

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 13 2017

Schlumberger

RECEIVED

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:
35, 23S, 31E, Eddy NM
N 32.26742 W -103.75483

I, Kalu UGA certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of June 25, 2017 through July 31, 2017, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 4468.00 feet to a depth of 16298.00 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 Cal-Mon 35 Federal 171H ST01 Well (Side Track) API No. 30-015-44269 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
Kalu UGA
FE

Subscribed and Sworn to before me this 3rd day of August (month) 2017 (yr)

My Commission expires:

December 20, 2020

J. Allemand

Notary Public

Adams County Colorado
(County State)

(signature) JENNIFER ALLEMAND
Notary Public
State of Colorado
Notary ID # 20164047962
My Commission Expires 12-20-2020

Ok
Cal Mon 35 2nd 171H
30-015-44269

Schlumberger**OXY**

Borehole:

ST01

Well:

Oxy Cal-Mon 35 Federal 171H

Field:

NM Eddy County (NAD 83)

Structure:

Oxy Cal-Mon 35 Federal 171H

Gravity & Magnetic Parameters

Model: HGM 2017

MagDec: 6.973°

Dip: 66.844°

FR: 48164.84817

Date:

27-Jul-2017

Gravity PS:

896.648mgals (0.0005 Based)

Surface Location

RAD33 New Mexico State Plane, NAD83 Zone 10, US Feet

Lat: N 32 16 2 71

Lon: W 103 45 12 37

Northings:

461561.817018

Easting:

720146.779918

Scale Feet:

0.32081

0.68954771

Meters

Oxy Cal-Mon

Federal 171H

TVD Ref:

RKB=26.5 (15482.7 ft above MSL)

Oxy Cal-Mon 35 Federal 171H ST01 REV4 LBN 27-Jul-17

Critical Point

Name

Elev

Depth

Azim

TVD

VSEC

N(UTM)

E(UTM)

DLR

Name

Elev

Depth

Azim

TVD

VSEC

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Oxy Cal-Mon Federal 171H ST01 MWD 0-16,342' Survey Geodetic Report

(Def Survey)

Report Date: August 02, 2017 - 03:25 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Cal-Mon 35 Federal 171H / Oxy Cal-Mon Federal 171H
Well: Oxy Cal-Mon 35 Federal 171H
Borehole: ST01
UWI / API#: Unknown / Unknown
Survey Name: Oxy Cal-Mon Federal 171H ST01 MWD 0-16,342'
Survey Date: July 17, 2017
Tort / AHD / DDI / ERD Ratio: 279.046' / 5291.614 ft / 6.314 / 0.452
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 2.70633", W 103° 45' 17.37330"
Location Grid N/E Y/X: N 461501 810 RUS, E 720146 770 RUS
CRS Grid Convergence Angle: 0.3089°
Grid Scale Factor: 0.99994571
Version / Patch: 2.10.544.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 183.862° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 3462.700 ft above MSL
Seabed / Ground Elevation: 3456.200 ft above MSL
Magnetic Declination: 8.976°
Total Gravity Field Strength: 998.4457 mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48147.781 nT
Magnetic Dip Angle: 60.045°
Declination Date: July 17, 2017
Magnetic Declination Model: HDGM 2017
North Reference: Grid North
Grid Convergence Angle: 0.3089°
Total Cor Mag North->Grid North: 6.6668°
Local Coord Referenced To: Well Head

Comments	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
SHL	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(ftUS)	(ftUS)	(N/S ° ' ")	(E/W ° ' ")
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	461501.81	720146.77	N 32 16 2.71	W 103 45 17.37
	81.30	0.47	31.41	81.30	-0.29	0.28	0.17	0.58	461502.09	720146.94	N 32 16 2.71	W 103 45 17.37
	171.10	0.70	21.55	171.09	-1.14	1.11	0.57	0.28	461502.92	720147.34	N 32 16 2.72	W 103 45 17.37
	261.30	0.70	19.94	261.29	-2.20	2.14	0.96	0.02	461503.95	720147.73	N 32 16 2.73	W 103 45 17.38
	350.70	0.67	15.71	350.68	-3.23	3.16	1.29	0.07	461504.97	720148.06	N 32 16 2.74	W 103 45 17.38
	440.70	0.54	1.15	440.68	-4.17	4.09	1.44	0.22	461505.90	720148.21	N 32 16 2.75	W 103 45 17.38
	533.20	0.20	342.75	533.17	-4.76	4.68	1.40	0.38	461506.49	720148.17	N 32 16 2.75	W 103 45 17.38
	625.80	0.15	17.26	625.57	-5.02	4.95	1.39	0.12	461506.76	720148.16	N 32 16 2.76	W 103 45 17.38
	718.10	0.14	345.00	718.07	-5.25	5.17	1.39	0.09	461506.98	720148.16	N 32 16 2.76	W 103 45 17.38
	810.60	0.21	216.37	810.57	-5.21	5.14	1.28	0.34	461506.95	720148.03	N 32 16 2.76	W 103 45 17.38
	903.00	0.45	202.80	902.97	-4.73	4.67	1.02	0.27	461506.48	720147.79	N 32 16 2.75	W 103 45 17.38
	995.50	0.53	200.33	995.47	-3.97	3.94	0.73	0.08	461505.75	720147.50	N 32 16 2.76	W 103 45 17.38
	1088.00	0.38	193.68	1087.97	-3.26	3.24	0.51	0.17	461505.65	720147.28	N 32 16 2.74	W 103 45 17.37
	1182.70	0.16	170.68	1182.66	-2.83	2.80	0.48	0.25	461504.61	720147.23	N 32 16 2.73	W 103 45 17.37
	1277.40	0.12	117.56	1277.38	-2.68	2.63	0.57	0.14	461504.44	720147.34	N 32 16 2.73	W 103 45 17.37
	1372.10	0.16	110.03	1372.06	-2.58	2.53	0.78	0.05	461504.34	720147.55	N 32 16 2.73	W 103 45 17.38
	1466.60	0.18	103.19	1466.76	-2.52	2.46	1.05	0.03	461504.27	720147.82	N 32 16 2.73	W 103 45 17.38
	1561.60	0.20	205.32	1561.56	-2.34	2.27	1.12	0.31	461504.08	720147.89	N 32 16 2.73	W 103 45 17.38
	1656.20	0.21	108.03	1656.16	-2.14	2.07	1.22	0.33	461503.88	720147.99	N 32 16 2.73	W 103 45 17.38
	1750.80	0.21	100.58	1750.78	-2.08	1.98	1.55	0.03	461503.79	720148.32	N 32 16 2.73	W 103 45 17.38
	1845.50	0.21	102.37	1845.46	-2.03	1.91	1.89	0.01	461503.72	720148.68	N 32 16 2.73	W 103 45 17.38
	1940.20	0.19	110.04	1940.18	-1.96	1.82	2.21	0.04	461503.63	720148.98	N 32 16 2.72	W 103 45 17.38
	2034.80	0.14	89.08	2034.76	-1.92	1.77	2.47	0.06	461503.58	720149.24	N 32 16 2.72	W 103 45 17.34
	2129.40	0.10	42.07	2129.36	-2.00	1.83	2.64	0.11	461503.64	720149.41	N 32 16 2.72	W 103 45 17.34
	2224.00	0.13	4.52	2223.98	-2.17	2.00	2.71	0.08	461503.81	720149.48	N 32 16 2.73	W 103 45 17.34
	2318.50	0.14	353.56	2318.48	-2.20	2.20	2.70	0.03	461504.03	720149.47	N 32 16 2.73	W 103 45 17.34
	2413.20	0.20	352.51	2413.16	-2.87	2.50	2.67	0.06	461504.31	720149.44	N 32 16 2.73	W 103 45 17.34
	2508.60	0.38	321.68	2508.56	-3.06	2.92	2.45	0.24	461504.73	720149.22	N 32 16 2.74	W 103 45 17.34
	2604.50	0.58	309.81	2604.45	-3.59	3.48	1.88	0.23	461505.29	720148.65	N 32 16 2.74	W 103 45 17.35
	2700.30	0.67	310.78	2700.25	-4.21	4.15	1.08	0.09	461505.96	720147.85	N 32 16 2.75	W 103 45 17.36
	2796.10	0.69	313.53	2796.04	-4.92	4.82	0.24	0.04	461506.73	720147.01	N 32 16 2.75	W 103 45 17.37
	2890.50	0.47	316.01	2890.44	-5.56	5.60	-0.43	0.24	461507.41	720146.34	N 32 16 2.78	W 103 45 17.38
	2985.00	0.50	326.90	2984.93	-6.16	6.23	-0.91	0.05	461508.04	720145.86	N 32 16 2.77	W 103 45 17.38
	3079.70	0.57	325.53	3079.63	-6.86	6.96	-1.41	0.08	461508.77	720145.38	N 32 16 2.78	W 103 45 17.39
	3174.60	0.54	331.92	3174.53	-7.61	7.75	-1.88	0.07	461509.58	720144.89	N 32 16 2.78	W 103 45 17.39
	3269.30	0.53	327.27	3269.22	-8.35	8.51	-2.33	0.05	461510.32	720144.44	N 32 16 2.79	W 103 45 17.40
	3363.90	0.56	325.20	3363.82	-9.08	9.26	-2.83	0.04	461511.07	720143.94	N 32 16 2.80	W 103 45 17.41
	3458.50	0.62	331.20	3458.41	-9.86	10.09	-3.34	0.09	461511.89	720143.43	N 32 16 2.81	W 103 45 17.41
	3553.10	0.80	341.46	3553.01	-10.67	10.93	-3.72	0.16	461512.73	720143.05	N 32 16 2.81	W 103 45 17.42
	3647.80	0.08	36.68	3647.71	-11.11	11.37	-3.81	0.49	461513.18	720142.96	N 32 16 2.82	W 103 45 17.42
	3742.50	0.33	127.61	3742.41	-11.01	11.25	-3.95	0.36	461513.08	720143.22	N 32 16 2.82	W 103 45 17.41
	3837.10	0.57	144.29	3837.00	-10.49	10.71	-3.06	0.28	461512.51	720143.71	N 32 16 2.81	W 103 45 17.41
	3931.70	1.72	154.21	3931.58	-8.89	9.04	-2.17	1.23	461510.85	720144.60	N 32 16 2.80	W 103 45 17.40
	4026.50	2.93	157.79	4026.30	-5.47	5.52	-0.64	1.28	461507.33	720146.13	N 32 16 2.76	W 103 45 17.38
	4120.70	3.70	160.55	4120.34	-6.51	6.43	1.28	0.83	461502.24	720148.06	N 32 16 2.71	W 103 45 17.36
	4215.30	3.23	155.83	4214.77	4.66	4.86	3.39	0.58	461496.93	720150.18	N 32 16 2.86	W 103 45 17.33
	4310.10	3.15	155.18	4309.42	9.31	9.88	5.58	0.09	461492.13	720152.35	N 32 16 2.81	W 103 45 17.31
	4468.00	3.37	160.78	4467.07	17.41	-18.00	8.93	0.24	461483.61	720155.70	N 32 16 2.53	W 103 45 17.27
	4563.00	3.04	162.37	4561.92	22.33	-23.04	10.61	0.36	461478.77	720157.38	N 32 16 2.48	W 103 45 17.25
	4658.00	2.57	176.00	4656.81	26.79	-27.57	11.52	0.86	461474.24	720158.29	N 32 16 2.43	W 103 45 17.24
	4752.00	2.19	194.15	4750.73	30.84	-31.41	11.23	0.89	461470.40	720158.09	N 32 16 2.39	W 103 45 17.24
	4847.00	2.58	248.82	4845.65	33.39	-34.01	8.82	2.26	461467.80	720155.89	N 32 16 2.37	W 103 45 17.27
	4942.00	3.76	287.54	4940.51	34.88	-34.99	3.74	1.71	461466.82	720150.51	N 32 16 2.36	W 103 45 17.33
	5036.00	5.74	279.17	5034.19	34.55	-34.37	-3.98	2.33	461467.44	720142.79	N 32 16 2.37	W 103 45 17.42
	5131.00	7.61	286.93	5128.54	32.64	-31.78	-14.69	2.18	461470.03	720132.09	N 32 16 2.39	W 103 45 17.55
	5225.00	8.37	290.43	5221.63	29.23	-27.58	-27.05	0.96	461474.23	720119.72	N 32 16 2.43	W 103 45 17.89
	5320.00	7.32	290.99	5315.74	25.42	-23.00	-39.18	1.11	461478.81	720107.59	N 32 16 2.48	W 103 45 17.83
	5415.00	6.32	292.44	5410.06	21.92	-18.84	-49.67	1.07	461482.97	720097.11	N 32 16 2.52	W 103 45 17.95
	5510.00	5.15	291.30	5504.59	18.94	-15.29	-58.47	1.24	461486.52	720088.30	N 32 16 2.56	W 103 45 18.06
	5604.00	4.47	297.36	5598.28	16.18	-12.06	-65.65	0.90	461489.73	720081.12	N 32 16 2.58	W 103 45 18.14
	5699.00	4.03	308.66	5693.00	12.76	-8.28	-71.54	1.01	461493.53	720075.23	N 32 16 2.63	W 103 45 18.21
	5793.00	4.25	321.56	5786.75	8.26	-3.48	-76.28	1.00	461488.33	720070.49	N 32 16 2.68	W 103 45 18.26
	5888.00	3.87	334.73	5881.52	2.84	2.18	-79.84	1.06	461503.99	720066.94	N 32 16 2.73	W 103 45 18.30
	5982.00	3.78	346.00	5875.31	-2.89	8.05	-81.94	0.80	461509.86	720064.83	N 32 16 2.79	W 103 45 18.33
	6077.00	3.69	354.74	6070.11	-8.89	14.14	-82.98	0.61	461515.84	720063.80	N 32 16 2.85	W 103 45 18.34
	6172.00	3.91	5.14	6164.90	-15.15	20.41	-82.97	0.76	461522.21	720063.81	N 32 16 2.91	W 103 45 18.34
	6266.00	4.56	9.35	6258.64	-22.07	27.26	-82.07	0.77	461529.09	720064.70	N 32 16 2.98	W 103 45 18.33
	6361.00	5.29	7.61	6353.29	-30.20	35.35	-80.88	0.78	461537.16	720065.89	N 32 16 3.06	W 103 45 18.31
	6455.00	6.74	353.70	6446.78	-39.96	45.13	-80.91	2.18	461546.94	720065.86	N 32 16 3.16	W 103 45 18.31
	6550.00	5.71	9.08	6541.22	-50.16	55.34	-80.78	2.05	461557.15	720066.00	N 32 16 3.26	W 103 45 18.31
	6645.00	5.87	6.82	6635.74	-59.71	64.83	-79.46	0.29	461566.64	720067.32	N 32 16 3.35	W 103 45 18.29
	6739.00	3.92	3.58	6729.39	-67.72	72.81	-78.69	2.09	461574.82	720068.09	N 32 16 3.43	W 103 45 18.28
	6834.00	2.47	7.20	6824.24	-73.01	78.08	-78.23	1.54	461579.89	720068.55	N 32 16 3.54	W 103 45 18.28
	6928.00	1.34	9.74	6918.19	-76.13	81.18	-77.79	1.21	461582.88	720068.99	N 32 16 3.51	W 103 45 18.27
	7117.00	0.00	76.82	7107.17	-78.33	83.35	-77.41	0.71	461585.16	720095.38	N 32 16 3.54	W 103 45 18.27
	7212.00	0.06	127.30	7202.17	-78.30	83.32	-77.37	0.06	461585.13	720095.40	N 32 16 3.53	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	OLS (1/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7590.00	0.16	124.80	7590.17	-78.19	83.20	-77.24	0.11	461585.01	720069.54	N 32 16 3.53 W	103 45 18.27
	7685.00	0.06	129.60	7675.17	-78.09	83.10	-77.09	0.11	461584.90	720069.59	N 32 16 3.53 W	103 45 18.27
	7780.00	0.06	122.92	7770.17	-78.04	83.04	-77.01	0.01	461584.84	720069.77	N 32 16 3.53 W	103 45 18.26
	7874.00	0.08	145.17	7864.17	-77.96	82.96	-76.93	0.04	461584.76	720069.84	N 32 16 3.53 W	103 45 18.26
	7969.00	0.13	185.79	7959.17	-77.80	82.80	-76.90	0.09	461584.60	720069.87	N 32 16 3.53 W	103 45 18.26
	8158.00	0.00	186.59	8148.17	-77.59	82.58	-76.92	0.07	461584.39	720069.85	N 32 16 3.53 W	103 45 18.26
	8253.00	0.18	123.76	8243.17	-77.51	82.50	-76.80	0.19	461584.31	720069.97	N 32 16 3.53 W	103 45 18.26
	8347.00	1.82	212.17	8337.15	-78.27	81.29	-77.38	1.73	461583.10	720069.39	N 32 16 3.51 W	103 45 18.27
	8442.00	2.38	218.78	8432.10	-73.48	78.62	-79.34	0.83	461580.42	720067.44	N 32 18 3.49 W	103 45 18.29
	8537.00	2.03	215.92	8527.03	-70.44	75.72	-81.56	0.39	461577.52	720065.22	N 32 18 3.48 W	103 45 18.32
	8631.00	2.48	199.00	8620.95	-67.08	72.45	-83.20	0.85	461574.25	720063.58	N 32 18 3.43 W	103 45 18.34
	8726.00	1.06	159.12	8715.91	-64.30	69.68	-83.55	1.69	461571.49	720063.22	N 32 16 3.40 W	103 45 18.34
	8820.00	0.20	40.03	8809.90	-63.04	69.00	-83.14	1.25	461570.80	720063.64	N 32 18 3.39 W	103 45 18.34
	8915.00	0.28	329.31	8904.90	-63.98	69.32	-83.15	0.30	461571.13	720063.83	N 32 16 3.40 W	103 45 18.34
	9009.00	0.17	317.13	8998.90	-64.25	69.62	-83.36	0.13	461571.43	720063.41	N 32 16 3.40 W	103 45 18.34
	9104.00	0.06	204.66	9093.90	-64.30	69.68	-83.48	0.21	461571.49	720063.30	N 32 16 3.40 W	103 45 18.34
	9198.00	0.74	282.41	9187.90	-64.34	69.77	-84.09	0.78	461571.57	720062.68	N 32 16 3.40 W	103 45 18.35
	9293.00	0.94	333.55	9282.89	-65.11	70.60	-85.04	0.79	461572.40	720061.74	N 32 16 3.41 W	103 45 18.36
	9388.00	0.22	180.79	9377.89	-65.61	71.11	-85.39	1.20	461572.92	720061.39	N 32 16 3.41 W	103 45 18.36
	9482.00	0.13	335.88	9471.89	-65.52	71.03	-85.43	0.36	461572.83	720061.34	N 32 16 3.41 W	103 45 18.36
	9577.00	0.43	273.83	9566.89	-65.62	71.15	-85.83	0.41	461572.98	720060.94	N 32 16 3.41 W	103 45 18.37
	9672.00	1.01	269.64	9661.88	-65.56	71.17	-87.03	0.61	461572.97	720059.75	N 32 16 3.42 W	103 45 18.38
	9766.00	0.45	284.16	9755.87	-65.57	71.25	-88.21	0.62	461573.06	720058.56	N 32 18 3.42 W	103 45 18.40
	9860.00	0.39	310.88	9849.87	-65.83	71.55	-88.81	0.22	461573.36	720057.96	N 32 16 3.42 W	103 45 18.40
	9955.00	0.11	256.78	9944.87	-66.00	71.74	-89.15	0.36	461573.55	720057.63	N 32 16 3.42 W	103 45 18.41
	10049.00	0.13	123.65	10038.87	-65.92	71.66	-89.14	0.23	461573.64	720057.64	N 32 16 3.42 W	103 45 18.41
	10144.00	0.25	256.97	10133.87	-65.81	71.56	-89.26	0.37	461573.36	720057.52	N 32 16 3.42 W	103 45 18.41
	10239.00	0.25	5.84	10228.87	-65.98	71.72	-89.44	0.43	461573.52	720057.34	N 32 16 3.42 W	103 45 18.41
	10333.00	0.16	116.90	10322.87	-66.11	71.88	-89.30	0.36	461573.67	720057.48	N 32 16 3.42 W	103 45 18.41
	10428.00	0.20	18.64	10417.87	-66.22	71.96	-89.13	0.29	461573.76	720057.65	N 32 16 3.42 W	103 45 18.41
	10484.00	0.30	182.05	10473.86	-66.16	71.90	-89.10	0.88	461573.71	720057.67	N 32 16 3.42 W	103 45 18.41
Tie In To Pilot Hole	10607.00	0.50	350.48	10596.86	-66.37	72.11	-89.20	0.85	461573.92	720057.57	N 32 16 3.42 W	103 45 18.41
	10774.00	0.52	150.59	10763.86	-66.44	72.17	-89.95	0.60	461573.98	720057.82	N 32 16 3.43 W	103 45 18.40
	10837.00	3.74	207.67	10826.81	-64.32	70.10	-89.77	5.53	461571.91	720057.01	N 32 16 3.40 W	103 45 18.41
	10939.00	4.60	214.95	10928.54	-57.79	63.80	-93.65	0.99	461565.81	720053.12	N 32 18 3.34 W	103 45 18.46
	11034.00	13.62	227.18	11022.25	-46.41	53.05	-104.06	9.66	461554.86	720042.71	N 32 18 3.24 W	103 45 18.58
	11129.00	22.10	251.18	11112.71	-31.45	39.85	-129.28	11.85	461541.45	720017.52	N 32 16 3.11 W	103 45 18.88
	11223.00	31.86	249.70	11196.38	-14.61	25.30	-169.36	10.41	461527.11	719977.42	N 32 16 2.97 W	103 45 19.34
	11318.00	32.29	234.24	11277.01	-11.69	11.73	-213.54	8.53	461503.54	719933.24	N 32 16 2.73 W	103 45 19.86
	11413.00	39.32	223.39	11354.09	-51.00	-35.06	-254.81	9.95	461466.76	719891.68	N 32 16 2.37 W	103 45 20.34
	11508.00	42.44	214.09	11425.98	-101.81	-83.53	-293.59	7.19	461418.29	719853.19	N 32 16 1.90 W	103 45 20.80
	11603.00	45.85	199.98	11494.42	-162.18	-142.15	-323.25	10.85	461358.66	719823.54	N 32 16 1.32 W	103 45 21.15
	11697.00	50.09	183.60	11557.70	-230.77	-210.01	-337.05	13.73	461291.81	719809.74	N 32 16 0.65 W	103 45 21.31
	11792.00	54.76	183.64	11615.61	-308.04	-285.13	-341.81	4.92	461216.70	719804.98	N 32 15 59.90 W	103 45 21.37
	11836.00	61.23	186.19	11639.98	-345.01	-323.97	-345.18	14.83	461177.86	719801.81	N 32 15 59.52 W	103 45 21.41
	11887.00	71.37	185.28	11659.65	-389.79	-368.59	-349.64	20.76	461133.28	719797.15	N 32 15 59.08 W	103 45 21.47
	11980.00	86.90	184.43	11673.37	-461.24	-439.77	-355.67	21.30	461082.07	719791.12	N 32 15 58.37 W	103 45 21.54
	11982.00	87.38	184.15	11674.47	-483.22	-461.68	-357.32	2.53	461040.18	719789.47	N 32 15 58.18 W	103 45 21.56
	12010.00	87.45	184.50	11675.73	-511.18	-489.57	-359.43	1.27	461012.27	719787.38	N 32 15 57.88 W	103 45 21.59
	12098.00	88.04	181.57	11679.19	-599.10	-587.37	-364.08	3.39	460924.47	719782.71	N 32 15 57.01 W	103 45 21.65
	12193.00	88.56	179.31	11682.01	-693.91	-673.32	-364.81	2.44	460829.53	719781.96	N 32 15 56.07 W	103 45 21.66
	12288.00	90.24	177.84	11683.01	-789.52	-767.27	-362.28	2.49	460734.58	719784.51	N 32 15 55.13 W	103 45 21.64
	12383.00	89.62	174.30	11683.12	-883.66	-862.02	-365.61	3.58	460639.83	719781.18	N 32 15 54.20 W	103 45 21.64
	12478.00	89.18	171.84	11684.12	-976.05	-956.32	-344.15	2.63	460545.55	719802.84	N 32 15 53.26 W	103 45 21.44
	12573.00	89.69	173.35	11685.06	-1069.29	-1050.52	-331.90	1.68	460451.35	719814.88	N 32 15 52.33 W	103 45 21.30
	12668.00	90.79	174.41	11684.66	-1162.93	-1144.87	-321.78	1.61	460356.90	719825.01	N 32 15 51.39 W	103 45 21.19
	12762.00	90.10	175.40	11683.93	-1255.84	-1238.80	-313.43	1.28	460263.28	719833.36	N 32 15 50.47 W	103 45 21.10
	12857.00	89.65	175.79	11684.13	-1349.91	-1333.31	-306.13	0.63	460168.57	719840.65	N 32 15 49.53 W	103 45 21.02
	12952.00	88.24	178.01	11685.88	-1444.24	-1428.15	-301.00	2.77	460073.74	719845.79	N 32 15 48.59 W	103 45 20.97
	13047.00	89.79	182.95	11687.52	-1539.05	-1523.10	-301.79	5.45	459978.79	719844.99	N 32 15 47.85 W	103 45 20.98
	13141.00	89.38	182.39	11688.20	-1633.04	-1617.00	-306.17	0.74	459884.90	719840.02	N 32 15 46.72 W	103 45 21.04
	13236.00	89.07	182.69	11689.48	-1728.01	-1711.89	-310.38	0.45	459790.01	719836.41	N 32 15 45.78 W	103 45 21.10
	13331.00	89.28	180.39	11690.85	-1822.93	-1806.84	-312.93	2.43	459695.07	719833.85	N 32 15 44.84 W	103 45 21.13
	13426.00	90.38	179.89	11691.13	-1917.76	-1901.84	-313.17	1.27	459600.08	719833.62	N 32 15 43.86 W	103 45 21.14
	13521.00	90.52	182.77	11690.39	-2017.53	-1996.80	-315.37	3.04	459505.12	719831.42	N 32 15 42.86 W	103 45 21.17
	13616.00	92.38	188.70	11687.98	-2201.31	-2091.25	-324.85	6.54	459410.68	719821.93	N 32 15 42.03 W	103 45 21.29
	13710.00	86.59	185.73	11687.19	-2291.31	-2184.48	-336.65	5.12	459317.48	719810.13	N 32 15 41.11 W	103 45 21.43
	13805.00	86.83	181.80	11686.49	-2386.26	-2279.22	-342.89	4.14	459222.71	719803.90	N 32 15 40.17 W	103 45 21.51
	13900.00	89.83	177.80	11690.77	-2391.03	-2374.19	-342.58	4.40	459127.75	719804.23	N 32 15 39.23 W	103 45 21.51
	13995.00	88.59	174.72	11692.08	-2485.22	-2468.87	-336.38	3.49	459032.68	719810.43	N 32 15 38.29 W	103 45 21.45
	14090.00	89.42	176.20	11693.73	-2579.25	-2563.85	-328.84	1.79	458938.30	719817.94	N 32 15 37.36 W	103 45 21.36
	14185.00	89.68	174.59	11694.49	-2673.27	-2658.34	-321.22	1.71	458843.62	719825.57	N 32 15 36.42 W	103 45 21.28
	14279.00	89.87	175.31	11694.88	-2766.20	-2751.97	-312.94	0.80	458749.99	719833.84	N 32 15 35.49 W	103 45 21.19
	14374.00	89.49	177.18	11695.41	-2860.41	-2846.76	-306.72	2.01	458655.21	719840.06	N 32 15 34.55 W	103 45 21.12
	14469.00	89.59	177.52	11696.17	-2954.84	-2941.66	-302.33	0.37	458560.32	719844.48	N 32 15 33.61 W	103 45 21.08
	14564.00	89.62	177.86	11696.82	-3049.33	-3036.58	-298.50	0.36	458465.40	719848.29	N 32 15 32.68 W	103 45 21.04
	14659.00	89.04	177.39	11697.94	-3143.81	-3131.49	-294.58	0.79	458370.49	719852.22	N 32 15 31.74 W	103 45 21.00

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 ° ' ")
		1	0.000	26.500	1:98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only		Original Borehole / Oxy Cal-Mon Federal 171H Pilot Hole MWD 0- Update		
		1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only		Original Borehole / Oxy Cal-Mon Federal 171H Pilot Hole MWD 0- Update		
		1	26.500	10607.000	Act Stns	30.000	30.000	NAL_NSG+MSHOT		Original Borehole / Oxy Cal-Mon Federal 171H Pilot Hole MWD 0- Update		
		1	10607.000	16342.000	Act Stns	30.000	30.000	NAL_MWD„PLUS_0.5_DEG		ST01 / Oxy Cal-Mon Federal 171H ST01 MWD 0-16,342'		