

JUL 27 2017

30-015-44074

Schlumberger

Final PVA - Rev3

OXY

H&P 617, RKB=26.5'



Borehole:

Original Borehole

Work

Oxy Cedar Canyon 23 Federal Com 33H

Field:

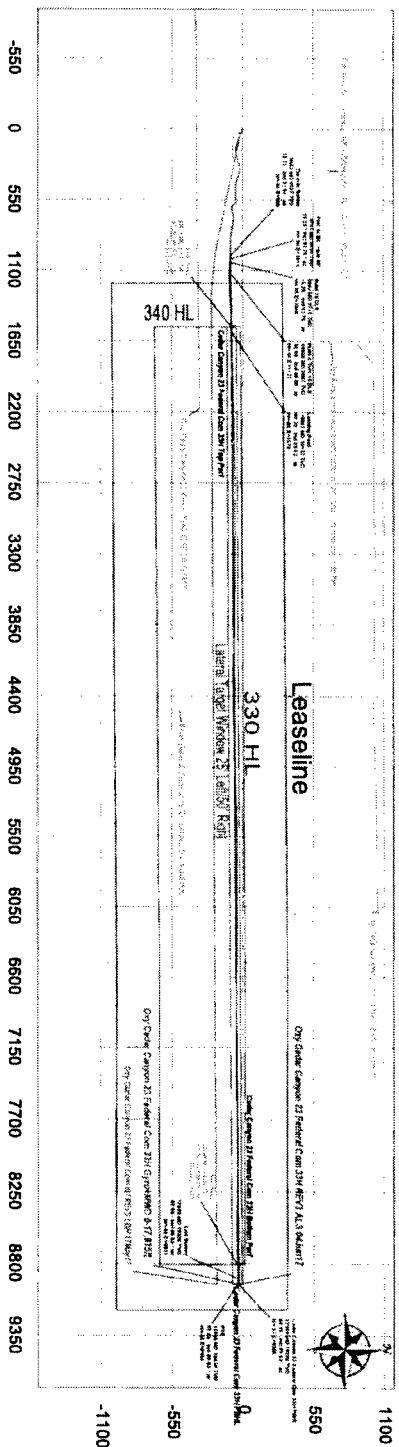
NM Eddy County (NAD 83)

Structure:

Oxy Cedar Canyon 23 Federal Com 33H

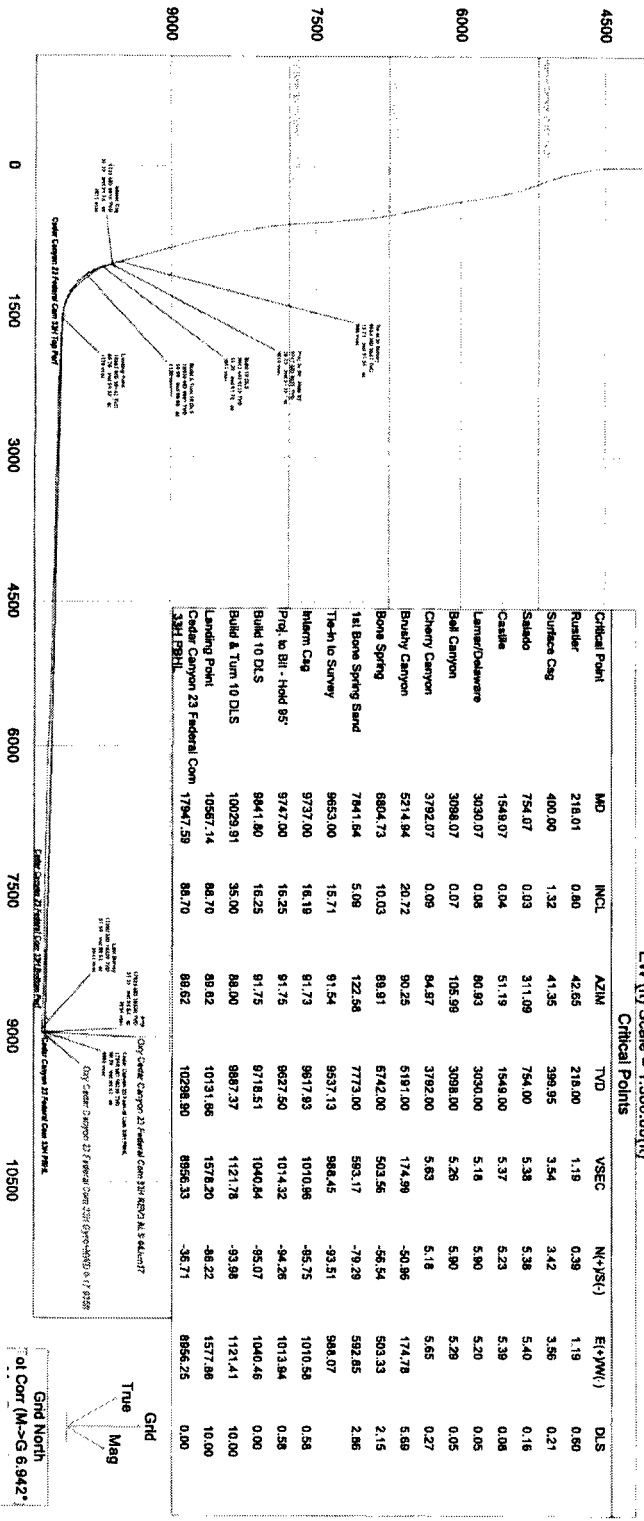
[illegible]

RECEIVED



NS (ft) Scale = 1:300.00(ft)

TVD (ft) Scale = 1:400.00(ft)



Vertical Section (ft) Azim = 90.235° Scale = 1:400.00(ft) Origin = 0N/S, 0E/W

Provide Signature Page for Directional Survey

Gnd North
01 Corr (M->G 6.942°

1	Original	1	Original
2	PC Sign of Authority	2	PC Sign of Authority
3	DADA Line Manager	3	DADA Line Manager
4	Client	4	Client

Date: _____
 Signature: _____
 Title: _____

Oxy Cedar Canyon 23 Federal Com 33H Gyro+MWD 0-17,935ft Survey Geodetic Report (Def Survey)



Report Date: June 16, 2017 - 02:35 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Cedar Canyon 23 Federal Com 33H / Oxy Cedar Canyon 23 Federal Com 33H
Well: Oxy Cedar Canyon 23 Federal Com 33H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Oxy Cedar Canyon 23 Federal Com 33H Gyro+MWD 0-17,935ft
Survey Date: May 18, 2017
Tort / AHD / DDI / ERD Ratio: 267.347' / 0007.026 ft / 6.621 / 0.872
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 12' 7.53917", W 103° 58' 3.47702"
Location Grid N/E Y/X: N 437448.500 RUS, E 654451.370 ftUS
CRS Grid Convergence Angle: 0.1949°
Grid Scale Factor: 0.99992374
Version / Patch: 2.10.302.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 90.235° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5
TVD Reference Elevation: 2974.400 ft above MSL
Seabed / Ground Elevation: 2947.800 ft above MSL
Magnetic Declination: 7.131°
Total Gravity Field Strength: 998.4679mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48130.026 nT
Magnetic Dip Angle: 80.041°
Declination Date: May 18, 2017
Magnetic Declination Model: HDGM 2016
North Reference: Grid North
Grid Convergence Used: 0.1949°
Total Corr Mag North->Grid North: 5.9361°
Local Coord Referenced To: Well Head

Comments	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft/100ft)	(ftUS)	(ftUS)	(N/S ° ' ")	(E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	437448.50	654451.37	N 32 12 7.54 W 103 58 3.48	
	137.70	0.50	93.17	137.70	0.60	-0.03	0.80	0.36	437448.47	654451.97	N 32 12 7.54 W 103 58 3.47	
	200.70	0.70	45.17	200.70	1.15	0.22	1.15	0.83	437448.72	654452.52	N 32 12 7.54 W 103 58 3.46	
	320.70	1.40	35.17	320.67	2.50	1.94	2.51	0.80	437450.44	654453.88	N 32 12 7.56 W 103 58 3.45	
Last Gyro	421.70	1.30	43.17	421.65	3.99	3.78	4.01	0.21	437452.28	654455.38	N 32 12 7.58 W 103 58 3.43	
	609.00	0.00	73.22	608.93	5.44	5.33	5.48	0.69	437453.83	654456.83	N 32 12 7.59 W 103 58 3.41	
	705.00	0.06	52.72	704.93	5.48	5.35	5.50	0.06	437453.85	654456.87	N 32 12 7.59 W 103 58 3.41	
	774.00	0.05	288.91	773.93	5.48	5.38	5.50	0.16	437453.86	654456.87	N 32 12 7.59 W 103 58 3.41	
	866.00	0.08	234.57	865.93	5.40	5.37	5.42	0.06	437453.87	654456.79	N 32 12 7.59 W 103 58 3.41	
	958.00	0.08	103.68	957.93	5.42	5.33	5.44	0.14	437453.83	654456.81	N 32 12 7.59 W 103 58 3.41	
	1048.00	0.08	284.94	1047.93	5.42	5.33	5.44	0.18	437453.83	654456.81	N 32 12 7.59 W 103 58 3.41	
	1140.00	0.08	111.23	1139.93	5.42	5.32	5.44	0.17	437453.82	654456.81	N 32 12 7.59 W 103 58 3.41	
	1231.00	0.08	255.49	1230.93	5.41	5.28	5.44	0.17	437453.78	654456.81	N 32 12 7.59 W 103 58 3.41	
	1325.00	0.06	35.08	1324.93	5.38	5.31	5.40	0.14	437453.81	654456.77	N 32 12 7.59 W 103 58 3.41	
1419.00	0.08	185.96	1418.93	5.42	5.28	5.45	0.14	437453.78	654456.82	N 32 12 7.59 W 103 58 3.41		
1608.00	0.08	26.90	1607.93	5.52	5.27	5.54	0.08	437453.77	654456.91	N 32 12 7.59 W 103 58 3.41		
1702.00	0.08	88.52	1701.93	5.61	5.33	5.63	0.08	437453.83	654457.00	N 32 12 7.59 W 103 58 3.41		
1796.00	0.08	318.41	1795.93	5.83	5.38	5.85	0.15	437453.88	654457.02	N 32 12 7.59 W 103 58 3.41		
1890.00	0.00	18.70	1889.93	5.59	5.43	5.61	0.09	437453.93	654456.98	N 32 12 7.58 W 103 58 3.41		
1985.00	0.22	235.43	1984.93	5.44	5.33	5.48	0.23	437453.83	654456.83	N 32 12 7.59 W 103 58 3.41		
2079.00	0.08	317.25	2078.93	5.25	5.27	5.27	0.24	437453.83	654456.83	N 32 12 7.59 W 103 58 3.41		
2173.00	0.11	5.77	2172.93	5.21	5.41	5.23	0.24	437453.77	654456.84	N 32 12 7.59 W 103 58 3.42		
2267.00	0.00	41.82	2266.93	5.22	5.50	5.23	0.24	437453.91	654456.80	N 32 12 7.59 W 103 58 3.42		
2362.00	0.08	121.99	2361.93	5.28	5.47	5.23	0.12	437454.00	654456.67	N 32 12 7.59 W 103 58 3.42		
2457.00	0.06	27.08	2456.93	5.35	5.48	5.38	0.11	437453.97	654456.75	N 32 12 7.59 W 103 58 3.41		
2551.00	0.06	321.84	2550.93	5.35	5.56	5.37	0.07	437454.08	654456.74	N 32 12 7.59 W 103 58 3.41		
2646.00	0.00	69.04	2645.93	5.31	5.60	5.34	0.06	437454.10	654456.71	N 32 12 7.59 W 103 58 3.41		
2740.00	0.13	305.89	2739.93	5.23	5.66	5.25	0.14	437454.16	654456.62	N 32 12 7.59 W 103 58 3.42		
2834.00	0.06	6.12	2833.93	5.15	5.77	5.17	0.12	437454.27	654456.54	N 32 12 7.60 W 103 58 3.42		
3023.00	0.08	78.85	3022.93	5.29	5.89	5.31	0.04	437454.39	654456.68	N 32 12 7.60 W 103 58 3.41		
3212.00	0.08	148.79	3211.93	5.48	5.81	5.51	0.05	437454.31	654456.88	N 32 12 7.60 W 103 58 3.41		
3307.00	0.13	233.78	3306.93	5.43	5.69	5.45	0.15	437454.18	654456.82	N 32 12 7.60 W 103 58 3.41		
3495.00	0.13	335.43	3494.93	5.41	5.41	5.43	0.10	437453.91	654456.80	N 32 12 7.59 W 103 58 3.41		
3590.00	0.08	174.03	3589.93	5.49	5.26	5.51	0.09	437453.76	654456.88	N 32 12 7.59 W 103 58 3.41		
3778.00	0.13	79.55	3777.93	5.71	5.17	5.74	0.27	437453.87	654457.13	N 32 12 7.59 W 103 58 3.41		
3873.00	0.13	232.09	3872.93	5.74	5.13	5.76	0.27	437453.83	654457.13	N 32 12 7.59 W 103 58 3.41		
3967.00	0.13	22.92	3966.93	5.69	5.16	5.71	0.27	437453.66	654457.08	N 32 12 7.59 W 103 58 3.41		
4061.00	0.06	110.29	4060.93	5.60	5.23	5.82	0.16	437453.73	654457.19	N 32 12 7.59 W 103 58 3.41		
4155.00	0.13	193.04	4154.93	5.83	5.11	5.85	0.15	437453.61	654457.22	N 32 12 7.59 W 103 58 3.41		
4249.00	0.13	343.95	4248.93	5.78	5.11	5.80	0.27	437453.61	654457.17	N 32 12 7.59 W 103 58 3.41		
4343.00	1.08	183.81	4342.92	5.54	4.35	5.86	1.27	437452.85	654456.93	N 32 12 7.58 W 103 58 3.41		
4438.00	3.46	134.03	4437.85	7.40	1.49	7.41	3.22	437449.99	654458.78	N 32 12 7.56 W 103 58 3.39		
4532.00	8.22	122.42	4531.51	13.76	-3.22	13.75	3.10	437445.28	654458.12	N 32 12 7.51 W 103 58 3.32		
4626.00	9.24	117.38	4624.64	24.79	-8.42	24.75	3.29	437438.08	654478.12	N 32 12 7.45 W 103 58 3.19		
4721.00	11.17	113.01	4719.14	40.36	-18.52	39.99	2.19	437431.98	654491.36	N 32 12 7.37 W 103 58 3.01		
4815.00	13.10	111.54	4810.03	58.38	-31.81	79.54	2.08	437424.51	654509.85	N 32 12 7.30 W 103 58 2.80		
4809.00	14.79	108.96	4801.26	79.67	-39.46	104.58	1.92	437416.70	654530.91	N 32 12 7.22 W 103 58 2.55		
5004.00	17.22	105.31	4992.57	104.74	-39.46	133.91	2.77	437409.04	654555.94	N 32 12 7.15 W 103 58 2.26		
5098.00	20.20	101.45	5081.80	134.10	-48.36	133.91	3.43	437402.15	654585.27	N 32 12 7.03 W 103 58 1.92		
5192.00	21.11	93.74	5169.57	168.92	-50.68	166.72	3.05	437397.82	654618.07	N 32 12 7.06 W 103 58 1.54		
5287.00	20.00	78.63	5258.59	199.94	-48.59	199.74	5.69	437398.91	654651.09	N 32 12 7.05 W 103 58 1.15		
5381.00	18.03	71.24	5347.47	229.44	-40.75	229.26	3.31	437407.76	654680.63	N 32 12 7.13 W 103 58 0.81		
5475.00	15.49	71.47	5437.47	255.09	-32.08	254.96	2.70	437416.43	654706.31	N 32 12 7.21 W 103 58 0.51		
5569.00	12.47	74.73	5528.67	276.78	-25.41	276.68	3.32	437423.09	654728.01	N 32 12 7.28 W 103 58 0.28		
5664.00	11.70	82.06	5621.57	296.18	-21.38	296.09	1.81	437427.12	654747.44	N 32 12 7.32 W 103 58 0.03		
5759.00	10.20	90.35	5713.86	313.94	-20.11	313.86	2.31	437428.39	654765.20	N 32 12 7.33 W 103 57 59.83		
5853.00	8.98	97.43	5807.58	329.45	-21.09	329.36	2.03	437427.41	654780.71	N 32 12 7.32 W 103 57 59.64		
5947.00	8.68	108.19	5900.51	343.22	-24.22	343.12	1.72	437424.28	654794.46	N 32 12 7.29 W 103 57 59.48		
6136.00	10.19	111.89	6086.95	372.34	-34.85	372.20	0.85	437411.85	654823.55	N 32 12 7.18 W 103 57 59.15		
6230.00	11.51	110.48	6179.27	388.88	-41.21	388.72	1.42	437407.30	654840.06	N 32 12 7.12 W 103 57 58.95		
6324.00	11.63	108.47	6271.36	406.78	-47.17	406.59	0.86	437403.83	654857.93	N 32 12 7.06 W 103 57 58.75		
6419.00	12.17	101.80	6164.32	425.78	-51.94	425.57	1.16	437398.57	654876.81	N 32 12 7.01 W 103 57 58.53		
6513.00	12.35	97.72	6456.18	445.48	-55.31	445.24	0.94	437393.19	654896.57	N 32 12 6.98 W 103 57 58.30		
6607.00	12.01	92.12	6548.07	465.20	-57.03	464.97	1.31	437391.48	654916.30	N 32 12 6.98 W 103 57 58.07		
6702.00	11.44	87.46	6641.09	484.49	-56.97	484.26	1.16	437391.53	654935.59	N 32 12 6.96 W 103 57 57.84		
6796.00	10.22	89.90	6733.41	502.14	-56.55	501.91	1.30	437391.86	654953.24	N 32 12 6.96 W 103 57 57.64		
6891.00	8.18	89.98	6827.18	517.33	-56.53	517.10	2.15	437391.98	654968.41	N 32 12 6.96 W 103 57 57.46		
6985.00	6.38	89.51	6920.42	529.24	-56.48	529.01	1.92	437392.02	654980.34	N 32 12 6.96 W 103 57 57.32		
7079.00	4.94	83.84	7013.96	538.48	-55.99	538.26	1.65	437392.52	654989.59	N 32 12 6.97 W 103 57 57.22		
7173.00	4.76	68.58	7107.93	546.13	-54.12	545.91	1.36	437394.39	654997.24	N 32 12 6.99 W 103 57 57.13		
7268.00	5.69	62.47	7202.23	553.98	-50.50	553.76	1.14	437398.00	655005.08	N 32 12 7.02 W 103 57 57.03		
7362.00	6.93	55.89	7295.88	563.74	-47.92	563.55	2.99	437400.58	655014.87	N 32 12 7.05 W 103 57 56.92		
7456.00	6.97	120.32	7389.03	574.33	-50.37	574.13	4.39	437398.13	655025.45	N 32 12 7.02 W 103 57 56.80		
7551.00	4.87	153.45	7483.54	581.14	-56.89	580.91	4.13	437391.81	655032.23	N 32 12 6.98 W 103 57 56.72		
7647.00	8.12	165.34	7579.10	584.29	-65.49	584.02	1.75	437383.01	655035.35	N 32 12 6.87 W 103 57 56.72		
7741.00	4.50	148.94	7872.70	587.49	-73.50	587.20	2.35	437375.01	655038.52	N 32 12 6.79 W 103 57 56.65		
7836.00	5.01	124.20	7767.38	592.57	-79.02	592.25	2.21	437369.48	655043.87	N 32 12 6.74 W 103 57 56.58		
7930.00	6.68	103.21										

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 ° ' '')
	8024.00	8.63	93.45	7854.06	613.97	-84.25	613.63	2.48	437364.25	655064.95	N 32 12 6.68 W	103 57 56.34
	8119.00	9.89	80.25	8047.86	628.97	-83.33	628.63	2.47	437365.18	655079.95	N 32 12 6.69 W	103 57 56.16
	8213.00	10.95	69.39	8140.39	644.88	-78.93	644.56	2.28	437369.58	655095.88	N 32 12 6.74 W	103 57 55.98
	8308.00	10.72	77.40	8233.75	661.70	-73.91	661.40	1.96	437374.59	655112.72	N 32 12 6.79 W	103 57 55.78
	8402.00	10.57	87.80	8326.14	678.83	-71.67	678.55	2.05	437376.83	655129.86	N 32 12 6.81 W	103 57 55.58
	8496.00	10.46	93.33	8418.57	695.92	-71.84	695.63	1.09	437376.67	655146.95	N 32 12 6.80 W	103 57 55.38
	8590.00	10.66	98.38	8510.99	713.00	-73.60	712.70	1.02	437374.91	655164.02	N 32 12 6.79 W	103 57 55.19
	8685.00	12.96	101.99	8603.98	732.13	-77.09	731.82	2.54	437371.42	655183.13	N 32 12 6.75 W	103 57 54.96
	8779.00	14.24	98.26	8695.34	753.90	-80.94	753.57	1.65	437367.56	655204.88	N 32 12 6.71 W	103 57 54.71
	8874.00	14.99	99.07	8787.27	777.81	-84.56	777.27	1.91	437360.49	655226.58	N 32 12 6.68 W	103 57 54.43
	8968.00	16.65	96.56	8877.70	803.01	-88.01	802.65	1.39	437358.08	655253.96	N 32 12 6.64 W	103 57 54.14
	9063.00	16.75	93.59	8968.70	830.20	-90.42	829.84	0.90	437355.76	655281.14	N 32 12 6.62 W	103 57 53.82
	9157.00	15.50	92.19	9059.00	856.28	-91.75	855.91	1.39	437355.76	655307.21	N 32 12 6.60 W	103 57 53.52
	9252.00	14.54	92.43	9150.75	880.88	-92.74	880.51	1.01	437354.91	655331.81	N 32 12 6.59 W	103 57 53.23
	9346.00	15.80	91.60	9241.52	905.31	-93.60	904.93	1.15	437354.46	655356.23	N 32 12 6.58 W	103 57 52.95
	9440.00	15.96	90.45	9331.98	930.87	-94.05	930.49	0.51	437354.13	655381.79	N 32 12 6.57 W	103 57 52.65
	9535.00	15.30	91.04	9423.46	956.46	-94.38	956.08	0.71	437353.41	655407.38	N 32 12 6.57 W	103 57 52.35
	9633.00	15.72	91.54	9537.18	988.01	-95.09	987.63	0.37	437351.02	655438.92	N 32 12 6.56 W	103 57 51.99
	9734.00	15.88	96.15	9683.22	1023.58	-97.49	1023.19	0.97	437347.83	655474.48	N 32 12 6.54 W	103 57 51.57
	9879.00	29.83	94.33	9750.55	1080.28	-100.68	1059.85	14.70	437345.70	655511.14	N 32 12 6.51 W	103 57 51.15
	9974.00	37.24	90.88	9828.69	1112.65	-102.81	1112.23	8.08	437344.87	655563.29	N 32 12 6.48 W	103 57 50.54
	10068.00	38.12	90.97	9904.08	1170.10	-103.64	1169.69	0.95	437343.37	655620.96	N 32 12 6.47 W	103 57 49.87
	10163.00	42.46	88.21	9976.53	1231.50	-105.13	1231.09	4.84	437340.91	655682.36	N 32 12 6.48 W	103 57 49.15
	10258.00	54.57	84.31	10039.36	1302.32	-98.28	1301.93	13.11	437335.23	655753.20	N 32 12 6.52 W	103 57 48.33
	10352.00	65.60	87.45	10086.18	1383.43	-92.56	1383.07	12.08	437335.95	655834.33	N 32 12 6.58 W	103 57 47.38
	10446.00	75.00	88.60	10117.83	1471.77	-89.54	1471.41	10.07	437331.35	655922.87	N 32 12 6.60 W	103 57 46.36
	10541.00	85.17	88.48	10134.16	1565.18	-87.15	1564.84	10.71	437321.55	656010.09	N 32 12 6.62 W	103 57 45.27
	10636.00	87.00	88.66	10136.35	1597.09	-86.36	1596.75	5.75	437321.55	656040.00	N 32 12 6.63 W	103 57 44.90
	10730.00	88.28	88.45	10138.94	1660.01	-84.77	1659.88	2.06	437321.55	656110.92	N 32 12 6.64 W	103 57 44.17
	10825.00	87.52	88.97	10146.66	1753.90	-82.42	1753.58	0.95	437321.55	656204.81	N 32 12 6.66 W	103 57 43.07
	10919.00	86.97	89.02	10151.18	1848.78	-80.47	1848.47	0.32	437321.55	656299.69	N 32 12 6.68 W	103 57 41.97
	11014.00	87.48	88.62	10156.77	1942.65	-78.82	1942.35	0.59	437321.55	656393.56	N 32 12 6.69 W	103 57 40.88
	11109.00	87.32	88.40	10160.07	2037.51	-76.87	2037.21	0.69	437321.55	656488.42	N 32 12 6.71 W	103 57 39.77
	11204.00	87.63	88.80	10164.26	2132.37	-74.40	2132.08	0.29	437321.55	656583.29	N 32 12 6.73 W	103 57 38.67
	11298.00	88.07	89.06	10167.79	2227.24	-72.08	2226.96	0.53	437321.55	656678.16	N 32 12 6.75 W	103 57 37.56
	11393.00	87.66	87.95	10174.88	2321.15	-70.33	2320.88	0.54	437321.55	656772.07	N 32 12 6.76 W	103 57 36.47
	11488.00	87.66	87.95	10174.88	2416.08	-68.58	2415.81	0.62	437321.55	656866.95	N 32 12 6.81 W	103 57 35.37
	11582.00	91.17	88.27	10175.82	2510.93	-67.28	2510.66	3.75	437321.55	656955.78	N 32 12 6.83 W	103 57 34.27
	11677.00	89.86	88.71	10174.97	2604.84	-65.99	2604.61	1.45	437321.55	657050.73	N 32 12 6.86 W	103 57 33.06
	11772.00	89.52	89.76	10175.48	2699.79	-59.77	2699.57	1.45	437321.55	657150.73	N 32 12 6.88 W	103 57 32.06
	11866.00	90.38	90.68	10175.57	2794.78	-58.50	2794.56	1.16	437321.55	657245.71	N 32 12 6.87 W	103 57 30.96
	11961.00	86.83	90.52	10177.88	2888.77	-58.87	2888.56	1.34	437321.55	657338.70	N 32 12 6.88 W	103 57 29.88
	12055.00	86.76	90.05	10183.13	2983.73	-58.86	2983.51	3.74	437321.55	657434.64	N 32 12 6.85 W	103 57 28.76
	12150.00	87.28	90.07	10188.07	3077.58	-60.33	3077.36	0.50	437321.55	657528.49	N 32 12 6.84 W	103 57 27.67
	12245.00	88.43	90.43	10191.21	3172.45	-60.43	3172.23	0.55	437321.55	657623.35	N 32 12 6.83 W	103 57 26.56
	12339.00	89.04	90.38	10192.88	3267.17	-60.84	3267.17	1.78	437321.55	657718.29	N 32 12 6.83 W	103 57 25.46
	12434.00	88.76	90.15	10194.70	3361.38	-61.49	3361.16	0.14	437321.55	657812.26	N 32 12 6.82 W	103 57 24.36
	12529.00	89.41	90.28	10198.22	3456.36	-61.91	3456.14	0.37	437321.55	657907.24	N 32 12 6.81 W	103 57 23.26
	12623.00	88.76	90.23	10198.22	3551.35	-62.27	3551.13	0.70	437321.55	658002.22	N 32 12 6.80 W	103 57 22.15
	12718.00	88.97	91.04	10200.23	3645.33	-62.68	3645.11	1.10	437321.55	658096.19	N 32 12 6.79 W	103 57 21.06
	12813.00	88.18	90.47	10202.59	3740.30	-63.74	3740.07	1.05	437321.55	658191.15	N 32 12 6.78 W	103 57 19.95
	12907.00	89.45	91.38	10204.54	3835.27	-64.99	3835.03	1.10	437321.55	658286.10	N 32 12 6.76 W	103 57 18.85
	13002.00	88.45	92.74	10206.28	3929.20	-66.49	3929.00	1.65	437321.55	658380.06	N 32 12 6.75 W	103 57 17.75
	13097.00	90.93	93.16	10206.79	4024.17	-68.89	4023.92	1.79	437321.55	658474.97	N 32 12 6.71 W	103 57 16.65
	13191.00	86.04	90.36	10209.28	4119.06	-74.78	4118.78	2.65	437321.55	658568.83	N 32 12 6.66 W	103 57 15.55
	13286.00	87.66	88.83	10219.66	4212.95	-77.86	4212.67	5.99	437321.55	658663.71	N 32 12 6.63 W	103 57 14.45
	13381.00	87.94	88.01	10223.31	4307.93	-73.71	4307.65	1.18	437321.55	658758.59	N 32 12 6.63 W	103 57 13.35
	13475.00	89.69	87.93	10227.22	4406.52	-73.71	4406.26	0.91	437321.55	658853.39	N 32 12 6.63 W	103 57 12.26
	13570.00	88.73	88.53	10228.53	4496.52	-73.71	4496.26	0.91	437321.55	658947.28	N 32 12 6.66 W	103 57 11.15
	13664.00	88.00	89.39	10232.27	4585.33	-72.02	4585.09	0.93	437321.55	659041.15	N 32 12 6.72 W	103 57 10.05
	13759.00	88.73	88.53	10236.53	4678.26	-68.08	4678.04	1.19	437321.55	659136.10	N 32 12 6.74 W	103 57 8.95
	13854.00	88.00	89.39	10240.27	4769.17	-60.65	4769.07	0.48	437321.55	659231.03	N 32 12 6.77 W	103 57 7.85
	13948.00	88.66	88.11	10244.21	4859.97	-58.58	4859.73	1.39	437321.55	659326.95	N 32 12 6.77 W	103 57 6.75
	14043.00	88.76	88.30	10248.47	4959.17	-52.86	4958.93	0.11	437321.55	659422.86	N 32 12 6.84 W	103 57 5.65
	14137.00	88.28	88.31	10250.92	5054.12	-50.85	5053.88	0.51	437321.55	659518.74	N 32 12 6.84 W	103 57 4.55
	14232.00	88.76	88.30	10253.47	5148.80	-47.81	5148.56	1.00	437321.55	659614.66	N 32 12 6.84 W	103 57 3.45
	14327.00	88.76	88.30	10256.02	5243.75	-45.41	5243.51	1.10	437321.55	659710.58	N 32 12 6.84 W	103 57 2.35
	14421.00	88.76	88.30	10258.57	5338.70	-45.41	5338.46	0.51	437321.55	659806.50	N 32 12 6.84 W	103 57 1.24
	14516.00	88.08	88.40	10261.12	5433.65	-45.41	5433.41	1.00	437321.55	659902.42	N 32 12 6.84 W	103 57 0.15
	14610.00	88.01	90.72	10263.67	5528.60	-44.89	5528.36	1.10	437321.55	659998.34	N 32 12 6.90 W	103 56 59.05
	14705.00	86.49	90.92	10266.22	5623.55	-44.89	5623.31	2.47	437321.55	660094.26	N 32 12 6.89 W	103 56 57.95
	14800.00	86.91	89.88	10268.77	5718.50	-46.70	5718.26	1.61	437321.55	660190.18	N 32 12 6.89 W	103 56 56.85
	14894.00	87.42	90.15	10271.32	5813.45	-46.70	5813.21	1.19	437321.55	660286.10	N 32 12 6.88 W	103 56 55.76
	14989.00	87.32	90.30	10273.87	5908.40	-47.10	5908.16	0.61	437321.55	660382.02	N 32 12 6.87 W	103 56 54.65
	15083.00	87.97	90.09	10276.42	6003.35	-47.10	6003.11	0.19	437321.55	660477.94	N 32 12 6.87 W	103 56 53.55
	15178.00	88.49	90.37	10278.97	6103.10	-47.42	6102.95	0.73	437321.55	660573.86	N 32 12 6.86 W	103 56 52.45
	15273.00	88.76	89.78	10281.52	6198.05	-47.80	6197.81	0.62	437321.55	660669.78	N 32	

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	OLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
		1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only			Original Borehole / Oxy Cedar Canyon 23 Federal Com 33H Gyro+MWD 0-17,935ft	
		1	26.500	421.700	Act Stns	30.000	30.000	NAL_NSG+MSHOT			Original Borehole / Oxy Cedar Canyon 23 Federal Com 33H	
		1	421.700	17935.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG			Original Borehole / Oxy Cedar Canyon 23 Federal Com 33H	