

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 09 2019

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

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

RECEIVED

☒ AMENDED REPORT
As-Drilled

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) 748-1253 Fax: (575) 748-9720
District III
1000 Rio Arriba 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-44930	Pool Code 90220	Pool Name Purple Sage Wolfcamp
Property Code 318942	Property Name SUNRISE MDP1 "8-5" FEDERAL COM	Well Number 171H
OGRID No. 116096	Operator Name OXY USA INC.	Elevation 3534.1'

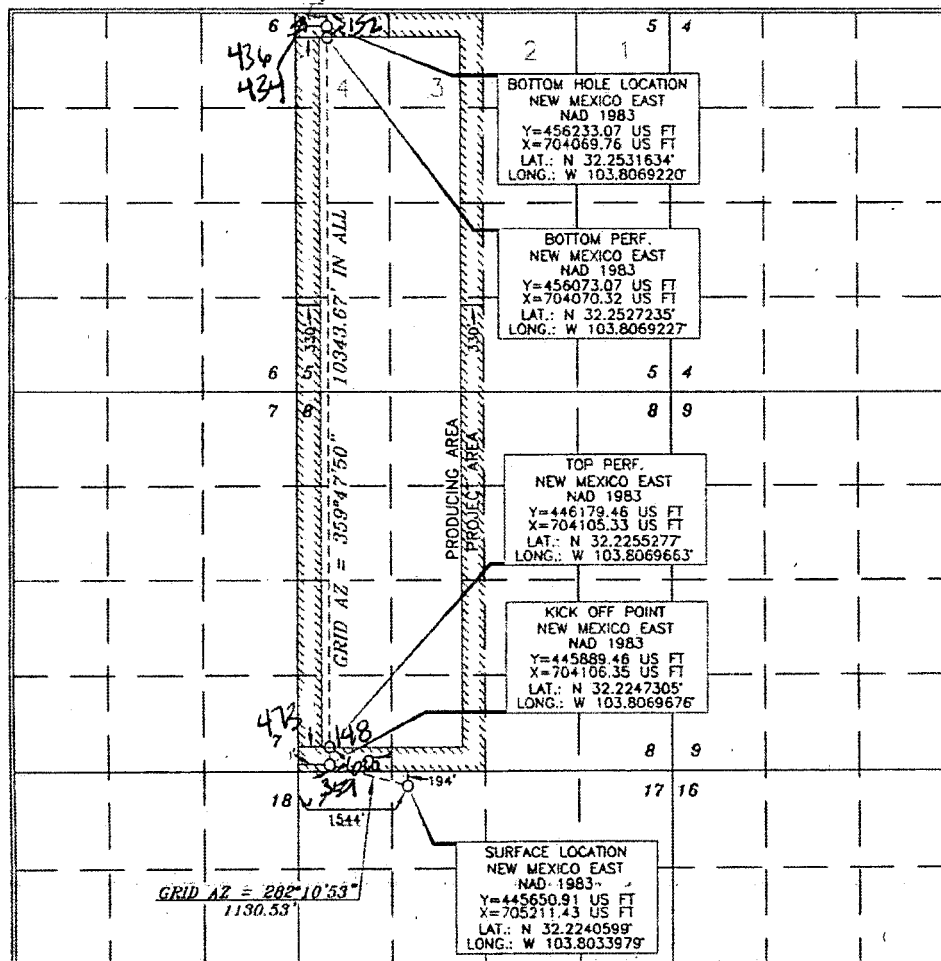
Surface Location

UL or lot no.	Section	Township	Range	Lot 1d1	Feet from the	North/South line	Feet from the	East/West line	County
C	17	24 SOUTH	31 EAST, N.M.P.M.		194'	NORTH	1544'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1d1	Feet from the	North/South line	Feet from the	East/West line	County
4	5	24 SOUTH	31 EAST, N.M.P.M.		27	NORTH	434	WEST	EDDY
Dedicated Acres 640	Joint or Infill	Consolidation Code	Order No. NSL order: 78/11						

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 selected 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.

Sarah Chapman 5/28/19
Signature Date
Sarah Chapman
Printed Name
Sarah.Chapman@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

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

TERRY J. ASH
15079
NOVEMBER 6 2017
Date of Survey

Signature and Seal of Professional Surveyor

Terry J. Ash 11/23/2017
Certificate Number 15079

WOF 171106WL-o (KA)

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 09 2019

Intent ☐ As Drilled ☒

RECEIVED

API # 30-015-44930		
Operator Name: Oxy USA Inc.	Property Name: Sunrise MDPI S-S Federal Com	Well Number 171H

Kick Off Point (KOP)

UL C	Section 17	Township 24S	Range 31E	Lot	Feet 359	From N/S NORTH	Feet 605	From E/W WEST	County EDDY
Latitude 32.22362					Longitude -103.50644				NAD NAD83

First Take Point (FTP)

UL M	Section 8	Township 24S	Range 31E	Lot	Feet 418	From N/S South	Feet 473	From E/W West	County EDDY
Latitude 32.22501					Longitude -103.50686				NAD NAD83

Last Take Point (LTP)

UL	Section 5	Township 24S	Range 31E	Lot 4	Feet 152	From N/S North	Feet 436	From E/W West	County EDDY
Latitude 32.25326					Longitude -103.50651				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

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

April 15, 2019

Oxy USA Inc.

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 09 2019

RECEIVED

Re:

17, 24S, 31E, Eddy NM
N 32.22406 W 103.80340

CLIENT: Oxy USA Inc.
WELL: Sunrise MDP1 8-5 Federal Com 171H
FIELD: Purple Sage Wolfcamp

RIG: H&P 657
COUNTY: Eddy
API NO: 30-015-44930
JOB NO: 19MLD4351

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>
Maria Zapata FE	Sunrise MDP1 8-5 Federal Com 171H Original Hole	733.00 Ft to 22275.00 Ft	March 22, 2019 to April 3, 2019	SlimPulse Third Party Corrected

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

Field Service Manager

Schlumberger-Private

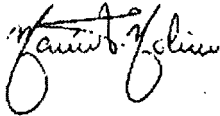
Oilfield Services, Central U.S. Land
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Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
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Schlumberger

Well Reference:
17; 24S, 31E, Eddy NM
N 32.22406 W 103.80340

I, Maria Zapata certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of March 22, 2019 through April 03, 2019, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 733.00 feet to a depth of 22275.00 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 Sunrise MDP1 8-5 Federal Com 171H Well (Original Hole) API No. 30-015-44930 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
Maria Zapata
FE



Subscribed and Sworn to before me this 15th day of April (month) 2019 (yr)

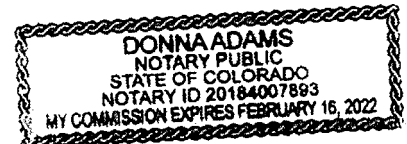
My Commission expires:

2-16-2022

D Adams
Notary Public

Adams County Colorado
(County State)

(signature)



Schlumberger

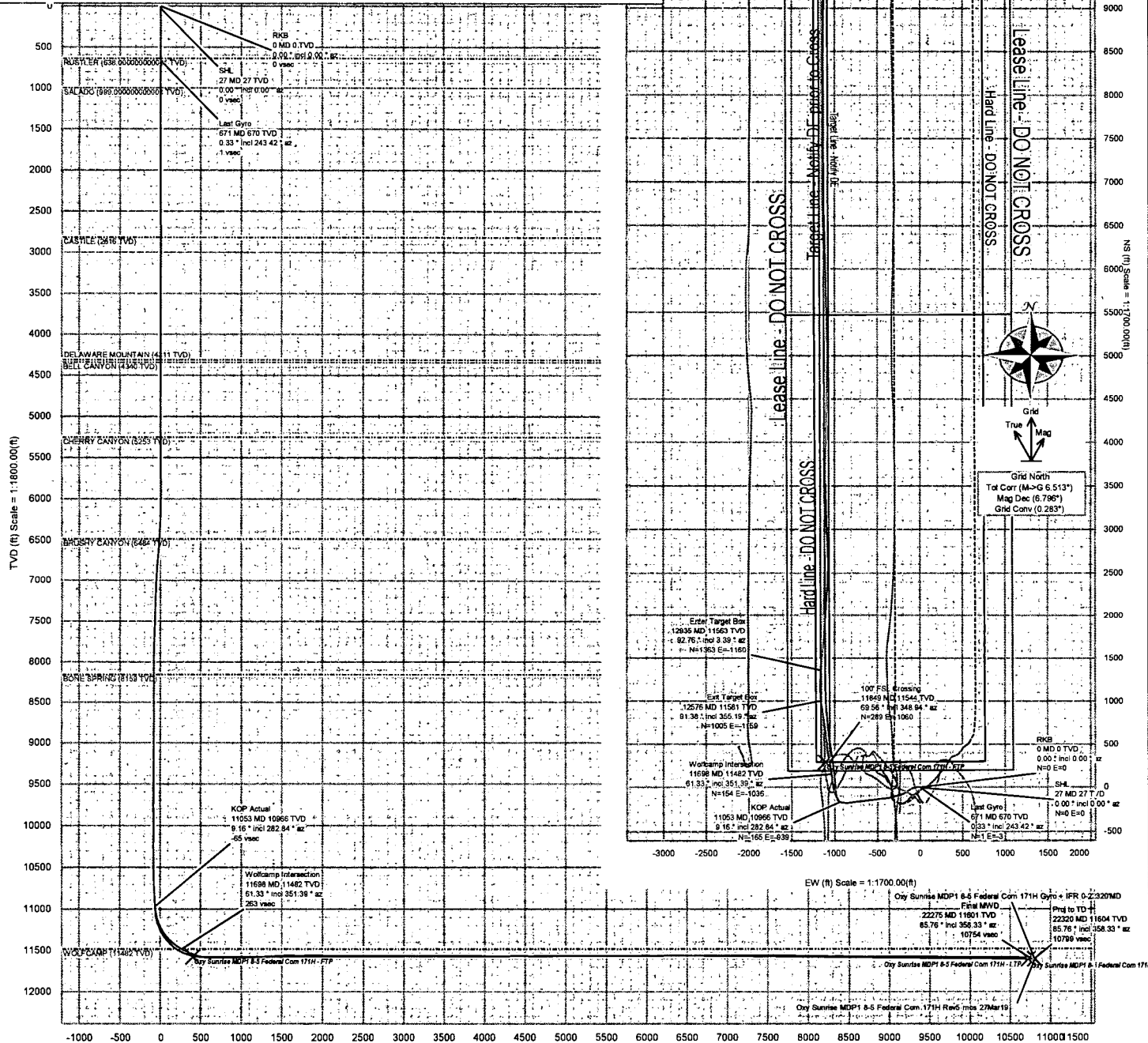
OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Sunrise MDP1 8-5 Federal Com 171H	NM Eddy County (NAD 83)	Oxy Sunrise MDP1 8-5 Federal Com 171H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	IFR1	Dip:	59.922°	Date:	19-Mar-2019	Lat:	N 32 13 26.82	North:	445650.91RUS	Grid Conv:	0.2828°
MagDec:	6.796°	FS:	47945.5nT	Gravity FS:	998.428mgn (8.89665 Based)	Lon:	W 103 48 12.23	East:	705211.43RUS	Scale Fact:	0.99993385
								Oxy Sunrise MDP1 8-5 Federal Com 171H Rev'd mcs 27Mar19			

Critical Points									
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)S(-)	E(+)W(-)	DLS	
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	
Last Gyro	670.50	0.33	243.42	670.49	1.25	0.90	-3.35	0.08	
KOP Actual	11053.00	9.16	282.84	10965.56	-64.86	-165.05	-939.20	0.43	
Wolfcamp Intersection	11697.94	61.33	351.39	11482.00	262.80	154.19	-1035.83	7.81	
100' FSL Crossing	11848.50	69.56	348.94	11544.37	399.35	288.94	-1059.94	5.81	
Exit Target Box	12576.00	91.38	355.19	11580.98	1121.40	1004.53	-1158.99	3.10	
Enter Target Box	12935.00	92.76	339	11563.04	1477.74	1362.74	-1160.23	1.70	
100' FNL Crossing	22241.00	84.70	358.82	11597.80	10719.99	10662.58	-1108.31	3.44	
Final MWD	22275.00	85.76	358.33	11600.63	10753.76	10696.45	-1109.15	3.44	
Proj to TD	22320.00	85.76	358.33	11603.95	10798.51	10741.30	-1110.46	0.00	



Vertical Section (ft) Azim = 353.93° Scale = 1:1800.00(ft) Origin = ONAS, DE/W

Oxy Sunrise MDP1 8-5 Federal Com 171H Gyro + IFR 0-22320'MD Survey

Geodetic Report

(Def Survey)



Report Date: April 04, 2019 - 09:05 AM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Sunrise MDP1 8-5 Federal Com 171H / Oxy Sunrise MDP1 8-5 Federal Com 171H
Well: Oxy Sunrise MDP1 8-5 Federal Com 171H
Borehole: Original Borehole
UWI / APW: Unknown / 30-015-44930
Survey Name: Oxy Sunrise MDP1 8-5 Federal Com 171H Gyro + IFR 0-22320'MD
Survey Date: February 26, 2019
Tort / AHD / DDI / ERD Ratio: 244.406' / 11925.392 ft / 6.749' / 1.028
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 13' 26.61549", W 103° 48' 12.23252"
Location Grid N/E Y/X: N 445650.910 RUS, E 705211.430 RUS
CRS Grid Convergence Angle: 0.2826°
Grid Scale Factor: 0.99993985
Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 353.933° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 3560.600 ft above MSL
Seabed / Ground Elevation: 3534.100 ft above MSL
Magnetic Declination: 6.798°
Total Gravity Field Strength: 998.4282mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47945.500 nT
Magnetic Dip Angle: 59.922°
Declination Date: March 19, 2019
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.2826°
Total Corr Mag North-Grid North: 6.5134°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	445650.91	705211.43	N 32 13 26.62	W 103 48 12.23
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	445650.91	705211.43	N 32 13 26.62	W 103 48 12.23
	94.30	0.36	318.84	94.30	0.17	0.16	-0.14	0.53	445651.07	705211.29	N 32 13 26.62	W 103 48 12.23
	181.80	0.43	291.66	181.80	0.55	0.49	-0.63	0.23	445651.40	705210.80	N 32 13 26.62	W 103 48 12.24
	302.50	0.40	289.82	302.49	0.95	0.80	-1.44	0.03	445651.71	705209.99	N 32 13 26.62	W 103 48 12.25
	397.30	0.33	274.90	397.29	1.14	0.93	-2.03	0.12	445651.84	705209.40	N 32 13 26.62	W 103 48 12.26
	492.20	0.28	295.28	492.19	1.31	1.05	-2.51	0.12	445651.96	705208.92	N 32 13 26.63	W 103 48 12.26
	587.00	0.28	251.18	586.99	1.38	1.08	-2.94	0.22	445651.99	705208.49	N 32 13 26.63	W 103 48 12.27
	670.50	0.33	243.42	670.49	1.25	0.90	-3.35	0.08	445651.81	705208.08	N 32 13 26.62	W 103 48 12.27
	733.00	0.52	224.35	732.99	1.01	0.62	-3.71	0.38	445651.53	705207.72	N 32 13 26.62	W 103 48 12.28
	826.00	0.68	233.85	825.98	0.46	-0.01	-4.45	0.20	445650.90	705206.98	N 32 13 26.62	W 103 48 12.28
	1010.00	0.01	341.68	1009.98	-0.07	-0.63	-5.33	0.37	445650.28	705206.10	N 32 13 26.61	W 103 48 12.29
	1195.00	0.18	222.49	1194.98	-0.24	-0.83	-5.53	0.10	445650.08	705205.90	N 32 13 26.61	W 103 48 12.30
	1381.00	0.29	327.81	1380.98	-0.01	-0.65	-5.98	0.20	445650.26	705205.45	N 32 13 26.61	W 103 48 12.30
	1570.00	0.24	13.47	1569.97	0.79	0.14	-6.15	0.11	445651.05	705205.29	N 32 13 26.62	W 103 48 12.30
	1665.00	0.23	1.20	1664.97	1.16	0.52	-6.09	0.05	445651.43	705205.34	N 32 13 26.62	W 103 48 12.30
	1854.00	0.23	2.21	1853.97	1.92	1.28	-6.07	0.00	445652.19	705205.36	N 32 13 26.63	W 103 48 12.30
	2043.00	0.20	73.07	2042.97	2.35	1.76	-5.74	0.13	445652.67	705205.69	N 32 13 26.63	W 103 48 12.30
	2138.00	0.12	68.30	2137.97	2.41	1.84	-5.49	0.09	445652.75	705205.94	N 32 13 26.63	W 103 48 12.30
	2327.00	0.40	249.60	2326.97	2.30	1.68	-5.93	0.28	445652.59	705205.50	N 32 13 26.63	W 103 48 12.30
	2421.00	0.31	339.36	2420.97	2.47	1.81	-6.32	0.54	445652.72	705205.11	N 32 13 26.63	W 103 48 12.31
	2516.00	0.30	290.79	2515.97	2.83	2.14	-6.65	0.26	445653.05	705204.78	N 32 13 26.64	W 103 48 12.31
	2611.00	0.28	314.81	2610.97	3.12	2.39	-7.04	0.13	445653.30	705204.39	N 32 13 26.64	W 103 48 12.31
	2705.00	0.39	324.39	2704.96	3.58	2.81	-7.39	0.13	445653.72	705204.04	N 32 13 26.64	W 103 48 12.32
	2800.00	0.23	303.00	2799.96	3.98	3.18	-7.74	0.21	445653.69	705203.69	N 32 13 26.65	W 103 48 12.32
	2894.00	0.05	103.05	2893.96	4.08	3.27	-7.86	0.30	445654.18	705203.57	N 32 13 26.65	W 103 48 12.32
	3083.00	0.33	70.68	3082.96	4.18	3.43	-7.26	0.15	445654.34	705204.17	N 32 13 26.65	W 103 48 12.32
	3178.00	0.11	125.54	3177.96	4.18	3.47	-6.93	0.30	445654.38	705204.50	N 32 13 26.65	W 103 48 12.31
	3273.00	0.27	108.17	3272.96	4.03	3.35	-6.65	0.18	445654.26	705204.78	N 32 13 26.65	W 103 48 12.31
	3367.00	0.16	345.15	3366.96	4.07	3.41	-6.47	0.41	445654.31	705204.96	N 32 13 26.65	W 103 48 12.31
	3462.00	0.34	333.92	3461.96	4.47	3.79	-6.63	0.20	445654.70	705204.80	N 32 13 26.65	W 103 48 12.31
	3556.00	0.41	5.98	3555.96	5.06	4.37	-6.71	0.23	445655.28	705204.72	N 32 13 26.66	W 103 48 12.31
	3651.00	0.37	203.78	3650.96	5.12	4.43	-6.80	0.81	445655.34	705204.63	N 32 13 26.66	W 103 48 12.31
	3745.00	0.19	207.41	3744.96	4.73	4.01	-7.00	0.19	445654.92	705204.43	N 32 13 26.66	W 103 48 12.31
	3839.00	0.36	265.26	3838.95	4.61	3.85	-7.36	0.32	445654.76	705204.07	N 32 13 26.65	W 103 48 12.32
	3934.00	0.38	181.94	3933.95	4.30	3.51	-7.67	0.52	445654.42	705203.76	N 32 13 26.65	W 103 48 12.32
	4028.00	0.23	229.73	4027.95	3.89	3.08	-7.83	0.30	445653.99	705203.61	N 32 13 26.65	W 103 48 12.32
	4122.00	0.36	183.85	4121.95	3.49	2.66	-7.99	0.28	445653.57	705203.44	N 32 13 26.64	W 103 48 12.33
	4311.00	0.39	200.08	4310.95	2.33	1.46	-8.25	0.06	445652.37	705203.18	N 32 13 26.63	W 103 48 12.33
	4405.00	0.16	200.89	4404.95	1.92	1.21	-8.41	0.24	445651.95	705203.02	N 32 13 26.63	W 103 48 12.33
	4593.00	0.28	24.26	4592.94	2.09	1.21	-8.31	0.23	445652.12	705203.12	N 32 13 26.63	W 103 48 12.33
	4688.00	0.06	289.47	4687.94	2.32	1.45	-8.26	0.30	445652.36	705203.17	N 32 13 26.63	W 103 48 12.33
	4782.00	0.13	103.96	4781.94	2.31	1.45	-8.20	0.20	445652.36	705203.23	N 32 13 26.63	W 103 48 12.33
	4877.00	0.06	204.31	4876.94	2.23	1.38	-8.11	0.16	445652.29	705203.32	N 32 13 26.63	W 103 48 12.33
	4971.00	0.08	244.76	4970.94	2.16	1.30	-8.19	0.06	445652.21	705203.24	N 32 13 26.63	W 103 48 12.33
	5065.00	0.08	215.50	5064.94	2.09	1.22	-8.29	0.04	445652.13	705203.14	N 32 13 26.63	W 103 48 12.33
	5159.00	0.21	318.49	5158.94	2.18	1.30	-8.44	0.26	445652.21	705202.99	N 32 13 26.63	W 103 48 12.33
	5254.00	0.28	351.68	5253.94	2.56	1.66	-8.59	0.16	445652.57	705202.84	N 32 13 26.63	W 103 48 12.33
	5348.00	0.19	29.98	5347.94	2.91	2.02	-8.55	0.19	445652.93	705202.88	N 32 13 26.64	W 103 48 12.33
	5442.00	0.16	59.67	5441.94	3.09	2.22	-8.36	0.10	445653.13	705203.07	N 32 13 26.64	W 103 48 12.33
	5537.00	0.18	84.45	5536.94	3.15	2.30	-8.09	0.08	445653.21	705203.34	N 32 13 26.64	W 103 48 12.33
	5631.00	0.85	265.59	5630.94	3.17	2.26	-8.64	1.10	445653.17	705202.79	N 32 13 26.64	W 103 48 12.33
	5725.00	3.51	266.47	5724.86	3.31	2.03	-12.21	2.83	445652.94	705199.22	N 32 13 26.64	W 103 48 12.37
	5820.00	5.91	265.37	5819.53	3.56	1.46	-19.99	2.53	445652.37	705191.44	N 32 13 26.63	W 103 48 12.47
	5914.00	8.23	263.73	5912.81	3.66	0.33	-31.50	2.48	445651.24	705179.93	N 32 13 26.62	W 103 48 12.60
	6009.00	8.55	260.36	6006.80	3.20	-1.59	-45.22	0.62	445649.32	705166.21	N 32 13 26.60	W 103 48 12.76
	6103.00	9.63	258.42	6099.62	2.01	-4.34	-59.81	1.19	445646.57	705151.62	N 32 13 26.58	W 103 48 12.93
	6198.00	10.33	254.27	6193.18	-0.19	-8.24	-75.80	1.06	445642.67	705135.64	N 32 13 26.54	W 103 48 13.12
	6292.00	9.97	250.66	6285.71	-3.47	-13.22	-91.59	0.78	445637.69	705119.85	N 32 13 26.49	W 103 48 13.30
	6482.00	10.09	240.55	6472.82	-13.85	-26.85	-121.60	0.93	445624.06	705089.83	N 32 13 26.36	W 103 48 13.65
	6576.00	10.04	237.89	6565.37	-20.72	-35.26	-135.71	0.50	445615.65	705075.72	N 32 13 26.27	W 103 48 13.81
	6671.00	10.21	235.13	6658.89	-28.41	-44.47	-149.64	0.54	445608.44	705061.80	N 32 13 26.18	W 103 48 13.98
	6765.00	9.99	233.88	6751.44	-36.51	-54.04	-163.06	0.33	445596.87	705048.38	N 32 13 26.09	W 103 48 14.13
	6860.00	11.19	242.94	6844.82	-43.94	-63.09	-177.92	2.16	445587.82	705033.52	N 32 13 26.00	W 103 48 14.31
	6955.00	11.38	250.72	6937.99	-49.38	-70.38	-194.98	1.61	445580.53	705016.46	N 32 13 25.93	W 103 48 14.51
	7049.00	11.08	245.24	7030.20	-54.40	-77.23	-211.94	1.18	445573.69	704999.51	N 32 13 25.86	W 103 48 14.70
	7144.00	10.96	254.26	7123.45	-58.84	-83.50	-228.92	1.82	445567.41	704982.52	N 32 13 25.80	W 103 48 14.90
	7333.00	11.15	256.06	7308.94	-64.36	-92.78	-263.95	0.21	445558.14	704947.50	N 32 13 25.71	W 103 48 15.31
	7427.00	11.10	255.31	7401.18	-66.96	-97.26	-281.52	0.16	445553.85	704929.92	N 32 13 25.67	W 103 48 15.52
	7522.00	11.03	255.16	7494.41	-69.72	-101.91	-299.15	0.08	445549.01	704912.30	N 32 13 25.62	W 103 48 15.72
	7616.00	11.13	255.96	7586.66	-72.35	-106.41	-316.65	0.20	445544.50	704894.80	N 32 13 25.58	W 103 48 15.92
	7805.00	11.04	254.83	7772.13	-77.74	-115.57	-351.81	0.12	445535.34	704859.64	N 32 13 25.49	W 103 48 16.33
	7900.00	10.93	256.62	7865.39	-80.33	-120.04	-369.35	0.38	445530.88	704842.10	N 32 13 25.45	W 103 48 16.54
	7995.00	10.89	264.75	7958.68	-81.35	-122.94	-387.05	0.62	445527.97	704824.40	N 32 13 25.42	W 103 48 16.75
	8184.00	10.71	264.68	8144.33	-80.86	-126.21	-422.31	1.1				

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 ° ' '')
	8750.00	10.10	259.35	8700.87	-82.02	-138.24	-524.64	0.69	445512.68	704686.83	N 32 13 25.27	W 103 48 18.35
	8845.00	10.06	263.53	8794.40	-82.74	-140.71	-541.07	0.77	445510.21	704670.40	N 32 13 25.25	W 103 48 18.54
	8939.00	10.43	264.70	8886.91	-82.68	-142.42	-557.70	0.45	445508.49	704653.77	N 32 13 25.23	W 103 48 18.73
	9128.00	10.80	265.24	9072.67	-82.05	-145.47	-592.38	0.20	445505.44	704619.09	N 32 13 25.20	W 103 48 19.14
	9317.00	10.89	262.85	9258.30	-81.98	-149.17	-627.74	0.24	445501.75	704583.73	N 32 13 25.17	W 103 48 19.55
	9506.00	10.65	262.00	9444.00	-82.00	-153.80	-662.59	0.20	445497.12	704548.88	N 32 13 25.13	W 103 48 19.95
	9600.00	10.50	264.15	9536.42	-83.16	-155.87	-679.63	0.42	445495.05	704531.84	N 32 13 25.11	W 103 48 20.15
	9695.00	10.33	263.15	9629.85	-83.25	-157.77	-696.70	0.26	445493.15	704514.78	N 32 13 25.09	W 103 48 20.35
	9789.00	10.96	262.61	9722.23	-83.57	-159.92	-713.93	0.68	445491.00	704497.55	N 32 13 25.07	W 103 48 20.55
	9883.00	10.82	265.13	9814.54	-83.59	-161.82	-731.58	0.53	445489.10	704479.89	N 32 13 25.05	W 103 48 20.76
	9978.00	10.38	265.71	9907.92	-83.14	-163.22	-749.00	0.48	445487.70	704462.48	N 32 13 25.04	W 103 48 20.96
	10166.00	10.95	262.44	10092.67	-83.08	-166.83	-783.59	0.44	445484.09	704427.89	N 32 13 25.00	W 103 48 21.36
	10261.00	10.43	260.02	10186.02	-83.90	-169.51	-801.00	0.72	445481.41	704410.48	N 32 13 24.98	W 103 48 21.57
	10450.00	10.83	262.43	10371.78	-85.53	-174.81	-835.45	0.32	445476.11	704376.03	N 32 13 24.93	W 103 48 21.97
	10544.00	11.13	268.15	10464.06	-85.10	-176.27	-853.28	1.20	445474.65	704358.21	N 32 13 24.91	W 103 48 22.18
	10639.00	10.21	271.50	10557.42	-83.31	-176.34	-870.86	1.17	445474.58	704340.63	N 32 13 24.91	W 103 48 22.38
	10733.00	9.70	275.33	10650.01	-80.65	-175.39	-887.07	0.89	445475.53	704324.41	N 32 13 24.92	W 103 48 22.57
	10828.00	9.42	282.20	10743.69	-76.63	-173.00	-902.64	1.24	445477.92	704308.85	N 32 13 24.95	W 103 48 22.75
	10922.00	9.97	281.16	10836.35	-71.81	-169.80	-918.14	0.61	445481.12	704293.35	N 32 13 24.98	W 103 48 22.93
	10972.00	9.50	283.27	10885.63	-69.17	-168.02	-926.40	1.18	445482.90	704285.08	N 32 13 25.00	W 103 48 23.03
	11053.00	9.16	282.84	10965.56	-64.86	-165.05	-939.20	0.43	445485.87	704272.29	N 32 13 25.03	W 103 48 23.17
	11243.00	20.08	336.73	11149.82	-28.56	-131.50	-967.02	8.62	445519.42	704244.47	N 32 13 25.36	W 103 48 23.50
	11337.00	29.70	336.04	11234.99	9.11	-95.31	-982.89	10.24	445555.61	704228.61	N 32 13 25.72	W 103 48 23.68
	11432.00	38.34	339.60	11313.67	60.15	-46.09	-1002.75	9.33	445604.82	704208.74	N 32 13 26.21	W 103 48 23.91
	11527.00	47.13	351.07	11383.48	123.69	16.14	-1018.48	12.33	445667.05	704193.01	N 32 13 26.82	W 103 48 24.09
	11622.00	55.98	354.39	11442.50	197.99	89.87	-1027.76	9.71	445740.77	704183.74	N 32 13 27.55	W 103 48 24.19
	11697.94	61.33	357.39	11482.00	262.80	154.19	-1035.83	7.81	445805.09	704175.67	N 32 13 28.19	W 103 48 24.28
	11717.00	62.68	350.69	11490.95	279.61	170.81	-1038.45	7.81	445821.71	704173.05	N 32 13 28.36	W 103 48 24.31
	11810.00	67.34	349.23	11530.23	363.67	253.78	-1053.16	5.21	445904.68	704158.34	N 32 13 29.18	W 103 48 24.48
	11848.94	69.56	348.94	11544.37	399.35	288.94	-1059.94	5.81	445939.83	704151.56	N 32 13 29.53	W 103 48 24.55
	11905.00	72.82	348.53	11562.58	452.60	341.39	-1070.39	5.81	445992.27	704141.11	N 32 13 30.05	W 103 48 24.67
	12000.00	86.70	353.44	11579.44	545.71	433.48	-1084.91	15.47	446084.36	704126.59	N 32 13 30.96	W 103 48 24.84
	12095.00	89.18	352.53	11582.85	640.63	527.69	-1096.50	2.78	446178.57	704115.00	N 32 13 31.79	W 103 48 24.97
	12186.00	89.79	352.17	11583.67	731.59	617.88	-1108.61	0.78	446268.75	704102.88	N 32 13 32.78	W 103 48 25.10
	12281.00	89.79	351.96	11584.02	826.54	711.97	-1121.03	0.22	446362.84	704089.77	N 32 13 33.72	W 103 48 25.25
	12376.00	90.41	351.66	11583.85	921.47	806.00	-1135.26	0.73	446456.85	704076.24	N 32 13 34.65	W 103 48 25.40
	12471.00	90.79	352.88	11582.86	1016.43	900.13	-1148.04	1.34	446550.98	704063.46	N 32 13 35.58	W 103 48 25.54
	12565.00	91.20	354.90	11581.23	1110.41	993.58	-1159.04	2.19	446644.43	704053.46	N 32 13 36.50	W 103 48 25.68
	12576.00	91.38	355.19	11580.98	1121.40	1004.53	-1158.99	3.10	446655.38	704052.51	N 32 13 36.61	W 103 48 25.67
	12661.00	92.75	357.44	11577.92	1206.27	1089.30	-1164.45	3.10	446740.14	704047.05	N 32 13 37.45	W 103 48 25.73
	12755.00	93.47	0.42	11572.82	1299.76	1183.13	-1166.21	3.26	446833.97	704045.30	N 32 13 38.38	W 103 48 25.74
	12935.00	92.76	3.39	11563.04	1477.74	1362.74	-1160.23	1.70	447013.57	704051.28	N 32 13 40.16	W 103 48 25.68
	12944.00	92.72	3.54	11562.61	1486.60	1371.72	-1159.68	1.70	447022.54	704051.82	N 32 13 40.25	W 103 48 25.65
	13039.00	90.51	4.25	11559.93	1580.13	1466.45	-1153.23	2.44	447117.27	704058.27	N 32 13 41.18	W 103 48 25.57
	13134.00	88.21	4.62	11560.99	1673.52	1561.16	-1145.89	2.45	447211.97	704065.61	N 32 13 42.12	W 103 48 25.48
	13228.00	91.58	5.21	11561.16	1765.79	1654.80	-1137.84	3.64	447305.60	704073.67	N 32 13 43.05	W 103 48 25.38
	13323.00	89.69	4.86	11560.11	1859.00	1749.42	-1129.50	2.02	447400.22	704082.00	N 32 13 43.98	W 103 48 25.28
	13417.00	89.65	5.24	11560.65	1951.23	1843.05	-1121.22	0.41	447493.85	704090.28	N 32 13 44.91	W 103 48 25.18
	13512.00	89.93	4.24	11561.00	2044.55	1937.73	-1113.37	1.09	447588.52	704098.12	N 32 13 45.84	W 103 48 25.08
	13606.00	89.52	2.52	11561.45	2137.27	2031.56	-1107.83	1.88	447682.34	704103.67	N 32 13 46.77	W 103 48 25.01
	13701.00	89.86	3.86	11561.97	2231.03	2126.41	-1102.55	1.46	447777.18	704108.95	N 32 13 47.71	W 103 48 24.95
	13796.00	89.55	5.11	11562.46	2324.42	2221.11	-1095.12	1.36	447871.88	704116.38	N 32 13 48.65	W 103 48 24.85
	13891.00	90.17	4.75	11562.69	2417.67	2315.76	-1086.95	0.75	447966.53	704124.54	N 32 13 49.58	W 103 48 24.75
	13986.00	89.58	2.32	11562.89	2511.33	2410.57	-1081.10	2.63	448061.33	704130.40	N 32 13 50.52	W 103 48 24.68
	14080.00	89.96	1.65	11563.27	2604.40	2504.51	-1077.84	0.82	448155.27	704133.66	N 32 13 51.45	W 103 48 24.64
	14175.00	90.10	0.12	11563.22	2698.70	2599.50	-1076.37	1.62	448250.25	704135.12	N 32 13 52.39	W 103 48 24.61
	14270.00	89.34	358.61	11563.69	2793.27	2694.49	-1077.43	1.78	448345.23	704134.07	N 32 13 53.33	W 103 48 24.62
	14365.00	90.20	358.23	11564.07	2887.98	2789.45	-1080.05	0.99	448440.19	704131.45	N 32 13 54.27	W 103 48 24.65
	14460.00	89.86	356.83	11564.02	2982.79	2884.36	-1084.14	1.52	448535.09	704127.36	N 32 13 55.21	W 103 48 24.69
	14555.00	89.89	356.84	11564.23	3077.67	2979.21	-1089.38	0.03	448629.94	704122.11	N 32 13 56.15	W 103 48 24.74
	14650.00	90.17	357.46	11564.18	3172.52	3074.10	-1094.11	0.72	448724.82	704117.39	N 32 13 57.09	W 103 48 24.79
	14745.00	90.27	358.24	11563.81	3267.29	3169.03	-1097.67	0.83	448819.74	704113.83	N 32 13 58.03	W 103 48 24.83
	14839.00	89.45	358.21	11564.04	3361.03	3262.98	-1100.58	0.87	448913.69	704110.91	N 32 13 58.96	W 103 48 24.86
	14934.00	90.62	358.49	11563.98	3455.74	3357.94	-1103.32	1.27	449008.64	704108.18	N 32 13 59.90	W 103 48 24.88
	15029.00	89.00	357.57	11564.30	3550.50	3452.88	-1106.58	1.96	449103.58	704104.91	N 32 14 00.84	W 103 48 24.92
	15124.00	90.03	356.83	11565.10	3645.23	3547.83	-1109.57	1.71	449198.52	704101.93	N 32 14 01.78	W 103 48 24.95
	15217.00	89.52	358.46	11565.47	3737.84	3640.81	-1110.96	0.87	449291.50	704100.54	N 32 14 02.70	W 103 48 24.96
	15311.00	89.62	0.99	11566.17	3831.27	3734.81	-1110.59	1.63	449385.49	704100.91	N 32 14 03.63	W 103 48 24.95
	15406.00	89.79	1.67	11566.66	3925.48	3829.78	-1108.38	0.74	449480.45	704103.12	N 32 14 04.57	W 103 48 24.92
	15500.00	89.76	1.18	11567.03	4018.67	3923.75	-1106.04	0.52	449574.42	704105.45	N 32 14 05.49	W 103 48 24.88
	15589.00	90.03	0.46	11567.38	4206.31	4112.73	-1103.34	0.41	449673.38	704108.16	N 32 14 06.41	W 103 48 24.84
	15683.00	90.51	0.61	11566.93	4299.68	4206.72	-1102.46	0.53	449857.37	704109.04	N 32 14 07.32	W 103 48 24.83
	15777.00	90.00	0.66	11566.52	4393.04	4300.72	-1101.42	0.55	449951.36	704110.08	N 32 14 08.22	W 103 48 24.81
	15872.00	89.86	0.89	11566.63	4487.36	4395.71	-1100.14	0.28	450046.35	704111.36	N 32 14 09.16	W 103 48 24.79
	16067.00	89.45	1.16	11567.20	4581.63	4490.69	-1098.44	0.52	450141.32	704113.06	N 32 14 10.10	W 103 48 24.76
	16162.00	90.00										

Comments	MD (ft)	Incl (°)	Azim Grd (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	19667.00	89.24	1.17	11569.19	8165.30	8089.83	-1142.79	0.16	453740.23	704068.71	N 32 14 46.72	W 103 48 25.07
	19761.00	89.27	1.06	11570.41	8258.55	8183.80	-1140.96	0.12	453834.20	704070.54	N 32 14 47.65	W 103 48 25.05
	19856.00	89.17	1.12	11571.70	8352.80	8278.77	-1139.15	0.12	453929.17	704072.35	N 32 14 48.59	W 103 48 25.02
	19950.00	89.24	0.80	11573.01	8446.09	8372.75	-1137.58	0.35	454023.14	704073.92	N 32 14 49.52	W 103 48 25.00
	20045.00	89.24	0.78	11574.27	8540.40	8467.74	-1136.27	0.02	454118.12	704075.23	N 32 14 50.46	W 103 48 24.98
	20139.00	89.31	1.13	11575.46	8633.69	8561.71	-1134.70	0.38	454212.09	704076.80	N 32 14 51.39	W 103 48 24.95
	20234.00	89.24	1.10	11576.66	8727.94	8656.69	-1132.85	0.08	454307.06	704078.65	N 32 14 52.33	W 103 48 24.93
	20329.00	89.76	0.67	11577.49	8822.23	8751.67	-1131.39	0.71	454402.04	704080.11	N 32 14 53.27	W 103 48 24.90
	20423.00	89.38	0.36	11578.19	8915.61	8845.67	-1130.54	0.52	454496.03	704080.96	N 32 14 54.20	W 103 48 24.89
	20518.00	90.20	1.05	11578.54	9009.95	8940.66	-1129.37	1.13	454591.01	704082.13	N 32 14 55.14	W 103 48 24.87
	20613.00	89.93	0.96	11578.43	9104.22	9035.64	-1127.71	0.30	454685.99	704083.79	N 32 14 56.08	W 103 48 24.84
	20707.00	90.93	2.68	11577.73	9197.33	9129.59	-1124.72	2.12	454779.93	704086.78	N 32 14 57.01	W 103 48 24.80
	20802.00	90.38	2.69	11576.64	9291.21	9224.48	-1120.27	0.58	454874.81	704091.23	N 32 14 57.95	W 103 48 24.75
	20896.00	90.34	1.78	11576.05	9384.23	9318.40	-1116.60	0.97	454968.73	704094.89	N 32 14 58.88	W 103 48 24.70
	20991.00	89.03	1.12	11576.57	9478.41	9413.37	-1114.20	1.54	455063.69	704097.30	N 32 14 59.82	W 103 48 24.67
	21086.00	88.76	0.85	11578.41	9572.67	9508.34	-1112.57	0.40	455158.66	704098.93	N 32 15 0.75	W 103 48 24.64
	21180.00	88.41	1.24	11580.73	9665.92	9602.29	-1110.85	0.56	455252.60	704100.64	N 32 15 1.68	W 103 48 24.62
	21275.00	89.21	1.01	11582.70	9760.15	9697.25	-1108.99	0.88	455347.56	704102.51	N 32 15 2.62	W 103 48 24.59
	21369.00	90.38	1.61	11583.04	9853.37	9791.22	-1106.84	1.40	455441.53	704104.66	N 32 15 3.55	W 103 48 24.56
	21464.00	89.89	1.82	11582.81	9947.49	9886.18	-1104.00	0.56	455536.48	704107.50	N 32 15 4.49	W 103 48 24.52
	21558.00	88.72	0.21	11583.95	10040.76	9980.16	-1102.33	2.12	455630.45	704109.17	N 32 15 5.42	W 103 48 24.49
	21653.00	90.48	359.09	11584.62	10135.28	10075.15	-1102.91	2.20	455725.43	704108.59	N 32 15 6.36	W 103 48 24.50
	21748.00	89.76	358.43	11584.42	10229.94	10170.12	-1104.97	1.03	455820.40	704106.53	N 32 15 7.30	W 103 48 24.51
	21843.00	90.55	358.38	11584.16	10324.65	10265.08	-1107.61	0.83	455915.36	704103.89	N 32 15 8.24	W 103 48 24.54
	21937.00	89.93	359.82	11583.77	10418.27	10359.07	-1109.09	1.67	456009.34	704102.41	N 32 15 9.17	W 103 48 24.55
	22032.00	88.72	1.05	11584.89	10512.65	10454.06	-1108.37	1.82	456104.32	704103.13	N 32 15 10.11	W 103 48 24.54
	22126.00	87.00	0.18	11588.40	10605.94	10547.98	-1107.36	2.05	456198.24	704104.14	N 32 15 11.04	W 103 48 24.52
	22220.00	84.04	359.12	11595.74	10699.17	10641.68	-1107.93	3.34	456291.93	704103.57	N 32 15 11.97	W 103 48 24.52
100' FNL Crossing	22241.00	84.70	358.82	11597.80	10719.99	10682.58	-1108.31	3.44	456312.82	704103.19	N 32 15 12.18	W 103 48 24.53
Final MWD	22275.00	85.76	358.33	11600.63	10753.76	10696.45	-1109.15	3.44	456346.69	704102.35	N 32 15 12.51	W 103 48 24.53
Proj to TD	22320.00	85.76	358.33	11603.95	10798.51	10741.30	-1110.46	0.00	456391.55	704101.04	N 32 15 12.95	W 103 48 24.55

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 (in)	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 Sunrise MDP1 8-5 Federal Com 171H Gyro + IFR 0-22320'MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 171H Gyro + IFR 0-22320'MD
	1	26.500	670.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 171H
	1	670.500	22320.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 171H

...Original Borehole/Oxy Sunrise MDP1 8-5 Federal Com 171H Gyro + IFR 0-22320'MD



Sunrise MDP1 8-5 Federal Com 171H Wellbore Diagram

Elevation: GL 3534'
API: 30-015-44930

14-3/4" hole – 10-3/4" 45.5# J-55 csg
Set @ 678'

9-7/8" hole – 7-5/8" 26.4# L-80 BTC csg
Set @ 11006'

6-3/4" hole – 5-1/2" 20# P-110 SF
TORQ/DQX csg
Set @ 22315'

Frac'd 11906'-22195'
60 stages

*Note: Diagram not to scale

PBTD – 22275' MD
TD – 22315' MD/11603' TVD