W 104 5 3.15	5 3.15
	9900.00	90.46	90.09	8829.81	1021.10	447.30	1002.85	0.22	614015.81	618075.36	N 32 41 15.81 W 104 5 2.05	5 2.05
	9995.00	90.41	90.32	8828.89	1116.00	446.96	1097.85	0.25	614015.47	618170.34	N 32 41 15.80 W 104 5 0.94	5 0.94
	10090.00	89.96	90.36	8828.58	1210.88	446.40	1192.85	0.48	614014.91	618265.33	N 32 41 15.80 W 104 5 5.83	5 5.83
	10184.00	89.07	90.28	8828.56	1304.77	445.87	1286.84	0.14	614014.38	618359.32	N 32 41 15.79 W 104 5 4.73	5 4.73
	10279.00	89.57	90.17	8828.85	1399.68	445.67	1381.84	0.62	614014.18	618454.31	N 32 41 15.79 W 104 5 3.62	5 3.62
	10373.00	89.34	90.17	8829.75	1493.58	445.57	1475.84	0.33	614014.08	618548.30	N 32 41 15.78 W 104 5 2.52	5 2.52
	10467.00	88.84	90.41	8831.24	1587.46	445.09	1569.83	0.59	614013.60	618642.28	N 32 41 15.78 W 104 5 1.42	5 1.42
	10562.00	88.78	90.15	8833.21	1682.33	444.63	1664.80	0.28	614013.14	618737.25	N 32 41 15.77 W 104 5 0.31	5 0.31
	10656.00	88.90	90.29	8835.12	1776.21	444.26	1758.78	0.20	614012.78	618831.22	N 32 41 15.76 W 104 5 53.21	5 53.21
	10751.00	88.90	90.47	8836.94	1871.08	443.63	1853.76	0.19	614012.15	618926.19	N 32 41 15.75 W 104 5 42.09	5 42.09
	10845.00	88.78	90.57	8838.84	1964.93	442.78	1947.74	0.17	614011.29	619020.16	N 32 41 15.74 W 104 5 31.00	5 31.00
	10940.00	88.84	90.56	8840.82	2059.78	441.84	2042.72	0.06	614010.36	619115.13	N 32 41 15.73 W 104 5 49.88	5 49.88
	11032.00	88.95	90.05	8842.59	2151.65	441.36	2134.70	0.57	614009.87	619207.10	N 32 41 15.73 W 104 5 48.81	5 48.81
	11124.00	88.84	90.17	8844.37	2243.54	441.18	2226.68	0.18	614009.69	619299.08	N 32 41 15.72 W 104 5 47.73	5 47.73
	11215.00	88.73	88.47	8846.30	2334.48	442.26	2317.65	1.87	614010.77	619390.04	N 32 41 15.73 W 104 5 46.67	5 46.67
	11307.00	88.90	87.92	8848.20	2426.45	445.16	2409.58	0.63	614013.67	619481.97	N 32 41 15.76 W 104 5 45.59	5 45.59
	11398.00	88.95	88.01	8849.91	2517.43	448.39	2500.51	0.11	614016.90	619572.88	N 32 41 15.79 W 104 5 44.53	5 44.53
	11489.00	88.00	88.01	8852.33	2608.40	451.55	2591.42	1.04	614020.06	619663.79	N 32 41 15.82 W 104 5 43.46	5 43.46
	11581.00	88.56	88.16	8855.09	2700.35	454.62	2683.33	0.63	614023.13	619755.69	N 32 41 15.84 W 104 5 42.39	5 42.39
	11673.00	88.39	88.31	8857.54	2792.31	457.45	2775.25	0.25	614025.96	619847.60	N 32 41 15.87 W 104 5 41.31	5 41.31
	11718.00	88.50	88.15	8858.76	2837.29	458.84	2820.22	0.43	614027.35	619882.56	N 32 41 15.88 W 104 5 40.79	5 40.79
	11764.00	89.23	87.99	8859.67	2883.28	460.39	2866.18	1.62	614028.90	619938.52	N 32 41 15.90 W 104 5 40.25	5 40.25
	11811.00	89.12	87.54	8860.35	2930.27	462.22	2913.14	0.99	614030.73	619985.48	N 32 41 15.91 W 104 5 39.70	5 39.70
	11856.00	88.22	88.00	8861.39	2975.26	463.97	2958.09	2.25	614032.48	620030.43	N 32 41 15.93 W 104 5 39.17	5 39.17
	11947.00	88.34	88.31	8864.12	3066.21	466.90	3049.00	0.37	614035.41	620121.33	N 32 41 15.96 W 104 5 38.11	5 38.11
	12039.00	87.72	88.30	8867.28	3158.15	469.62	3140.91	0.67	614038.13	620213.23	N 32 41 15.98 W 104 5 37.03	5 37.03
	12131.00	87.78	89.75	8870.90	3250.05	471.18	3232.82	1.58	614039.69	620305.13	N 32 41 15.99 W 104 5 35.96	5 35.96
	12223.00	87.83	90.38	8874.42	3341.89	471.08	3324.75	0.69	614039.59	620397.06	N 32 41 15.99 W 104 5 34.88	5 34.88
	12317.00	87.89	90.09	8877.93	3435.72	470.70	3418.69	0.31	614039.20	620490.98	N 32 41 15.98 W 104 5 33.78	5 33.78
	12412.00	87.89	90.13	8881.43	3530.56	470.51	3513.62	0.04	614039.02	620585.91	N 32 41 15.98 W 104 5 32.67	5 32.67
	12506.00	88.28	90.30	8884.57	3624.41	470.16	3607.57	0.45	614038.67	620679.85	N 32 41 15.98 W 104 5 31.57	5 31.57
	12601.00	88.39	90.21	8887.33	3719.26	469.74	3702.53	0.15	614038.25	620774.80	N 32 41 15.97 W 104 5 30.46	5 30.46
	12695.00	88.84	90.20	8889.60	3813.13	468.40	3796.50	0.48	614037.91	620868.76	N 32 41 15.96 W 104 5 29.36	5 29.36
	12790.00	88.90	90.38	8891.48	3908.00	468.92	3891.48	0.20	614037.43	620963.73	N 32 41 15.96 W 104 5 28.25	5 28.25
	12885.00	88.84	89.95	8893.35	4002.89	468.65	3986.46	0.46	614037.16	621058.71	N 32 41 15.95 W 104 5 27.14	5 27.14
	12979.00	89.23	90.08	8894.93	4096.78	468.62	4080.45	0.44	614037.13	621152.69	N 32 41 15.95 W 104 5 26.04	5 26.04
	13073.00	89.48	89.90	8896.01	4190.69	468.64	4174.44	0.31	614037.15	621246.67	N 32 41 15.95 W 104 5 24.94	5 24.94
	13168.00	89.40	90.20	8896.95	4285.60	468.56	4269.44	0.32	614037.07	621341.66	N 32 41 15.94 W 104 5 23.83	5 23.83
	13262.00	89.46	90.03	8897.89	4379.50	468.37	4363.43	0.19	614036.88	621435.65	N 32 41 15.94 W 104 5 22.73	5 22.73
	13357.00	89.51	93.59	8898.74	4474.22	465.37	4458.37	3.75	614033.88	621530.57	N 32 41 15.91 W 104 5 21.62	5 21.62
	13451.00	89.51	93.93	8899.54	4567.66	459.20	4552.16	0.36	614027.71	621624.36	N 32 41 15.84 W 104 5 20.52	5 20.52
	13546.00	89.40	91.93	8900.45	4662.23	454.35	4647.03	2.11	614022.86	621719.21	N 32 41 15.79 W 104 5 19.41	5 19.41
	13640.00	89.85	91.46	8901.06	4755.98	451.57	4740.98	0.69	614020.08	621813.16	N 32 41 15.78 W 104 5 18.31	5 18.31
	13734.00	89.48	89.98	8901.63	4849.83	450.39	4834.97	1.63	614018.90	621907.14	N 32 41 15.75 W 104 5 17.21	5 17.21
	13824.00	89.46	89.26	8903.42	4939.70	451.65	4924.96	0.38	614020.16	622001.11	N 32 41 15.76 W 104 5 16.11	5 16.11
	14018.00	89.35	90.21	8904.40	5133.62	452.08	5118.95	1.02	614020.59	622191.10	N 32 41 15.76 W 104 5 15.01	5 15.01
	14208.00	89.62	89.89	8906.10	5323.43	451.92	5308.94	0.22	614020.43	622381.07	N 32 41 15.75 W 104 5 13.91	5 13.91
	14302.00	89.18	89.91	8907.09	5417.35	452.08	5402.94	0.47	614020.59	622475.06	N 32 41 15.75 W 104 5 12.81	5 12.81
	14396.00	88.50	89.94	8908.99	5511.2							

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 ° ' ")
	17328.00	88.92	90.61	8959.75	8439.83	453.47	8428.14	0.59	614021.98	625500.00	N 32 41 15.69 W 104	3 35.17
	17516.00	88.82	91.61	8963.45	8627.42	449.83	8616.06	0.53	614018.34	625687.91	N 32 41 15.65 W 104	3 32.97
	17611.00	88.77	91.22	8965.45	8722.19	447.48	8711.01	0.41	614015.99	625782.85	N 32 41 15.62 W 104	3 31.88
	17705.00	88.66	91.43	8967.56	8815.96	445.31	8804.96	0.25	614013.82	625876.79	N 32 41 15.60 W 104	3 30.76
Final SLB MWD	17895.00	88.82	90.54	8971.74	9005.57	442.04	8994.89	0.48	614010.56	626066.70	N 32 41 15.56 W 104	3 28.54
	18031.00	88.86	86.21	8974.49	9141.49	445.90	9130.77	3.18	614014.41	626202.57	N 32 41 15.60 W 104	3 26.95
	18125.00	88.58	86.05	8976.59	9235.44	452.24	9224.53	0.34	614020.75	626296.33	N 32 41 15.66 W 104	3 25.85
	18219.00	88.64	87.01	8978.87	9329.40	457.93	9318.33	1.02	614026.44	626390.12	N 32 41 15.71 W 104	3 24.76
	18314.00	88.58	87.23	8981.18	9424.37	462.70	9413.18	0.24	614031.21	626484.96	N 32 41 15.76 W 104	3 23.65
	18409.00	88.55	87.34	8983.55	9519.34	467.20	9508.05	0.12	614035.71	626579.82	N 32 41 15.80 W 104	3 22.54
	18504.00	88.52	88.89	8985.98	9614.30	470.32	9602.96	1.63	614038.83	626674.72	N 32 41 15.83 W 104	3 21.43
	18598.00	88.55	89.14	8988.39	9708.24	471.94	9696.92	0.27	614040.45	626768.67	N 32 41 15.84 W 104	3 20.33
	18788.00	89.20	90.43	8992.12	9898.05	472.65	9886.88	0.76	614041.16	626958.61	N 32 41 15.84 W 104	3 18.10
	18882.00	90.10	92.24	8992.69	9991.84	470.46	9980.84	2.15	614038.97	627052.57	N 32 41 15.82 W 104	3 17.00
Final MWD	18978.00	89.28	90.69	8993.21	10087.61	468.01	10076.81	1.83	614036.52	627148.53	N 32 41 15.79 W 104	3 15.88
Survey Proj. to Bit	19061.00	89.28	90.69	8994.25	10170.47	467.01	10159.79	0.00	614035.52	627231.51	N 32 41 15.78 W 104	3 14.91

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	1/88.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Turkey Track 4-3 State 33H Gyro+MWD 0-19,061' MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Turkey Track 4-3 State 33H Gyro+MWD 0-19,061' MD
	1	26.500	273.900	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Turkey Track 4-3 State 33H Gyro+MWD
	1	273.900	19061.000	Act Stns	30.000	30.000	NAL_MWD_IFR1	Original Borehole / Oxy Turkey Track 4-3 State 33H Gyro+MWD

...Original Borehole\Oxy Turkey Track 4-3 State 33H Gyro+MWD 0-19,061' MD

Schlumberger

OXY



Borehole: Original Borehole Well: Oxy Turkey Track 4-3 State 33H Field: NM Eddy County (NAD 83) Structure: Oxy Turkey Track 4-3 State 33H

Gravity & Magnetic Parameters

Model: MD08 2018 Dip: 60.48° Date: 14-Jun-2018
MagDec: 7.39° FB: 43087.700mT Gravity FB: 988.81cm/s (3.80895 Based)

Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet

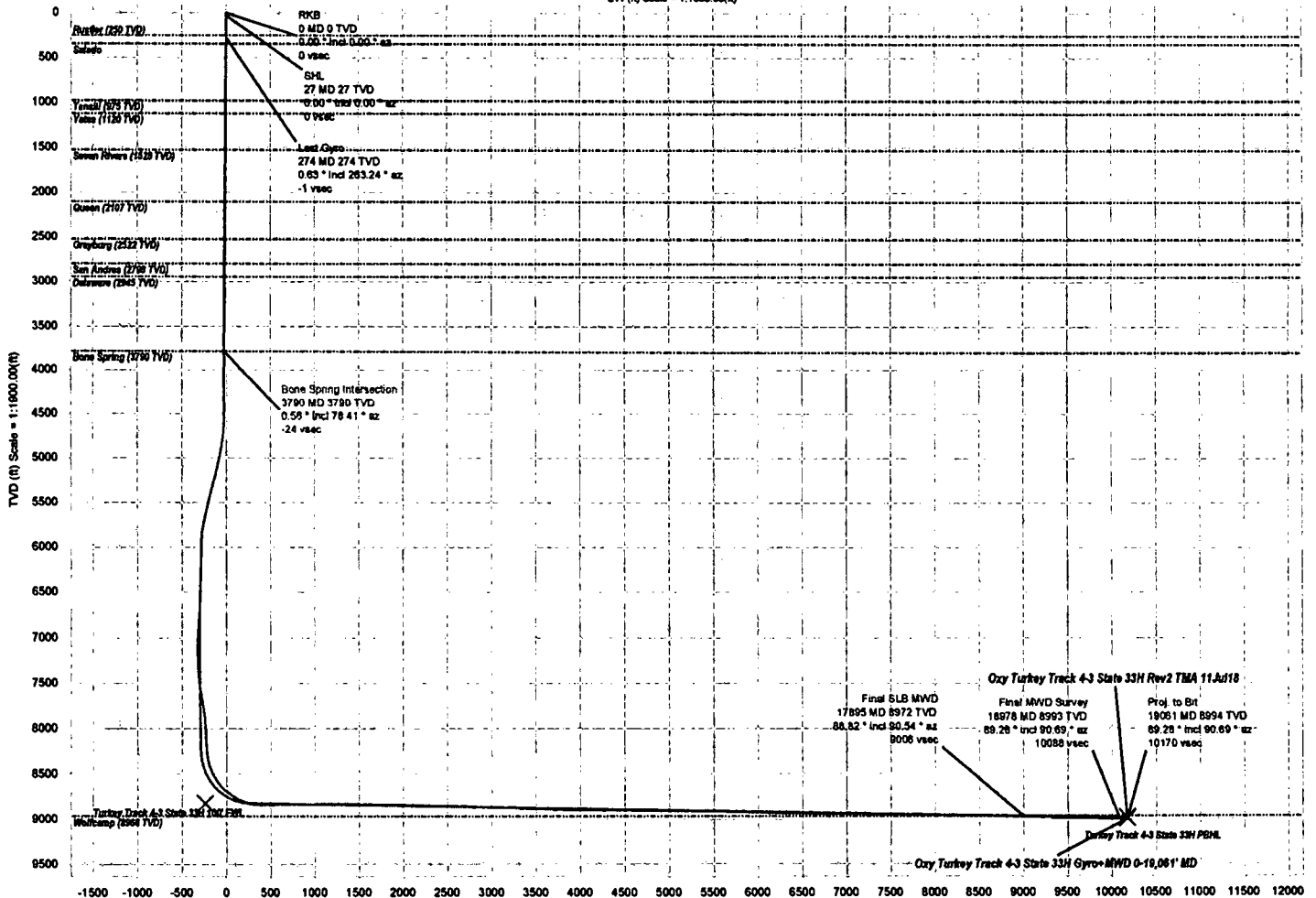
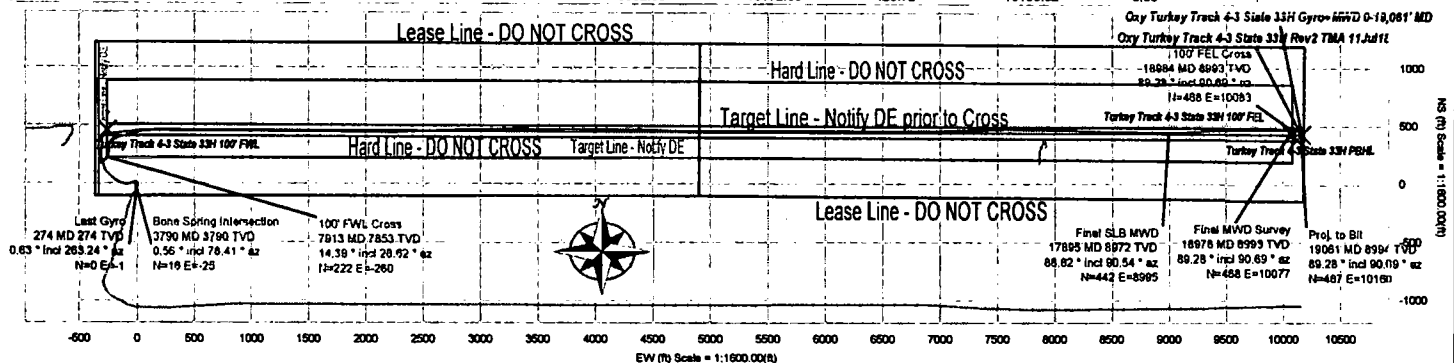
Lat: N 32 41 11.41 Northing: 813983.85MUS Grid Conv: 0.122°
Lon: W 104 8 13.80 Easting: 817073.60MUS Scale Fact: 0.99991088

Miscellaneous

Shot: Oxy Turkey Track 4-3 State 33H TVO Ref: RVD=26.5' (3432.80 above MSL)
Plan: Oxy Turkey Track 4-3 State 33H Rev2 TMA 11.Jul18

Critical Point		Critical Points		Critical Points		Critical Points		Critical Points		Critical Points		Critical Points	
MD	INCL	AZIM	TVD	VSEC	N(+)S(-)	E(+)W(-)	DLS	MD	INCL	AZIM	TVD	VSEC	N(+)S(-)
Rustler	250.00	0.51	243.14	250.00	-0.43	-0.08	0.97						
Salado	345.01	0.59	270.92	345.00	-1.42	-0.19	0.13						
Tansil	975.03	0.50	341.16	975.00	-5.01	2.86	0.28						
Yates	1120.04	0.89	325.35	1120.00	-5.73	4.43	0.32						
Seven Rivers	1528.10	0.54	302.44	1528.00	-9.83	9.38	0.11						
Queen	2107.13	0.29	318.49	2107.00	-14.20	11.76	0.15						
Grayburg	2522.14	0.40	293.38	2522.00	-16.50	13.33	0.22						
San Andres	2768.15	0.40	255.73	2768.00	-18.63	13.26	0.08						
Delaware	2945.15	0.42	218.72	2945.00	-19.40	12.70	0.15						
Bone Spring	3790.20	0.55	83.27	3790.00	-24.08	16.17	2.08						
Tie-In	6598.00	1.51	256.89	6544.79	-297.82	201.94							
PTB, Build & Turn 2"/100'	6730.00	1.51	256.89	6678.75	-301.09	201.13	0.00						
Hold Tangent	7143.62	7.73	2.89	7091.13	-303.95	227.74	2.00						
Turn 2"/100'	8235.75	7.73	2.89	8173.33	-290.78	374.54	0.00						
Build/Turn 10"/100'	8338.47	7.73	18.00	8275.12	-287.75	388.02	2.00						
Landing Point	9205.55	89.06	90.16	8820.00	278.00	455.74	10.00						
Wolfcamp	18131.80	89.06	90.16	8968.00	9193.99	431.48	0.00						
Turkey Track 4-3 State 33H PBHL	19111.23	89.06	90.16	8982.00	10172.06	428.72	0.00						

Grid North
Tot Corr (M>G 7.263")
Mag Dec (7.396")
Grid Conv (0.133")



Vertical Section (R) Azim = 87.54° Scale = 1:1900.00(R) Origin = 0N-S, 0E-W