

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

July 6, 2019

OXY USA WTP Limited Partnership
5 Greenway Plaza, Suite 110
Houston, Texas 77046-0521

Re:

9, 19S, 29E, Eddy NM
N 32.67206 W 104.08654

CLIENT: OXY USA WTP Limited Partnership
WELL: Turkey Track 8-7 State 33H
FIELD: Bone Spring

RIG: Pioneer 82
COUNTY: Eddy
API NO: 30-015-44159
JOB NO: 19MLH0210

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>
Cody Jacks FE	Turkey Track 8-7 State 33H Original Hole	8832.00 Ft to 19118.00 Ft	June 8, 2019 to June 16, 2019	TelePacer/SlimPulse Third Party Corrected

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

Andrew Salomon
Field Service Manager

Schlumberger-Private

Schlumberger Drilling and Measurements
Drilling Group
Geo-Market Area: South West Texas Basin
7220 W.I-H 20
Midland, Texas 79706
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Schlumberger

Well Reference:

9, 19S, 29E, Eddy NM
N 32.67206 W 104.08654

I, Cody Jacks certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of June 08, 2019 through June 16, 2019, conduct or supervise the taking of the TelePacer/SlimPulse & Third Party Corrected surveys from a depth of 8832.00 feet to a depth of 19118.00 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 WIP Limited Partnership for the Turkey Track 8-7 State 33H Well (Original Hole) API No. 30-015-44159 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
Cody Jacks

FE

Cody Jacks

Subscribed and Sworn to before me this 1 day of August (month) 2019 (yr)

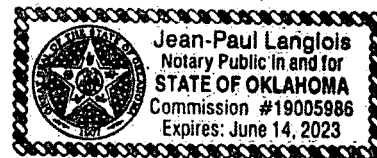
My Commission expires:

6/14/2023

Notary Public

Jean-Paul Langlois
Comanche Oklahoma
(County State)

(signature)

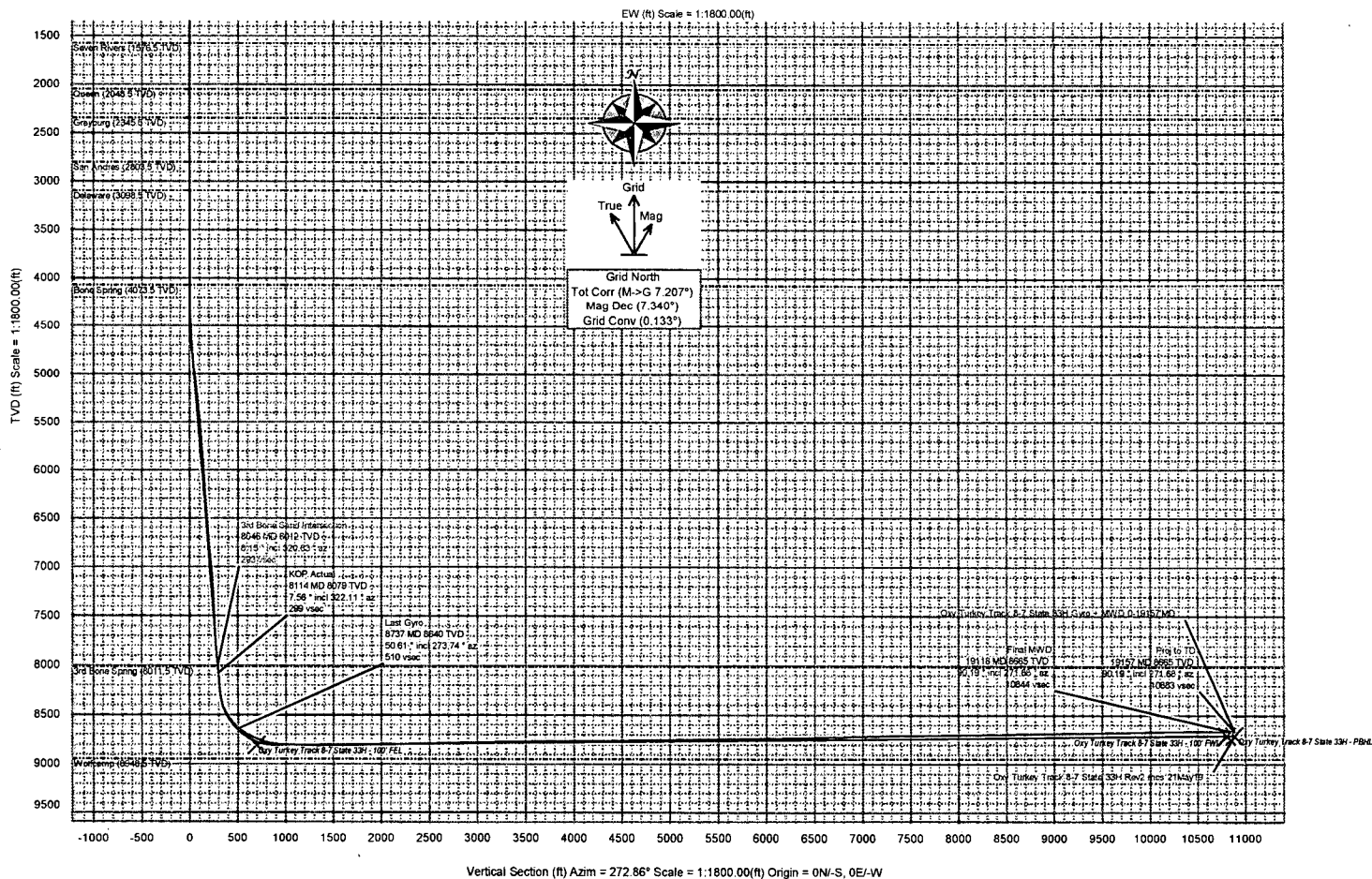
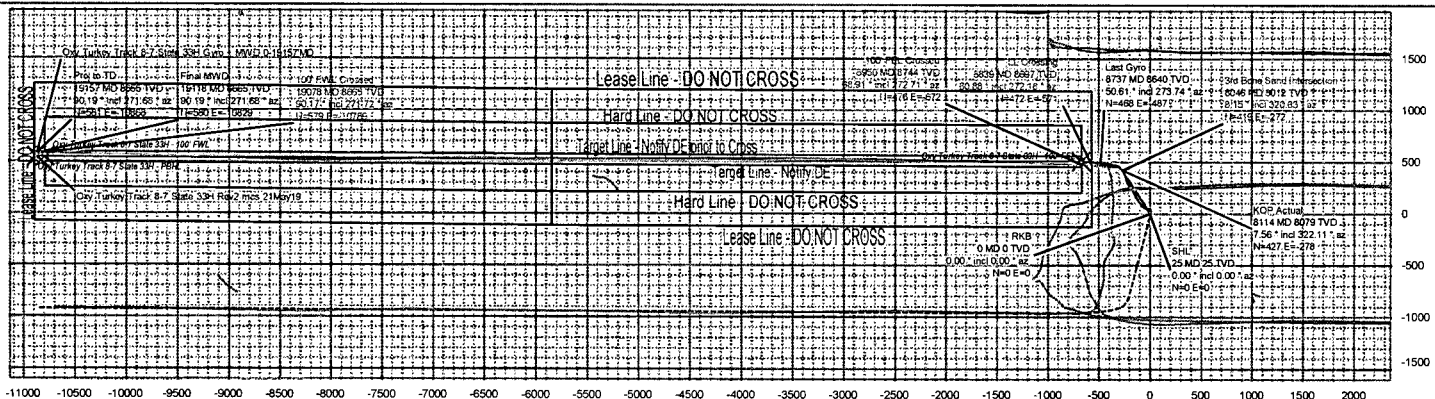


Schlumberger

Oxy



Borehole:			Well:		Field:		Structure:								
Original Borehole			Oxy Turkey Track 8-7 State 33H		NM Eddy County (NAD 83)		Oxy Turkey Track 8-7 State 33H								
Gravity & Magnetic Parameters				Surface Location			Miscellaneous								
Model:	IFR1	Dip:	60.615°	Date:	23-May-2019	Lat:	N 32 40 19.40	Northing:	608313.33RUS	Grid Conv:	0.1332°	Slot:	New Slot	TVD Ref:	RKB=25'(3407.9ft above MSL)
MagDec:	7.34°	FS:	48034.5nT	Gravity FS:	998.513mgn (9.80665 Based)	Lon:	W 104 5 11.53	Easting:	617278.48RUS	Scale Fact:	0.9999157	Plan:	Oxy Turkey Track 8-7 State 33H Gyro + MWD 6-19167MD		
Critical Points															
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS							
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
SHL	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00							
3rd Bone Sand Intersection	8045.97	8.15	320.63	8011.50	292.56	419.41	-271.95	0.92							
KOP Actual	8114.00	7.56	322.11	8078.89	298.72	426.67	-277.75	0.92							
Last Gyro	8737.00	50.61	273.74	8640.23	509.68	467.60	-486.93	11.23							
LL Crossing	8839.00	60.88	272.18	8697.46	593.94	471.78	-571.08	8.06							
100' FEL Crossed	8950.00	68.91	272.71	8743.87	694.65	476.00	-671.71	4.17							
100' FWL Crossed	19078.00	90.17	271.72	8665.44	10804.49	578.94	-10789.04	0.11							
Final Survey	19118.00	90.19	271.68	8665.32	10844.48	580.12	-10829.02	0.11							
Proj. to TD	19157.00	90.19	271.68	8665.19	10883.47	581.26	-10868.00	0.00							



Vertical Section (ft) Azim = 272.86° Scale = 1:1800.00(ft) Origin = 0N/-S, 0E/-W

Oxy Turkey Track 8-7 State 33H Gyro + MWD 0-19157'MD Survey Geodetic Report

(Def Survey)



Report Date: June 19, 2019 - 11:48 AM
 Client: Oxy
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Turkey Track 8-7 State 33H / New Slot
 Well: Oxy Turkey Track 8-7 State 33H
 Borehole: Original Borehole
 UWI / API#: Unknown / 30-015-44159
 Survey Name: Oxy Turkey Track 8-7 State 33H Gyro + MWD 0-19157'MD
 Survey Date: May 21, 2019
 Tort / AHD / DDI / ERD Ratio: 167.380' / 11149.162 ft / 6.608' / 1.265
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 40' 19.40140", W 104° 5' 11.53021"
 Location Grid N/E Y/X: N 608313.330 RUS, E 617278.490 RUS
 CRS Grid Convergence Angle: 0.1332°
 Grid Scale Factor: 0.9999157
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 272.863° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=25'
 TVD Reference Elevation: 3407.900 ft above MSL
 Seabed / Ground Elevation: 3382.900 ft above MSL
 Magnetic Declination: 7.340°
 Total Gravity Field Strength: 998.5131mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48034.500 nT
 Magnetic Dip Angle: 60.515°
 Declination Date: May 23, 2019
 Magnetic Declination Model: IFR1
 North Reference: Grid North
 Grid Convergence Used: 0.1332°
 Total Corr Mag North→Grid North: 7.2068°
 Local Coord Referenced To: Well Head

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 ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	608313.33	617278.49	N 32 40 19.40 W 104	5 11 53
SHL	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	608313.33	617278.49	N 32 40 19.40 W 104	5 11 53
	83.40	0.31	22.88	83.40	-0.05	0.15	0.06	0.53	608313.48	617278.55	N 32 40 19.40 W 104	5 11 53
	175.10	0.18	27.22	175.10	-0.20	0.50	0.22	0.14	608313.83	617278.71	N 32 40 19.41 W 104	5 11 53
	265.40	0.28	341.04	265.40	-0.17	0.84	0.22	0.22	608314.17	617278.71	N 32 40 19.41 W 104	5 11 53
	357.90	0.45	338.44	357.90	0.06	1.39	0.01	0.18	608314.72	617278.50	N 32 40 19.42 W 104	5 11 53
	448.90	0.45	335.24	448.89	0.37	2.05	-0.27	0.03	608315.38	617278.22	N 32 40 19.42 W 104	5 11 53
	541.80	0.55	340.01	541.79	0.72	2.80	-0.58	0.12	608316.13	617277.91	N 32 40 19.43 W 104	5 11 54
	633.80	0.48	5.97	633.79	0.87	3.59	-0.69	0.26	608316.92	617277.80	N 32 40 19.44 W 104	5 11 54
	725.30	0.50	29.45	725.28	0.67	4.32	-0.45	0.22	608317.65	617278.04	N 32 40 19.44 W 104	5 11 54
	816.80	0.68	35.00	816.78	0.20	5.12	0.06	0.21	608318.44	617278.55	N 32 40 19.45 W 104	5 11 53
	907.90	0.81	43.33	907.87	-0.51	6.03	0.81	0.19	608319.36	617279.30	N 32 40 19.46 W 104	5 11 52
	1001.00	0.81	44.33	1000.96	-1.37	6.98	1.72	0.02	608320.31	617280.21	N 32 40 19.47 W 104	5 11 51
	1090.40	0.80	43.73	1090.35	-2.20	7.88	2.59	0.01	608321.21	617281.08	N 32 40 19.48 W 104	5 11 50
	1181.40	0.81	37.44	1181.34	-2.98	8.85	3.42	0.10	608322.18	617281.91	N 32 40 19.49 W 104	5 11 49
	1273.60	0.80	30.44	1273.53	-3.64	9.92	4.15	0.11	608323.25	617282.64	N 32 40 19.50 W 104	5 11 48
	1365.60	0.73	23.43	1365.53	-4.15	11.01	4.70	0.13	608324.34	617283.19	N 32 40 19.51 W 104	5 11 47
	1460.80	0.73	12.66	1460.72	-4.46	12.16	5.08	0.14	608325.49	617283.57	N 32 40 19.52 W 104	5 11 47
	1556.10	0.84	10.49	1556.01	-4.66	13.44	5.34	0.12	608326.77	617283.83	N 32 40 19.53 W 104	5 11 47
	1651.40	0.89	8.08	1651.30	-4.82	14.86	5.57	0.06	608328.19	617284.06	N 32 40 19.55 W 104	5 11 46
	1746.90	1.00	9.58	1746.79	-4.99	16.42	5.81	0.12	608329.74	617284.30	N 32 40 19.56 W 104	5 11 46
	1842.30	0.92	5.29	1842.17	-5.11	18.00	6.02	0.11	608331.33	617284.51	N 32 40 19.58 W 104	5 11 46
	1937.60	0.88	0.11	1937.46	-5.11	19.49	6.09	0.10	608332.82	617284.58	N 32 40 19.59 W 104	5 11 46
	2032.80	0.88	355.73	2032.65	-4.99	20.95	6.04	0.07	608334.28	617284.53	N 32 40 19.61 W 104	5 11 46
	2128.10	0.83	351.58	2127.94	-4.76	22.37	5.89	0.08	608335.69	617284.37	N 32 40 19.62 W 104	5 11 46
	2223.60	0.89	351.31	2223.43	-4.48	23.78	5.67	0.06	608337.11	617284.16	N 32 40 19.64 W 104	5 11 46
	2318.90	0.85	344.47	2318.72	-4.11	25.20	5.37	0.12	608338.52	617283.86	N 32 40 19.65 W 104	5 11 47
	2413.20	0.93	345.72	2413.01	-3.66	26.61	4.99	0.09	608339.94	617283.48	N 32 40 19.66 W 104	5 11 47
	2508.50	0.95	343.68	2508.29	-3.17	28.12	4.58	0.04	608341.45	617283.07	N 32 40 19.68 W 104	5 11 48
	2603.80	0.96	342.81	2603.58	-2.64	29.64	4.12	0.02	608342.97	617282.61	N 32 40 19.69 W 104	5 11 48
	2698.60	0.99	342.87	2698.37	-2.09	31.18	3.65	0.03	608344.51	617282.14	N 32 40 19.71 W 104	5 11 49
	2793.80	1.02	341.93	2793.55	-1.50	32.77	3.14	0.04	608346.10	617281.63	N 32 40 19.73 W 104	5 11 49
	2888.60	0.99	341.79	2888.34	-0.91	34.35	2.63	0.03	608347.68	617281.11	N 32 40 19.74 W 104	5 11 50
	2983.50	1.04	345.09	2983.22	-0.35	35.96	2.15	0.08	608349.29	617280.64	N 32 40 19.76 W 104	5 11 50
	3078.70	1.05	343.48	3078.41	0.21	37.63	1.68	0.03	608350.96	617280.17	N 32 40 19.77 W 104	5 11 51
	3173.50	1.20	340.78	3173.19	0.87	39.40	1.10	0.17	608352.73	617279.59	N 32 40 19.79 W 104	5 11 52
	3269.00	0.53	332.27	3268.68	1.47	40.74	0.57	0.71	608354.07	617279.06	N 32 40 19.80 W 104	5 11 52
	3364.30	0.11	137.44	3363.98	1.63	41.08	0.43	0.67	608354.39	617278.92	N 32 40 19.81 W 104	5 11 52
	3459.70	0.09	139.71	3459.37	1.51	40.94	0.54	0.02	608354.26	617279.03	N 32 40 19.81 W 104	5 11 52
	3555.00	0.07	144.96	3554.67	1.42	40.83	0.62	0.02	608354.16	617279.11	N 32 40 19.81 W 104	5 11 52
	3649.90	0.08	122.76	3649.57	1.33	40.75	0.71	0.03	608354.08	617279.20	N 32 40 19.80 W 104	5 11 52
	3744.20	0.10	136.95	3743.87	1.21	40.65	0.82	0.03	608353.98	617279.31	N 32 40 19.80 W 104	5 11 52
	3838.80	0.09	118.82	3838.47	1.09	40.56	0.94	0.03	608353.88	617279.43	N 32 40 19.80 W 104	5 11 52
	3933.90	0.09	130.20	3933.57	0.96	40.47	1.06	0.02	608353.80	617279.55	N 32 40 19.80 W 104	5 11 52
	4029.20	0.09	124.27	4028.87	0.84	40.38	1.18	0.01	608353.71	617279.67	N 32 40 19.80 W 104	5 11 52
	4124.40	0.12	128.79	4124.07	0.69	40.28	1.32	0.03	608353.61	617279.81	N 32 40 19.80 W 104	5 11 51
	4219.60	0.75	15.87	4219.27	0.47	40.82	1.57	0.84	608354.14	617280.06	N 32 40 19.81 W 104	5 11 51
	4314.80	1.50	0.28	4314.45	0.39	42.66	1.75	0.84	608355.99	617280.23	N 32 40 19.82 W 104	5 11 51
	4410.10	1.20	327.22	4409.73	1.03	44.75	1.21	0.86	608358.07	617279.70	N 32 40 19.84 W 104	5 11 51
	4504.30	1.58	284.27	4503.90	2.87	45.90	-0.58	1.14	608359.22	617277.91	N 32 40 19.86 W 104	5 11 54
	4599.60	3.45	276.02	4599.11	7.03	46.52	-4.71	1.99	608359.85	617273.78	N 32 40 19.86 W 104	5 11 58
	4694.80	5.32	274.68	4694.02	14.30	47.18	-11.96	1.97	608360.51	617266.54	N 32 40 19.87 W 104	5 11 67
	4789.90	6.30	277.88	4788.63	23.90	48.26	-21.52	1.08	608361.58	617256.97	N 32 40 19.88 W 104	5 11 78
	4885.10	7.09	283.55	4883.19	34.88	50.35	-32.40	1.08	608363.68	617246.09	N 32 40 19.90 W 104	5 11 91
	4980.00	7.52	288.85	4977.32	46.60	53.73	-43.97	0.84	608367.05	617234.52	N 32 40 19.93 W 104	5 12 04
	5074.20	8.00	296.20	5070.66	58.55	58.61	-55.69	1.17	608371.94	617222.80	N 32 40 19.98 W 104	5 12 18
	5168.20	8.06	305.81	5163.74	70.09	65.36	-66.90	1.43	608378.68	617211.59	N 32 40 20.05 W 104	5 12 31
	5263.30	7.92	313.51	5257.92	80.65	73.77	-77.06	1.13	608387.09	617201.43	N 32 40 20.13 W 104	5 12 43
	5358.00	8.07	320.65	5351.70	90.07	83.40	-86.01	1.06	608396.73	617192.49	N 32 40 20.23 W 104	5 12 53
	5453.20	7.97	328.66	5445.97	98.80	93.83	-94.23	0.34	608407.15	617184.27	N 32 40 20.33 W 104	5 12 63
	5548.40	7.99	324.80	5540.25	107.12	104.50	-102.03	0.28	608417.82	617176.47	N 32 40 20.44 W 104	5 12 72
	5642.60	7.97	327.47	5633.53	114.94	115.35	-109.32	0.39	608428.68	617169.18	N 32 40 20.55 W 104	5 12 81
	5736.80	8.08	328.14	5726.81	122.50	126.48	-116.32	0.15	608438.80	617162.18	N 32 40 20.66 W 104	5 12 89
	5829.90	7.88	325.62	5819.01	130.08	137.31	-123.38	0.43	608450.63	617155.12	N 32 40 20.76 W 104	5 12 97
	5924.80	7.62	329.89	5913.04	137.45	148.12	-130.21	0.67	608461.44	617148.29	N 32 40 20.87 W 104	5 13 05
	6019.30	7.94	332.79	6006.68	144.13	159.34	-136.34	0.54	608472.66	617142.17	N 32 40 20.98 W 104	5 13 12
	6113.80	7.56	334.91	6100.31	150.31	170.78	-141.96	0.50	608484.09	617136.55	N 32 40 21.09 W 104	5 13 19
	6208.80	7.30	333.15	6194.51	156.23	181.82	-147.33	0.36	608495.14	617131.17	N 32 40 21.20 W 104	5 13 25
	6303.90	7.29	332.15	6288.84	162.31	192.55	-152.88	0.13	608505.86	617125.62	N 32 40 21.31 W 104	5 13 31
	6398.60	7.88	330.08	6382.72	168.89	203.49	-158.93	0.69	608516.80	617119.58	N 32 40 21.42 W 104	5 13 38
	6493.80	7.89	331.00	6477.02	175.88	214.86	-165.35	0.13	608528.17	617113.16	N 32 40 21.53 W 104	5 13 46
	6589.00	7.49	328.62	6571.36	182.82	225.87	-171.75	0.54	608539.18	617106.76	N 32 40 21.64 W 104	5 13 53
	6683.90	8.35	325.15	6665.35	190.51	236.81	-178.91	1.04	608550.12	617099.60	N 32 40 21.75 W 104	5 13 62
	6779.00	8.15	322.03	6759.47	199.14	247.79	-187.00	0.52	608561.10	617091.51	N 32 40 21.86 W 104	5 13 71
	6874.50	9.06	322									

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 ° ' '')
	7351.50	8.94	344.90	7325.29	246.61	322.24	-230.80		608635.54	617047.71	N 32 40 22.60 W 104	5 14.22
	7447.00	8.90	345.99	7419.64	251.05	336.57	-234.53	0.18	608649.87	617043.98	N 32 40 22.74 W 104	5 14.26
	7542.50	8.65	344.67	7514.02	255.43	350.66	-238.21	0.34	608663.96	617040.30	N 32 40 22.88 W 104	5 14.31
	7637.90	9.23	342.93	7608.26	260.28	364.89	-242.36	0.67	608678.19	617036.16	N 32 40 23.02 W 104	5 14.36
	7733.40	8.87	339.10	7702.57	265.86	379.09	-247.23	0.73	608692.39	617031.28	N 32 40 23.16 W 104	5 14.41
	7828.80	9.23	332.48	7796.79	272.69	392.75	-253.39	1.15	608706.05	617025.12	N 32 40 23.29 W 104	5 14.48
	7924.10	8.55	325.02	7890.94	280.91	405.33	-260.98	1.40	608718.63	617017.53	N 32 40 23.42 W 104	5 14.57
	8018.70	8.39	320.09	7984.51	289.91	416.39	-269.44	0.79	608729.68	617009.07	N 32 40 23.53 W 104	5 14.67
3rd Bone Sand Intersection KOP Actual	8045.97	8.15	320.63	8011.50	292.56	419.41	-271.95	0.92	608732.71	617006.57	N 32 40 23.56 W 104	5 14.70
	8114.00	7.56	322.11	8078.89	298.72	426.67	-277.75	0.92	608739.96	617000.76	N 32 40 23.63 W 104	5 14.77
	8209.40	8.63	320.59	8173.34	307.63	437.15	-286.15	1.14	608750.45	616992.36	N 32 40 23.73 W 104	5 14.87
	8303.80	7.08	315.31	8266.85	316.68	446.75	-294.73	1.83	608760.04	616983.79	N 32 40 23.83 W 104	5 14.97
	8399.00	12.26	284.86	8360.73	330.90	453.51	-308.63	7.48	608766.80	616969.89	N 32 40 23.90 W 104	5 15.13
	8494.30	24.76	273.13	8450.95	360.88	457.21	-338.47	13.62	608770.50	616940.05	N 32 40 23.93 W 104	5 15.48
	8589.40	36.32	273.51	8532.72	409.12	460.03	-386.62	12.16	608773.32	616891.90	N 32 40 23.96 W 104	5 16.04
	8684.80	44.82	274.97	8605.12	471.09	464.68	-448.44	8.96	608777.97	616830.09	N 32 40 24.01 W 104	5 16.76
Last Gyro	8737.00	50.61	273.74	8640.23	509.68	467.60	-486.93	11.23	608780.89	616791.61	N 32 40 24.04 W 104	5 17.21
	8832.00	60.32	272.15	8694.02	587.84	471.55	-564.99	10.31	608784.84	616713.55	N 32 40 24.08 W 104	5 18.13
LL Crossing	8839.00	60.88	272.18	8697.46	593.94	471.78	-571.08	8.06	608785.07	616707.46	N 32 40 24.08 W 104	5 18.20
	8927.00	67.97	272.51	8735.42	673.26	475.03	-650.34	8.06	608788.32	616628.20	N 32 40 24.12 W 104	5 19.13
100' FEL Crossed	8950.00	68.91	272.71	8743.87	694.65	476.00	-671.71	4.17	608789.29	616606.84	N 32 40 24.13 W 104	5 19.38
	9023.00	71.90	273.32	8768.35	763.42	479.62	-740.38	4.17	608792.91	616538.17	N 32 40 24.16 W 104	5 20.18
	9118.00	81.35	271.77	8790.30	855.73	483.70	-832.61	10.07	608796.99	616445.96	N 32 40 24.21 W 104	5 21.26
	9188.00	87.19	271.62	8797.29	925.34	485.76	-902.20	8.35	608799.05	616376.37	N 32 40 24.23 W 104	5 22.07
	9270.00	88.39	271.52	8800.45	1007.25	488.00	-984.10	1.47	608801.29	616294.47	N 32 40 24.25 W 104	5 22.03
	9363.00	87.72	270.88	8803.61	1100.16	489.85	-1077.03	1.00	608803.24	616201.56	N 32 40 24.27 W 104	5 22.12
	9455.00	87.72	270.48	8807.27	1192.02	491.04	-1168.95	0.43	608804.33	616109.64	N 32 40 24.29 W 104	5 25.19
	9537.00	89.68	271.41	8811.39	1373.86	494.04	-1350.87	1.19	608807.33	615927.74	N 32 40 24.32 W 104	5 27.32
	9637.00	90.91	271.18	8810.93	1462.82	496.07	-1440.84	1.39	608809.36	615837.78	N 32 40 24.34 W 104	5 28.37
	9727.00	90.69	271.17	8809.66	1554.77	497.84	-1531.81	0.24	608811.23	615746.81	N 32 40 24.36 W 104	5 29.44
	9818.00	91.25	271.60	8808.12	1645.73	500.14	-1622.77	0.78	608813.43	615655.86	N 32 40 24.39 W 104	5 30.50
	10094.00	91.19	271.50	8804.18	1830.64	505.14	-1807.66	0.06	608818.43	615470.98	N 32 40 24.44 W 104	5 32.66
	10185.00	91.42	271.44	8802.11	1921.59	507.48	-1898.61	0.26	608820.76	615380.05	N 32 40 24.47 W 104	5 33.73
	10277.00	91.31	271.40	8799.92	2013.53	509.76	-1990.55	0.13	608823.04	615288.11	N 32 40 24.49 W 104	5 34.80
	10372.00	91.25	271.48	8797.79	2108.48	512.14	-2085.50	0.11	608825.43	615193.17	N 32 40 24.52 W 104	5 35.91
	10467.00	91.48	271.10	8795.53	2203.42	514.28	-2180.45	0.47	608827.57	615098.23	N 32 40 24.54 W 104	5 37.02
	10562.00	91.14	271.22	8793.36	2298.35	516.20	-2275.40	0.38	608829.49	615003.28	N 32 40 24.56 W 104	5 38.14
	10658.00	91.42	271.24	8791.22	2394.29	518.26	-2371.36	0.29	608831.55	614907.34	N 32 40 24.58 W 104	5 39.26
	10753.00	91.20	271.01	8789.04	2489.22	520.13	-2466.31	0.33	608833.41	614812.39	N 32 40 24.60 W 104	5 40.37
	10848.00	91.36	271.64	8786.92	2584.16	522.32	-2561.26	0.68	608835.61	614717.45	N 32 40 24.63 W 104	5 41.48
	10942.00	91.47	271.42	8784.60	2678.11	524.83	-2655.20	0.26	608838.12	614623.52	N 32 40 24.65 W 104	5 42.58
	11038.00	91.14	269.87	8782.41	2774.01	525.91	-2751.17	1.65	608839.20	614527.56	N 32 40 24.67 W 104	5 43.70
	11133.00	90.91	271.27	8780.71	2868.91	526.86	-2846.15	1.49	608840.14	614432.59	N 32 40 24.68 W 104	5 44.81
	11228.00	91.14	270.88	8779.01	2963.85	528.64	-2941.11	0.48	608841.93	614337.63	N 32 40 24.70 W 104	5 45.92
	11324.00	90.86	271.18	8777.34	3059.79	530.37	-3037.08	0.43	608843.65	614241.67	N 32 40 24.72 W 104	5 47.05
	11419.00	90.91	271.36	8775.87	3154.74	532.47	-3132.05	0.20	608845.76	614146.71	N 32 40 24.74 W 104	5 48.16
	11513.00	90.86	269.83	8774.42	3248.65	533.45	-3226.03	1.63	608846.73	614052.74	N 32 40 24.75 W 104	5 49.26
	11603.00	91.08	271.34	8771.20	3348.47	535.39	-3415.99	0.80	608848.67	613862.80	N 32 40 24.78 W 104	5 51.48
	11694.00	90.63	269.91	8768.35	3629.30	537.47	-3606.95	0.78	608850.75	613671.85	N 32 40 24.80 W 104	5 53.71
	11789.00	90.35	269.62	8767.54	3724.15	537.08	-3701.94	0.42	608850.36	613576.86	N 32 40 24.80 W 104	5 54.82
	12085.00	90.24	269.89	8767.05	3820.01	536.67	-3797.94	0.30	608849.95	613480.88	N 32 40 24.80 W 104	5 55.95
	12180.00	90.24	269.92	8766.65	3914.88	536.51	-3892.94	0.03	608849.80	613385.88	N 32 40 24.80 W 104	5 57.06
	12275.00	90.91	270.13	8765.70	4009.76	536.55	-3987.94	0.74	608849.84	613290.90	N 32 40 24.80 W 104	5 58.17
	12371.00	90.75	269.62	8764.30	4105.62	536.34	-4083.93	0.56	608849.63	613194.92	N 32 40 24.80 W 104	5 59.29
	12466.00	90.74	270.00	8763.07	4200.48	536.03	-4178.92	0.40	608849.31	613099.93	N 32 40 24.80 W 104	6 0.40
	12561.00	90.69	269.76	8761.88	4295.34	535.83	-4273.91	0.26	608849.11	613004.95	N 32 40 24.80 W 104	6 1.51
	12657.00	90.80	269.65	8760.64	4391.19	535.34	-4369.90	0.16	608848.62	612908.97	N 32 40 24.80 W 104	6 2.64
	12752.00	90.80	269.53	8759.31	4486.02	534.66	-4464.89	0.13	608847.94	612813.99	N 32 40 24.79 W 104	6 3.75
	12847.00	90.69	269.52	8758.07	4580.85	533.87	-4559.88	0.12	608847.15	612719.01	N 32 40 24.79 W 104	6 4.86
	12942.00	90.80	269.58	8756.84	4675.69	533.12	-4654.87	0.13	608846.41	612624.03	N 32 40 24.78 W 104	6 5.97
	13034.00	90.75	269.11	8754.24	4867.31	530.93	-4846.84	0.25	608844.21	612432.07	N 32 40 24.76 W 104	6 8.22
	13229.00	90.80	269.65	8752.96	4962.12	529.90	-4941.82	0.57	608843.18	612337.10	N 32 40 24.75 W 104	6 9.33
	13325.00	90.75	269.74	8751.66	5057.97	529.39	-5037.81	0.11	608842.67	612241.11	N 32 40 24.75 W 104	6 10.45
	13515.00	90.75	269.92	8749.17	5247.68	528.83	-5227.79	0.09	608842.11	612051.15	N 32 40 24.75 W 104	6 12.67
	13611.00	90.75	269.44	8747.91	5343.53	528.29	-5323.78	0.50	608841.57	611955.17	N 32 40 24.75 W 104	6 13.80
	13795.00	90.86	270.18	8745.33	5527.25	527.68	-5507.76	0.41	608840.96	611771.20	N 32 40 24.74 W 104	6 15.95
	13890.00	90.75	270.13	8743.99	5622.13	527.94	-5602.75	0.13	608841.22	611676.22	N 32 40 24.75 W 104	6 17.06
	13986.00	90.81	270.25	8742.69	5718.02	528.26	-5698.74	0.14	608841.54	611580.24	N 32 40 24.75 W 104	6 18.18
	14177.00	90.70	270.53	8740.17	5908.82	529.56	-5889.72	0.16	608842.84	611389.28	N 32 40 24.77 W 104	6 20.42
	14272.00	90.86	270.44	8738.88	6003.73	530.36	-5984.71	0.19	608843.64	611294.30	N 32 40 24.78 W 104	6 21.53
	14367.00	90.70	269.94	8737.58	6098.62	530.67	-6079.70	0.55	608843.96	611199.31	N 32 40 24.79 W 104	6 22.64
	14463.00	90.81	270.19	8736.32	6194.50	530.78	-6175.69	0.28	608844.07	611103.33	N 32 40 24.79 W 104	6 23.76
	14558.00	90.81	269.96	8734.98	6289.37	530.91	-6270.68	0.24	608844.19	611008.35	N 32 40 24.79 W 104	6 24.87
	14653.00	90.75	270.02	8733.68	6384.25	530.89	-6365.67	0.09	608844.17	610913.37	N 32 40 24.79 W 104	6 25.99
	14749.00	91.43	270.03	8731.86	6480.11	530.93	-6461.66	0.71	608844.22	610817.39	N 32 40 24.80 W 104	6 27.11
	14844.00	91.43	270.59	8729.49	6574.99	531.45	-6556.62	0.59	608844.73	610722.43	N 32 40 24.80 W 104	6 28.22
	14939.00	91.48	270.28									

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 ° ' ")
	18358.00	90.97	270.69	8671.26	10084.76	560.25	-10069.34	0.60	608873.53	607210.02	N 32 40 25.16 W 104 7 9.31	
	18454.00	90.69	270.27	8669.87	10180.66	561.05	-10165.33	0.53	608874.33	607114.04	N 32 40 25.17 W 104 7 10.43	
	18549.00	90.86	271.58	8668.59	10275.60	562.58	-10260.30	1.39	608875.86	607019.07	N 32 40 25.19 W 104 7 11.55	
	18644.00	90.53	271.74	8667.43	10370.57	565.33	-10355.26	0.39	608878.62	606924.13	N 32 40 25.22 W 104 7 12.66	
	18739.00	90.13	271.90	8666.89	10465.55	568.35	-10450.21	0.45	608881.63	606829.19	N 32 40 25.25 W 104 7 13.77	
	18833.00	90.19	271.88	8666.62	10559.54	571.45	-10544.16	0.07	608884.73	606735.24	N 32 40 25.28 W 104 7 14.87	
	18927.00	90.47	271.68	8666.08	10653.52	574.37	-10638.11	0.37	608887.65	606641.30	N 32 40 25.31 W 104 7 15.97	
	19022.00	90.13	271.77	8665.59	10748.50	577.23	-10733.06	0.37	608890.51	606546.35	N 32 40 25.34 W 104 7 17.08	
100' FWL Crossed	19078.00	90.17	271.72	8665.44	10804.49	578.94	-10789.04	0.11	608892.22	606490.38	N 32 40 25.36 W 104 7 17.73	
Final Survey	19118.00	90.19	271.68	8665.32	10844.48	580.12	-10829.02	0.11	608893.40	606450.40	N 32 40 25.37 W 104 7 18.20	
Proj. to TD	19157.00	90.19	271.68	8665.19	10883.47	581.26	-10868.00	0.00	608894.54	606411.43	N 32 40 25.38 W 104 7 18.65	

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 (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	25.000	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Turkey Track 8-7 State 33H Gyro + MWD 0-19157MD
	1	25.000	25.000	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Turkey Track 8-7 State 33H Gyro + MWD 0-19157MD
	1	25.000	8737.000	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Turkey Track 8-7 State 33H Gyro + MWD
	1	8737.000	19157.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Turkey Track 8-7 State 33H Gyro + MWD

...Original Borehole\Oxy Turkey Track 8-7 State 33H Gyro + MWD 0-19157MD