

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

30-015-44772

May 21, 2018

RECEIVED

OXY USA INC.

MAR 18 2019

DISTRICT II-ARTESIA O.C.D.

Re:

CLIENT: OXY USA INC.
WELL: Cal-Mon MDP1 35 Fed 2H
FIELD: Cottan Draw Bone Spring

RIG: H&P 617
COUNTY: Eddy
API NO: 30-015-44772
JOB NO: 18MLD2975

35, 23 South, 31 East, Eddy NM
-32.26789 -103.75388

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>
Tyler Matthews FE	Cal-Mon MDP1 35 Fed 2H	798.00 Ft to 14799.00 Ft	April 17, 2018 to April 29, 2018	TelePacer

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

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

Well Reference:
35, 23 South, 31 East, Eddy NM
-32.26789 -103.75388

I, Tyler Matthews certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of April 17, 2018 through April 29, 2018, conduct or supervise the taking of the TelePacer surveys from a depth of 798.00 feet to a depth of 14799.00 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 MDPI 35 Fed 2H Well () API No. 30-015-44772 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.

Tyler Matthews

By
Tyler Matthews
FE

Subscribed and Sworn to before me this 21st day of May (month) 2018 (yr)

My Commission expires:

2-16-2022

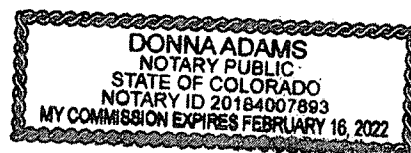
D. Adams

Notary Public

Adams County Colorado

(County State)

(signature)



Schlumberger

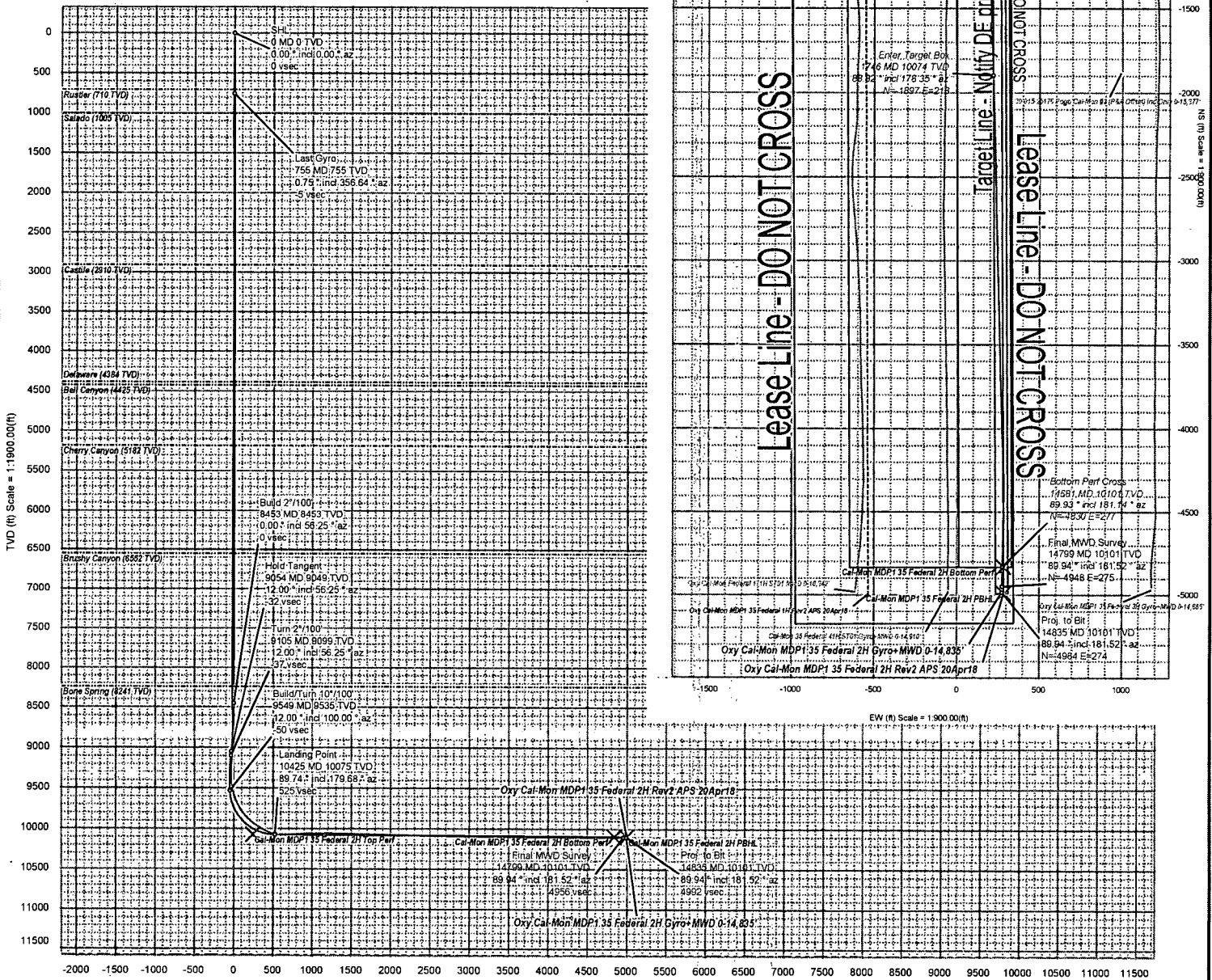
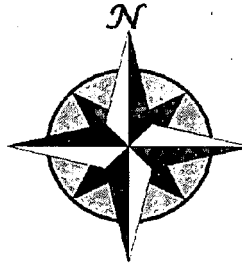
OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Cal-Mon MDP1 35 Federal 2H	NM Eddy County (NAD 83)	Oxy Cal-Mon MDP1 35 Federal 2H
Gravity & Magnetic Parameters			
Model: HDGM 2018	Dip: 60.01°	Date: 14-Apr-2018	Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet
MagDec: 6.903°	FS: 48063.272mT	Gravity FS: 998.446mgm (9.80665 Based)	Lat: N 32 16 4.39
			North: 461673.121m
			East: 729437.827m
			Scale Fact: 0.99994583
Miscellaneous			
			Slot: Oxy Cal-Mon MDP1 35 Federal 2H
			TVD Ref: RKB=26.5(3482.8ft above MSL)
			Plan: Oxy Cal-Mon MDP1 35 Federal 2H Rev2 APS 20Apr18

Grid
True
Mag

Grid North
Tot Corr (M->G 6.594°)
Mag Dec (6.903°)
Grid Conv (0.309°)





Oxy Cal-Mon MDP1 35 Federal 2H Gyro+MWD 0-14,835' Survey Geodetic Report

(Def Survey)

Report Date: May 01, 2018 - 09:03 AM
 Client: OXY
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Cal-Mon MDP1 35 Federal 2H / Oxy Cal-Mon MDP1 35 Federal 2H
 Well: Oxy Cal-Mon MDP1 35 Federal 2H
 Borehole: Original Borehole
 UWI / API#: Unknown / 30-015-44772
 Survey Name: Oxy Cal-Mon MDP1 35 Federal 2H Gyro+MWD 0-14,835'
 Survey Date: April 14, 2018
 Tort / AHD / DDI / ERD Ratio: 166.286 ° / 5222.996 ft / 6.106 / 0.517
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 16' 4.38598", W 103° 45' 13.97276"
 Location Grid N/E Y/X: N 461673.120 ftUS, E 720437.820 ftUS
 CRS Grid Convergence Angle: 0.3094 °
 Grid Scale Factor: 0.99994583
 Version / Patch: 2.10.720.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 176.729 ° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=26.5'
 TVD Reference Elevation: 3482.800 ft above MSL
 Seabed / Ground Elevation: 3456.300 ft above MSL
 Magnetic Declination: 6.903 °
 Total Gravity Field Strength: 998.4459mgm (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48063.272 nT
 Magnetic Dip Angle: 60.019 °
 Declination Date: April 14, 2018
 Magnetic Declination Model: HDGM 2018
 North Reference: Grid North
 Grid Convergence Used: 0.3094 °
 Total Corr Mag North->Grid North: 6.5939 °
 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	461673.12	720437.82	N 32 16 4.39 W 103 45 13.97	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	461673.12	720437.82	N 32 16 4.39 W 103 45 13.97	
	93.50	0.64	48.18	93.50	-0.23	0.25	0.28	0.96	461673.37	720438.10	N 32 16 4.39 W 103 45 13.97	
	124.30	0.62	51.40	124.30	-0.44	0.47	0.54	0.13	461673.59	720438.36	N 32 16 4.39 W 103 45 13.97	
	215.20	0.58	49.59	215.19	-1.00	1.07	1.27	0.05	461674.19	720439.09	N 32 16 4.40 W 103 45 13.96	
	302.50	0.60	40.71	302.49	-1.59	1.71	1.91	0.11	461674.83	720439.73	N 32 16 4.40 W 103 45 13.95	
	397.50	0.51	37.95	397.48	-2.27	2.42	2.49	0.10	461675.54	720440.31	N 32 16 4.41 W 103 45 13.94	
	492.90	0.37	8.25	492.88	-2.89	3.06	2.80	0.28	461676.18	720440.62	N 32 16 4.42 W 103 45 13.94	
	587.80	0.52	355.91	587.78	-3.62	3.79	2.81	0.19	461676.91	720440.63	N 32 16 4.42 W 103 45 13.94	
	682.40	0.58	351.78	682.37	-4.53	4.69	2.71	0.08	461677.81	720440.53	N 32 16 4.43 W 103 45 13.94	
	754.90	0.75	356.64	754.87	-5.37	5.53	2.63	0.25	461678.65	720440.45	N 32 16 4.44 W 103 45 13.94	
	798.00	0.59	350.75	797.96	-5.87	6.03	2.58	0.40	461679.15	720440.40	N 32 16 4.45 W 103 45 13.94	
	983.00	0.08	271.64	982.96	-6.83	6.97	2.30	0.31	461680.09	720440.12	N 32 16 4.45 W 103 45 13.95	
	1076.00	0.06	190.23	1075.96	-6.79	6.93	2.22	0.10	461680.05	720440.04	N 32 16 4.45 W 103 45 13.95	
	1166.00	0.11	69.90	1165.96	-6.77	6.91	2.29	0.17	461680.03	720440.11	N 32 16 4.45 W 103 45 13.95	
	1348.00	0.08	92.26	1347.96	-6.81	6.96	2.59	0.03	461680.08	720440.41	N 32 16 4.45 W 103 45 13.94	
	1441.00	0.13	162.35	1440.96	-6.70	6.86	2.68	0.14	461679.98	720440.50	N 32 16 4.45 W 103 45 13.94	
	1533.00	0.06	285.50	1532.96	-6.61	6.78	2.67	0.19	461679.89	720440.49	N 32 16 4.45 W 103 45 13.94	
	1715.00	0.08	276.09	1714.96	-6.66	6.81	2.45	0.01	461679.93	720440.27	N 32 16 4.45 W 103 45 13.94	
	1807.00	0.06	246.42	1806.96	-6.66	6.80	2.34	0.04	461679.92	720440.16	N 32 16 4.45 W 103 45 13.95	
	1989.00	0.06	180.64	1988.96	-6.53	6.67	2.25	0.04	461679.79	720440.07	N 32 16 4.45 W 103 45 13.95	
	2080.00	0.11	289.52	2079.96	-6.51	6.65	2.17	0.16	461679.77	720439.99	N 32 16 4.45 W 103 45 13.95	
	2175.00	0.06	307.65	2174.96	-6.58	6.71	2.05	0.06	461679.83	720439.87	N 32 16 4.45 W 103 45 13.95	
	2269.00	0.08	63.31	2268.96	-6.64	6.77	2.06	0.13	461679.89	720439.88	N 32 16 4.45 W 103 45 13.95	
	2458.00	0.06	342.26	2457.96	-6.79	6.92	2.15	0.05	461680.04	720439.97	N 32 16 4.45 W 103 45 13.95	
	2552.00	0.06	193.99	2551.96	-6.79	6.92	2.13	0.12	461680.04	720439.95	N 32 16 4.45 W 103 45 13.95	
	2647.00	0.06	215.03	2646.96	-6.70	6.83	2.09	0.02	461679.95	720439.91	N 32 16 4.45 W 103 45 13.95	
	2741.00	0.06	250.84	2740.96	-6.65	6.78	2.01	0.04	461679.90	720439.83	N 32 16 4.45 W 103 45 13.95	
	2836.00	0.06	228.78	2835.96	-6.61	6.73	1.93	0.02	461679.85	720439.75	N 32 16 4.45 W 103 45 13.95	
	2931.00	0.08	316.59	2930.96	-6.63	6.74	1.84	0.10	461679.86	720439.66	N 32 16 4.45 W 103 45 13.95	
	3025.00	0.13	79.67	3024.96	-6.69	6.81	1.90	0.20	461679.93	720439.72	N 32 16 4.45 W 103 45 13.95	
	3214.00	0.06	287.84	3213.96	-6.75	6.88	2.02	0.10	461680.00	720439.84	N 32 16 4.45 W 103 45 13.95	
	3309.00	0.08	347.89	3308.96	-6.84	6.96	1.96	0.08	461680.08	720439.78	N 32 16 4.45 W 103 45 13.95	
	3403.00	0.11	338.51	3402.96	-6.99	7.11	1.91	0.04	461680.23	720439.73	N 32 16 4.46 W 103 45 13.95	
	3592.00	0.11	117.46	3591.96	-7.07	7.19	2.01	0.11	461680.31	720439.83	N 32 16 4.46 W 103 45 13.95	
	3687.00	0.06	217.03	3686.96	-6.98	7.11	2.06	0.14	461680.23	720439.88	N 32 16 4.46 W 103 45 13.95	
	3782.00	0.16	234.01	3781.96	-6.87	6.99	1.92	0.11	461680.11	720439.74	N 32 16 4.46 W 103 45 13.95	
	3876.00	0.06	105.99	3875.96	-6.78	6.90	1.86	0.22	461680.02	720439.68	N 32 16 4.45 W 103 45 13.95	
	3971.00	0.06	282.96	3970.96	-6.78	6.90	1.86	0.13	461680.02	720439.68	N 32 16 4.45 W 103 45 13.95	
	4066.00	0.06	233.14	4065.96	-6.77	6.88	1.77	0.05	461680.00	720439.59	N 32 16 4.45 W 103 45 13.95	
	4160.00	0.11	348.44	4159.96	-6.83	6.94	1.71	0.16	461680.06	720439.53	N 32 16 4.45 W 103 45 13.95	
	4255.00	0.08	107.40	4254.96	-6.90	7.01	1.76	0.17	461680.13	720439.58	N 32 16 4.46 W 103 45 13.95	
	4320.00	0.13	100.23	4319.96	-6.86	6.98	1.88	0.08	461680.10	720439.70	N 32 16 4.45 W 103 45 13.95	
	4511.00	0.23	54.28	4510.96	-7.02	7.17	2.40	0.09	461680.29	720440.22	N 32 16 4.46 W 103 45 13.94	
	4606.00	0.22	36.05	4605.96	-7.26	7.43	2.66	0.08	461680.55	720440.48	N 32 16 4.46 W 103 45 13.94	
	4700.00	0.38	36.65	4699.96	-7.64	7.82	2.95	0.17	461680.94	720440.77	N 32 16 4.46 W 103 45 13.94	
	4795.00	0.34	22.02	4794.95	-8.14	8.34	3.25	0.11	461681.46	720441.07	N 32 16 4.47 W 103 45 13.93	
	4889.00	0.45	347.24	4888.95	-8.75	8.96	3.27	0.27	461682.08	720441.09	N 32 16 4.47 W 103 45 13.93	
	4984.00	0.73	345.89	4983.95	-9.72	9.91	3.04	0.30	461683.03	720440.86	N 32 16 4.48 W 103 45 13.94	
	5078.00	0.80	337.28	5077.94	-10.92	11.09	2.64	0.14	461684.21	720440.46	N 32 16 4.50 W 103 45 13.94	
	5173.00	0.91	338.08	5172.93	-12.26	12.40	2.10	0.12	461685.52	720439.92	N 32 16 4.51 W 103 45 13.95	
	5267.00	0.90	333.93	5266.92	-13.65	13.76	1.50	0.07	461686.88	720439.32	N 32 16 4.52 W 103 45 13.95	
	5362.00	0.93	323.04	5361.90	-14.98	15.05	0.71	0.19	461688.16	720438.53	N 32 16 4.53 W 103 45 13.96	
	5456.00	0.00	328.60	5455.90	-15.62	15.66	0.25	0.99	461688.77	720438.07	N 32 16 4.54 W 103 45 13.97	
	5646.00	0.06	322.74	5645.90	-15.70	15.73	0.19	0.03	461688.85	720438.01	N 32 16 4.54 W 103 45 13.97	
	5740.00	0.06	66.07	5739.90	-15.76	15.79	0.21	0.10	461688.91	720438.03	N 32 16 4.54 W 103 45 13.97	
	5835.00	0.06	61.84	5834.90	-15.79	15.84	0.29	0.00	461688.96	720438.11	N 32 16 4.54 W 103 45 13.97	
	5929.00	0.06	299.08	5928.90	-15.84	15.88	0.30	0.11	461689.00	720438.12	N 32 16 4.54 W 103 45 13.97	
	6024.00	0.06	174.00	6023.90	-15.82	15.86	0.26	0.11	461688.98	720438.08	N 32 16 4.54 W 103 45 13.97	
	6119.00	0.06	97.06	6118.90	-15.76	15.80	0.31	0.08	461688.92	720438.13	N 32 16 4.54 W 103 45 13.97	
	6213.00	0.06	53.98	6212.90	-15.78	15.83	0.40	0.05	461688.95	720438.22	N 32 16 4.54 W 103 45 13.97	
	6307.00	0.06	321.83	6306.90	-15.84	15.89	0.41	0.09	461689.01	720438.23	N 32 16 4.54 W 103 45 13.97	
	6402.00	0.06	251.59	6401.90	-15.87	15.92	0.33	0.07	461689.04	720438.15	N 32 16 4.54 W 103 45 13.97	
	6497.00	0.08	243.69	6496.90	-15.83	15.87	0.23	0.02	461688.99	720438.05	N 32 16 4.54 W 103 45 13.97	
	6591.00	0.06	175.79	6590.90	-15.76	15.79	0.17	0.09	461688.91	720437.99	N 32 16 4.54 W 103 45 13.97	
	6685.00	0.06	342.06	6684.90	-15.76	15.79	0.16	0.13	461688.91	720437.98	N 32 16 4.54 W 103 45 13.97	
	6780.00	0.06	159.82	6779.90	-15.76	15.79	0.16	0.13	461688.91	720437.98	N 32 16 4.54 W 103 45 13.97	
	6874.00	0.06	177.55	6873.90	-15.66	15.70	0.18	0.02	461688.82	720438.00	N 32 16 4.54 W 103 45 13.97	
	6969.00	0.08	200.26	6968.90	-15.55	15.59	0.16	0.04	461688.70	720437.98	N 32 16 4.54 W 103 45 13.97	
	7064.00	0.06	217.59	7063.90	-15.45	15.48	0.11	0.03	461688.60	720437.93	N 32 16 4.54 W 103 45 13.97	
	7158.00	0.06	206.24	7157.90	-15.37	15.40	0.05	0.01	461688.52	720437.87	N 32 16 4.54 W 103 45 13.97	
	7252.00	0.06	35.14	7251.90	-15.37	15.40	0.06	0.13	461688.52	720437.88	N 32 16 4.54 W 103 45 13.97	
	7347.00	0.06	217.65	7346.90	-15.37	15.40	0.06	0.13	461688.52	720437.88	N 32 16 4.54 W 103 45 13.97	
	7536.00	0.06	151.71	7535.90	-15.21	15.23	0.04	0.03	461688.35	720437.86	N 32 16 4.54 W 103 45 13.97	

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 ° ' ")
	8009.00	0.08	195.28	8008.90	-14.94	14.96	0.04	0.09	461688.08	720437.86	N 32 16 4.53 W	103 45 13.97
	8106.00	0.06	185.77	8105.90	-14.82	14.85	0.02	0.02	461687.97	720437.84	N 32 16 4.53 W	103 45 13.97
	8200.00	0.08	295.84	8199.90	-14.81	14.83	-0.04	0.12	461687.95	720437.78	N 32 16 4.53 W	103 45 13.97
	8295.00	0.22	6.59	8294.90	-15.02	15.04	-0.08	0.22	461688.16	720437.74	N 32 16 4.53 W	103 45 13.97
	8389.00	0.48	171.32	8388.90	-14.80	14.83	0.00	0.74	461687.95	720437.82	N 32 16 4.51 W	103 45 13.97
	8484.00	1.91	112.68	8483.88	-13.71	13.82	1.52	1.80	461686.94	720439.34	N 32 16 4.52 W	103 45 13.95
	8578.00	3.92	100.58	8577.75	-12.26	12.63	6.12	2.22	461685.75	720443.94	N 32 16 4.51 W	103 45 13.90
	8673.00	5.59	98.08	8672.42	-10.57	11.38	13.90	1.77	461684.50	720451.72	N 32 16 4.50 W	103 45 13.81
	8767.00	6.80	91.64	8765.87	-9.19	10.58	23.99	1.48	461683.70	720461.81	N 32 16 4.49 W	103 45 13.69
	8862.00	7.66	84.72	8860.12	-8.93	11.00	35.92	1.29	461684.12	720473.74	N 32 16 4.49 W	103 45 13.55
	8956.00	9.08	76.64	8953.12	-10.45	13.29	49.37	1.96	461686.41	720487.19	N 32 16 4.51 W	103 45 13.40
	9050.00	10.75	67.45	9045.72	-14.65	18.37	64.69	2.44	461691.49	720502.51	N 32 16 4.56 W	103 45 13.22
	9145.00	12.57	62.68	9138.75	-21.79	26.51	82.06	2.17	461699.63	720519.87	N 32 16 4.64 W	103 45 13.02
	9239.00	11.55	70.35	9230.68	-28.61	34.37	100.01	2.02	461707.49	720537.82	N 32 16 4.72 W	103 45 12.81
	9334.00	9.55	86.12	9324.09	-31.37	38.10	116.83	3.68	461711.22	720554.65	N 32 16 4.76 W	103 45 12.61
	9401.00	8.52	100.33	9390.27	-30.27	37.59	127.26	3.66	461710.71	720565.08	N 32 16 4.75 W	103 45 12.49
	9464.00	10.62	123.91	9452.41	-25.66	33.51	136.68	6.99	461706.63	720574.49	N 32 16 4.71 W	103 45 12.38
	9559.00	16.91	148.94	9544.71	-8.11	16.76	151.10	8.98	461689.88	720589.91	N 32 16 4.54 W	103 45 12.21
	9653.00	24.30	155.69	9632.65	22.08	-12.62	166.14	8.25	461660.50	720603.95	N 32 16 4.25 W	103 45 12.04
	9748.00	29.73	156.14	9717.26	62.40	-52.01	183.73	5.72	461621.12	720621.53	N 32 16 3.86 W	103 45 11.84
	9843.00	38.35	153.85	9795.91	111.70	-100.10	206.29	9.17	461573.03	720644.09	N 32 16 3.38 W	103 45 11.58
	9937.00	47.34	155.95	9864.76	171.01	-157.96	233.28	9.68	461515.17	720671.09	N 32 16 2.81 W	103 45 11.27
	10032.00	53.12	164.07	9925.57	240.87	-226.52	257.99	8.95	461446.61	720695.80	N 32 16 2.13 W	103 45 10.98
	10126.00	60.11	172.30	9977.32	318.37	-303.24	273.81	10.42	461369.90	720711.61	N 32 16 1.37 W	103 45 10.80
	10221.00	61.61	184.01	10023.70	401.10	-385.96	276.41	10.88	461287.19	720714.21	N 32 16 0.55 W	103 45 10.78
	10316.00	74.93	187.42	10058.80	488.04	-473.54	267.52	14.41	461199.61	720705.33	N 32 15 59.69 W	103 45 10.89
	10410.00	85.62	190.64	10074.66	578.40	-564.89	252.96	11.86	461108.26	720690.77	N 32 15 58.78 W	103 45 11.06
	10504.00	92.13	190.78	10076.51	669.55	-657.18	235.51	6.93	461015.97	720673.31	N 32 15 57.87 W	103 45 11.27
	10623.00	93.14	187.11	10071.03	785.71	-774.59	217.02	3.20	460898.57	720654.83	N 32 15 56.71 W	103 45 11.49
	10717.00	93.03	183.20	10065.97	878.55	-868.06	208.59	4.16	460805.11	720646.40	N 32 15 55.79 W	103 45 11.60
	10812.00	90.90	180.26	10062.72	973.11	-962.94	205.73	3.82	460710.23	720643.54	N 32 15 54.85 W	103 45 11.64
	10906.00	90.28	182.27	10061.75	1066.81	-1056.91	203.65	2.24	460616.27	720641.46	N 32 15 53.92 W	103 45 11.67
	11001.00	90.34	181.03	10061.23	1161.45	-1151.87	200.92	1.31	460521.32	720638.73	N 32 15 52.98 W	103 45 11.71
	11096.00	89.66	178.83	10061.23	1256.30	-1246.86	201.03	2.42	460426.33	720638.84	N 32 15 52.04 W	103 45 11.71
	11190.00	88.88	178.40	10062.43	1350.24	-1340.82	203.31	0.95	460332.37	720641.11	N 32 15 51.11 W	103 45 11.69
	11285.00	88.82	178.53	10064.34	1445.18	-1435.77	205.85	0.15	460237.43	720643.66	N 32 15 50.17 W	103 45 11.67
	11379.00	88.71	178.60	10066.36	1539.11	-1529.72	208.20	0.14	460143.49	720646.01	N 32 15 49.24 W	103 45 11.64
	11474.00	88.93	178.57	10068.32	1634.04	-1624.67	210.55	0.23	460048.54	720648.36	N 32 15 48.30 W	103 45 11.62
	11569.00	88.82	178.23	10070.19	1728.98	-1719.61	213.20	0.38	459953.60	720651.01	N 32 15 47.36 W	103 45 11.60
	11663.00	88.82	178.36	10072.12	1822.92	-1813.55	216.00	0.14	459859.67	720653.80	N 32 15 46.43 W	103 45 11.57
	11758.00	88.82	178.35	10074.08	1917.87	-1908.49	218.72	0.01	459764.73	720656.53	N 32 15 45.49 W	103 45 11.55
	11947.00	88.99	178.34	10077.69	2106.76	-2097.38	224.18	0.09	459575.86	720661.99	N 32 15 43.62 W	103 45 11.49
	12042.00	88.88	178.42	10079.46	2201.70	-2192.33	226.87	0.14	459480.92	720664.67	N 32 15 42.68 W	103 45 11.47
	12136.00	88.93	178.41	10081.25	2295.64	-2286.27	229.47	0.05	459386.98	720667.27	N 32 15 41.75 W	103 45 11.44
	12231.00	88.88	178.78	10083.07	2390.57	-2381.23	231.79	0.39	459292.03	720669.60	N 32 15 40.81 W	103 45 11.42
	12326.00	88.82	178.99	10084.97	2485.49	-2476.19	233.64	0.23	459197.07	720671.45	N 32 15 39.87 W	103 45 11.41
	12420.00	88.77	178.99	10086.95	2579.39	-2570.15	235.30	0.05	459103.11	720673.11	N 32 15 38.94 W	103 45 11.39
	12514.00	88.88	178.63	10088.88	2673.31	-2664.11	237.25	0.40	459009.16	720675.06	N 32 15 38.01 W	103 45 11.38
	12609.00	88.99	178.21	10090.64	2768.25	-2759.06	239.87	0.46	458914.21	720677.68	N 32 15 37.07 W	103 45 11.35
	12703.00	89.44	178.16	10091.93	2862.21	-2853.01	242.85	0.48	458820.28	720680.65	N 32 15 36.14 W	103 45 11.32
	12798.00	89.27	178.69	10093.00	2957.17	-2947.96	245.46	0.59	458725.32	720683.26	N 32 15 35.20 W	103 45 11.30
	12893.00	89.49	178.67	10094.03	3052.11	-3042.93	247.65	0.23	458630.36	720685.45	N 32 15 34.26 W	103 45 11.28
	12987.00	89.44	178.28	10094.91	3146.06	-3136.89	250.15	0.42	458536.40	720687.95	N 32 15 33.33 W	103 45 11.26
	13082.00	89.78	178.68	10095.55	3241.01	-3231.86	252.67	0.55	458441.44	720690.47	N 32 15 32.39 W	103 45 11.23
	13176.00	89.72	178.33	10095.96	3334.96	-3325.83	255.12	0.38	458347.48	720692.93	N 32 15 31.46 W	103 45 11.21
	13271.00	89.83	178.67	10096.34	3429.92	-3420.79	257.61	0.38	458252.52	720695.41	N 32 15 30.52 W	103 45 11.19
	13365.00	89.78	178.58	10096.66	3523.87	-3514.76	259.86	0.11	458158.55	720697.67	N 32 15 29.59 W	103 45 11.17
	13460.00	89.66	178.64	10097.12	3618.81	-3609.74	262.17	0.14	458063.59	720699.97	N 32 15 28.65 W	103 45 11.15
	13554.00	89.72	178.50	10097.63	3712.76	-3703.70	264.51	0.16	457969.62	720702.32	N 32 15 27.72 W	103 45 11.13
	13649.00	89.78	178.26	10098.04	3807.72	-3798.67	267.20	0.26	457874.67	720705.00	N 32 15 26.78 W	103 45 11.10
	13743.00	89.72	178.18	10098.45	3901.69	-3892.62	270.12	0.11	457780.72	720707.92	N 32 15 25.85 W	103 45 11.07
	13838.00	89.78	178.36	10098.87	3996.66	-3887.58	272.99	0.20	457685.77	720710.79	N 32 15 24.91 W	103 45 11.04
	13932.00	89.83	178.28	10099.19	4090.62	-4081.53	275.74	0.10	457591.82	720713.55	N 32 15 23.98 W	103 45 11.02
	14027.00	89.89	178.05	10099.42	4185.59	-4176.49	278.78	0.25	457496.87	720716.59	N 32 15 23.05 W	103 45 10.99
	14121.00	89.84	178.44	10099.56	4279.56	-4270.44	281.66	0.42	457402.92	720719.47	N 32 15 22.12 W	103 45 10.96
	14216.00	90.06	179.45	10099.56	4374.48	-4365.42	283.41	1.07	457307.94	720721.22	N 32 15 21.18 W	103 45 10.95
	14310.00	89.78	181.15	10099.69	4468.30	-4459.42	282.92	1.83	457213.95	720720.95	N 32 15 20.25 W	103 45 10.96
	14405.00	89.72	180.75	10100.11	4563.04	-4554.40	281.35	0.43	457118.97	720719.15	N 32 15 19.31 W	103 45 10.98
	14499.00	89.94	180.77	10100.39	4656.80	-4648.40	280.10	0.24	457024.99	720717.90	N 32 15 18.38 W	103 45 11.00
	14594.00	89.78	180.91	10100.62	4751.56	-4743.39	278.71	0.22	456930.00	720716.51	N 32 15 17.44 W	103 45 11.03
	14688.00	89.94	181.16	10100.85	4845.29	-4837.37	277.01	0.32	456836.02	720714.81	N 32 15 16.51 W	103 45 11.05
	14783.00	89.83	181.33	10101.04	4940.00	-4932.35	274.94	0.21	456741.05	720712.75	N 32 15 15.57 W	103 45 11.08
Final MWD Survey Proj. to Bit	14799.00	89.94	181.52	10101.07	4955.95	-4948.34	274.55	1.37	456725.06	720712.35	N 32 15 15.41 W	103 45 11.09
	14835.00	89.94	181.52	10101.11	4991.82	-4984.33	273.59	0.00	456689.07	720711.40	N 32 15 15.05 W	103 45 11.10

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	1/98.425	30.000	30.000 NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Cal-Mon MDP1 35 Federal 2H Gyro+MWD 0-14.835'</