

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 30-025-46112	Pool Code 98252	Pool Name MESA VERDE; WOLFCAMP
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 4H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3569.2'

Surface Location

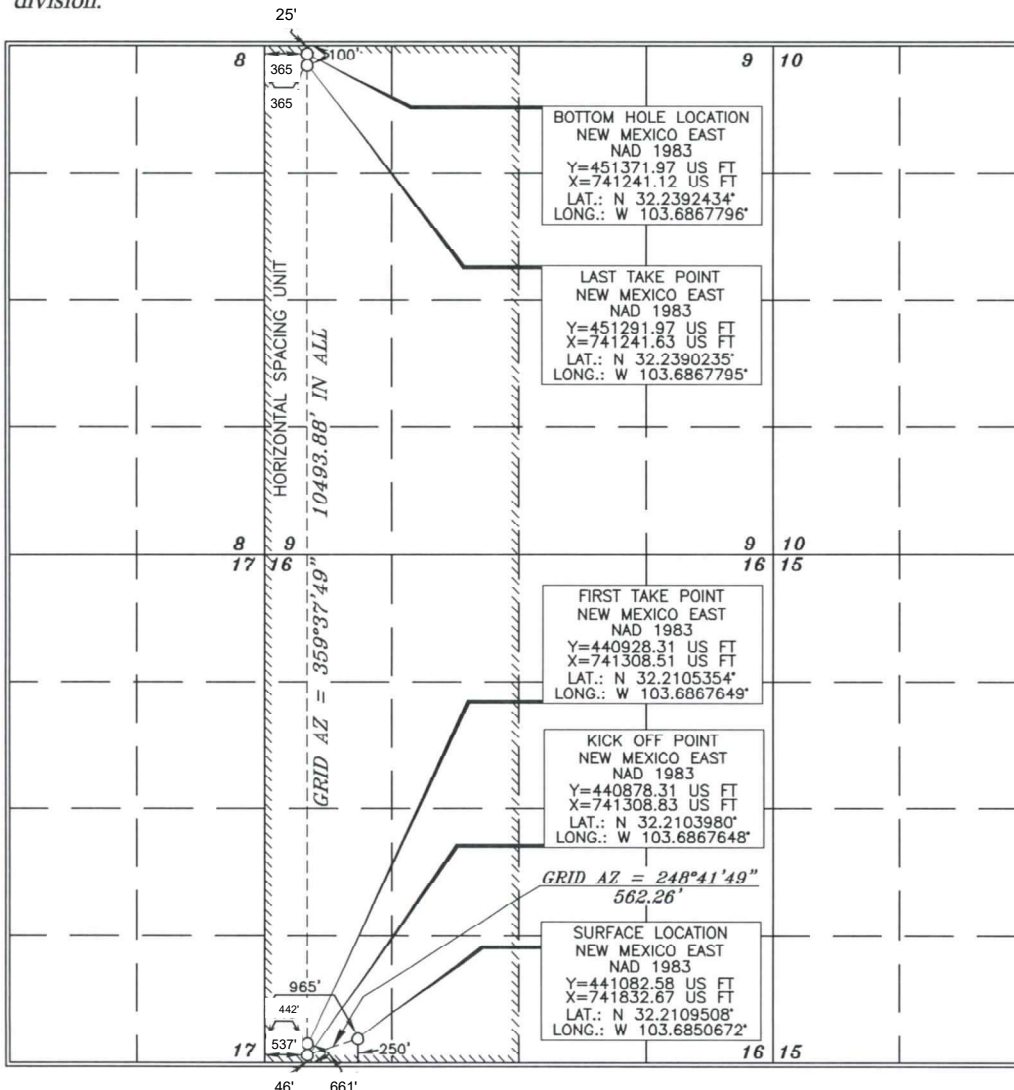
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	24 SOUTH	32 EAST, N.M.P.M.		250'	SOUTH	965'	WEST	LEA

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
D	9	24 SOUTH	32 EAST, N.M.P.M.		25'	NORTH	365'	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.

15079

NOVEMBER 16, 2017

Date of Survey

Signature and Seal of
Professional Surveyor

15079

Certificate Number

15079

WO# 171116WL-a (Rev. A) (KA)

Intent ☐ As Drilled ☒

API # 30-025-46112		
Operator Name: OXY USA INC.	Property Name: MESA VERDE WOLFCAMP UNIT	Well Number 4H

Kick Off Point (KOP)

UL M	Section 16	Township 24S	Range 32E	Lot	Feet 46	From N/S S	Feet 537	From E/W W	County LEA
Latitude 32.21040					Longitude -103.68645			NAD NAD83	

First Take Point (FTP)

UL M	Section 16	Township 24S	Range 32E	Lot	Feet 661	From N/S S	Feet 442	From E/W W	County LEA
Latitude 32.21209					Longitude -103.68675			NAD NAD83	

Last Take Point (LTP)

UL D	Section 9	Township 24S	Range 32E	Lot	Feet 100	From N/S N	Feet 365	From E/W W	County LEA
Latitude 32.23904					Longitude -103.68681			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



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)

April 2, 2020

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

Re:

S16, T24S, R32E LEA, NM
 N 32.2111951 W -103.6867652

CLIENT: OXY USA Incorporated
 WELL: MESA VERDE WC UNIT 4H
 FIELD: MESA VERDE

RIG: Pioneer 82
 COUNTY: LEA
 API NO: 30-025-46112
 JOB NO: 20MLH0278

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 4 H Original Hole	1068.00 Ft to 22522.00 Ft	January 28, 2020 to March 24, 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 32.2111951 W -103.6867652

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 January 28, 2020 through March 24, 2020, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 1068.00 feet to a depth of 22522.00 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 4 H Well (Original Hole) API No. 30-025-46112 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 2 day of April (month) 2020 (yr)

My Commission expires:

6/14/23

Jean-Paul Langlois (signature)

Notary Public

Comanche, Oklahoma

(County State)





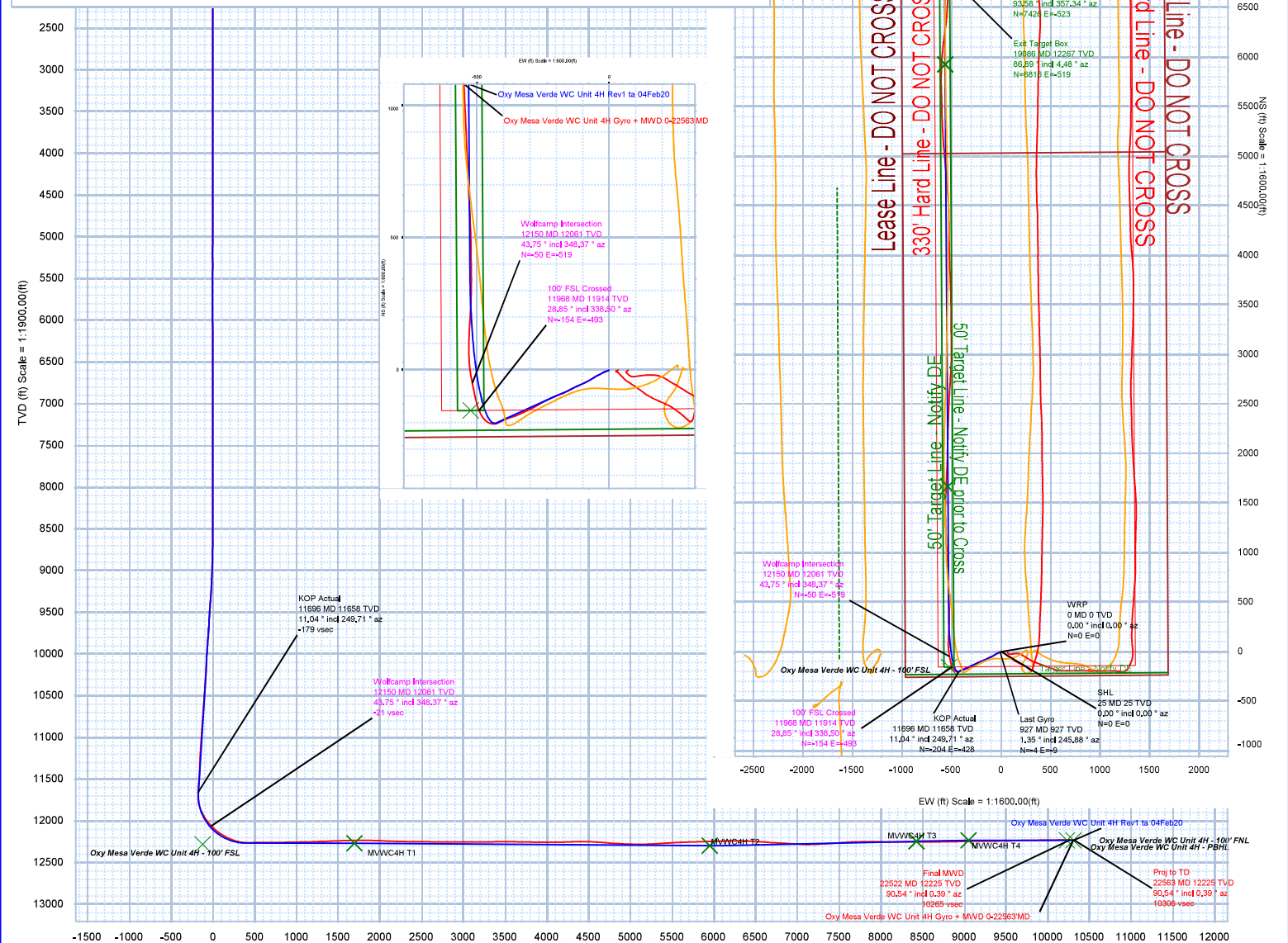
OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Mesa Verde WC Unit 4H	NM Lea County (NAD 83)	Oxy Mesa Verde WC Unit 4H

Gravity & Magnetic Parameters				Surface Location				NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	IFR1	Dip:	59.815°	Date:	12-Mar-2020	Lat:	N 32 12 39.42	Northing:	441082.581US	Grid Conv:	0.3456°	Slot:	Oxy Mesa Verde WC Unit 4H	TVD Ref:	RKB = 25'(3594.2ft above MSL)
MagDec:	6.581°	FS:	47812.1nT	Gravity FS:	998.432mgn (9,80665 Based)	Lon:	W 103 41 6.24	Easting:	741832.671US	Scale Fact:	0.99995513	Plan:	Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-22563MD		

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
WRP	0.00	0.00	0.00	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	927.00	1.35	245.88	926.91	-3.83	-4.35	-8.86	0.09
KOP Actual	11696.00	11.04	249.71	11658.24	-178.96	-203.84	-427.65	1.55
100' FSL Crossed	11968.00	28.85	338.50	11913.89	-125.53	-154.07	-492.97	12.40
Wolfcamp Intersection	12150.08	43.75	348.37	12060.70	-20.63	-50.48	-518.67	8.90
Exit Target Box	19086.40	86.89	4.48	12266.89	6834.75	6816.19	-519.18	0.74
Enter Target Box	19698.00	93.58	357.34	12264.97	7444.06	7426.27	-523.13	1.18
100' FNL Crossed	22484.00	90.72	0.26	12225.78	10227.55	10209.93	-600.31	0.32
Final MWD	22522.00	90.54	0.39	12225.34	10265.47	10247.92	-600.10	1.09
Proj to TD	22563.00	90.54	0.39	12224.95	10306.39	10288.92	-599.82	0.00



Vertical Section (ft) Azim = 356.71° Scale = 1:1900.00(ft) Origin = 0N/-S, 0E/-W



Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-22563'MD Survey Geodetic Report

(Def Survey)

Report Date: March 24, 2020 - 11:46 AM
Client: OXY
Field: NM Lea County (NAD 83)
Structure / Slot: Oxy Mesa Verde WC Unit 4H / Oxy Mesa Verde WC Unit 4H
Well: Oxy Mesa Verde WC Unit 4H
Borehole: Original Borehole
UVI / API#: Unknown / 30-025-46112
Survey Name: Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-22563'MD
Survey Date: January 27, 2020
Tort / AHD / DDI / ERD Ratio: 274,404' / 11032.152 ft / 6.745 / 0.898
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 12' 39.42284", W 103° 41' 6.24193"
Location Grid N/E Y/X: N 441082.580 ftUS, E 741832.870 ftUS
CRS Grid Convergence Angle: 0.3456 °
Grid Scale Factor: 0.99995513
Version / Patch: 2.10.782.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 356.710 ° (Grid North)
Vertical Section Origin: 0,000 ft, 0,000 ft
TVD Reference Datum: RKB = 25'
TVD Reference Elevation: 3594.200 ft above MSL
Seabed / Ground Elevation: 3569.200 ft above MSL
Magnetic Declination: 6,581 °
Total Gravity Field Strength: 998.4319mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47812.100 nT
Magnetic Dip Angle: 59.815 °
Declination Date: March 12, 2020
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.3456 °
Total Corr Mag North->Grid North: 6.2354 °
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	441082.58	741832.67	N 32 12 39.42	W 103 41 6.24
SHL	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	441082.58	741832.67	N 32 12 39.42	W 103 41 6.24
	100.00	0.10	25.59	100.00	0.06	0.06	0.03	0.13	441082.64	741832.70	N 32 12 39.42	W 103 41 6.24
	129.00	0.07	345.98	129.00	0.10	0.10	0.03	0.22	441082.68	741832.70	N 32 12 39.42	W 103 41 6.24
	162.00	0.06	231.94	162.00	0.11	0.11	0.02	0.33	441082.69	741832.69	N 32 12 39.42	W 103 41 6.24
	190.00	0.12	213.66	190.00	0.08	0.07	-0.01	0.23	441082.65	741832.66	N 32 12 39.42	W 103 41 6.24
	220.00	0.13	233.10	220.00	0.03	0.03	-0.06	0.14	441082.61	741832.61	N 32 12 39.42	W 103 41 6.24
	246.00	0.10	210.90	246.00	0.00	-0.01	-0.09	0.20	441082.57	741832.58	N 32 12 39.42	W 103 41 6.24
	272.00	0.15	200.47	272.00	-0.05	-0.06	-0.11	0.21	441082.52	741832.56	N 32 12 39.42	W 103 41 6.24
	303.00	0.22	207.59	303.00	-0.14	-0.15	-0.16	0.24	441082.43	741832.51	N 32 12 39.42	W 103 41 6.24
	335.00	0.31	216.96	335.00	-0.26	-0.27	-0.24	0.31	441082.31	741832.43	N 32 12 39.42	W 103 41 6.24
	366.00	0.36	224.97	366.00	-0.39	-0.41	-0.36	0.22	441082.17	741832.31	N 32 12 39.42	W 103 41 6.25
	398.00	0.42	230.52	398.00	-0.53	-0.56	-0.52	0.22	441082.02	741832.15	N 32 12 39.42	W 103 41 6.25
	429.00	0.50	233.65	429.00	-0.67	-0.71	-0.71	0.27	441081.87	741831.96	N 32 12 39.42	W 103 41 6.25
	460.00	0.58	234.37	460.00	-0.82	-0.88	-0.95	0.26	441081.70	741831.72	N 32 12 39.41	W 103 41 6.25
	492.00	0.69	238.78	491.99	-1.00	-1.07	-1.25	0.38	441081.51	741831.42	N 32 12 39.41	W 103 41 6.26
	524.00	0.78	243.66	523.99	-1.18	-1.27	-1.61	0.34	441081.31	741831.06	N 32 12 39.41	W 103 41 6.26
	555.00	0.77	247.73	554.99	-1.33	-1.44	-1.99	0.18	441081.14	741830.68	N 32 12 39.41	W 103 41 6.27
	587.00	0.73	248.34	586.99	-1.46	-1.60	-2.38	0.13	441080.98	741830.29	N 32 12 39.41	W 103 41 6.27
	618.00	0.83	249.37	617.98	-1.59	-1.75	-2.77	0.33	441080.83	741829.90	N 32 12 39.41	W 103 41 6.27
	650.00	0.94	249.86	649.98	-1.74	-1.92	-3.23	0.34	441080.66	741829.44	N 32 12 39.40	W 103 41 6.28
	681.00	1.05	249.50	680.97	-1.89	-2.11	-3.74	0.36	441080.47	741828.93	N 32 12 39.40	W 103 41 6.29
	712.00	1.13	249.22	711.97	-2.07	-2.32	-4.29	0.26	441080.26	741828.38	N 32 12 39.40	W 103 41 6.29
	744.00	1.23	246.51	743.96	-2.28	-2.57	-4.90	0.36	441080.01	741827.77	N 32 12 39.40	W 103 41 6.30
	775.00	1.33	245.77	774.95	-2.53	-2.85	-5.53	0.33	441079.73	741827.14	N 32 12 39.39	W 103 41 6.31
	807.00	1.40	245.31	806.94	-2.80	-3.16	-6.23	0.22	441079.42	741826.44	N 32 12 39.39	W 103 41 6.31
	839.00	1.40	244.88	838.94	-3.09	-3.49	-6.94	0.03	441079.09	741825.73	N 32 12 39.39	W 103 41 6.32
	870.00	1.39	246.20	869.93	-3.36	-3.81	-7.62	0.11	441078.77	741825.05	N 32 12 39.39	W 103 41 6.33
	902.00	1.34	246.72	901.92	-3.63	-4.11	-8.32	0.16	441078.47	741824.35	N 32 12 39.38	W 103 41 6.34
Last Gyro	927.00	1.35	245.88	926.91	-3.83	-4.35	-8.86	0.09	441078.23	741823.81	N 32 12 39.38	W 103 41 6.35
	1068.00	0.30	219.00	1067.89	-4.69	-5.31	-10.61	0.77	441077.27	741822.06	N 32 12 39.37	W 103 41 6.37
	1161.00	0.10	85.46	1160.89	-4.87	-5.49	-10.68	0.40	441077.09	741821.99	N 32 12 39.37	W 103 41 6.37
	1253.00	0.08	351.24	1252.89	-4.81	-5.43	-10.61	0.14	441077.16	741822.06	N 32 12 39.37	W 103 41 6.37
	1434.00	0.10	158.37	1433.89	-4.83	-5.45	-10.57	0.10	441077.13	741822.10	N 32 12 39.37	W 103 41 6.37
	1526.00	0.08	163.11	1525.89	-4.97	-5.58	-10.52	0.02	441077.00	741822.15	N 32 12 39.37	W 103 41 6.36
	1712.00	0.08	290.62	1711.89	-5.04	-5.66	-10.61	0.08	441076.92	741822.06	N 32 12 39.37	W 103 41 6.37
	1901.00	0.08	213.20	1900.89	-5.10	-5.73	-10.80	0.05	441076.85	741821.87	N 32 12 39.37	W 103 41 6.37
	1997.00	0.10	161.83	1996.89	-5.23	-5.86	-10.81	0.08	441076.72	741821.86	N 32 12 39.37	W 103 41 6.37
	2092.00	0.08	9.85	2091.89	-5.25	-5.87	-10.78	0.18	441076.71	741821.89	N 32 12 39.37	W 103 41 6.37
	2187.00	0.08	340.21	2186.89	-5.12	-5.75	-10.79	0.04	441076.83	741821.88	N 32 12 39.37	W 103 41 6.37
	2282.00	0.10	211.81	2281.89	-5.12	-5.76	-10.85	0.17	441076.83	741821.82	N 32 12 39.37	W 103 41 6.37
	2377.00	0.08	229.17	2376.89	-5.23	-5.87	-10.95	0.04	441076.71	741821.72	N 32 12 39.37	W 103 41 6.37
	2473.00	0.05	290.16	2472.89	-5.25	-5.90	-11.04	0.07	441076.68	741821.63	N 32 12 39.37	W 103 41 6.37
	2568.00	0.10	27.77	2567.89	-5.17	-5.81	-11.04	0.12	441076.77	741821.63	N 32 12 39.37	W 103 41 6.37
	2663.00	0.08	131.60	2662.89	-5.14	-5.78	-10.95	0.15	441076.80	741821.72	N 32 12 39.37	W 103 41 6.37
	2758.00	0.07	209.17	2757.89	-5.24	-5.88	-10.93	0.10	441076.70	741821.74	N 32 12 39.37	W 103 41 6.37
	2854.00	0.10	156.63	2853.89	-5.37	-6.00	-10.92	0.08	441076.58	741821.75	N 32 12 39.36	W 103 41 6.37
	2949.00	0.10	312.50	2948.89	-5.39	-6.02	-10.95	0.21	441076.56	741821.72	N 32 12 39.36	W 103 41 6.37
	3044.00	0.08	255.64	3043.89	-5.34	-5.98	-11.08	0.09	441076.60	741821.59	N 32 12 39.36	W 103 41 6.37
	3139.00	0.07	110.54	3138.89	-5.38	-6.02	-11.09	0.15	441076.56	741821.58	N 32 12 39.36	W 103 41 6.37
	3233.00	0.08	355.03	3232.89	-5.33	-5.98	-11.04	0.14	441076.60	741821.63	N 32 12 39.36	W 103 41 6.37
	3328.00	0.08	308.94	3327.89	-5.22	-5.87	-11.10	0.07	441076.71	741821.57	N 32 12 39.37	W 103 41 6.37
	3423.00	0.10	244.81	3422.89	-5.21	-5.86	-11.22	0.10	441076.72	741821.45	N 32 12 39.37	W 103 41 6.37
	3519.00	0.05	246.23	3518.89	-5.25	-5.91	-11.34	0.05	441076.67	741821.33	N 32 12 39.36	W 103 41 6.37
	3614.00	0.08	231.53	3613.89	-5.31	-5.97	-11.43	0.04	441076.61	741821.24	N 32 12 39.36	W 103 41 6.38
	3804.00	0.09	211.05	3803.89	-5.51	-6.18	-11.61	0.02	441076.40	741821.06	N 32 12 39.36	W 103 41 6.38
	3899.00	0.10	331.79	3898.89	-5.49	-6.17	-11.69	0.17	441076.41	741820.98	N 32 12 39.36	W 103 41 6.38
	3994.00	0.05	262.83	3993.89	-5.42	-6.11	-11.77	0.10	441076.47	741820.90	N 32 12 39.36	W 103 41 6.38
	4089.00	0.12	202.12	4088.89	-5.51	-6.20	-11.84	0.11	441076.38	741820.83	N 32 12 39.36	W 103 41 6.38
	4184.00	0.05	357.16	4183.89	-5.56	-6.25	-11.88	0.18	441076.33	741820.79	N 32 12 39.36	W 103 41 6.38
	4280.00	0.12	186.97	4279.89	-5.62	-6.31	-11.90	0.18	441076.27	741820.77	N 32 12 39.36	W 103 41 6.38
	4375.00	0.08	87.02	4374.89	-5.72	-6.41	-11.84	0.16	441076.17	741820.83	N 32 12 39.36	W 103 41 6.38
	4470.00	0.10	194.14	4469.89	-5.80	-6.48	-11.80	0.15	441076.10	741820.87	N 32 12 39.36	W 103 41 6.38
	4565.00	0.08	268.42	4564.89	-5.87	-6.57	-11.88	0.12	441076.01	741820.79	N 32 12 39.36	W 103 41 6.38
	4661.00	0.05	52.31	4660.89	-5.85	-6.54	-11.92	0.13	441076.04	741820.75	N 32 12 39.36	W 103 41 6.38
	4756.00	0.10	33.56	4755.89	-5.76	-6.45	-11.84	0.06	441076.13	741820.83	N 32 12 39.36	W 103 41 6.38
	4851.00	0.10	128.86	4850.89	-5.75	-6.43	-11.73	0.16	441076.15	741820.94	N 32 12 39.36	W 103 41 6.38
	4946.00	0.05	256.94	4945.89	-5.81	-6.49	-11.71	0.14	441076.09	741820.97	N 32 12 39.36	W 103 41 6.38
	5042.00	0.10	183.00	5041.89	-5.90	-6.59	-11.75	0.10	441075.99	741820.92	N 32 12 39.36	W 103 41 6.38
	5137.00	0.08	232.25	5136.89	-6.02	-6.71	-11.81	0.08	441075.87	741820.86	N 32 12 39.36	W 103 41 6.38
	5327.00	0.07	38.66	5326.89	-6.01	-6.70	-11.84	0.08	441075.88	741820.83	N 32 12 39.36	W 103 41 6.38
	5422.00	0.08	183.42	5421.89	-6.03	-6.72	-11.81	0.15	441075.86	741820.86	N 32 12 39.36	W 103 41 6.38
	5612.00	0.05	244.60	5611.89	-6.19	-6.89	-11.89	0.04	441075.69	741820.78	N 32 12 39.36	W 103 41 6.38
	5707.00	0.08	216.05	5706.89	-6.26	-6.96	-11.97	0.05	441075.62	741820.70	N 32 12 39.35	W 103 41 6.38
	5897.00	0.12	330.43	5896								

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 ° ' ")
	6466.00	0.10	37.73	6465.89	-5.96	-6.67	-12.27	0.21	441075.91	741820.40	N 32 12 39.36 W 103 41	6.39
	6656.00	0.07	20.09	6655.89	-5.72	-6.43	-12.13	0.02	441076.15	741820.54	N 32 12 39.36 W 103 41	6.38
	6846.00	0.10	315.12	6845.89	-5.49	-6.20	-12.20	0.05	441076.38	741820.47	N 32 12 39.36 W 103 41	6.38
	6941.00	0.08	159.69	6940.89	-5.49	-6.21	-12.24	0.19	441076.37	741820.43	N 32 12 39.36 W 103 41	6.38
	7037.00	0.17	246.90	7036.89	-5.61	-6.33	-12.35	0.19	441076.25	741820.32	N 32 12 39.36 W 103 41	6.39
	7131.00	0.14	42.31	7130.89	-5.57	-6.30	-12.40	0.32	441076.28	741820.27	N 32 12 39.36 W 103 41	6.39
	7226.00	0.14	354.19	7225.89	-5.38	-6.09	-12.33	0.12	441076.49	741820.34	N 32 12 39.36 W 103 41	6.39
	7320.00	0.14	300.86	7319.89	-5.20	-5.92	-12.44	0.13	441076.66	741820.23	N 32 12 39.36 W 103 41	6.39
	7415.00	0.14	46.54	7414.89	-5.06	-5.78	-12.46	0.23	441076.80	741820.21	N 32 12 39.37 W 103 41	6.39
	7511.00	0.11	69.59	7510.89	-4.95	-5.67	-12.29	0.06	441076.91	741820.39	N 32 12 39.37 W 103 41	6.39
	7684.00	0.07	203.15	7683.89	-5.00	-5.71	-12.17	0.10	441076.87	741820.50	N 32 12 39.37 W 103 41	6.38
	7778.00	0.10	269.87	7777.89	-5.05	-5.76	-12.28	0.10	441076.82	741820.39	N 32 12 39.37 W 103 41	6.39
	7969.00	0.10	302.08	7968.89	-4.94	-5.67	-12.58	0.03	441076.91	741820.09	N 32 12 39.37 W 103 41	6.39
	8064.00	0.10	285.31	8063.89	-4.87	-5.61	-12.73	0.03	441076.97	741819.94	N 32 12 39.37 W 103 41	6.39
	8160.00	0.15	52.78	8159.89	-4.77	-5.51	-12.71	0.23	441077.07	741819.96	N 32 12 39.37 W 103 41	6.39
	8253.00	0.19	0.82	8252.89	-4.55	-5.28	-12.62	0.16	441077.30	741820.06	N 32 12 39.37 W 103 41	6.39
	8348.00	0.14	40.45	8347.89	-4.31	-5.04	-12.54	0.13	441077.54	741820.13	N 32 12 39.37 W 103 41	6.39
	8443.00	0.22	146.87	8442.89	-4.38	-5.10	-12.36	0.31	441077.48	741820.31	N 32 12 39.37 W 103 41	6.39
	8554.00	0.52	235.59	8553.88	-4.83	-5.56	-12.66	0.50	441077.02	741820.01	N 32 12 39.37 W 103 41	6.39
	8650.00	1.12	242.27	8649.87	-5.44	-6.25	-13.85	0.63	441076.33	741818.82	N 32 12 39.36 W 103 41	6.40
	8744.00	1.66	246.86	8743.85	-6.28	-7.21	-15.92	0.59	441075.37	741816.75	N 32 12 39.35 W 103 41	6.43
	8840.00	2.47	247.93	8839.78	-7.42	-8.53	-19.11	0.84	441074.05	741813.56	N 32 12 39.34 W 103 41	6.46
	8935.00	3.71	241.96	8934.64	-9.37	-10.75	-23.72	1.35	441071.83	741808.95	N 32 12 39.32 W 103 41	6.52
	9029.00	5.61	241.31	9028.33	-12.61	-14.38	-30.44	2.02	441068.20	741802.23	N 32 12 39.28 W 103 41	6.60
	9124.00	6.93	243.89	9122.76	-16.63	-19.13	-39.66	1.42	441063.45	741793.01	N 32 12 39.24 W 103 41	6.70
	9219.00	7.25	239.86	9217.03	-21.76	-24.67	-49.99	0.62	441057.92	741782.68	N 32 12 39.18 W 103 41	6.83
	9315.00	8.78	238.88	9312.09	-27.91	-31.49	-61.50	1.60	441051.09	741771.17	N 32 12 39.11 W 103 41	6.96
	9410.00	9.17	239.89	9405.93	-34.74	-39.06	-74.24	0.43	441043.52	741758.43	N 32 12 39.04 W 103 41	7.11
	9505.00	9.53	243.00	9499.67	-41.34	-46.45	-87.78	0.68	441036.13	741744.89	N 32 12 38.97 W 103 41	7.27
	9601.00	9.51	246.08	9594.35	-47.33	-53.28	-102.12	0.53	441029.31	741730.56	N 32 12 38.90 W 103 41	7.43
	9696.00	9.63	245.56	9688.02	-52.96	-59.75	-116.52	0.16	441022.84	741716.15	N 32 12 38.84 W 103 41	7.60
	9792.00	9.91	245.17	9782.63	-58.89	-66.54	-131.33	0.30	441016.05	741701.35	N 32 12 38.77 W 103 41	7.78
	9887.00	9.96	241.89	9876.21	-65.34	-73.84	-146.00	0.60	441008.74	741686.68	N 32 12 38.70 W 103 41	7.95
	9982.00	9.57	243.04	9969.83	-71.96	-81.29	-160.28	0.46	441001.29	741672.40	N 32 12 38.63 W 103 41	8.11
	10078.00	9.18	248.36	10064.55	-77.57	-87.73	-174.51	0.99	440994.85	741658.17	N 32 12 38.57 W 103 41	8.28
	10173.00	9.49	247.55	10158.29	-82.53	-93.52	-188.79	0.35	440989.06	741643.88	N 32 12 38.51 W 103 41	8.45
	10269.00	9.52	248.33	10252.97	-87.63	-99.47	-203.49	0.14	440983.11	741629.19	N 32 12 38.45 W 103 41	8.62
	10364.00	11.27	246.20	10346.41	-93.36	-106.12	-219.28	1.89	440976.46	741613.40	N 32 12 38.39 W 103 41	8.80
	10459.00	10.24	243.21	10439.74	-99.98	-113.67	-235.31	1.23	440968.91	741597.37	N 32 12 38.31 W 103 41	8.99
	10554.00	9.81	241.68	10533.29	-106.77	-121.32	-249.98	0.53	440961.27	741582.70	N 32 12 38.24 W 103 41	9.16
	10649.00	9.55	237.15	10626.94	-114.08	-129.43	-263.72	0.85	440953.15	741568.96	N 32 12 38.16 W 103 41	9.32
	10745.00	9.69	240.54	10721.59	-121.57	-137.73	-277.45	0.61	440944.86	741555.24	N 32 12 38.08 W 103 41	9.48
	10839.00	9.93	243.47	10814.22	-128.26	-145.24	-291.59	0.59	440937.35	741541.10	N 32 12 38.00 W 103 41	9.65
	10934.00	10.55	245.82	10907.70	-134.59	-152.46	-306.85	0.79	440930.13	741525.83	N 32 12 37.93 W 103 41	9.82
	11029.00	10.20	243.82	11001.15	-140.97	-159.73	-322.33	0.53	440922.86	741510.35	N 32 12 37.86 W 103 41	10.00
	11125.00	10.03	244.97	11095.66	-147.37	-167.02	-337.53	0.27	440915.57	741495.15	N 32 12 37.79 W 103 41	10.18
	11219.00	9.05	247.06	11188.36	-152.89	-173.36	-351.76	1.11	440909.22	741480.93	N 32 12 37.73 W 103 41	10.35
	11315.00	9.71	255.01	11283.08	-157.07	-178.40	-366.53	1.51	440904.19	741466.15	N 32 12 37.68 W 103 41	10.52
	11410.00	9.72	251.44	11376.72	-160.81	-183.03	-381.88	0.63	440899.56	741450.81	N 32 12 37.63 W 103 41	10.70
	11505.00	9.98	244.50	11470.32	-166.03	-189.12	-396.91	1.28	440893.47	741435.78	N 32 12 37.58 W 103 41	10.87
	11564.00	9.90	240.32	11528.43	-170.22	-193.83	-405.93	1.23	440888.75	741426.76	N 32 12 37.53 W 103 41	10.98
	11696.00	11.04	249.71	11658.24	-178.96	-203.84	-427.65	1.55	440878.75	741405.04	N 32 12 37.43 W 103 41	11.23
	11790.00	17.77	286.69	11749.42	-176.68	-202.84	-449.90	11.79	440879.75	741382.79	N 32 12 37.44 W 103 41	11.49
	11884.00	22.20	319.67	11838.01	-157.53	-185.11	-475.22	12.68	440897.47	741357.47	N 32 12 37.62 W 103 41	11.79
100' FSL Crossed	11968.00	28.85	338.50	11913.89	-125.53	-154.07	-492.97	12.40	440928.51	741339.72	N 32 12 37.93 W 103 41	11.99
	11978.00	29.78	340.18	11922.61	-120.85	-149.49	-494.70	12.40	440933.09	741338.00	N 32 12 37.97 W 103 41	12.01
	12072.00	36.81	348.16	12001.17	-70.54	-99.88	-508.41	8.80	440982.70	741324.28	N 32 12 38.46 W 103 41	12.17
Wolfcamp Intersection	12150.08	43.75	348.37	12060.70	-20.63	-50.48	-518.67	8.90	441032.10	741314.03	N 32 12 38.95 W 103 41	12.28
	12166.00	45.17	348.41	12072.06	-9.60	-39.56	-520.91	8.90	441043.02	741311.78	N 32 12 39.06 W 103 41	12.31
	12260.00	53.70	356.40	12133.19	61.46	31.09	-530.01	11.13	441113.67	741302.68	N 32 12 39.76 W 103 41	12.41
	12355.00	61.47	1.79	12184.10	141.47	111.17	-531.11	9.47	441193.75	741301.58	N 32 12 40.55 W 103 41	12.42
	12450.00	68.19	3.76	12224.49	226.91	196.99	-526.91	7.32	441279.57	741305.78	N 32 12 41.40 W 103 41	12.36
	12544.00	79.58	1.64	12250.54	316.58	287.05	-522.71	12.31	441369.62	741309.98	N 32 12 42.29 W 103 41	12.31
	12638.00	89.64	358.86	12259.36	409.86	380.50	-522.32	11.10	441463.06	741310.37	N 32 12 43.22 W 103 41	12.29
	12719.00	90.98	359.53	12258.92	490.78	461.49	-523.46	1.85	441544.05	741309.23	N 32 12 44.02 W 103 41	12.30
	12777.00	90.30	357.75	12258.27	548.74	519.47	-524.84	3.29	441602.02	741307.86	N 32 12 44.59 W 103 41	12.31
	12872.00	90.16	357.21	12257.89	643.73	614.38	-529.02	0.59	441696.93	741303.68	N 32 12 45.53 W 103 41	12.36
	12966.00	90.64	357.32	12257.23	737.72	708.27	-533.50	0.52	441790.81	741298.19	N 32 12 46.46 W 103 41	12.40
	13060.00	90.85	357.48	12256.01	831.70	802.16	-537.77	0.28	441884.70	741294.93	N 32 12 47.39 W 103 41	12.44
	13155.00	91.33	357.66	12254.20	926.68	897.06	-541.79	0.54	441979.60	741290.90	N 32 12 48.33 W 103 41	12.48
	13250.00	90.30	357.29	12252.85	1021.66	991.95	-545.98	1.15	442074.49	741286.72	N 32 12 49.27 W 103 41	12.53
	13345.00	91.81	357.68	12251.10	1116.63	1086.84	-550.15	1.64	442169.37	741282.55	N 32 12 50.21 W 103 41	12.57
	13439.00	91.64	357.45	12248.27	1210.58	1180.72	-554.14	0.30	442263.24	741278.56	N 32 12 51.14 W 103 41	12.61
	13534.00	92.26	357.73	12245.04	1305.51	1275.58	-558.13	0.72	442356.10	741274.57	N 32 12 52.08 W 103 41	12.65
	13628.00	92.05	359.14	12241.51	1399.40	1368.47	-560.69	1.52	442451.99	741272.00	N 32 12 53.01 W 103 41	12.67
	13723.00	91.95	0.84	12238.19	1494.18	1464.41	-560.71	1.79	442546.92	741271.98	N 32 12 53.95 W 103 41	12.67
	13817.00	91.95	2.43	12234.99	1587.78	1558.32	-568.03	1.69	442640.82	741274.67	N 32 12 54.88 W 103 41	12.63
	13912.00	91.09	2.86	12232.47	1682.23	1653.18	-553.65	1.01	442735.88			

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 ° ' ")
	16742.00	87.86	357.84	12248.34	4504.12	4481.14	-529.13	3.34	445563.51	741303.56	N 32 13 23.80	W 103 41 12.09
	16837.00	85.96	357.08	12253.46	4598.97	4575.90	-533.33	2.15	445658.27	741299.36	N 32 13 24.73	W 103 41 12.13
	16931.00	85.72	355.90	12260.28	4692.72	4669.48	-539.07	1.28	445751.84	741293.62	N 32 13 25.66	W 103 41 12.19
	17026.00	86.07	354.55	12267.08	4787.44	4763.90	-546.96	1.46	445846.26	741285.73	N 32 13 26.59	W 103 41 12.27
	17120.00	87.00	353.94	12272.77	4881.18	4857.26	-556.37	1.18	445939.61	741276.33	N 32 13 27.52	W 103 41 12.38
	17214.00	88.17	354.91	12276.73	4975.02	4950.73	-565.49	1.62	446033.07	741267.20	N 32 13 28.44	W 103 41 12.48
	17308.00	89.17	355.13	12278.91	5068.95	5044.34	-573.65	1.09	446126.69	741259.05	N 32 13 29.37	W 103 41 12.57
	17403.00	91.02	355.66	12278.75	5163.92	5139.03	-581.28	2.03	446221.37	741251.42	N 32 13 30.31	W 103 41 12.65
	17498.00	93.02	357.07	12275.40	5258.86	5233.78	-587.30	2.58	446316.11	741245.40	N 32 13 31.25	W 103 41 12.71
	17592.00	93.50	357.56	12270.06	5352.70	5327.52	-591.69	0.73	446409.85	741241.00	N 32 13 32.17	W 103 41 12.76
	17687.00	93.57	357.86	12264.20	5447.50	5422.26	-595.48	0.32	446504.59	741237.22	N 32 13 33.11	W 103 41 12.79
	17782.00	93.33	359.13	12258.48	5542.28	5517.06	-597.97	1.36	446599.38	741234.73	N 32 13 34.05	W 103 41 12.82
	17876.00	91.92	358.35	12254.18	5636.12	5610.93	-600.04	1.71	446693.25	741232.66	N 32 13 34.98	W 103 41 12.83
	17971.00	91.40	358.17	12251.43	5731.05	5705.85	-602.92	0.58	446788.16	741229.78	N 32 13 35.92	W 103 41 12.86
	18065.00	91.81	1.13	12248.79	5824.88	5799.80	-603.49	3.18	446882.11	741229.20	N 32 13 36.85	W 103 41 12.86
	18160.00	91.78	2.12	12245.82	5919.48	5894.71	-600.80	1.04	446977.02	741231.90	N 32 13 37.79	W 103 41 12.82
	18254.00	91.54	4.21	12243.09	6012.84	5988.52	-598.61	2.24	447070.82	741237.08	N 32 13 38.71	W 103 41 12.75
	18349.00	91.43	6.55	12240.63	6106.71	6083.07	-586.71	2.47	447165.36	741245.99	N 32 13 39.65	W 103 41 12.64
	18443.00	90.44	6.90	12239.10	6199.27	6176.41	-575.70	1.12	447258.70	741256.99	N 32 13 40.57	W 103 41 12.51
	18537.00	90.40	7.76	12238.41	6291.66	6269.64	-563.71	0.92	447351.92	741268.98	N 32 13 41.49	W 103 41 12.36
	18632.00	88.68	6.13	12239.17	6385.13	6363.93	-552.23	2.49	447446.21	741280.47	N 32 13 42.43	W 103 41 12.22
	18727.00	86.48	3.54	12243.18	6479.08	6458.49	-544.23	3.58	447540.77	741288.47	N 32 13 43.36	W 103 41 12.12
	18821.00	85.34	3.13	12249.89	6572.21	6552.09	-538.77	1.29	447634.37	741293.92	N 32 13 44.29	W 103 41 12.05
	18916.00	85.62	4.30	12257.37	6666.21	6646.60	-532.63	1.26	447728.86	741300.06	N 32 13 45.22	W 103 41 11.98
	19010.00	87.41	4.69	12263.09	6759.17	6740.13	-525.28	1.95	447822.39	741307.41	N 32 13 46.15	W 103 41 11.88
Exit Target Box	19086.40	86.89	4.48	12266.89	6834.75	6816.19	-519.18	0.74	447896.45	741313.51	N 32 13 46.90	W 103 41 11.81
	19105.00	86.76	4.43	12267.92	6853.16	6834.71	-517.74	0.74	447916.97	741314.96	N 32 13 47.08	W 103 41 11.79
	19199.00	86.31	2.55	12273.80	6946.32	6928.36	-512.03	2.05	448010.81	741320.67	N 32 13 48.01	W 103 41 11.72
	19294.00	86.76	1.28	12279.34	7040.76	7023.13	-508.86	1.42	448105.38	741323.84	N 32 13 48.95	W 103 41 11.67
	19389.00	90.75	358.55	12281.41	7135.56	7118.08	-509.00	5.09	448200.32	741323.69	N 32 13 49.89	W 103 41 11.67
	19484.00	93.19	356.60	12278.14	7230.48	7212.92	-513.02	3.29	448295.17	741319.68	N 32 13 50.83	W 103 41 11.71
	19578.00	93.71	357.41	12272.48	7324.31	7306.62	-517.92	1.02	448388.86	741314.78	N 32 13 51.75	W 103 41 11.76
	19673.00	93.50	357.62	12266.51	7419.11	7401.35	-522.03	0.31	448483.58	741310.66	N 32 13 52.69	W 103 41 11.80
Enter Target Box	19698.00	93.58	357.34	12264.97	7444.06	7426.27	-523.13	1.18	448508.51	741309.57	N 32 13 52.94	W 103 41 11.81
	19768.00	93.81	356.54	12260.45	7513.91	7496.03	-526.86	1.18	448578.26	741305.84	N 32 13 53.63	W 103 41 11.85
	19862.00	93.99	356.98	12254.06	7607.69	7589.66	-532.16	0.50	448671.89	741300.54	N 32 13 54.55	W 103 41 11.90
	19957.00	90.65	358.34	12250.22	7702.59	7684.49	-536.03	3.80	448766.71	741296.66	N 32 13 55.49	W 103 41 11.94
	20052.00	91.13	359.33	12248.74	7797.51	7779.46	-537.96	1.16	448861.67	741294.73	N 32 13 56.43	W 103 41 11.96
	20146.00	89.41	359.40	12248.30	7891.40	7873.45	-539.01	1.83	448955.66	741293.69	N 32 13 57.36	W 103 41 11.96
	20241.00	89.48	357.03	12249.22	7986.36	7968.39	-541.96	2.50	449050.59	741290.73	N 32 13 58.30	W 103 41 11.99
	20335.00	89.75	358.68	12249.85	8080.33	8062.32	-545.48	1.78	449144.52	741287.21	N 32 13 59.23	W 103 41 12.03
	20430.00	89.99	356.85	12250.06	8175.31	8157.24	-549.19	1.94	449239.44	741283.51	N 32 14 0.17	W 103 41 12.06
	20524.00	89.68	357.05	12250.33	8269.31	8251.11	-554.19	0.39	449333.30	741278.51	N 32 14 1.10	W 103 41 12.11
	20619.00	89.82	359.92	12250.75	8364.26	8346.06	-556.70	3.02	449428.25	741276.00	N 32 14 2.04	W 103 41 12.14
	20713.00	89.86	358.18	12251.01	8458.17	8440.05	-558.26	1.85	449522.23	741274.44	N 32 14 2.97	W 103 41 12.15
	20802.00	90.44	357.13	12250.52	8647.14	8628.88	-565.99	0.63	449711.06	741266.70	N 32 14 4.84	W 103 41 12.23
	20996.00	91.27	0.06	12249.11	8741.07	8722.83	-568.30	3.24	449805.00	741264.40	N 32 14 5.77	W 103 41 12.25
	21091.00	90.65	358.26	12247.52	8835.97	8817.81	-569.69	2.00	449899.97	741263.01	N 32 14 6.71	W 103 41 12.25
	21185.00	91.30	357.13	12245.92	8929.94	8911.71	-573.47	1.39	449993.88	741259.23	N 32 14 7.64	W 103 41 12.29
	21280.00	90.85	356.40	12244.14	9024.92	9006.54	-578.83	0.90	450088.70	741253.87	N 32 14 8.58	W 103 41 12.35
	21375.00	90.72	357.64	12242.84	9119.91	9101.41	-583.77	1.31	450183.56	741248.93	N 32 14 9.52	W 103 41 12.40
	21470.00	89.41	358.95	12242.73	9214.87	9196.36	-586.59	1.95	450278.51	741246.10	N 32 14 10.46	W 103 41 12.43
	21564.00	91.03	356.31	12242.37	9308.84	9290.27	-590.48	3.30	450372.41	741242.22	N 32 14 11.38	W 103 41 12.46
	21658.00	91.61	357.88	12240.20	9402.81	9384.12	-595.24	1.78	450466.26	741237.46	N 32 14 12.31	W 103 41 12.51
	21752.00	90.92	359.85	12238.13	9496.72	9478.07	-597.10	2.22	450560.21	741235.59	N 32 14 13.24	W 103 41 12.53
	21847.00	91.58	359.92	12236.06	9591.55	9573.05	-597.29	0.70	450655.18	741235.40	N 32 14 14.18	W 103 41 12.52
	21942.00	91.40	0.72	12233.59	9686.33	9668.01	-596.76	0.86	450750.14	741235.93	N 32 14 15.12	W 103 41 12.51
	22036.00	90.54	359.54	12232.00	9780.14	9762.00	-596.55	1.55	450844.12	741236.15	N 32 14 16.05	W 103 41 12.50
	22130.00	90.78	358.86	12230.91	9874.05	9855.98	-597.86	0.77	450938.10	741234.83	N 32 14 16.98	W 103 41 12.51
	22225.00	90.82	359.65	12229.59	9968.94	9950.96	-599.10	0.83	451033.08	741233.60	N 32 14 17.92	W 103 41 12.52
	22320.00	90.92	359.29	12228.14	10063.82	10045.95	-599.98	0.39	451128.06	741232.72	N 32 14 18.86	W 103 41 12.52
	22414.00	90.82	0.06	12226.72	10157.69	10139.93	-600.51	0.83	451222.04	741232.19	N 32 14 19.79	W 103 41 12.52
100' FNL Crossed	22484.00	90.72	0.26	12225.78	10227.55	10209.93	-600.31	0.32	451292.03	741232.38	N 32 14 20.49	W 103 41 12.51
	22508.00	90.68	0.33	12225.49	10251.50	10233.93	-600.19	0.32	451316.03	741232.51	N 32 14 20.72	W 103 41 12.51
Final MWD	22522.00	90.54	0.39	12225.34	10265.47	10247.92	-600.10	1.09	451330.02	741232.60	N 32 14 20.86	W 103 41 12.51
Proj to TD	22563.00	90.54	0.39	12224.95	10306.39	10288.92	-599.82	0.00	451371.02	741232.87	N 32 14 21.27	W 103 41 12.50

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	G_YD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-22563'MD
	1	25.000	25.000	Act Stns	26.400	26.400	G_YD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-22563'MD
	1	25.000	927.000	Act Stns	26.400	26.400	G_YD_GC+DROP+OH	Original Borehole / Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-927.000
	1	927.000	6941.000	Act Stns	26.400	26.400	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-6941.000
	1	6941.000	8744.000	Act Stns	26.400	26.400	B001Mb_MWD+HRGM	Original Borehole / Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-8744.000
	1	8744.000	22563.000	Act Stns	26.400	26.400	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Mesa Verde WC Unit 4H Gyro + MWD 0-22563'MD