

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

(As-Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-46110	Pool Code 98252	Pool Name MESA VERDE; WOLFCAMP	KZ
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 2H	
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3567.9'	

Surface Location

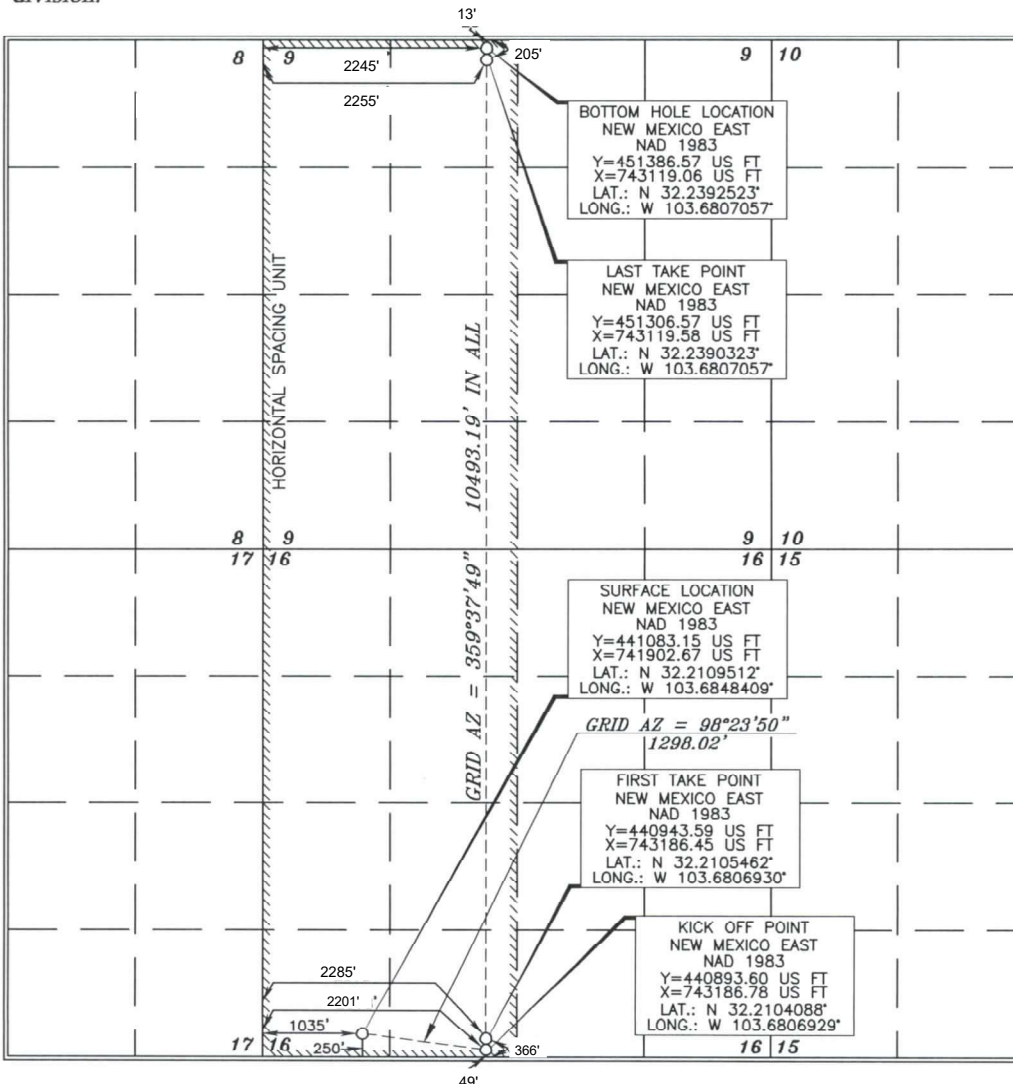
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	24 SOUTH	32 EAST, N.M.P.M.		250'	SOUTH	1035'	WEST	LEA

Bottom Hole Location If Different From Surface

SL

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	24 SOUTH	32 EAST, N.M.P.M.		13'	NORTH	2245'	WEST	LEA
Dedicated Acres 640	Joint or Infill	Consolidation Code	Order No.						

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.

8/25/2020

Signature

Date

JANA MENDIOLA

Printed Name

janalyn_mendiola@oxy.com

E-mail Address

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.

NOVEMBER 16, 2015

Date of Survey

Signature and Seal of
Professional Surveyor

Terry J. As...
Certificate Number

15079

Intent ☐ As Drilled ☒

API # 30-025-46110	Rec'd 8/25/2020 - NMOCD	
Operator Name: OXY USA INC.	Property Name: MESA VERDE WOLFCAMP UNIT	Well Number 2H

Kick Off Point (KOP)

UL N	Section 16	Township 24S	Range 32E	Lot	Feet 49	From N/S S	Feet 2201	From E/W W	County LEA
Latitude 32.21038					Longitude -103.68108				NAD NAD83

First Take Point (FTP)

UL N	Section 16	Township 24S	Range 32E	Lot	Feet 366	From N/S S	Feet 2285	From E/W W	County LEA
Latitude 32.21125					Longitude -103.68080				NAD NAD83

Last Take Point (LTP)

UL C	Section 9	Township 24S	Range 32E	Lot	Feet 205	From N/S N	Feet 2255	From E/W W	County LEA
Latitude 32.23871					Longitude -103.68070				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)

Rec'd 8/25/2020 - NMOCD
Schlumberger

March 10, 2020

OXY USA Incorporated
PO Box 4294
Houston, TX 77210-4294

Re:

S16, T24S, R32E LEA, NM
N 32.21095 W -104.68484

CLIENT: OXY USA Incorporated
WELL: MESA VERDE WC UNIT 2H
FIELD: MESA VERDE

RIG: Pioneer 82
COUNTY: LEA
API NO: 30-025-46110
JOB NO: 20MLH0442

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>
Balqees Alabdullah FE	MESA VERDE WC UNIT 2 H Original Hole	1069.00 Ft to 22566.00 Ft	February 15, 2020 to February 29, 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:
S16, T24S, R32E LEA, NM
N 32.21095 W -104.68484

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 February 15, 2020 through February 29, 2020, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 1069.00 feet to a depth of 22566.00 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 MESA VERDE WC UNIT 2H Well (Original Hole) API No. 30-025-46110 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 10 day of March (month) 2020 (yr)

My Commission expires:

6/14/23

Jean Paul Langlois

Notary Public

Comanche, Oklahoma

(County State)

(signature)





OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Mesa Verde WC Unit 2H	NM Lea County (NAD 83)	Oxy Mesa Verde WC Unit 2H

Gravity & Magnetic Parameters

Model: IFR1 Dip: 59.817° Date: 14-Feb-2020
 MagDec: 6.589° FS: 47819.9nT Gravity FS: 998.432mg (9.80665 Based)

Surface Location

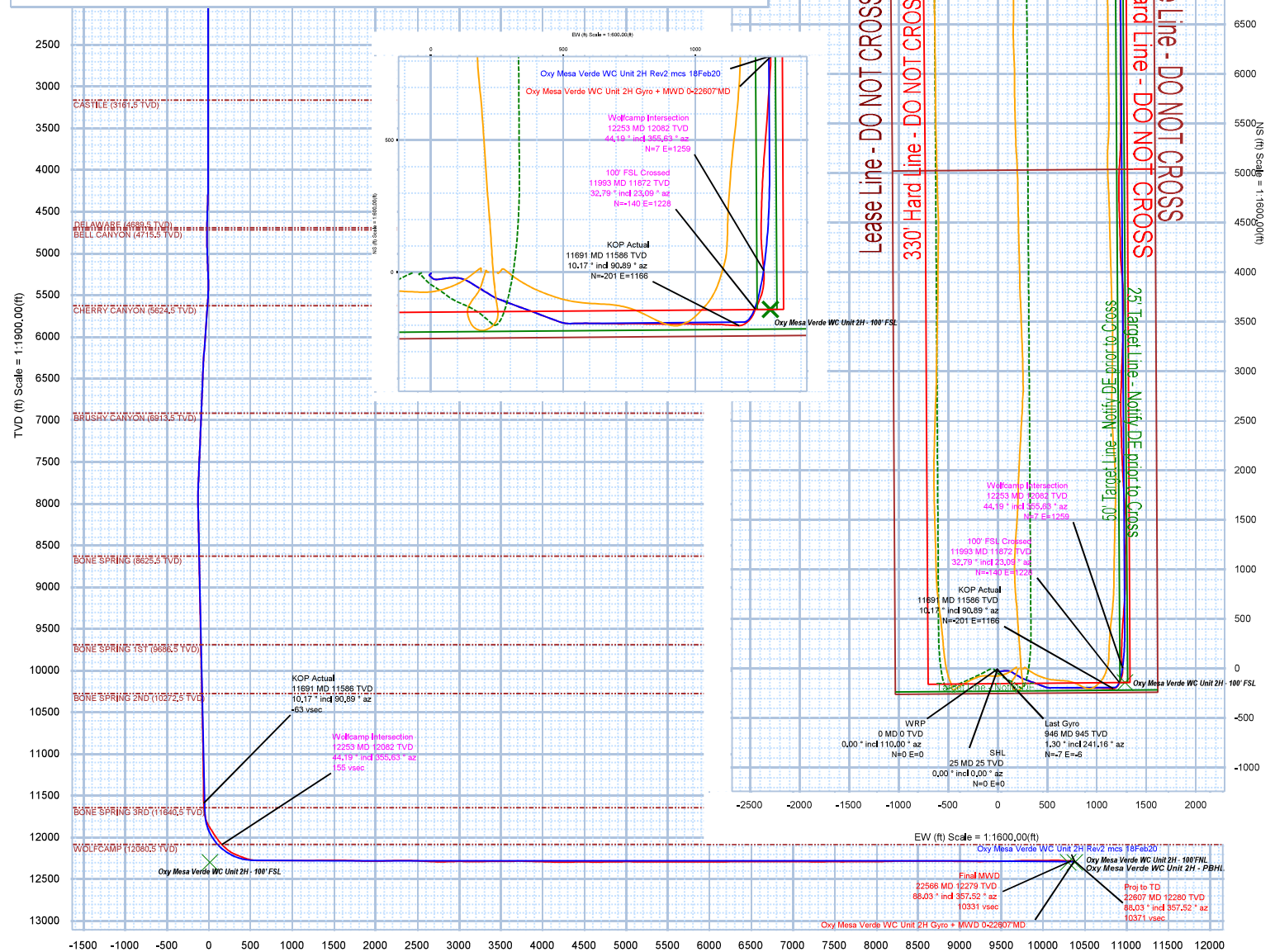
NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Lat: N 32 12 38.42 Northing: 441083.15RUS Grid Conv: 0.3457°
 Lon: W 103 41 5.43 Easting: 741902.67RUS Scale Fact: 0.99995516

Miscellaneous

Slot: Oxy Mesa Verde WC Unit 2H TVD Ref: RKB = 25'(3592.9ft above MSL)
 Plan: Oxy Mesa Verde WC Unit 2H Gyro + MWD 0-22607 MD

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
WRP	0.00	0.00	110.00	0.00	0.00	0.00	0.00	
SHL	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00
Last Gyro	945.50	1.30	241.16	945.43	-7.79	-7.18	-5.67	0.52
KOP Actual	11691.00	10.17	90.89	11586.50	-63.06	-201.13	1165.80	0.72
100' FSL Crossed	11993.00	32.79	23.09	11871.82	5.13	-139.77	1227.67	0.94
Wolfcamp Intersection	12253.29	44.19	355.63	12082.40	154.65	7.09	1259.08	13.02
100' FNL Crossed	22530.00	87.56	356.99	12277.20	10295.30	10223.58	1213.09	1.96
Final MWD	22566.00	88.03	357.52	12278.59	10330.78	10259.51	1211.37	1.96
Proj to TD	22607.00	88.03	357.52	12280.00	10371.23	10300.45	1209.60	0.00



Vertical Section (ft) Azim = 6.73° Scale = 1:1900.00(ft) Origin = 0N/-S, 0E/-W



Oxy Mesa Verde WC Unit 2H Gyro + MWD 0-22607'MD Survey Geodetic Report

(Def Survey)

Report Date: March 02, 2020 - 01:26 PM
Client: OXY
Field: NM Lea County (NAD 83)
Structure / Slot: Oxy Mesa Verde WC Unit 2H / Oxy Mesa Verde WC Unit 2H
Well: Oxy Mesa Verde WC Unit 2H
Borehole: Original Borehole
UVI / API#: Unknown / 30-025-46110
Survey Name: Oxy Mesa Verde WC Unit 2H Gyro + MWD 0-22607'MD
Survey Date: January 27, 2020
Tort / AHD / DDI / ERD Ratio: 282.365 ° / 11781.529 ft / 6.787 / 0.958
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 12' 39.42430", W 103° 41' 5.42714"
Location Grid N/E Y/X: N 441083.150 ftUS, E 741902.870 ftUS
CRS Grid Convergence Angle: 0.3457 °
Grid Scale Factor: 0.99995516
Version / Patch: 2.10.782.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 6.733 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB = 25'
TVD Reference Elevation: 3592.900 ft above MSL
Seabed / Ground Elevation: 3567.900 ft above MSL
Magnetic Declination: 6,589 °
Total Gravity Field Strength: 998.4320mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47819.900 nT
Magnetic Dip Angle: 59.817 °
Declination Date: February 14, 2020
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.3457 °
Total Corr Mag North->Grid North: 6.2433 °
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	110.00	0.00	0.00	0.00	0.00	N/A	441083.15	741902.67	N 32 12 39.42	W 103 41 5.43
	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	441083.15	741902.67	N 32 12 39.42	W 103 41 5.43
	103.50	0.40	161.37	103.50	-0.25	-0.26	0.09	0.51	441082.89	741902.76	N 32 12 39.42	W 103 41 5.43
	132.50	0.44	158.58	132.50	-0.44	-0.46	0.16	0.15	441082.69	741902.83	N 32 12 39.42	W 103 41 5.43
	159.50	0.42	161.86	159.50	-0.62	-0.65	0.23	0.12	441082.50	741902.90	N 32 12 39.42	W 103 41 5.42
	187.50	0.42	166.20	187.50	-0.81	-0.85	0.29	0.11	441082.30	741902.96	N 32 12 39.42	W 103 41 5.42
	216.50	0.40	167.45	216.50	-1.00	-1.05	0.33	0.08	441082.10	741903.00	N 32 12 39.41	W 103 41 5.42
	242.50	0.40	170.39	242.50	-1.18	-1.23	0.37	0.08	441081.92	741903.04	N 32 12 39.41	W 103 41 5.42
	271.50	0.37	171.40	271.50	-1.36	-1.42	0.40	0.11	441081.73	741903.07	N 32 12 39.41	W 103 41 5.42
	303.50	0.40	168.50	303.49	-1.57	-1.63	0.44	0.11	441081.52	741903.11	N 32 12 39.41	W 103 41 5.42
Last Gyro	334.50	0.43	172.37	334.49	-1.78	-1.85	0.47	0.13	441081.30	741903.14	N 32 12 39.41	W 103 41 5.42
	366.50	0.48	183.07	366.49	-2.03	-2.11	0.48	0.31	441081.04	741903.15	N 32 12 39.40	W 103 41 5.42
	397.50	0.51	188.26	397.49	-2.30	-2.37	0.46	0.17	441080.78	741903.13	N 32 12 39.40	W 103 41 5.42
	429.50	0.53	195.73	429.49	-2.59	-2.65	0.39	0.22	441080.50	741903.06	N 32 12 39.40	W 103 41 5.42
	460.50	0.54	201.19	460.49	-2.87	-2.93	0.30	0.17	441080.22	741902.97	N 32 12 39.40	W 103 41 5.42
	492.50	0.56	209.28	492.49	-3.16	-3.21	0.17	0.25	441079.94	741902.84	N 32 12 39.39	W 103 41 5.43
	523.50	0.58	214.45	523.49	-3.44	-3.47	0.01	0.18	441079.68	741902.68	N 32 12 39.39	W 103 41 5.43
	555.50	0.62	216.43	555.48	-3.74	-3.74	-0.19	0.14	441079.41	741902.48	N 32 12 39.39	W 103 41 5.43
	586.50	0.68	225.01	586.48	-4.03	-4.01	-0.41	0.37	441079.14	741902.26	N 32 12 39.38	W 103 41 5.43
	618.50	0.73	231.00	618.48	-4.32	-4.27	-0.71	0.28	441078.88	741901.96	N 32 12 39.38	W 103 41 5.44
	649.50	0.76	234.32	649.48	-4.60	-4.51	-1.03	0.17	441078.64	741901.64	N 32 12 39.38	W 103 41 5.44
	681.50	0.83	238.04	681.47	-4.89	-4.76	-1.40	0.27	441078.39	741901.27	N 32 12 39.38	W 103 41 5.44
	712.50	0.91	240.06	712.47	-5.18	-5.00	-1.80	0.28	441078.15	741900.87	N 32 12 39.37	W 103 41 5.45
	744.50	0.96	239.17	744.47	-5.49	-5.26	-2.25	0.16	441077.89	741900.42	N 32 12 39.37	W 103 41 5.45
	775.50	1.01	238.73	775.46	-5.82	-5.54	-2.71	0.16	441077.61	741899.96	N 32 12 39.37	W 103 41 5.46
	807.50	1.06	239.86	807.46	-6.17	-5.83	-3.20	0.17	441077.32	741899.47	N 32 12 39.37	W 103 41 5.46
	838.50	1.11	241.37	838.45	-6.52	-6.12	-3.72	0.19	441077.03	741898.95	N 32 12 39.36	W 103 41 5.47
	870.50	1.17	240.98	870.44	-6.89	-6.43	-4.27	0.19	441076.72	741898.40	N 32 12 39.36	W 103 41 5.48
	901.50	1.19	242.01	901.44	-7.25	-6.73	-4.83	0.09	441076.42	741897.84	N 32 12 39.36	W 103 41 5.48
	933.50	1.24	242.00	933.43	-7.64	-7.05	-5.43	0.16	441076.10	741897.24	N 32 12 39.35	W 103 41 5.49
	965.50	1.30	241.16	965.43	-7.79	-7.18	-5.67	0.52	441075.97	741897.00	N 32 12 39.35	W 103 41 5.49
	1069.00	1.08	228.95	1068.90	-9.47	-8.62	-7.77	0.27	441074.53	741894.90	N 32 12 39.34	W 103 41 5.52
	1162.00	0.12	197.93	1161.89	-10.22	-9.29	-8.46	1.05	441073.86	741894.21	N 32 12 39.33	W 103 41 5.53
	1345.00	0.14	177.01	1344.89	-10.62	-9.69	-8.51	0.03	441073.46	741894.16	N 32 12 39.33	W 103 41 5.53
	1435.00	0.10	164.08	1434.89	-10.80	-9.88	-8.48	0.05	441073.27	741894.19	N 32 12 39.33	W 103 41 5.53
	1526.00	0.12	180.52	1525.89	-10.97	-10.05	-8.46	0.04	441073.10	741894.21	N 32 12 39.33	W 103 41 5.53
	1617.00	0.17	81.79	1616.89	-11.03	-10.13	-8.33	0.24	441073.02	741894.34	N 32 12 39.32	W 103 41 5.52
	1713.00	0.12	284.59	1712.89	-10.98	-10.08	-8.29	0.30	441073.07	741894.38	N 32 12 39.33	W 103 41 5.52
	1807.00	0.12	343.02	1806.89	-10.88	-9.96	-8.41	0.12	441073.19	741894.26	N 32 12 39.33	W 103 41 5.53
	1902.00	0.05	339.51	1901.89	-10.75	-9.83	-8.45	0.07	441073.32	741894.22	N 32 12 39.33	W 103 41 5.53
	1997.00	0.12	23.35	1996.89	-10.62	-9.70	-8.43	0.10	441073.45	741894.24	N 32 12 39.33	W 103 41 5.53
	2092.00	0.15	229.83	2091.89	-10.61	-9.69	-8.48	0.28	441073.46	741894.19	N 32 12 39.33	W 103 41 5.53
	2188.00	0.02	150.38	2187.89	-10.72	-9.78	-8.57	0.15	441073.37	741894.10	N 32 12 39.33	W 103 41 5.53
	2283.00	0.15	165.96	2282.89	-10.85	-9.92	-8.53	0.14	441073.23	741894.14	N 32 12 39.33	W 103 41 5.53
	2378.00	0.12	321.04	2377.89	-10.90	-9.96	-8.57	0.28	441073.19	741894.10	N 32 12 39.33	W 103 41 5.53
	2568.00	0.09	51.87	2567.89	-10.65	-9.71	-8.57	0.08	441073.44	741894.10	N 32 12 39.33	W 103 41 5.53
	2664.00	0.17	226.83	2663.89	-10.71	-9.76	-8.62	0.27	441073.39	741894.05	N 32 12 39.33	W 103 41 5.53
	2759.00	0.15	247.91	2758.89	-10.88	-9.91	-8.84	0.06	441073.24	741893.83	N 32 12 39.33	W 103 41 5.53
	2854.00	0.12	272.39	2853.89	-10.94	-9.95	-9.05	0.07	441073.20	741893.62	N 32 12 39.33	W 103 41 5.53
	2949.00	0.12	146.17	2948.89	-11.03	-10.03	-9.10	0.23	441073.12	741893.57	N 32 12 39.33	W 103 41 5.53
	3044.00	0.17	205.53	3043.89	-11.23	-10.24	-9.10	0.16	441072.91	741893.57	N 32 12 39.32	W 103 41 5.53
	3140.00	0.15	327.73	3139.89	-11.27	-10.26	-9.23	0.29	441072.89	741893.44	N 32 12 39.32	W 103 41 5.54
	3234.00	0.19	23.39	3233.89	-11.03	-10.01	-9.23	0.17	441073.14	741893.44	N 32 12 39.33	W 103 41 5.54
	3329.00	0.17	64.15	3328.89	-10.80	-9.81	-9.04	0.13	441073.34	741893.63	N 32 12 39.33	W 103 41 5.53
	3424.00	0.09	55.34	3423.89	-10.67	-9.70	-8.86	0.09	441073.45	741893.81	N 32 12 39.33	W 103 41 5.53
	3519.00	0.07	272.88	3518.89	-10.63	-9.66	-8.85	0.16	441073.49	741893.82	N 32 12 39.33	W 103 41 5.53
	3615.00	0.17	88.46	3614.89	-10.61	-9.65	-8.77	0.25	441073.50	741893.90	N 32 12 39.33	W 103 41 5.53
	3709.00	0.17	96.34	3708.89	-10.59	-9.66	-8.49	0.02	441073.49	741894.18	N 32 12 39.33	W 103 41 5.53
	3805.00	0.25	117.33	3804.89	-10.66	-9.77	-8.16	0.11	441073.38	741894.51	N 32 12 39.33	W 103 41 5.52
	3900.00	0.09	86.15	3899.89	-10.72	-9.87	-7.90	0.19	441073.29	741894.77	N 32 12 39.33	W 103 41 5.52
3995.00	0.15	198.56	3994.89	-10.83	-9.98	-7.87	0.21	441073.17	741894.80	N 32 12 39.33	W 103 41 5.52	
4090.00	0.21	116.37	4089.89	-11.01	-10.17	-7.75	0.25	441072.98	741894.92	N 32 12 39.32	W 103 41 5.52	
4280.00	1.59	129.60	4279.86	-12.56	-12.01	-5.41	0.73	441071.14	741897.26	N 32 12 39.31	W 103 41 5.49	
4375.00	2.67	132.82	4374.79	-14.58	-14.35	-2.77	1.14	441068.80	741899.90	N 32 12 39.28	W 103 41 5.46	
4471.00	3.67	135.38	4470.65	-17.81	-18.06	1.03	1.05	441065.09	741903.70	N 32 12 39.25	W 103 41 5.42	
4566.00	3.39	127.17	4565.47	-21.14	-21.92	5.40	0.61	441061.23	741908.07	N 32 12 39.21	W 103 41 5.37	
4661.00	3.01	113.04	4660.32	-23.26	-24.59	9.93	0.92	441058.56	741912.60	N 32 12 39.18	W 103 41 5.31	
4756.00	3.21	99.70	4755.18	-24.10	-26.02	14.85	0.79	441057.13	741917.52	N 32 12 39.17	W 103 41 5.26	
4852.00	4.79	88.15	4850.94	-23.64	-26.34	21.51	1.84	441056.81	741924.18	N 32 12 39.16	W 103 41 5.18	
4947.00	6.43	81.24	4945.49	-21.63	-25.40	30.73	1.86	441057.75	741933.40	N 32 12 39.17	W 103 41 5.07	
5042.00	8.37	82.82	5039.69	-18.54	-23.73	42.85	2.05	441059.42	741945.52	N 32 12 39.19	W 103 41 4.93	
5138.00	9.71	83.42	5134.50	-15.00	-21.93	57.82	1.40	441061.22	741960.49	N 32 12 39.20	W 103 41 4.76	
5233.00	10.37	86.14	5228.04	-11.58	-20.43	74.31	0.86	441062.72	741976.98	N 32 12 39.22	W 103 41 4.56	
5328.00	10.27	90.81	5321.51	-9.13	-19.98	91.31	0.89	441063.17	741993.98	N 32 12 39.22	W 103 41 4.37	
5423.00	10.32	100.83	5414.99	-8.87	-21.70	108.14	1.88	441061.45	742010.80	N 32 12 39.20	W 103 41 4.17	
5517.00	10.06	109.00	5507.01	-11.21	-25.95	124.17	1.56	441057.20	742026.84	N 32 12 39.16	W 103 41 3.98	
5613.00	10.03	119.94	5602.0									

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 ° ' ")
	5898.00	9.78	121.09	5882.86	-36.46	-58.07	180.92	0.06	441025.08	742083.59	N 32 12 38.84	W 103 41 3.33
	5993.00	9.91	122.07	5976.47	-43.29	-66.58	194.76	0.22	441016.57	742097.42	N 32 12 38.75	W 103 41 3.17
	6088.00	9.84	121.01	6070.06	-50.12	-75.10	208.65	0.21	441008.05	742111.31	N 32 12 38.67	W 103 41 3.00
	6183.00	9.82	122.15	6163.66	-56.94	-83.60	222.46	0.21	440999.56	742125.12	N 32 12 38.58	W 103 41 2.84
	6278.00	10.02	121.05	6257.24	-63.82	-92.17	236.40	0.29	440990.98	742139.06	N 32 12 38.50	W 103 41 2.68
	6373.00	9.98	109.65	6350.81	-69.06	-99.20	251.24	2.08	440983.95	742153.89	N 32 12 38.43	W 103 41 2.51
	6467.00	9.78	111.09	6443.42	-72.86	-104.81	266.36	0.34	440978.34	742169.01	N 32 12 38.37	W 103 41 2.33
	6562.00	9.88	110.75	6537.02	-76.84	-110.60	281.51	0.12	440972.55	742184.16	N 32 12 38.31	W 103 41 2.16
	6657.00	9.93	110.40	6630.60	-80.75	-116.35	296.80	0.08	440966.81	742198.46	N 32 12 38.26	W 103 41 1.98
	6752.00	9.84	110.97	6724.19	-84.68	-122.11	312.06	0.14	440961.05	742214.72	N 32 12 38.20	W 103 41 1.80
	6847.00	9.92	109.71	6817.79	-88.51	-127.77	327.35	0.24	440955.38	742230.00	N 32 12 38.14	W 103 41 1.63
	6942.00	9.62	110.41	6911.41	-92.23	-133.30	342.49	0.34	440949.86	742245.14	N 32 12 38.08	W 103 41 1.45
	7037.00	9.96	109.89	7005.02	-95.97	-138.86	357.65	0.37	440944.29	742260.31	N 32 12 38.03	W 103 41 1.27
	7132.00	9.83	109.75	7098.61	-99.67	-144.40	373.01	0.14	440938.76	742275.66	N 32 12 37.97	W 103 41 1.10
	7227.00	9.78	110.76	7192.22	-103.45	-150.00	388.19	0.19	440933.16	742290.84	N 32 12 37.92	W 103 41 0.92
	7322.00	9.57	110.89	7285.87	-107.34	-155.67	403.11	0.22	440927.48	742305.76	N 32 12 37.86	W 103 41 0.75
	7417.00	9.86	110.76	7379.51	-111.24	-161.37	418.10	0.31	440921.78	742320.75	N 32 12 37.80	W 103 41 0.57
	7513.00	9.74	111.17	7474.11	-115.26	-167.22	433.35	0.14	440915.94	742336.00	N 32 12 37.74	W 103 41 0.40
	7608.00	9.84	110.39	7567.73	-119.18	-172.95	448.46	0.17	440910.21	742351.11	N 32 12 37.69	W 103 41 0.22
	7702.00	9.85	109.59	7660.34	-122.86	-178.44	463.56	0.15	440904.71	742366.21	N 32 12 37.63	W 103 41 0.04
	7797.00	9.74	111.91	7753.96	-126.78	-184.17	478.67	0.43	440898.99	742381.32	N 32 12 37.57	W 103 40 59.87
	7892.00	9.84	104.74	7847.58	-130.01	-189.23	493.98	1.29	440893.93	742396.62	N 32 12 37.52	W 103 40 59.69
	7987.00	9.63	97.43	7941.21	-131.24	-192.32	509.71	1.32	440890.83	742412.35	N 32 12 37.49	W 103 40 59.51
	8083.00	9.78	88.92	8035.84	-130.23	-193.21	525.82	1.50	440889.95	742428.47	N 32 12 37.48	W 103 40 59.32
	8178.00	9.76	88.82	8129.47	-128.02	-192.89	541.94	0.03	440890.27	742444.59	N 32 12 37.48	W 103 40 59.13
	8273.00	9.50	89.18	8223.13	-125.88	-192.61	557.83	0.28	440890.55	742460.47	N 32 12 37.49	W 103 40 58.95
	8368.00	9.33	88.48	8316.85	-123.75	-192.30	573.37	0.22	440890.86	742476.01	N 32 12 37.49	W 103 40 58.77
	8558.00	10.00	91.77	8504.15	-120.11	-192.40	605.25	0.46	440890.76	742507.89	N 32 12 37.48	W 103 40 58.40
	8652.00	9.75	91.14	8596.76	-118.63	-192.81	621.37	0.29	440890.35	742524.01	N 32 12 37.48	W 103 40 58.21
	8747.00	9.78	90.47	8690.38	-116.96	-193.03	637.48	0.12	440890.12	742540.12	N 32 12 37.48	W 103 40 58.02
	8840.00	9.64	90.83	8782.05	-115.30	-193.21	653.16	0.16	440889.95	742555.80	N 32 12 37.47	W 103 40 57.84
	8935.00	9.91	90.22	8875.67	-113.56	-193.36	669.29	0.30	440889.80	742571.93	N 32 12 37.47	W 103 40 57.65
	9124.00	10.39	91.95	9061.71	-110.29	-194.00	702.59	0.30	440889.16	742605.23	N 32 12 37.46	W 103 40 57.26
	9219.00	10.03	89.86	9155.21	-108.59	-194.27	719.42	0.54	440888.89	742622.06	N 32 12 37.46	W 103 40 57.07
	9315.00	9.89	88.38	9249.76	-106.39	-194.02	736.02	0.30	440889.14	742638.66	N 32 12 37.46	W 103 40 56.87
	9410.00	9.88	90.31	9343.35	-104.29	-193.83	752.33	0.35	440889.33	742654.96	N 32 12 37.46	W 103 40 56.68
	9505.00	9.69	89.12	9436.97	-102.32	-193.75	768.47	0.29	440889.40	742671.11	N 32 12 37.46	W 103 40 56.50
	9601.00	9.97	90.14	9531.56	-100.30	-193.65	784.86	0.34	440889.51	742687.50	N 32 12 37.46	W 103 40 56.31
	9696.00	10.60	92.20	9625.03	-98.66	-194.01	801.82	0.77	440889.15	742704.45	N 32 12 37.46	W 103 40 56.11
	9792.00	10.89	90.15	9719.35	-96.92	-194.37	819.71	0.50	440888.79	742722.34	N 32 12 37.45	W 103 40 55.90
	9887.00	10.72	91.46	9812.67	-95.08	-194.62	837.52	0.31	440888.54	742740.15	N 32 12 37.45	W 103 40 55.69
	9982.00	10.55	89.84	9906.03	-93.23	-194.82	855.05	0.36	440888.34	742757.68	N 32 12 37.45	W 103 40 55.49
	10078.00	10.74	91.38	10000.38	-91.34	-195.01	872.78	0.36	440888.15	742775.41	N 32 12 37.44	W 103 40 55.28
	10173.00	10.33	88.39	10093.78	-89.28	-194.98	890.14	0.72	440888.18	742792.77	N 32 12 37.44	W 103 40 55.08
	10269.00	10.42	90.44	10188.21	-87.08	-194.81	907.42	0.40	440888.35	742810.05	N 32 12 37.44	W 103 40 54.88
	10364.00	10.50	88.75	10281.63	-84.93	-194.68	924.67	0.33	440888.47	742827.30	N 32 12 37.44	W 103 40 54.68
	10459.00	10.93	90.98	10374.98	-82.83	-194.65	942.33	0.63	440888.51	742844.95	N 32 12 37.44	W 103 40 54.47
	10554.00	10.36	89.54	10468.34	-80.85	-194.74	959.88	0.66	440888.42	742862.50	N 32 12 37.44	W 103 40 54.27
	10649.00	10.43	91.32	10561.78	-78.97	-194.86	977.01	0.35	440888.29	742879.64	N 32 12 37.44	W 103 40 54.07
	10745.00	10.82	90.66	10656.14	-77.20	-195.17	994.71	0.43	440887.99	742897.34	N 32 12 37.43	W 103 40 53.86
	10839.00	10.36	90.01	10748.54	-75.28	-195.27	1011.99	0.51	440887.89	742914.61	N 32 12 37.43	W 103 40 53.66
	10934.00	10.55	89.84	10841.96	-73.23	-195.25	1029.23	0.20	440887.91	742931.85	N 32 12 37.43	W 103 40 53.46
	11029.00	9.94	93.99	10935.45	-71.80	-195.80	1046.10	1.01	440887.36	742948.72	N 32 12 37.42	W 103 40 53.27
	11125.00	10.35	90.31	11029.95	-70.44	-196.42	1062.99	0.80	440886.74	742965.61	N 32 12 37.42	W 103 40 53.07
	11220.00	10.99	89.51	11123.30	-68.34	-196.39	1080.58	0.69	440886.77	742983.20	N 32 12 37.42	W 103 40 52.86
	11315.00	10.53	94.49	11216.63	-66.86	-196.99	1098.29	1.09	440886.17	743000.91	N 32 12 37.41	W 103 40 52.66
	11410.00	10.60	93.65	11310.02	-66.05	-198.23	1115.86	0.18	440884.93	743018.28	N 32 12 37.40	W 103 40 52.46
	11505.00	10.43	93.10	11403.43	-65.04	-199.25	1132.97	0.21	440883.91	743035.59	N 32 12 37.38	W 103 40 52.25
	11600.00	10.07	94.56	11496.91	-64.18	-200.37	1149.84	0.47	440882.79	743052.45	N 32 12 37.37	W 103 40 52.06
	11691.00	10.17	90.89	11586.50	-63.06	-201.13	1165.80	0.72	440882.03	743068.42	N 32 12 37.36	W 103 40 51.87
	11885.00	17.86	45.42	11775.09	-37.99	-180.43	1204.28	6.64	440902.73	743106.89	N 32 12 37.57	W 103 40 51.42
	11979.00	32.67	23.19	11860.04	-2.13	-146.73	1224.69	18.46	440936.43	743127.30	N 32 12 37.90	W 103 40 51.18
100' FSL Crossed	11993.00	32.79	23.09	11871.82	5.13	-139.77	1227.67	0.94	440943.39	743130.28	N 32 12 37.97	W 103 40 51.15
	12073.00	33.47	22.52	11938.82	47.14	-99.46	1244.61	0.94	440983.69	743147.22	N 32 12 38.37	W 103 40 50.95
	12167.00	35.84	7.40	12016.28	99.71	-48.13	1258.11	9.47	441035.02	743160.72	N 32 12 38.87	W 103 40 50.79
Wolfcamp Intersection	12253.29	44.19	355.63	12082.40	154.65	7.09	1259.08	13.02	441090.23	743161.69	N 32 12 39.42	W 103 40 50.77
	12262.00	45.09	354.65	12088.60	160.65	13.19	1258.56	13.02	441096.34	743161.17	N 32 12 39.48	W 103 40 50.78
	12356.00	52.21	354.89	12150.66	229.61	83.40	1252.01	7.57	441166.55	743154.82	N 32 12 40.17	W 103 40 50.85
	12451.00	67.42	0.82	12198.32	310.46	165.17	1248.99	16.88	441248.31	743151.60	N 32 12 40.98	W 103 40 50.88
	12545.00	68.83	1.78	12233.34	397.28	252.38	1250.82	1.89	441335.51	743153.43	N 32 12 41.85	W 103 40 50.85
	12639.00	76.02	2.71	12261.71	486.56	341.86	1254.34	7.71	441424.99	743156.95	N 32 12 42.73	W 103 40 50.80
	12734.00	89.94	4.56	12273.29	580.48	435.72	1260.33	14.78	441518.85	743162.94	N 32 12 43.66	W 103 40 50.73
	12797.00	89.91	4.53	12273.37	643.43	498.52	1265.32	0.07	441581.65	743167.93	N 32 12 44.28	W 103 40 50.67
	12872.00	89.30	3.91	12273.89	718.36	573.32	1270.84	1.16	441656.44	743173.45	N 32 12 45.02	W 103 40 50.60
	12966.00	89.92	4.11	12274.53	812.25	687.08	1277.41	0.69	441750.20	743180.02	N 32 12 45.95	W 103 40 50.51
	13060.00	89.92	3.18	12274.66	906.11	760.89	1283.39	0.99	441844.01	743186.00	N 32 12 46.88	W 103 40 50.44
	13155.00	89.61	0.39	12275.05	1000.75	855.84	1286.35	2.95	4419			

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 ° ' ")
	16080.00	88.61	358.56	12285.60	3900.28	3778.00	1265.21	0.99	444860.98	743167.82	N 32 13 16.73	W 103 40 50.43
	16174.00	88.09	356.32	12288.31	3993.01	3871.87	1261.01	2.45	444954.83	743163.62	N 32 13 17.66	W 103 40 50.48
	16269.00	88.68	354.99	12290.99	4086.20	3966.55	1253.81	1.53	445049.52	743158.43	N 32 13 18.60	W 103 40 50.55
	16363.00	88.54	355.03	12293.27	4178.21	4060.17	1245.64	0.15	445143.13	743148.25	N 32 13 19.52	W 103 40 50.64
	16458.00	90.67	357.15	12293.92	4271.56	4154.93	1239.16	3.16	445237.89	743141.78	N 32 13 20.46	W 103 40 50.71
	16553.00	91.50	358.83	12292.12	4365.44	4249.85	1235.83	1.97	445332.81	743138.44	N 32 13 21.40	W 103 40 50.74
	16647.00	89.61	359.09	12291.21	4458.56	4343.83	1234.13	2.03	445426.78	743136.74	N 32 13 22.33	W 103 40 50.76
	16742.00	89.75	358.49	12291.74	4552.65	4438.81	1232.12	0.65	445521.75	743134.73	N 32 13 23.27	W 103 40 50.77
	16837.00	89.99	357.80	12291.96	4646.58	4533.76	1229.05	0.77	445616.69	743131.66	N 32 13 24.21	W 103 40 50.80
	16931.00	90.47	358.09	12291.58	4739.48	4627.69	1225.67	0.60	445710.63	743128.29	N 32 13 25.14	W 103 40 50.83
	17026.00	90.16	358.77	12291.06	4833.48	4722.66	1223.07	0.79	445805.59	743125.68	N 32 13 26.08	W 103 40 50.86
	17120.00	91.67	359.66	12289.56	4926.66	4816.63	1221.78	1.86	445899.56	743124.40	N 32 13 27.01	W 103 40 50.87
	17214.00	89.71	0.64	12288.43	5020.03	4910.62	1222.03	2.33	445993.54	743124.64	N 32 13 27.94	W 103 40 50.86
	17308.00	89.61	1.76	12288.98	5113.59	5004.60	1224.00	1.20	446087.51	743126.61	N 32 13 28.87	W 103 40 50.83
	17403.00	89.64	4.01	12289.61	5208.36	5099.47	1228.78	2.37	446182.38	743131.39	N 32 13 29.81	W 103 40 50.77
	17497.00	89.81	3.48	12290.06	5302.23	5193.27	1234.92	0.59	446276.17	743137.53	N 32 13 30.74	W 103 40 50.69
	17592.00	89.75	1.72	12290.42	5396.98	5288.16	1239.23	1.85	446371.07	743141.84	N 32 13 31.68	W 103 40 50.63
	17687.00	89.68	0.40	12290.90	5491.51	5383.14	1240.99	1.39	446466.04	743143.60	N 32 13 32.62	W 103 40 50.60
	17781.00	89.64	0.09	12291.45	5584.91	5477.14	1241.39	0.33	446560.03	743144.00	N 32 13 33.55	W 103 40 50.59
	17876.00	90.40	0.09	12291.42	5679.27	5572.14	1241.54	0.80	446655.03	743144.15	N 32 13 34.49	W 103 40 50.58
	17971.00	90.40	359.71	12290.76	5773.59	5667.14	1241.37	0.40	446750.02	743143.98	N 32 13 35.43	W 103 40 50.58
	18065.00	90.02	0.03	12290.41	5866.82	5761.14	1241.16	0.53	446844.02	743143.77	N 32 13 36.36	W 103 40 50.57
	18159.00	90.16	359.83	12290.26	5960.26	5855.14	1241.04	0.26	446938.01	743143.66	N 32 13 37.29	W 103 40 50.57
	18254.00	90.40	359.57	12289.80	6054.54	5950.13	1240.55	0.37	447033.00	743143.16	N 32 13 38.23	W 103 40 50.57
	18348.00	90.43	359.51	12289.12	6147.80	6044.13	1239.79	0.07	447126.99	743142.40	N 32 13 39.16	W 103 40 50.57
	18443.00	90.23	359.67	12288.57	6242.06	6139.12	1239.11	0.27	447221.99	743141.72	N 32 13 40.10	W 103 40 50.57
	18537.00	90.06	0.02	12288.33	6335.38	6233.12	1238.86	0.41	447315.98	743141.47	N 32 13 41.03	W 103 40 50.57
	18632.00	90.18	359.73	12288.15	6429.70	6328.12	1238.55	0.32	447410.98	743141.26	N 32 13 41.97	W 103 40 50.56
	18727.00	90.54	359.81	12287.57	6523.98	6423.12	1238.10	0.42	447505.97	743140.71	N 32 13 42.91	W 103 40 50.56
	18821.00	90.30	358.85	12286.88	6617.17	6517.11	1236.84	0.85	447599.95	743139.45	N 32 13 43.84	W 103 40 50.57
	18915.00	89.81	359.46	12286.79	6710.35	6611.10	1235.45	0.83	447693.94	743138.07	N 32 13 44.77	W 103 40 50.58
	19010.00	89.64	359.93	12287.25	6804.63	6706.09	1234.95	0.53	447788.93	743137.56	N 32 13 45.71	W 103 40 50.58
	19105.00	89.75	359.95	12287.75	6898.96	6801.09	1234.85	0.12	447883.92	743137.46	N 32 13 46.65	W 103 40 50.57
	19199.00	89.78	359.93	12288.14	6992.30	6895.09	1234.75	0.04	447977.92	743137.36	N 32 13 47.58	W 103 40 50.57
	19294.00	89.92	359.81	12288.39	7086.62	6990.09	1234.53	0.19	448072.91	743137.15	N 32 13 48.52	W 103 40 50.56
	19389.00	89.88	359.94	12288.55	7180.94	7085.09	1234.33	0.14	448167.91	743136.94	N 32 13 49.46	W 103 40 50.56
	19483.00	89.88	359.21	12288.75	7274.21	7179.09	1233.63	0.78	448261.90	743136.24	N 32 13 50.39	W 103 40 50.56
	19578.00	90.23	358.81	12288.66	7368.35	7274.07	1231.99	0.56	448356.88	743134.60	N 32 13 51.33	W 103 40 50.57
	19673.00	90.12	358.87	12288.37	7462.45	7369.05	1230.07	0.13	448451.86	743132.68	N 32 13 52.27	W 103 40 50.59
	19767.00	89.61	357.64	12288.59	7555.42	7463.01	1227.20	1.42	448545.81	743129.82	N 32 13 53.20	W 103 40 50.62
	19862.00	90.85	357.10	12288.21	7649.15	7557.90	1222.84	1.42	448640.70	743125.46	N 32 13 54.14	W 103 40 50.66
	19957.00	90.57	357.84	12287.03	7742.90	7652.80	1218.65	0.83	448735.59	743121.26	N 32 13 55.08	W 103 40 50.70
	20051.00	89.81	356.04	12286.72	7835.53	7746.66	1213.63	2.08	448829.45	743116.25	N 32 13 56.00	W 103 40 50.75
	20146.00	89.47	355.10	12287.32	7928.73	7841.38	1206.30	1.05	448924.16	743108.91	N 32 13 56.94	W 103 40 50.83
	20240.00	90.74	356.21	12287.15	8020.97	7935.10	1199.17	1.79	449017.88	743101.79	N 32 13 57.87	W 103 40 50.91
	20335.00	92.29	359.31	12284.63	8114.76	8029.98	1195.46	3.65	449112.76	743098.08	N 32 13 58.81	W 103 40 50.95
	20429.00	90.64	1.71	12282.23	8208.17	8123.94	1196.30	3.10	449206.71	743098.91	N 32 13 59.74	W 103 40 50.93
	20524.00	89.75	2.70	12281.91	8302.87	8218.86	1199.95	1.40	449301.63	743102.57	N 32 14 0.68	W 103 40 50.88
	20618.00	90.06	2.32	12282.06	8396.61	8312.77	1204.07	0.52	449395.53	743106.68	N 32 14 1.61	W 103 40 50.83
	20712.00	90.19	2.52	12281.86	8490.35	8406.69	1208.04	0.25	449489.45	743110.65	N 32 14 2.54	W 103 40 50.77
	20807.00	89.50	2.39	12282.11	8585.08	8501.60	1212.11	0.74	449584.35	743114.72	N 32 14 3.47	W 103 40 50.72
	20901.00	90.92	4.17	12281.77	8678.90	8595.44	1217.49	2.42	449678.19	743120.10	N 32 14 4.40	W 103 40 50.65
	20995.00	90.09	2.35	12280.94	8772.72	8689.28	1222.83	2.13	449772.02	743125.44	N 32 14 5.33	W 103 40 50.58
	21090.00	89.02	0.52	12281.68	8867.31	8784.24	1225.21	2.23	449866.98	743127.82	N 32 14 6.27	W 103 40 50.55
	21185.00	89.54	359.88	12282.87	8961.68	8879.23	1225.54	0.87	449961.97	743128.15	N 32 14 7.21	W 103 40 50.54
	21280.00	89.75	359.30	12283.46	9055.94	8974.23	1224.86	0.65	450056.96	743127.47	N 32 14 8.15	W 103 40 50.54
	21374.00	88.75	359.71	12284.69	9149.19	9068.22	1224.05	1.15	450150.94	743126.66	N 32 14 9.08	W 103 40 50.54
	21469.00	90.23	0.85	12285.54	9243.58	9163.21	1224.51	1.97	450245.93	743127.13	N 32 14 10.02	W 103 40 50.53
	21563.00	90.30	0.54	12285.10	9337.05	9257.20	1225.65	0.34	450339.92	743128.27	N 32 14 10.95	W 103 40 50.51
	21658.00	90.95	359.97	12284.07	9431.44	9352.19	1226.08	0.91	450434.90	743128.69	N 32 14 11.89	W 103 40 50.50
	21752.00	91.33	359.58	12282.20	9524.73	9446.17	1225.71	0.58	450528.88	743128.32	N 32 14 12.82	W 103 40 50.49
	21846.00	91.02	358.93	12280.27	9617.91	9540.14	1224.49	0.77	450622.85	743127.10	N 32 14 13.75	W 103 40 50.50
	21941.00	93.05	359.18	12276.90	9711.99	9635.07	1222.92	2.15	450717.76	743125.53	N 32 14 14.69	W 103 40 50.51
	22035.00	90.36	359.98	12274.10	9805.21	9729.01	1222.23	2.99	450811.71	743124.85	N 32 14 15.62	W 103 40 50.51
	22130.00	89.23	0.08	12274.44	9899.56	9824.01	1222.28	1.19	450906.70	743124.89	N 32 14 16.56	W 103 40 50.51
	22224.00	90.85	1.19	12274.37	9993.02	9918.00	1223.32	2.09	451000.68	743125.94	N 32 14 17.49	W 103 40 50.49
	22319.00	91.47	359.27	12272.45	10087.39	10012.97	1223.71	2.12	451095.66	743126.32	N 32 14 18.43	W 103 40 50.48
	22414.00	88.34	356.32	12272.61	10181.21	10107.88	1220.05	4.53	451190.56	743122.66	N 32 14 19.37	W 103 40 50.51
	22508.00	87.27	356.67	12276.21	10273.65	10201.64	1214.31	1.20	451284.31	743116.92	N 32 14 20.30	W 103 40 50.57
100' FNL Crossed	22530.00	87.56	356.99	12277.20	10295.30	10223.58	1213.09	1.96	451306.25	743115.71	N 32 14 20.51	W 103 40 50.59
Final MWD	22566.00	88.03	357.52	12278.59	10330.78	10259.51	1211.37	1.96	451342.18	743113.99	N 32 14 20.87	W 103 40 50.60
Proj to TD	22607.00	88.03	357.52	12280.00	10371.23	10300.45	1209.60	0.00	451383.12	743112.21	N 32 14 21.27	W 103 40 50.62

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 Mesa Verde WC Unit 2H Gyro + MWD 0-22607MD