

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

MAR 03 2020

Form C-102

Revised August 1, 2011

EDWARD-OCD ARTESIA

☒ AMENDED REPORT
(As-Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-45085	Pool Code 50371	Pool Name Pierce Crossing; Bone Spring
Property Code 321633	Property Name OXBOW CC "17-8" FEDERAL COM	Well Number 33H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 2937.9'

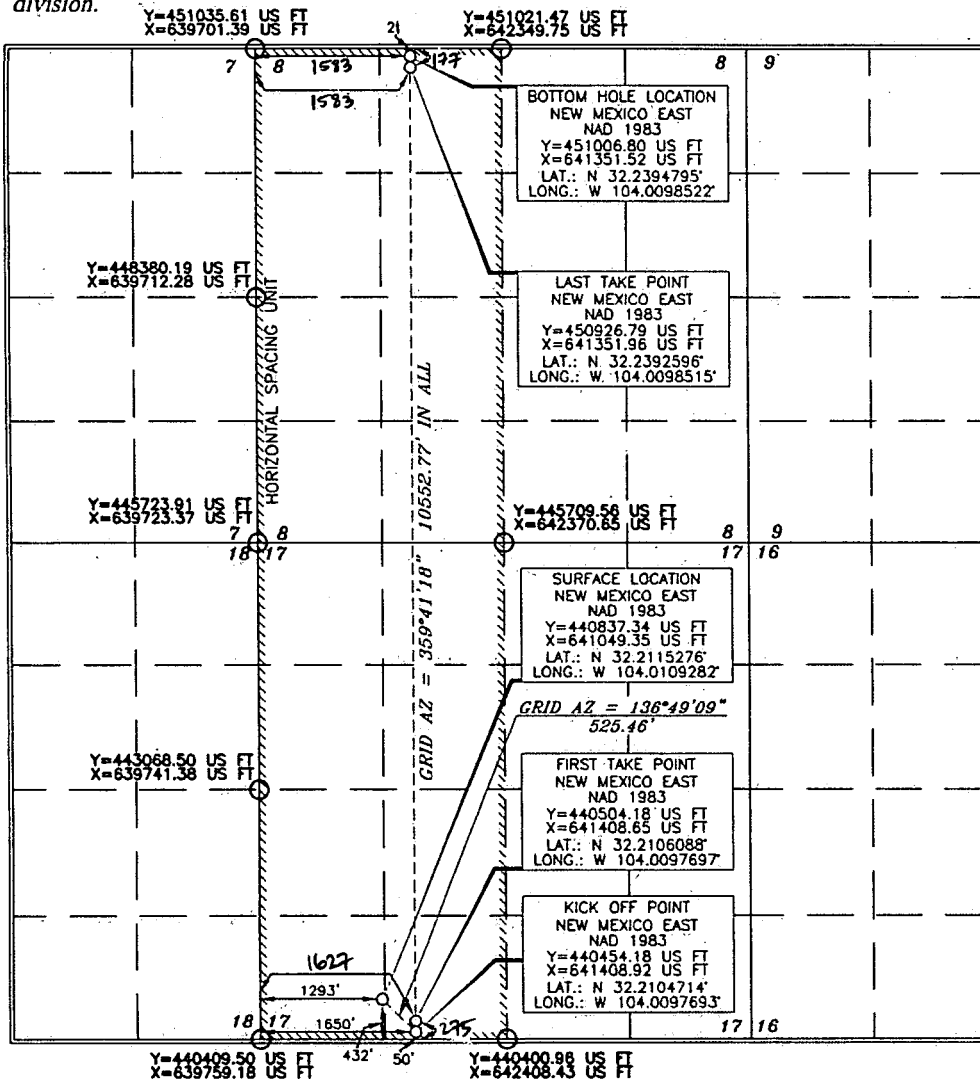
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	17	24 SOUTH	29 EAST, N.M.P.M.		432'	SOUTH	1293'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	8	24 SOUTH	29 EAST, N.M.P.M.		20' 21	NORTH	1050' 1583	WEST	EDDY
Dedicated Acres 640	Joint or Infill	Consolidation Code	Order No.	FTP- 275 FSL 1627 FWL LTP- 177 FNL 1583 FWL					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *[Signature]* Date: 3/2/20
Printed Name: Jana Mendiola
E-mail Address: janalyn-mendiola@oxy.com

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Signature: *[Signature]* Date of Survey: OCTOBER 18, 2017
Professional Surveyor: 15079
Certificate Number: 15079

WO# 171019WL-a-XY (Rev. A) (KA)

RW 4-30-20

Intent ☐ As Drilled ☒

API #
30-015-45085

Operator Name: OXY USA INC.	Property Name: OXBOW CC 17-8 FEDERAL COM	Well Number 33H
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Kick Off Point (KOP)

UL N	Section 17	Township 24S	Range 29E	Lot	Feet 75	From N/S S	Feet 1583	From E/W W	County EDDY
Latitude 32.21013					Longitude -104.00999			NAD NAD83	

First Take Point (FTP)

UL N	Section 17	Township 24S	Range 29E	Lot	Feet 275	From N/S S	Feet 1627	From E/W W	County EDDY
Latitude 32.21109					Longitude -104.00985			NAD NAD83	

Last Take Point (LTP)

UL C	Section 8	Township 24S	Range 29E	Lot	Feet 177	From N/S N	Feet 1583	From E/W W	County EDDY
Latitude 32.23904					Longitude -104.00989			NAD NAD83	

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number
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KZ 06/29/2018

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

January 31, 2020

OXY USA Incorporated
P.O. BOX 2289
Houston, TX 77252

RECEIVED

MAR 03 2020

EMNRD-OCDARTESIA

Re:

S17, T24S, R29E EDDY, NM
N 32.21153 W -104.01093

CLIENT: OXY USA Incorporated
WELL: OXBOW CC 17-8 FED COM 33H
FIELD: Pierce Crossing-Bone Spring

RIG: Pioneer 82
COUNTY: EDDY
API NO: 30-015-45085
JOB NO: 19MLH0384

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>
Balgees Alabdullah FE	OXBOW CC 17-8 FED.COM 33H Original Hole	556.00 Ft to 20199.00 Ft	December 7, 2019 to January 22, 2020	SlimPulse Third Party Corrected

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

Well Reference:

S17, T24S, R29E EDDY, NM
N 32.21153 W -104.01093

I, Balqees Alabdullah certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of December 07, 2019 through January 22, 2020, conduct or supervise the taking of the SlimPulse & 3rd party Corrected surveys from a depth of 556.00 feet to a depth of 20199.00 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 Incorporated for the OXBOW CC 17-8 FED COM 33H Well (Original Hole) API No. 30-015-45085 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
Balqees Alabdullah
FE

Balqees

Subscribed and Sworn to before me this 31 day of January (month) 2020 (yr)

My Commission expires:

6/14/23

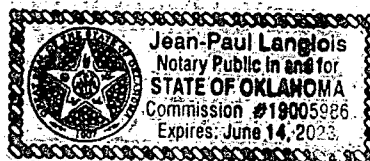
Jean-Paul Langlois

(signature)

Notary Public

Comanche, Oklahoma

(County State)



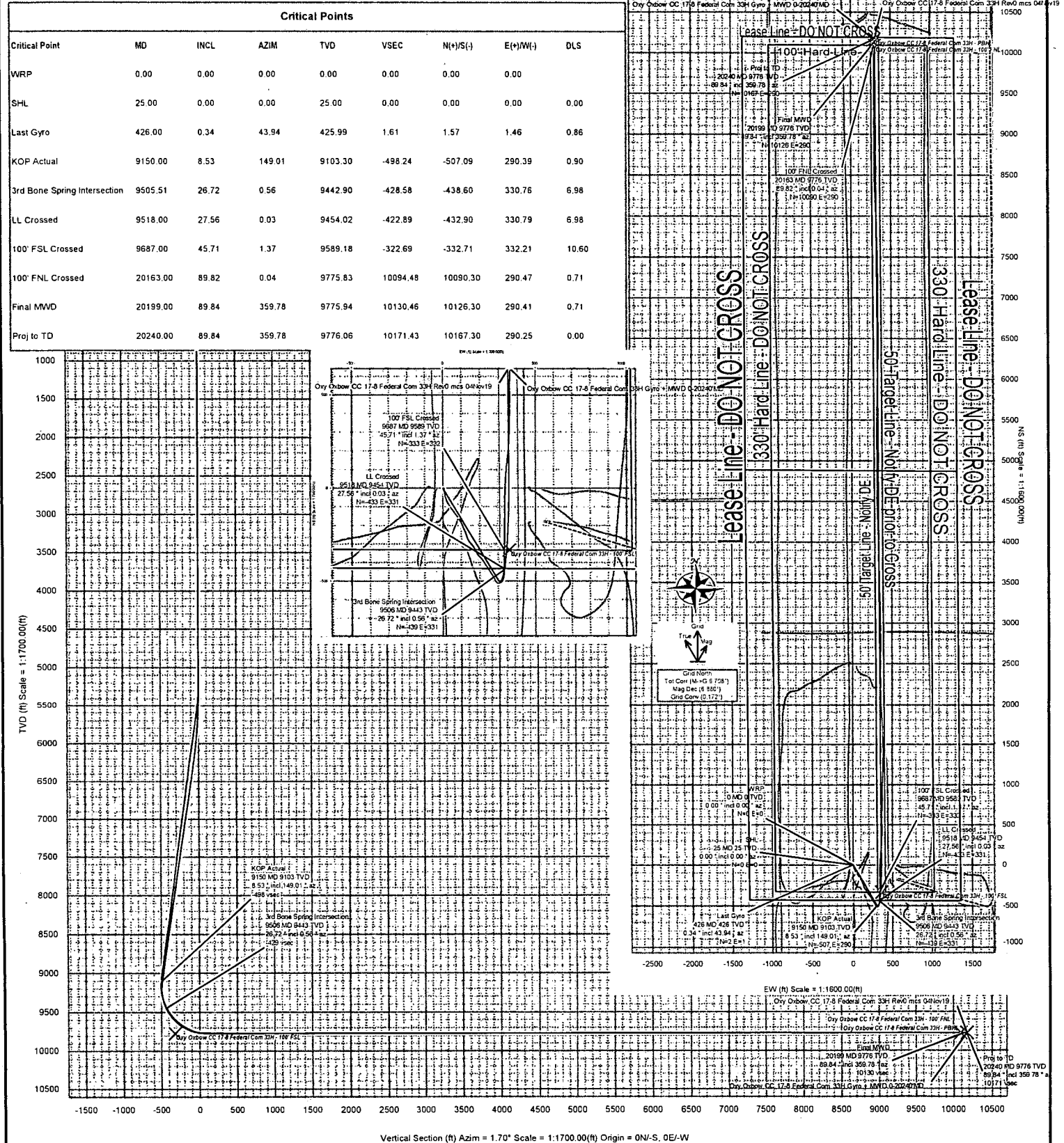
Schlumberger

OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Oxbow CC 17-8 Federal Com 33H	NM Eddy County (NAD 83)	Oxy Oxbow CC 17-8 Federal Com 33H

Gravity & Magnetic Parameters				Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	IFR1	Dip:	59.917°	Date:	13-Jan-2020	Lat:	N 32 12 41.50	Northing:	440837.34NUS	Grid Conv:	0.1719°
MagDec:	6.88°	F5:	47837.6nT	Gravity F5:	998.468mg (9.80665 Based)	Lon:	W 104 0 39.34	Easting:	641049.35NUS	Scale Fact:	0.99992048
								Plan: Oxy Oxbow CC 17-8 Federal Com 33H Gyro + MWD 0-20240 MD			



Oxy Oxbow CC 17-8 Federal Com 33H Gyro + MWD 0-20240'MD Survey

Geodetic Report

(Def Survey)



Report Date: January 21, 2020 - 02:37 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Oxbow CC 17-8 Federal Com 33H / Oxy Oxbow CC 17-8 Federal Com 33H
Well: Oxy Oxbow CC 17-8 Federal Com 33H
Borehole: Original Borehole
UW / API#: Unknown / 30-015-45082
Survey Name: Oxy Oxbow CC 17-8 Federal Com 33H Gyro + MWD 0-20240 MD
Survey Date: November 27, 2019
Tort / AHD / DDI / ERD Ratio: 252.771' / 11310.367 ft / 6.772 / 1.157
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 12' 41.49930", W 104° 0' 39.34147"
Location Grid N/E Y/X: N 440837.340 RUS, E 641049.350 RUS
CRS Grid Convergence Angle: 0.1719 °
Grid Scale Factor: 0.99992048
Version / Patch: 2.10.782.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 1.702 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB = 25ft
TVD Reference Elevation: 2962.900 ft above MSL
Seabed / Ground Elevation: 2937.900 ft above MSL
Magnetic Declination: 6.880 °
Total Gravity Field Strength: 998.4678mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47837.600 nT
Magnetic Dip Angle: 59.917 °
Declination Date: January 13, 2020
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.1719 °
Total Corr Mag North->Grid North: 6.7081 °
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 ° ' ")
WRP SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	440837.34	641049.35	N 32 12 41.50 W 104	0 39.34
	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	440837.34	641049.35	N 32 12 41.50 W 104	0 39.34
	96.00	0.45	48.12	96.00	0.19	0.19	0.21	0.63	440837.53	641049.56	N 32 12 41.50 W 104	0 39.34
	123.00	0.54	47.55	123.00	0.35	0.34	0.38	0.33	440837.68	641049.73	N 32 12 41.50 W 104	0 39.34
	150.00	0.42	52.87	150.00	0.50	0.49	0.55	0.47	440837.83	641049.90	N 32 12 41.50 W 104	0 39.34
	177.00	0.27	44.42	177.00	0.61	0.59	0.68	0.59	440837.93	641050.03	N 32 12 41.51 W 104	0 39.33
	203.00	0.24	32.11	203.00	0.71	0.68	0.75	0.24	440838.02	641050.10	N 32 12 41.51 W 104	0 39.33
	229.00	0.24	34.58	229.00	0.80	0.77	0.81	0.04	440838.11	641050.16	N 32 12 41.51 W 104	0 39.33
	258.00	0.23	43.06	258.00	0.89	0.87	0.88	0.12	440838.21	641050.23	N 32 12 41.51 W 104	0 39.33
	290.00	0.21	58.64	290.00	0.97	0.94	0.98	0.20	440838.28	641050.33	N 32 12 41.51 W 104	0 39.33
	321.00	0.27	30.24	321.00	1.07	1.04	1.06	0.42	440838.38	641050.41	N 32 12 41.51 W 104	0 39.33
	353.00	0.34	37.26	353.00	1.21	1.18	1.16	0.25	440838.52	641050.51	N 32 12 41.51 W 104	0 39.33
	385.00	0.41	39.00	384.99	1.38	1.34	1.29	0.22	440838.68	641050.64	N 32 12 41.51 W 104	0 39.33
	416.00	0.41	36.18	415.99	1.56	1.52	1.42	0.07	440838.86	641050.77	N 32 12 41.51 W 104	0 39.32
Last Gyro	426.00	0.34	43.94	425.99	1.61	1.57	1.46	0.86	440838.91	641050.81	N 32 12 41.51 W 104	0 39.32
	556.00	0.05	107.74	555.99	1.88	1.83	1.79	0.25	440839.17	641051.14	N 32 12 41.52 W 104	0 39.32
	707.00	0.11	246.36	706.99	1.80	1.75	1.72	0.10	440839.09	641051.07	N 32 12 41.52 W 104	0 39.32
	799.00	0.11	303.27	798.99	1.81	1.76	1.56	0.11	440839.10	641050.91	N 32 12 41.52 W 104	0 39.32
	891.00	0.14	219.59	890.99	1.77	1.73	1.42	0.18	440839.07	641050.77	N 32 12 41.52 W 104	0 39.32
	983.00	0.19	284.83	982.99	1.71	1.68	1.20	0.20	440839.02	641050.55	N 32 12 41.52 W 104	0 39.33
	1070.00	0.08	9.18	1069.99	1.81	1.77	1.07	0.23	440839.11	641050.42	N 32 12 41.52 W 104	0 39.33
	1161.00	0.09	109.95	1160.99	1.85	1.81	1.14	0.14	440839.15	641050.49	N 32 12 41.52 W 104	0 39.33
	1253.00	0.14	181.58	1252.99	1.71	1.68	1.21	0.15	440839.02	641050.56	N 32 12 41.52 W 104	0 39.33
	1345.00	0.09	23.26	1344.99	1.67	1.63	1.23	0.25	440838.97	641050.58	N 32 12 41.52 W 104	0 39.33
	1437.00	0.05	305.84	1436.99	1.76	1.72	1.23	0.10	440839.06	641050.58	N 32 12 41.52 W 104	0 39.33
	1529.00	0.05	51.15	1528.99	1.80	1.77	1.23	0.09	440839.11	641050.58	N 32 12 41.52 W 104	0 39.33
	1625.00	0.16	112.25	1624.99	1.78	1.74	1.39	0.15	440839.08	641050.74	N 32 12 41.52 W 104	0 39.33
	1720.00	0.14	222.72	1719.99	1.65	1.61	1.43	0.26	440838.95	641050.78	N 32 12 41.52 W 104	0 39.32
	1815.00	0.09	123.21	1814.99	1.52	1.48	1.41	0.19	440838.82	641050.76	N 32 12 41.51 W 104	0 39.32
	1911.00	0.09	151.63	1910.99	1.42	1.37	1.51	0.05	440838.71	641050.86	N 32 12 41.51 W 104	0 39.32
	2101.00	0.16	156.15	2100.99	1.05	1.00	1.69	0.04	440838.34	641051.04	N 32 12 41.51 W 104	0 39.32
	2198.00	0.08	176.71	2195.99	0.86	0.81	1.75	0.09	440838.15	641051.10	N 32 12 41.51 W 104	0 39.32
	2291.00	0.10	87.16	2290.99	0.81	0.75	1.83	0.13	440838.09	641051.18	N 32 12 41.51 W 104	0 39.32
	2386.00	0.16	111.28	2385.99	0.77	0.71	2.04	0.08	440838.05	641051.39	N 32 12 41.51 W 104	0 39.32
	2490.00	0.19	187.89	2479.99	0.57	0.51	2.14	0.23	440837.85	641051.49	N 32 12 41.50 W 104	0 39.32
	2575.00	0.17	132.97	2574.99	0.32	0.25	2.22	0.18	440837.59	641051.57	N 32 12 41.50 W 104	0 39.32
	2671.00	0.09	199.56	2670.99	0.15	0.09	2.30	0.16	440837.43	641051.65	N 32 12 41.50 W 104	0 39.31
	2766.00	0.09	142.87	2765.99	0.02	-0.04	2.32	0.09	440837.30	641051.67	N 32 12 41.50 W 104	0 39.31
	2861.00	0.12	312.11	2860.99	0.03	-0.04	2.29	0.22	440837.30	641051.68	N 32 12 41.50 W 104	0 39.31
	2956.00	0.09	172.19	2955.99	0.02	-0.04	2.23	0.21	440837.30	641051.69	N 32 12 41.50 W 104	0 39.32
	3052.00	0.17	125.27	3051.99	-0.13	-0.20	2.36	0.13	440837.14	641051.71	N 32 12 41.50 W 104	0 39.31
	3147.00	0.06	30.61	3146.99	-0.17	-0.24	2.50	0.19	440837.10	641051.85	N 32 12 41.50 W 104	0 39.31
	3243.00	0.09	261.90	3242.99	-0.13	-0.21	2.45	0.14	440837.13	641051.80	N 32 12 41.50 W 104	0 39.31
	3338.00	0.09	18.37	3337.99	-0.08	-0.15	2.40	0.16	440837.19	641051.75	N 32 12 41.50 W 104	0 39.31
	3433.00	0.12	147.13	3432.99	-0.09	-0.16	2.47	0.20	440837.18	641051.82	N 32 12 41.50 W 104	0 39.31
	3529.00	0.14	311.54	3528.99	-0.09	-0.17	2.44	0.27	440837.17	641051.79	N 32 12 41.50 W 104	0 39.31
	3719.00	0.05	119.18	3718.99	0.02	-0.05	2.34	0.10	440837.29	641051.69	N 32 12 41.50 W 104	0 39.31
	3814.00	0.04	184.09	3813.99	-0.04	-0.11	2.37	0.05	440837.23	641051.72	N 32 12 41.50 W 104	0 39.31
	3909.00	0.05	295.97	3908.99	-0.05	-0.12	2.33	0.08	440837.22	641051.68	N 32 12 41.50 W 104	0 39.31
	4004.00	0.14	351.69	4003.99	0.08	0.01	2.28	0.13	440837.35	641051.63	N 32 12 41.50 W 104	0 39.31
	4100.00	0.07	257.88	4099.99	0.18	0.12	2.21	0.17	440837.46	641051.56	N 32 12 41.50 W 104	0 39.32
	4195.00	0.14	247.79	4194.99	0.12	0.06	2.04	0.08	440837.40	641051.39	N 32 12 41.50 W 104	0 39.32
	4291.00	0.16	242.77	4290.99	0.01	-0.05	1.81	0.02	440837.29	641051.16	N 32 12 41.50 W 104	0 39.32
	4386.00	0.05	100.00	4385.99	-0.06	-0.11	1.74	0.21	440837.23	641051.09	N 32 12 41.50 W 104	0 39.32
	4481.00	0.12	185.10	4480.99	-0.17	-0.22	1.77	0.13	440837.12	641051.12	N 32 12 41.50 W 104	0 39.32
	4576.00	0.14	254.27	4575.99	-0.30	-0.35	1.65	0.16	440836.99	641051.00	N 32 12 41.50 W 104	0 39.32
	4672.00	0.09	68.53	4671.99	-0.31	-0.36	1.61	0.24	440836.98	641050.96	N 32 12 41.50 W 104	0 39.32
	4768.00	0.12	145.93	4767.99	-0.36	-0.41	1.73	0.14	440836.93	641051.08	N 32 12 41.50 W 104	0 39.32
	4863.00	0.10	79.03	4862.99	-0.42	-0.48	1.87	0.13	440836.86	641051.22	N 32 12 41.49 W 104	0 39.32
	4959.00	0.16	325.59	4958.99	-0.30	-0.35	1.88	0.23	440836.99	641051.23	N 32 12 41.50 W 104	0 39.32
	5054.00	0.19	216.20	5053.99	-0.32	-0.37	1.71	0.30	440836.97	641051.06	N 32 12 41.50 W 104	0 39.32
	5244.00	1.18	80.87	5243.97	-0.21	-0.31	3.45	0.70	440837.03	641052.80	N 32 12 41.50 W 104	0 39.30
	5339.00	2.33	154.77	5338.94	-1.75	-1.90	5.24	2.42	440835.44	641054.59	N 32 12 41.48 W 104	0 39.28
	5434.00	4.32	172.91	5433.77	-7.01	-7.20	6.51	2.34	440830.14	641055.86	N 32 12 41.43 W 104	0 39.27
5529.00	6.23	173.34	5528.37	-15.64	-15.87	7.55	2.01	440821.47	641056.90	N 32 12 41.34 W 104	0 39.25	
5624.00	6.82	170.87	5622.75	-26.28	-26.56	9.04	0.69	440810.78	641058.39	N 32 12 41.24 W 104	0 39.24	
5720.00	7.61	168.51	5717.99	-38.07	-38.42	11.21	0.88	440798.92	641060.56	N 32 12 41.12 W 104	0 39.21	
5815.00	8.53	163.66	5812.05	-50.89	-51.35	14.45	1.20	440786.00	641063.79	N 32 12 40.99 W 104	0 39.18	
5909.00	9.09	158.82	5904.94	-64.36	-64.96	19.09	0.99	440772.39	641068.44	N 32 12 40.86 W 104	0 39.12	
6005.00	10.05	153.60	5999.61	-78.74	-79.53	25.55	1.35	440757.81	641074.90	N 32 12 40.71 W 104	0 39.05	
6099.00	10.72	147.24	6092.07	-93.18	-94.23	33.93	1.41	440743.11	641083.28	N 32 12 40.57 W 104	0 38.95	
6194.00	11.08	142.23	6185.36	-107.52	-108.88	44.30	1.07	440728.47	641093.65	N 32 12 40.42 W 104	0 38.83	
6289.00	9.65	142.02	6278.81	-120.69	-122.37	54.80	1.51	440714.98	641104.14	N 32 12 40.29 W 104	0 38.71	
6384.00	9.01	143.12	6372.55	-132.63	-134.60	64.16	0.70	440702.75	641113.51	N 32 12 40.17 W 104	0 38.60	
6479.00	9.02	143.82	6466.38	-144.33	-146.56	73.02	0.12	440690.79	641122.37	N 32 12 40.05 W 104	0 38.50	
6574.00	8.92	145.55	6560.21	-156.15	-158.65	81.58	0.30	440678.71	641130.93	N 32 12 39.93 W 104	0 38.40	
6669.00	9.04	146.50	6654.05	-168.20	-170.94	89.87	0.20	440666.41	641139.21	N 32 12 39.81 W 104	0 38.30	
6764.00	8.83	149.58	6747.90</									

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 ° ' '')
	6860.00	8.61	155.57	6842.79	-193.16	-196.35	104.38	0.97	440641.01	641153.73	N 32 12 39.55 W 104	0 38.13
	6955.00	8.55	159.29	6936.73	-206.08	-209.43	109.82	0.59	440627.93	641159.16	N 32 12 39.42 W 104	0 38.07
	7050.00	8.76	156.04	7030.65	-219.13	-222.65	115.26	0.56	440614.71	641164.60	N 32 12 39.29 W 104	0 38.01
	7145.00	9.12	157.34	7124.49	-232.50	-236.21	121.10	0.43	440601.15	641170.44	N 32 12 39.16 W 104	0 37.94
	7241.00	8.33	162.56	7219.38	-246.00	-249.86	126.11	1.16	440587.50	641175.45	N 32 12 39.02 W 104	0 37.88
	7336.00	8.21	165.16	7313.39	-259.01	-262.98	129.91	0.41	440574.38	641179.25	N 32 12 38.89 W 104	0 37.84
	7431.00	8.84	153.47	7407.35	-271.94	-276.07	134.91	1.94	440561.29	641184.25	N 32 12 38.76 W 104	0 37.78
	7526.00	8.65	139.74	7501.26	-283.69	-288.06	142.79	2.20	440549.31	641192.13	N 32 12 38.64 W 104	0 37.69
	7621.00	8.80	142.77	7595.16	-294.65	-299.29	151.80	0.51	440538.07	641201.14	N 32 12 38.53 W 104	0 37.59
	7716.00	7.66	139.28	7689.18	-304.98	-309.88	160.33	1.31	440527.49	641209.66	N 32 12 38.43 W 104	0 37.49
	7811.00	7.95	150.45	7783.30	-315.27	-320.39	167.70	1.62	440516.97	641217.04	N 32 12 38.32 W 104	0 37.40
	7907.00	8.81	158.89	7878.28	-327.72	-333.03	173.62	1.56	440504.34	641222.96	N 32 12 38.20 W 104	0 37.33
	8002.00	10.06	152.40	7972.00	-341.67	-347.17	180.09	1.73	440490.20	641229.42	N 32 12 38.06 W 104	0 37.26
	8097.00	10.47	135.61	8065.50	-354.89	-360.69	189.97	3.17	440476.68	641239.30	N 32 12 37.92 W 104	0 37.14
	8192.00	9.70	134.73	8159.03	-366.34	-372.49	201.69	0.83	440464.88	641251.03	N 32 12 37.81 W 104	0 37.01
	8287.00	10.02	142.54	8252.63	-378.21	-384.69	212.41	1.45	440452.69	641261.74	N 32 12 37.69 W 104	0 36.88
	8381.00	10.07	146.89	8345.19	-391.30	-398.06	221.87	0.81	440439.31	641271.20	N 32 12 37.55 W 104	0 36.77
	8476.00	10.36	145.82	8438.68	-405.04	-412.08	231.21	0.36	440425.29	641280.54	N 32 12 37.41 W 104	0 36.66
	8571.00	10.10	147.93	8532.17	-418.88	-426.21	240.43	0.48	440411.16	641289.76	N 32 12 37.27 W 104	0 36.56
	8667.00	9.84	147.11	8626.72	-432.63	-440.23	249.35	0.31	440397.14	641298.68	N 32 12 37.14 W 104	0 36.45
	8762.00	9.74	145.99	8720.34	-445.84	-453.71	258.25	0.23	440383.67	641307.58	N 32 12 37.00 W 104	0 36.35
	8857.00	9.24	147.57	8814.04	-458.68	-466.81	266.84	0.59	440370.57	641316.17	N 32 12 36.87 W 104	0 36.25
	8953.00	9.34	151.62	8908.78	-471.80	-480.17	274.68	0.69	440357.21	641324.00	N 32 12 36.74 W 104	0 36.16
	9035.00	9.32	150.05	8989.70	-483.21	-491.78	281.15	0.31	440345.60	641330.48	N 32 12 36.62 W 104	0 36.09
	9114.00	8.82	148.04	9067.71	-493.69	-502.46	287.55	0.75	440334.92	641336.88	N 32 12 36.52 W 104	0 36.01
	9150.00	8.53	149.01	9103.30	-498.24	-507.09	290.39	0.90	440330.29	641339.71	N 32 12 36.47 W 104	0 35.98
	9245.00	13.00	82.41	9196.92	-502.46	-511.73	304.66	13.00	440325.65	641353.99	N 32 12 36.43 W 104	0 35.81
	9339.00	17.03	28.00	9288.11	-488.34	-498.11	321.69	14.97	440339.27	641371.01	N 32 12 36.56 W 104	0 35.61
	9434.00	21.98	4.35	9377.77	-458.04	-468.04	329.59	9.71	440369.34	641378.91	N 32 12 36.86 W 104	0 35.52
3rd Bone Spring Intersection	9505.51	26.72	0.56	9442.90	-428.58	-438.60	330.76	6.98	440398.77	641380.08	N 32 12 37.15 W 104	0 35.51
LL Crossed	9518.00	27.56	0.03	9454.02	-422.89	-432.90	330.79	6.98	440404.47	641380.11	N 32 12 37.21 W 104	0 35.51
	9528.00	28.23	359.62	9462.86	-418.21	-428.22	330.78	6.98	440409.15	641380.10	N 32 12 37.25 W 104	0 35.51
	9623.00	38.93	1.19	9541.89	-365.76	-375.76	331.25	11.30	440461.61	641380.57	N 32 12 37.77 W 104	0 35.50
100' FSL Crossed	9687.00	45.71	1.37	9589.18	-322.69	-332.71	332.21	10.60	440504.66	641381.54	N 32 12 38.20 W 104	0 35.49
	9718.00	49.00	1.44	9610.18	-299.89	-309.91	332.77	10.60	440527.45	641382.10	N 32 12 38.42 W 104	0 35.48
	9811.00	56.69	0.33	9666.31	-225.84	-235.86	333.88	8.32	440601.50	641383.20	N 32 12 39.16 W 104	0 35.46
	9906.00	62.62	0.12	9714.28	-143.92	-153.91	334.20	6.25	440683.44	641383.52	N 32 12 39.97 W 104	0 35.46
	10001.00	72.49	0.73	9750.51	-56.24	-66.22	334.86	10.41	440771.13	641384.19	N 32 12 40.83 W 104	0 35.45
	10095.00	89.60	3.23	9765.09	36.26	26.23	338.11	18.39	440863.56	641387.43	N 32 12 41.75 W 104	0 35.41
	10171.00	90.05	5.25	9765.32	112.18	102.01	343.73	2.72	440939.35	641393.05	N 32 12 42.50 W 104	0 35.34
	10247.00	88.47	5.74	9766.30	188.00	177.66	351.00	2.18	441014.98	641400.33	N 32 12 43.25 W 104	0 35.25
	10341.00	89.46	3.45	9768.00	281.86	271.33	358.53	2.65	441108.65	641407.85	N 32 12 44.17 W 104	0 35.16
	10434.00	89.29	0.89	9769.01	374.84	364.25	362.05	2.76	441201.56	641411.37	N 32 12 45.09 W 104	0 35.11
	10528.00	89.43	0.02	9770.06	468.81	458.24	362.80	0.94	441295.54	641412.12	N 32 12 46.02 W 104	0 35.10
	10621.00	89.36	0.51	9771.04	561.78	551.23	363.23	0.53	441388.53	641412.55	N 32 12 46.94 W 104	0 35.09
	10714.00	89.74	1.07	9771.78	654.76	644.22	364.51	0.73	441481.51	641413.83	N 32 12 47.86 W 104	0 35.08
	10807.00	90.26	1.45	9771.78	747.76	737.20	366.56	0.69	441574.48	641415.88	N 32 12 48.78 W 104	0 35.05
	10900.00	89.74	0.50	9771.78	840.75	830.18	368.14	1.16	441667.46	641417.66	N 32 12 49.70 W 104	0 35.03
	10993.00	89.57	0.90	9772.34	933.74	923.18	369.28	0.47	441760.44	641418.60	N 32 12 50.62 W 104	0 35.01
	11086.00	90.12	2.80	9772.59	1026.73	1016.12	372.28	2.13	441853.38	641421.60	N 32 12 51.54 W 104	0 34.97
	11179.00	90.19	1.12	9772.34	1119.73	1109.06	375.46	1.81	441946.31	641424.78	N 32 12 52.46 W 104	0 34.93
	11273.00	90.26	2.12	9771.97	1213.72	1203.02	378.12	1.07	442040.27	641427.43	N 32 12 53.39 W 104	0 34.90
	11368.00	90.15	0.77	9771.63	1308.72	1297.99	380.51	1.43	442135.23	641429.83	N 32 12 54.33 W 104	0 34.87
	11462.00	90.43	0.30	9771.15	1402.70	1391.99	381.39	0.58	442229.21	641430.71	N 32 12 55.26 W 104	0 34.85
	11553.00	89.77	358.50	9770.99	1493.62	1482.98	380.44	2.11	442320.20	641429.76	N 32 12 56.16 W 104	0 34.86
	11648.00	90.08	358.89	9771.12	1588.49	1577.95	378.27	0.52	442415.16	641427.59	N 32 12 57.10 W 104	0 34.88
	11743.00	90.70	359.99	9770.47	1683.41	1672.94	377.34	1.33	442510.15	641426.66	N 32 12 58.04 W 104	0 34.89
	11837.00	90.05	355.53	9769.85	1777.16	1766.84	373.67	4.79	442604.04	641422.99	N 32 12 58.97 W 104	0 34.93
	11932.00	89.98	355.36	9769.83	1871.60	1861.54	366.13	0.19	442698.73	641415.45	N 32 12 59.91 W 104	0 35.01
	12026.00	89.84	356.19	9769.98	1965.09	1955.29	359.20	0.90	442792.47	641408.52	N 32 13 0.84 W 104	0 35.09
	12121.00	89.84	358.93	9770.24	2059.84	2050.19	355.16	2.88	442887.37	641404.48	N 32 13 1.78 W 104	0 35.14
	12215.00	90.19	359.60	9770.22	2153.75	2144.18	353.95	0.80	442981.35	641403.27	N 32 13 2.71 W 104	0 35.15
	12309.00	89.88	359.50	9770.16	2247.68	2238.18	353.21	0.35	443075.34	641402.53	N 32 13 3.64 W 104	0 35.15
	12404.00	89.91	358.21	9770.33	2342.57	2333.16	351.31	1.36	443170.31	641400.64	N 32 13 4.58 W 104	0 35.17
	12498.00	89.84	359.34	9770.54	2436.44	2427.14	349.31	1.20	443264.28	641398.63	N 32 13 5.51 W 104	0 35.19
	12593.00	89.88	1.01	9770.77	2531.40	2522.13	349.60	1.76	443359.27	641398.92	N 32 13 6.45 W 104	0 35.18
	12687.00	90.12	1.15	9770.77	2625.40	2616.12	351.37	0.30	443453.24	641400.69	N 32 13 7.38 W 104	0 35.16
	12782.00	89.81	1.50	9770.83	2720.40	2711.09	353.56	0.49	443548.21	641402.89	N 32 13 8.32 W 104	0 35.13
	12876.00	90.19	0.08	9770.83	2814.38	2805.08	354.86	1.56	443642.19	641404.18	N 32 13 9.25 W 104	0 35.11
	12971.00	90.05	357.97	9770.63	2909.27	2900.06	353.24	2.23	443737.16	641402.56	N 32 13 10.19 W 104	0 35.13
	13065.00	89.74	359.50	9770.80	3003.14	2994.03	351.17	1.66	443831.13	641400.49	N 32 13 11.12 W 104	0 35.15
	13160.00	89.91	359.65	9771.09	3098.08	3089.03	350.46	0.24	443926.12	641399.79	N 32 13 12.06 W 104	0 35.15
	13255.00	89.84	358.99	9771.30	3192.99	3184.02	349.34	0.70	444021.10	641398.66	N 32 13 13.00 W 104	0 35.16
	13349.00	89.77	358.03	9771.62	3286.85	3277.99	346.89	1.02	444115.06	641396.21	N 32 13 13.93 W 104	0 35.19
	13444.00	89.84	358.34	9771.94	3381.67	3372.94	343.88	0.33	444210.01	641393.21	N 32 13 14.86 W 104	0 35.22
	13538.00	90.15	358.67	9771.95	3475.52	3466.91	341.43	0.48	444303.97	641390.75	N 32 13 15.79 W 104	0 35.25
	13632.00	89.98	358.70	9771.84	3569.39	3560.88	339.27	0.18	444397.93	641388.60	N 32 13 16.72 W 104	0 35.27
	13727											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	16467.00	89.91	359.55	9768.90	6402.10	6395.07	331.49	1.64	447231.89	641380.82	N 32 13 44.77 W 104	0 35.26
	16561.00	89.70	359.65	9769.22	6496.03	6489.07	330.84	0.25	447325.88	641380.16	N 32 13 45.70 W 104	0 35.26
	16656.00	89.84	0.15	9769.60	6590.99	6584.07	330.67	0.55	447420.87	641379.99	N 32 13 46.64 W 104	0 35.26
	16751.00	89.60	359.35	9770.06	6685.93	6679.07	330.26	0.88	447515.86	641379.58	N 32 13 47.58 W 104	0 35.26
	16845.00	89.81	359.57	9770.55	6779.86	6773.06	329.37	0.32	447609.85	641378.69	N 32 13 48.51 W 104	0 35.27
	16940.00	89.88	0.13	9770.80	6874.80	6868.06	329.12	0.59	447704.84	641378.44	N 32 13 49.45 W 104	0 35.27
	17033.00	90.29	0.34	9770.67	6967.77	6961.06	329.50	0.50	447797.83	641378.83	N 32 13 50.37 W 104	0 35.26
	17127.00	90.39	359.76	9770.11	7061.73	7055.06	329.59	0.63	447891.82	641378.91	N 32 13 51.30 W 104	0 35.26
	17315.00	89.88	0.48	9769.66	7249.66	7243.05	329.98	0.47	448079.80	641379.30	N 32 13 53.16 W 104	0 35.25
	17409.00	90.01	357.99	9769.75	7343.56	7337.04	328.72	2.65	448173.78	641378.05	N 32 13 54.09 W 104	0 35.26
	17503.00	89.98	0.30	9769.76	7437.46	7431.02	327.32	2.46	448267.76	641376.64	N 32 13 55.02 W 104	0 35.27
	17598.00	89.84	358.63	9769.91	7532.39	7526.01	326.43	1.76	448362.74	641375.76	N 32 13 55.96 W 104	0 35.28
	17692.00	89.88	357.96	9770.14	7626.22	7619.97	323.65	0.69	448456.69	641372.98	N 32 13 56.89 W 104	0 35.31
	17787.00	90.22	357.93	9770.06	7721.02	7714.91	320.26	0.36	448551.62	641369.59	N 32 13 57.83 W 104	0 35.34
	17881.00	89.70	358.23	9770.12	7814.83	7808.86	317.11	0.64	448645.56	641366.44	N 32 13 58.76 W 104	0 35.38
	17975.00	90.01	357.92	9770.36	7908.64	7902.80	313.96	0.47	448739.50	641363.28	N 32 13 59.69 W 104	0 35.41
	18070.00	90.05	358.00	9770.31	8003.44	7997.74	310.58	0.09	448834.43	641359.90	N 32 14 0.63 W 104	0 35.45
	18164.00	89.88	357.92	9770.37	8097.24	8091.58	307.23	0.20	448928.36	641356.55	N 32 14 1.56 W 104	0 35.48
	18259.00	89.81	356.89	9770.63	8191.97	8186.59	302.93	1.09	449023.26	641352.25	N 32 14 2.50 W 104	0 35.53
	18353.00	89.81	357.28	9770.94	8285.65	8280.46	298.15	0.41	449117.13	641347.47	N 32 14 3.43 W 104	0 35.58
	18448.00	89.64	358.04	9771.39	8380.43	8375.38	294.27	0.82	449212.04	641343.60	N 32 14 4.37 W 104	0 35.62
	18542.00	89.74	358.93	9771.90	8474.28	8469.35	291.78	0.95	449306.00	641341.11	N 32 14 5.30 W 104	0 35.65
	18636.00	89.91	359.89	9772.19	8568.20	8563.34	290.82	1.04	449399.98	641340.14	N 32 14 6.23 W 104	0 35.68
	18731.00	89.95	359.87	9772.31	8663.15	8658.34	290.62	0.05	449494.97	641339.94	N 32 14 7.17 W 104	0 35.66
	18826.00	90.19	359.64	9772.19	8758.10	8753.34	290.21	0.35	449589.96	641339.54	N 32 14 8.11 W 104	0 35.66
	18920.00	90.08	359.44	9771.97	8852.03	8847.34	289.46	0.24	449683.95	641338.78	N 32 14 9.04 W 104	0 35.66
	19014.00	89.91	359.64	9771.98	8945.96	8941.33	288.70	0.28	449777.94	641338.03	N 32 14 9.97 W 104	0 35.67
	19108.00	90.01	0.02	9772.04	9039.91	9035.33	288.42	0.42	449871.93	641337.75	N 32 14 10.90 W 104	0 35.67
	19203.00	90.12	0.16	9771.94	9134.87	9130.33	288.57	0.19	449966.93	641337.90	N 32 14 11.84 W 104	0 35.66
	19297.00	89.26	359.70	9772.44	9228.83	9224.33	288.46	1.04	450060.92	641337.78	N 32 14 12.77 W 104	0 35.66
	19392.00	90.19	0.65	9772.90	9323.79	9319.33	288.75	1.40	450155.91	641338.07	N 32 14 13.71 W 104	0 35.65
	19486.00	89.95	0.05	9772.78	9417.76	9413.32	289.32	0.69	450249.90	641338.65	N 32 14 14.64 W 104	0 35.64
	19581.00	89.77	359.45	9773.02	9512.71	9508.32	288.91	0.66	450344.89	641338.23	N 32 14 15.58 W 104	0 35.65
	19675.00	89.81	0.78	9773.36	9606.67	9602.32	289.10	1.42	450438.88	641338.42	N 32 14 16.51 W 104	0 35.64
	19769.00	89.74	359.39	9773.73	9700.63	9696.31	289.23	1.48	450532.86	641338.56	N 32 14 17.44 W 104	0 35.64
	19864.00	89.57	359.93	9774.30	9795.57	9791.31	288.67	0.60	450627.85	641338.00	N 32 14 18.38 W 104	0 35.64
	19957.00	89.74	0.34	9774.86	9889.53	9884.31	288.89	0.48	450720.84	641338.22	N 32 14 19.30 W 104	0 35.63
	20052.00	89.67	0.69	9775.35	9983.51	9979.30	289.74	0.38	450815.83	641339.07	N 32 14 20.24 W 104	0 35.62
	20147.00	89.81	0.15	9775.78	10078.48	10074.30	290.44	0.59	450910.82	641339.77	N 32 14 21.18 W 104	0 35.61
100' FNL Crossed	20163.00	89.82	0.04	9775.83	10094.48	10090.30	290.47	0.71	450926.82	641339.79	N 32 14 21.34 W 104	0 35.61
Final MWD	20199.00	89.84	359.78	9775.94	10130.46	10126.30	290.41	0.71	450962.81	641339.74	N 32 14 21.69 W 104	0 35.61
Proj to TD	20240.00	89.84	359.78	9776.06	10171.43	10167.30	290.25	0.00	451003.81	641339.58	N 32 14 22.10 W 104	0 35.61

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 3 *** 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	25.000	1/98.425	26.400	26.400 GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Oxbow CC 17-8 Federal Com 33H Gyro + MWD 0-20240'MD
	1	25.000	25.000	Act Stns	26.400	26.400 GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Oxbow CC 17-8 Federal Com 33H Gyro + MWD 0-20240'MD
	1	25.000	426.000	Act Stns	26.400	26.400 GYD_GC+DROP+OH	Original Borehole / Oxy Oxbow CC 17-8 Federal Com 33H Gyro + Original Borehole / Oxy Oxbow
	1	426.000	20240.000	Act Stns	26.400	26.400 A010Mb_MWD+IFR1+SAG+MS	CC 17-8 Federal Com 33H Gyro + MWD 0-20240'MD

...Original Borehole\Oxy Oxbow CC 17-8 Federal Com 33H Gyro + MWD 0-20240'MD