

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

15-43843

November 21, 2016

OXY USA INC.
5 Greenway Plaza, Suite 110
Houston, TX 77046-052

Re:

16, T24S, R29E, Eddy NM
N 32.22365 W 103.98407

CLIENT: OXY USA INC.
WELL: Cedar Canyon 16 State 34H
FIELD: Wolfcamp

RIG: H&P 617
COUNTY: Eddy
API NO: 30-015-43843
JOB NO: 16MLD2103

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>
Tamer Ahmed FE	Cedar Canyon 16 State 34H Original Hole	515.00 Ft to 14505.00 Ft	October 16, 2016 to October 31, 2016	TelePacer SlimPulse

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

Lindsey Keith
Field Service Manager

Schlumberger

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)

Well Reference:

16, T24S, R29E, Eddy NM
N 32.22365 W 103.98394

I, Tamer Ahmed certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of October 16, 2016 through October 31, 2016, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 515.00 feet to a depth of 14505.00 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 Cedar Canyon 16 State 34H Well (Original Hole) API No. 30-015-43843 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
Tamer Ahmed
FE

Tamer Ahmed

Tamer Ahmed

Subscribed and Sworn to before me this 26th day of November (month) 2016 (yr)

My Commission expires:

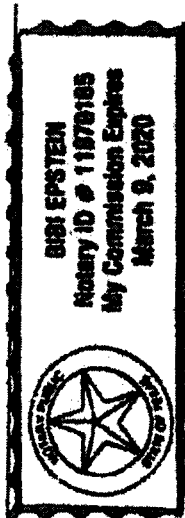
03-09-2020

[Signature]

Notary Public

(signature)

Denton County, Texas
(County State)

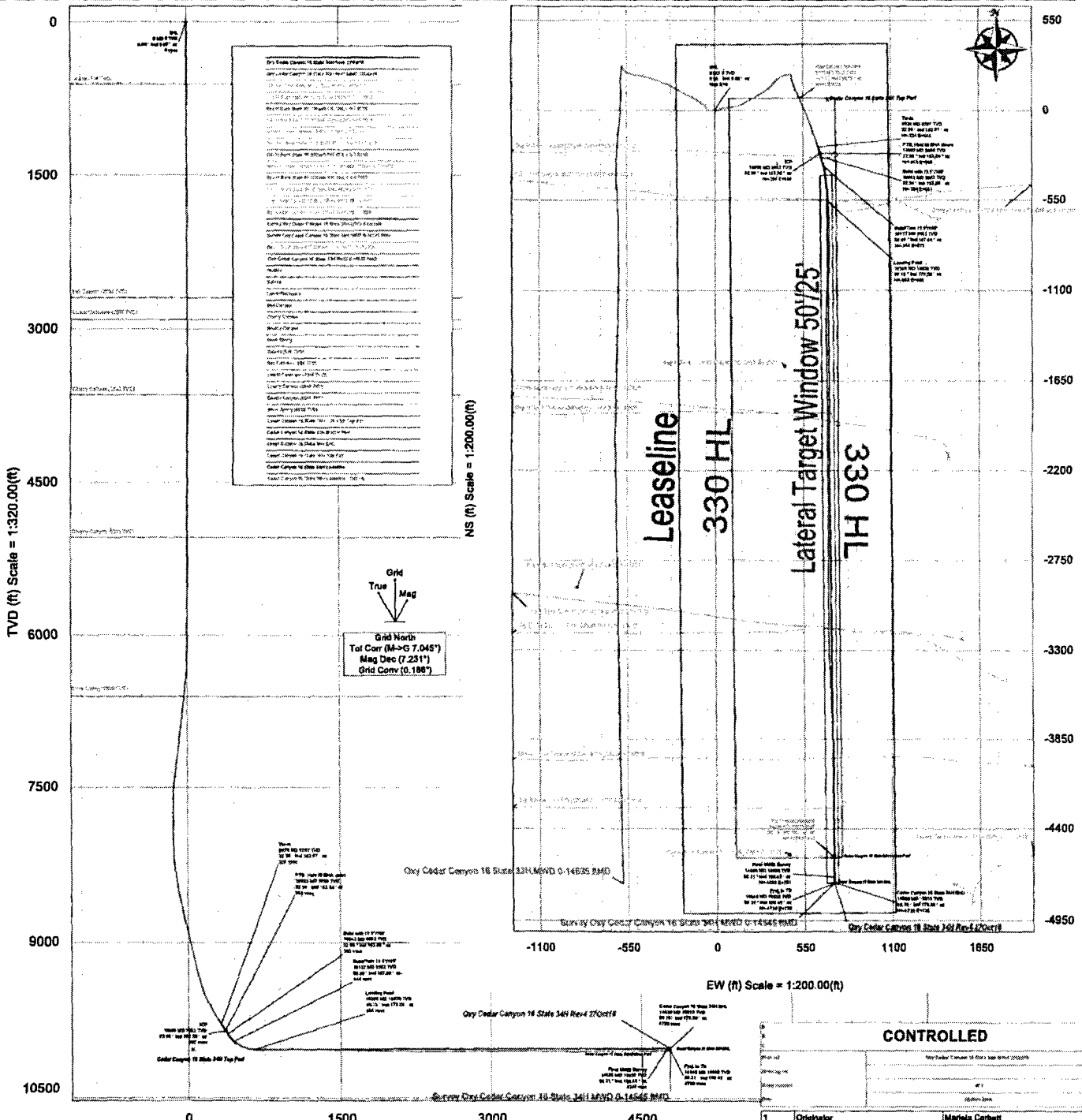


Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Cedar Canyon 16 State 34H	NM Eddy County (NAD 27)	Oxy Cedar Canyon 16 State 34H

Geology & Magnetics Parameters	Surface Location	Measurements
Model: M0008 2018 MagDec: 7.231°	Date: 10-Oct-2018 Lat: N 32 13 25.14 Long: W 103 58 2.17	Site: Oxy Cedar Canyon TVD Hole Plot: Oxy Cedar Canyon 16 State 34H Rev4 27Oct18

Critical Points

Comments	Survey MD (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Sub-Sea (ft)	VS (ft)	RS (ft)	UV (ft)	Latitude (deg)	Longitude (deg)	Facing (ft)	Heading (ft)	DS (ft)	Foot Face (ft)
Tie-In	9928.00	32.96	162.07	9786.61	6832.81	319.91	-223.75	642.99	N 32 13 22.909	W 103 58 54.694	608690.82	445035.19	0.60	90.00
PTB, Hold till BHA clears	10003.00	32.96	163.50	9849.54	6895.74	360.27	-262.72	655.07	N 32 13 22.522	W 103 58 54.554	608702.89	444996.22	1.04	0.00
ICP	10005.69	32.96	163.50	9851.71	6897.91	361.67	-264.07	655.47	N 32 13 22.509	W 103 58 54.550	608703.29	444994.87	0.00	0.00
Build with 18 25°/100'	10043.00	32.96	163.50	9883.10	6929.30	381.84	-283.59	661.25	N 32 13 22.316	W 103 58 54.483	608709.07	444975.35	0.00	9.10
Build/Turn 18 25°/100'	10137.20	50.00	167.00	9953.42	6999.62	443.69	-343.77	676.76	N 32 13 21.720	W 103 58 54.305	608724.58	444915.18	18.25	18.97
Landing Point	10365.91	90.15	179.50	10030.05	7076.25	653.57	-552.80	698.43	N 32 13 19.651	W 103 58 54.061	608746.25	444706.16	18.25	0.00
Cedar Canyon 16 State 34H BHL	14538.23	90.15	179.50	10019.00	7065.20	478.75	-472.95	734.85	N 32 12 38.364	W 103 58 53.796	608782.67	440534.35	0.00	





Survey Oxy Cedar Canyon 16 State 34H MWD 0-14545 ftMD Survey

Geodetic Report

(Def Survey)

Report Date: November 09, 2016 - 10:04 AM
 Client: OXY
 Field: NM Eddy County (NAD 27)
 Structure / Slot: Oxy Cedar Canyon 16 State 34H / Oxy Cedar Canyon 16 State 34H
 Well: Oxy Cedar Canyon 16 State 34H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Survey Oxy Cedar Canyon 16 State 34H MWD 0-14545 ftMD
 Survey Date: October 02, 2016
 Tort / AHD / DDI / ERD Ratio: 208.161' / 5541.159 ft / 6.223 / 0.551
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 13' 25.14340", W 103° 59' 2.16962"
 Location Grid N/E Y/X: N 445258.920 NUS, E 608047.880 NUS
 CRS Grid Convergence Angle: 0.1863°
 Grid Scale Factor: 0.99992246
 Version / Patch: 2 10.254.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 171.160° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB-26.5'
 TVD Reference Elevation: 2953.800 ft above MSL
 Seabed / Ground Elevation: 2927.300 ft above MSL
 Magnetic Declination: 7.233°
 Total Gravity Field Strength: 998.4710mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48203.406 nT
 Magnetic Dip Angle: 60.080°
 Declination Date: October 02, 2016
 Magnetic Declination Model: HDGM 2016
 North Reference: Grid North
 Grid Convergence Used: 0.1863°
 Total Corr Mag North-Grid North: 7.0470°
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (NUS)	Latitude (NS ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	445258.92	608047.88	N 32 13 25.14 W 103 59 2.17	
RKB	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	445258.92	608047.88	N 32 13 25.14 W 103 59 2.17	
	515.00	0.13	294.46	515.00	-0.30	0.23	-0.50	0.03	445259.15	608047.38	N 32 13 25.15 W 103 59 2.18	
	606.00	0.09	297.08	606.00	-0.40	0.30	-0.86	0.04	445259.22	608047.22	N 32 13 25.15 W 103 59 2.18	
	784.00	0.11	353.15	784.00	-0.66	0.54	-0.81	0.05	445259.46	608047.07	N 32 13 25.15 W 103 59 2.18	
	877.00	0.13	332.86	877.00	-0.85	0.72	-0.87	0.05	445259.64	608047.01	N 32 13 25.15 W 103 59 2.18	
	966.00	0.11	39.66	966.00	-1.00	0.88	-0.86	0.15	445259.80	608047.02	N 32 13 25.15 W 103 59 2.18	
	1054.00	0.09	229.30	1054.00	-1.02	0.90	-0.86	0.23	445259.82	608047.02	N 32 13 25.15 W 103 59 2.18	
	1151.00	0.13	32.84	1151.00	-1.08	0.94	-0.85	0.22	445259.86	608047.03	N 32 13 25.15 W 103 59 2.18	
	1246.00	0.11	84.64	1246.00	-1.13	1.04	-0.71	0.11	445259.96	608047.17	N 32 13 25.15 W 103 59 2.18	
	1340.00	0.09	276.20	1340.00	-1.15	1.05	-0.69	0.21	445259.97	608047.19	N 32 13 25.15 W 103 59 2.18	
	1435.00	0.09	128.30	1435.00	-1.11	1.02	-0.70	0.18	445259.94	608047.16	N 32 13 25.15 W 103 59 2.18	
	1529.00	0.11	161.39	1529.00	-0.97	0.89	-0.61	0.07	445259.81	608047.27	N 32 13 25.15 W 103 59 2.18	
	1624.00	0.13	301.41	1624.00	-0.95	0.86	-0.68	0.24	445259.78	608047.20	N 32 13 25.15 W 103 59 2.18	
	1718.00	0.15	183.39	1718.00	-0.90	0.79	-0.78	0.26	445259.71	608047.10	N 32 13 25.15 W 103 59 2.18	
	1813.00	0.11	334.03	1813.00	-0.87	0.75	-0.82	0.26	445259.67	608047.06	N 32 13 25.15 W 103 59 2.18	
	1907.00	0.11	39.17	1907.00	-1.01	0.90	-0.81	0.13	445259.82	608047.07	N 32 13 25.15 W 103 59 2.18	
	2096.00	0.09	90.78	2096.00	-1.11	1.04	-0.54	0.05	445259.96	608047.34	N 32 13 25.15 W 103 59 2.18	
	2190.00	0.11	102.57	2190.00	-1.07	1.02	-0.38	0.03	445259.94	608047.50	N 32 13 25.15 W 103 59 2.17	
	2284.00	0.15	257.95	2284.00	-1.03	0.97	-0.41	0.27	445259.89	608047.47	N 32 13 25.15 W 103 59 2.17	
	2378.00	0.11	125.63	2378.00	-0.96	0.90	-0.46	0.25	445259.82	608047.42	N 32 13 25.15 W 103 59 2.17	
	2472.00	0.15	206.41	2472.00	-0.79	0.73	-0.44	0.18	445259.65	608047.44	N 32 13 25.15 W 103 59 2.17	
	2567.00	0.73	186.75	2566.99	-0.14	0.04	-0.87	0.61	445259.96	608047.21	N 32 13 25.14 W 103 59 2.18	
	2661.00	1.10	181.24	2660.98	1.28	-1.43	-0.86	0.47	445257.49	608047.02	N 32 13 25.13 W 103 59 2.18	
	2850.00	0.15	284.48	2849.97	2.97	-3.19	-1.14	0.61	445255.73	608046.74	N 32 13 25.11 W 103 59 2.18	
	2944.00	0.07	182.73	2943.97	2.98	-3.21	-1.26	0.19	445255.71	608046.82	N 32 13 25.11 W 103 59 2.18	
	3039.00	0.11	143.31	3038.97	3.12	-3.34	-1.21	0.08	445255.58	608046.67	N 32 13 25.11 W 103 59 2.18	
	3133.00	0.13	356.46	3132.97	3.09	-3.31	-1.16	0.24	445255.61	608046.72	N 32 13 25.11 W 103 59 2.18	
	3476.00	0.11	317.40	3475.97	2.43	-2.68	-1.41	0.02	445256.24	608046.47	N 32 13 25.12 W 103 59 2.19	
	3511.00	0.11	81.93	3510.97	2.39	-2.64	-1.40	0.50	445256.28	608046.48	N 32 13 25.12 W 103 59 2.19	
	3606.00	0.11	88.38	3605.97	2.34	-2.56	-1.24	0.01	445256.36	608046.64	N 32 13 25.12 W 103 59 2.18	
	3700.00	0.13	279.24	3699.97	2.29	-2.51	-1.26	0.25	445256.41	608046.62	N 32 13 25.12 W 103 59 2.18	
	3794.00	0.15	301.83	3793.97	2.17	-2.43	-1.47	0.06	445256.40	608046.41	N 32 13 25.12 W 103 59 2.19	
	3889.00	0.13	20.61	3888.97	2.00	-2.26	-1.54	0.19	445256.66	608046.34	N 32 13 25.12 W 103 59 2.19	
	3983.00	0.11	252.96	3982.97	1.92	-2.19	-1.59	0.23	445256.73	608046.29	N 32 13 25.12 W 103 59 2.19	
	4077.00	0.13	34.36	4076.97	1.85	-2.13	-1.61	0.24	445256.79	608046.27	N 32 13 25.12 W 103 59 2.19	
	4172.00	0.11	22.06	4171.97	1.70	-1.95	-1.52	0.03	445256.97	608046.36	N 32 13 25.12 W 103 59 2.19	
	4268.00	0.09	125.00	4265.97	1.67	-1.91	-1.42	0.17	445257.01	608046.46	N 32 13 25.12 W 103 59 2.19	
	4455.00	0.11	236.90	4454.97	1.85	-2.10	-1.45	0.09	445256.82	608046.43	N 32 13 25.12 W 103 59 2.19	
	4549.00	0.11	18.92	4548.97	1.81	-2.06	-1.50	0.22	445256.86	608046.38	N 32 13 25.12 W 103 59 2.19	
	4738.00	0.13	324.59	4737.97	1.45	-1.71	-1.57	0.06	445257.21	608046.31	N 32 13 25.13 W 103 59 2.19	
	4832.00	0.11	336.19	4831.97	1.27	-1.55	-1.66	0.03	445257.37	608046.22	N 32 13 25.13 W 103 59 2.19	
	4927.00	0.11	317.65	4926.97	1.11	-1.39	-1.76	0.04	445257.53	608046.12	N 32 13 25.13 W 103 59 2.19	
	5021.00	0.29	99.82	5020.97	1.11	-1.37	-1.59	0.41	445257.55	608046.29	N 32 13 25.13 W 103 59 2.19	
	5116.00	0.44	92.99	5115.96	1.26	-1.43	-0.99	0.16	445257.49	608046.89	N 32 13 25.13 W 103 59 2.18	
	5210.00	0.66	97.03	5209.96	1.48	-1.51	-0.09	0.24	445257.41	608047.79	N 32 13 25.13 W 103 59 2.17	
	5305.00	2.18	89.73	5304.93	1.80	-1.57	2.26	1.61	445257.35	608050.14	N 32 13 25.13 W 103 59 2.14	
	5400.00	3.49	80.03	5399.81	2.11	-1.08	6.92	1.46	445257.86	608054.79	N 32 13 25.13 W 103 59 2.08	
	5494.00	4.29	75.37	5493.59	1.70	0.32	13.14	0.91	445259.24	608061.01	N 32 13 25.15 W 103 59 2.02	
	5589.00	6.31	78.28	5588.18	0.90	2.48	21.65	2.13	445261.38	608069.52	N 32 13 25.17 W 103 59 1.92	
	5683.00	7.54	75.31	5681.50	-0.17	5.25	32.63	1.31	445264.17	608080.51	N 32 13 25.19 W 103 59 1.79	
	5777.00	9.41	76.76	5774.46	-1.39	8.57	46.08	2.00	445267.49	608093.95	N 32 13 25.23 W 103 59 1.63	
	5872.00	11.12	79.05	5867.94	-2.32	12.09	62.63	1.85	445271.01	608110.51	N 32 13 25.26 W 103 59 1.44	
	5967.00	11.58	80.16	5961.08	-2.82	15.46	81.02	0.54	445274.38	608128.88	N 32 13 25.20 W 103 59 1.23	
	6061.00	12.39	80.84	6053.03	-3.04	18.68	100.27	0.87	445277.80	608148.15	N 32 13 25.32 W 103 59 1.00	
	6150.00	12.70	78.08	6139.81	-3.62	22.22	119.27	0.76	445281.14	608167.14	N 32 13 25.36 W 103 59 0.78	
	6245.00	13.65	75.03	6232.41	-5.38	27.27	140.32	1.24	445286.19	608188.19	N 32 13 25.41 W 103 59 0.54	
	6339.00	14.24	68.29	6323.64	-9.14	34.41	161.78	1.84	445283.33	608209.64	N 32 13 25.48 W 103 59 0.29	
	6433.00	15.60	63.05	6414.48	-15.65	44.42	183.79	2.04	445303.33	608231.65	N 32 13 25.58 W 103 59 0.03	
	6528.00	17.16	60.30	6505.62	-24.61	57.15	207.35	1.83	445316.07	608255.21	N 32 13 25.70 W 103 58 59.75	
	6622.00	18.00	61.04	6595.71	-34.00	70.30	230.73	1.25	445329.21	608278.59	N 32 13 25.83 W 103 58 59.48	
	6716.00	15.21	59.89	6686.24	-42.93	82.75	252.73	0.90	445341.67	608300.59	N 32 13 25.95 W 103 58 59.22	
	6811.00	16.04	57.01	6777.73	-52.82	96.15	274.52	1.20	445355.07	608322.38	N 32 13 26.09 W 103 58 58.97	
	6906.00	15.68	56.20	6869.14	-63.58	110.40	296.13	0.54	445369.31	608343.99	N 32 13 26.23 W 103 58 58.72	
	7006.00	14.81	56.36	6965.64	-74.60	124.95	317.93	0.77	445383.86	608365.79	N 32 13 26.37 W 103 58 58.46	
	7101.00	12.11	50.67	7058.03	-84.76	137.99	335.75	3.16	445396.90	608383.61	N 32 13 26.50 W 103 58 58.26	
	7195.00	11.54	46.93	7150.04	-95.05	150.68	350.25	1.02	445409.57	608398.10	N 32 13 26.62 W 103 58 58.09	
	7289.00	14.39	46.87	7241.63	-106.92	165.07	365.65	3.03	445423.98	608413.50	N 32 13 26.77 W 103 58 57.81	
	7384.00	15.98	50.44	7333.31	-120.25	181.47	384.34	1.94	445440.38	608432.19	N 32 13 26.83 W 103 58 57.69	
	7478.00	12.57	54.58	7424.40	-131.44	195.65	402.66	3.78	445454.55	608450.51	N 32 13 27.07 W 103 58 57.48	
	7573.00	10.77	59.66	7517.43	-139.32	206.12	418.75	2.18	445465.03	608466.59	N 32 13 27.17 W 103 58 57.29	

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 ° ' '')
	7667.00	9.56	70.47	7609.97	-143.99	213.17	433.69	2.40	445472.07	608481.53	N 32 13 27.24 W	103 58 57.11
	7762.00	10.13	80.87	7703.57	-145.49	217.13	449.37	1.96	445476.03	608487.21	N 32 13 27.28 W	103 58 56.93
	7858.00	7.38	82.65	7798.47	-145.38	219.21	463.51	2.96	445478.12	608511.35	N 32 13 27.30 W	103 58 56.77
	7951.00	4.33	86.47	7890.97	-144.76	220.09	473.13	3.25	445478.99	608520.97	N 32 13 27.31 W	103 58 56.65
	8045.00	1.93	119.27	7984.83	-143.34	219.41	478.06	3.03	445478.31	608525.90	N 32 13 27.30 W	103 58 56.60
	8140.00	1.03	164.46	8079.80	-141.50	217.80	479.88	1.48	445476.71	608527.52	N 32 13 27.28 W	103 58 56.58
	8234.00	3.71	185.97	8173.71	-137.72	213.86	479.59	2.95	445472.87	608527.43	N 32 13 27.25 W	103 58 56.58
	8329.00	6.86	177.58	8268.29	-129.11	205.24	479.51	3.41	445464.14	608527.35	N 32 13 27.16 W	103 58 56.58
	8423.00	8.35	167.44	8361.47	-116.72	192.96	481.23	2.13	445451.87	608529.08	N 32 13 27.04 W	103 58 56.58
	8518.00	10.88	168.65	8455.13	-100.87	177.44	484.50	2.67	445436.34	608532.34	N 32 13 26.88 W	103 58 56.52
	8612.00	12.00	161.82	8547.26	-82.37	159.46	489.29	1.87	445418.36	608537.13	N 32 13 26.71 W	103 58 56.47
	8706.00	11.49	157.36	8639.30	-63.63	141.53	495.94	1.11	445400.44	608543.78	N 32 13 26.53 W	103 58 56.39
	8801.00	13.67	156.04	8732.01	-43.60	122.54	504.15	2.31	445381.45	608551.99	N 32 13 26.34 W	103 58 56.30
	8896.00	15.16	153.95	8824.02	-20.90	101.12	514.16	1.66	445360.03	608562.00	N 32 13 26.13 W	103 58 56.18
	8990.00	14.79	156.39	8914.83	2.44	79.08	524.36	0.78	445337.99	608572.20	N 32 13 25.91 W	103 58 56.06
	9084.00	14.09	154.15	9005.86	24.99	57.79	534.16	0.95	445316.70	608582.00	N 32 13 25.70 W	103 58 55.95
	9173.00	11.67	154.12	9092.61	43.95	39.94	542.81	2.72	445298.86	608590.65	N 32 13 25.52 W	103 58 55.85
	9267.00	14.66	157.18	9184.13	64.59	20.42	551.58	3.27	445278.33	608599.41	N 32 13 25.33 W	103 58 55.75
	9362.00	16.81	157.17	9275.56	89.59	-3.33	561.57	2.26	445256.59	608609.41	N 32 13 25.09 W	103 58 55.63
	9456.00	16.04	157.11	9365.73	115.38	-27.82	571.90	0.82	445231.10	608619.73	N 32 13 24.85 W	103 58 55.51
	9551.00	19.76	160.12	9458.12	143.88	-55.02	582.46	4.03	445203.90	608630.30	N 32 13 24.58 W	103 58 55.39
	9645.00	25.27	159.07	9542.92	179.12	-88.73	595.05	5.88	445170.20	608642.88	N 32 13 24.25 W	103 58 55.25
	9739.00	29.10	159.39	9626.52	221.13	-128.88	610.26	4.08	445130.05	608658.10	N 32 13 23.85 W	103 58 55.07
	9834.00	33.16	161.10	9707.82	269.35	-175.10	626.82	4.37	445083.83	608674.65	N 32 13 23.39 W	103 58 54.88
	9928.00	32.96	162.07	9786.60	319.91	-223.76	643.02	0.80	445035.18	608690.85	N 32 13 22.81 W	103 58 54.69
	10032.00	33.78	161.74	9873.46	376.37	-278.13	660.79	0.81	444990.81	608708.61	N 32 13 22.37 W	103 58 54.49
	10082.00	41.91	163.04	9912.91	406.67	-307.35	670.03	16.34	444951.58	608717.86	N 32 13 22.08 W	103 58 54.38
	10129.00	48.68	165.55	9945.96	439.82	-339.50	679.02	14.89	444919.45	608726.85	N 32 13 21.76 W	103 58 54.28
	10222.00	63.29	173.29	9997.89	516.58	-415.06	692.68	17.14	444843.90	608740.50	N 32 13 21.01 W	103 58 54.12
	10318.00	79.55	175.46	10028.38	607.11	-505.31	701.49	17.07	444753.65	608749.31	N 32 13 20.12 W	103 58 54.02
	10408.00	91.03	177.31	10035.76	696.28	-594.68	707.12	12.92	444664.29	608754.94	N 32 13 19.24 W	103 58 53.96
	10474.00	91.45	178.34	10034.33	761.82	-660.61	709.62	1.69	444598.36	608767.45	N 32 13 18.58 W	103 58 53.93
	10569.00	90.14	179.67	10033.01	855.92	-755.59	711.27	1.96	444503.39	608769.10	N 32 13 17.64 W	103 58 53.92
	10662.00	90.24	179.63	10032.71	947.90	-848.58	711.84	0.12	444410.40	608759.67	N 32 13 16.72 W	103 58 53.92
	10755.00	90.21	182.60	10032.34	1039.49	-941.56	710.03	3.19	444317.44	608757.86	N 32 13 15.80 W	103 58 53.94
	10850.00	90.48	185.06	10031.77	1132.16	-1036.33	703.89	2.60	444222.67	608751.51	N 32 13 14.87 W	103 58 54.02
	10944.00	90.28	183.54	10031.15	1223.70	-1130.06	696.64	1.63	444128.95	608744.46	N 32 13 13.94 W	103 58 54.10
	11037.00	89.83	181.36	10031.06	1314.89	-1222.97	692.66	2.39	444036.04	608740.49	N 32 13 13.02 W	103 58 54.15
	11132.00	89.55	179.91	10031.57	1408.59	-1317.96	691.61	1.55	443941.06	608739.44	N 32 13 12.08 W	103 58 54.17
	11226.00	89.76	179.47	10032.14	1501.55	-1411.96	692.12	0.52	443847.07	608739.95	N 32 13 11.15 W	103 58 54.17
	11320.00	89.45	179.73	10032.78	1594.65	-1505.95	693.60	0.85	443753.09	608741.42	N 32 13 10.22 W	103 58 54.15
	11413.00	89.11	179.11	10033.95	1688.79	-1598.92	695.35	0.55	443660.13	608743.17	N 32 13 9.30 W	103 58 54.14
	11507.00	88.24	178.63	10036.13	1779.91	-1692.88	697.20	1.08	443566.18	608745.03	N 32 13 8.37 W	103 58 54.12
	11601.00	87.56	179.31	10039.57	1872.98	-1786.80	698.89	1.02	443472.26	608746.72	N 32 13 7.44 W	103 58 54.10
	11695.00	89.21	178.83	10042.22	1968.04	-1880.74	703.29	1.83	443378.32	608748.24	N 32 13 6.51 W	103 58 54.09
	11789.00	88.73	179.43	10043.91	2059.12	-1974.72	701.84	0.82	443284.36	608749.67	N 32 13 5.58 W	103 58 54.08
	11883.00	88.18	179.56	10046.44	2152.09	-2068.68	702.67	0.60	443190.40	608750.50	N 32 13 4.65 W	103 58 54.07
	11977.00	90.14	179.33	10047.82	2245.10	-2162.66	703.58	2.10	443096.43	608751.41	N 32 13 3.72 W	103 58 54.06
	12071.00	90.07	179.62	10047.85	2338.11	-2258.66	704.44	0.32	443002.44	608752.27	N 32 13 2.79 W	103 58 54.06
	12166.00	91.03	179.89	10046.74	2432.03	-2351.65	704.85	1.05	442907.46	608752.67	N 32 13 1.85 W	103 58 54.05
	12260.00	89.88	179.90	10046.01	2524.94	-2445.65	705.02	1.24	442813.47	608752.85	N 32 13 0.92 W	103 58 54.06
	12354.00	90.86	180.16	10045.42	2617.81	-2539.64	704.97	1.10	442719.48	608752.80	N 32 12 59.99 W	103 58 54.06
	12447.00	91.03	180.32	10043.88	2709.63	-2632.63	704.58	0.25	442626.50	608752.41	N 32 12 59.07 W	103 58 54.07
	12541.00	90.69	180.84	10042.47	2802.36	-2726.61	703.63	0.66	442532.52	608751.46	N 32 12 58.14 W	103 58 54.08
	12635.00	90.24	180.51	10041.71	2895.06	-2820.60	702.52	0.59	442438.54	608750.35	N 32 12 57.21 W	103 58 54.10
	12729.00	90.17	180.37	10041.37	2987.83	-2914.60	701.80	0.17	442344.55	608749.63	N 32 12 56.28 W	103 58 54.11
	12823.00	89.97	179.84	10041.26	3080.68	-3008.80	701.63	0.60	442250.56	608749.45	N 32 12 55.35 W	103 58 54.12
	12917.00	89.90	179.25	10041.37	3173.68	-3102.60	702.38	0.63	442156.57	608750.20	N 32 12 54.42 W	103 58 54.11
	13011.00	89.38	179.16	10041.96	3266.75	-3196.58	703.58	0.58	442062.59	608751.51	N 32 12 53.49 W	103 58 54.10
	13105.00	89.00	178.33	10043.28	3359.92	-3290.55	705.74	0.97	441968.63	608753.56	N 32 12 52.56 W	103 58 54.08
	13198.00	89.86	177.45	10044.21	3452.27	-3383.48	709.16	1.32	441875.71	608756.99	N 32 12 51.64 W	103 58 54.04
	13290.00	89.90	177.46	10044.40	3543.72	-3475.39	713.25	0.04	441783.81	608761.07	N 32 12 50.73 W	103 58 54.00
	13383.00	90.89	177.58	10043.76	3636.14	-3568.30	717.29	1.07	441690.90	608765.11	N 32 12 49.81 W	103 58 53.96
	13474.00	89.28	177.82	10043.63	3728.55	-3659.22	720.96	1.79	441599.99	608768.78	N 32 12 48.91 W	103 58 53.92
	13568.00	89.21	177.63	10044.87	3819.93	-3753.14	724.69	0.22	441506.08	608772.51	N 32 12 47.98 W	103 58 53.88
	13662.00	90.41	177.82	10045.18	3913.31	-3847.06	728.42	1.29	441412.16	608776.24	N 32 12 47.05 W	103 58 53.84
	13756.00	90.96	178.43	10044.05	4006.61	-3941.01	731.49	0.87	441318.23	608779.32	N 32 12 46.12 W	103 58 53.80
	13850.00	90.93	180.50	10042.50	4099.60	-4034.98	732.37	2.20	441224.25	608780.19	N 32 12 45.19 W	103 58 53.80
	13943.00	90.24	180.37	10041.55	4191.38	-4127.98	731.67	0.75	441131.27	608779.49	N 32 12 44.27 W	103 58 53.81
	14038.00	90.41	180.35	10041.01	4285.16	-4222.97	731.07	0.18	441036.28	608778.89	N 32 12 43.33 W	103 58 53.82
	14132.00	90.14	180.00	10040.56	4377.99	-4316.97	730.78	0.47	440942.29	608778.60	N 32 12 42.40 W	103 58 53.83
	14226.00	90.03	179.28	10040.42	4470.97	-4410.97	731.37	0.77	440848.30	608779.19	N 32 12 41.47 W	103 58 53.82
	14320.00	90.48	179.95	10040.01	4563.94	-4504.96	732.00	0.86	440754.31	608779.83	N 32 12 40.54 W	103 58 53.82
	14414.00	90.89	180.53	10038.88	4656.78	-4598.96	731.61	0.76	440660.33	608779.43	N 32 12 39.61 W	103 58 53.83
Final MWD	14505.00	90.31	180.49	10037.93	4746.54	-4689.95	730.80	0.64	440569.35	608778.62	N 32 12 38.71 W	103 58 53.84
Proj. to TD	14545.00	90.31	180.49	10037.71	4786.01	-4729.95	730.46	0.00	440529.35	608778.28	N 32 1	