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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 30-025-46111	Pool Code 98252	Pool Name MESA VERDE; WOLFCAMP
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 3H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3569.3'

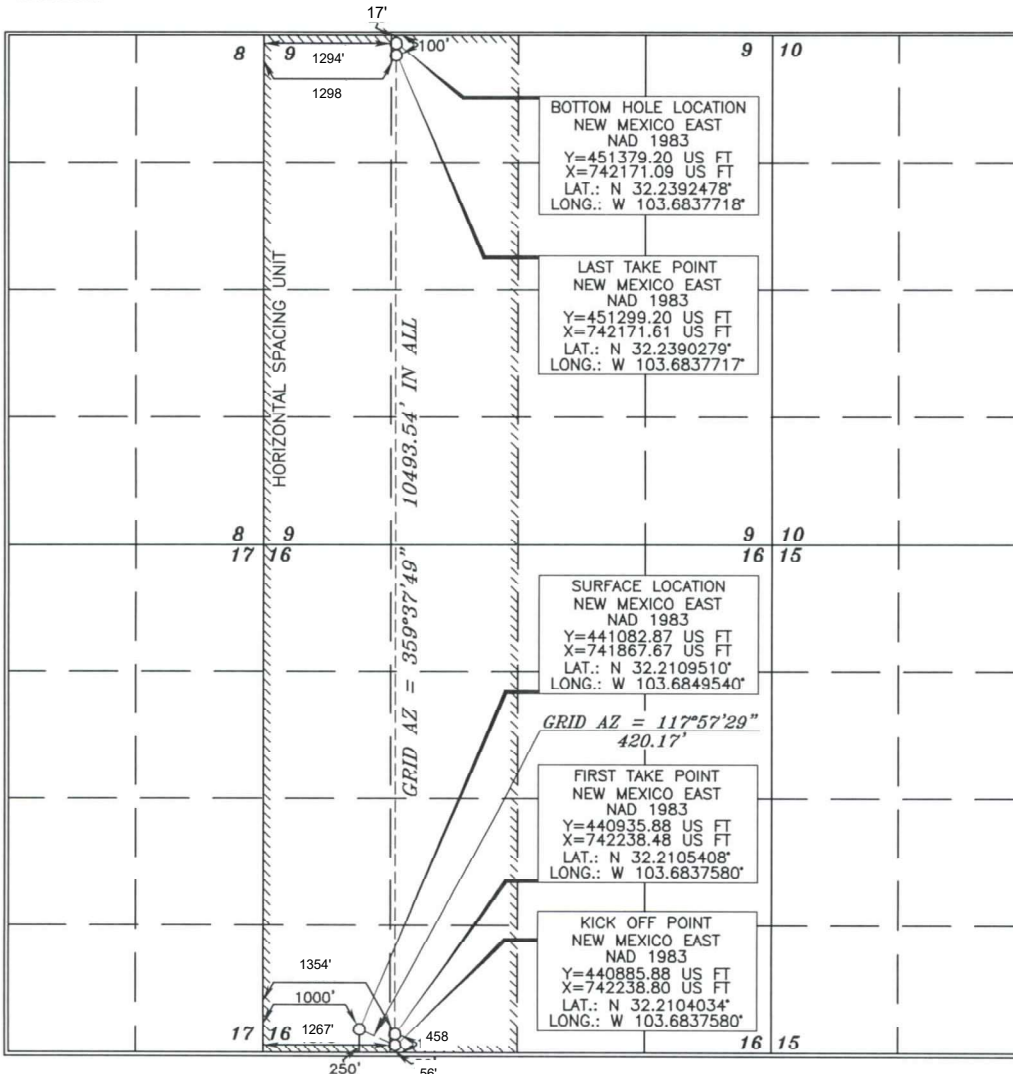
Surface Location

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	1000'	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	24 SOUTH	32 EAST, N.M.P.M.		17'	NORTH	1294'	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, 2017

Date of Survey _____
Signature and Seal of Professional Surveyor _____

Certificate Number 15079

Intent ☐ As Drilled ☒

API # 30-025-46111		
Operator Name: OXY USA INC.	Property Name: MESA VERDE WOLFCAMP UNIT	Well Number 3H

Kick Off Point (KOP)

UL M	Section 16	Township 24S	Range 32E	Lot	Feet 56	From N/S S	Feet 1267	From E/W W	County LEA
Latitude 32.21041					Longitude -103.68409			NAD NAD83	

First Take Point (FTP)

UL N	Section 16	Township 24S	Range 32E	Lot	Feet 458	From N/S S	Feet 1354	From E/W W	County LEA
Latitude 32.21152					Longitude -103.68381			NAD NAD83	

Last Take Point (LTP)

UL D	Section 9	Township 24S	Range 32E	Lot	Feet 100	From N/S N	Feet 1298	From E/W W	County LEA
Latitude 32.23902					Longitude -103.68379			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)

Rec'd 8/25/2020 - NMOCD

Schlumberger

March 21, 2020

OXY USA Incorporated
P.O. BOX 4294
Houston, TX 77210-4294

Re:

S16, T24S, R32E LEA, NM
N 32.210951 W -103.684954

CLIENT: OXY USA Incorporated
WELL: MESA VERDE WC UNIT 3H
FIELD: MESA VERDE

RIG: Pioneer 82
COUNTY: LEA
API NO: 30-025-46111
JOB NO: 20MLH0279

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>
Katherine Ramirez Gomez FE	MESA VERDE WC UNIT 3H Original Hole	977.00 Ft to 22318.00 Ft	February 6, 2020 to March 11, 2020	SlimPulse Third Party Corrected

Well Reference:

16, 24S, 32E, LEA NM

N 32.21095 W -103.68495

I, Katherine Ramirez Gomez certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of February 06, 2020 through March 11, 2020, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 977.00 feet to a depth of 22318.00 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 3H Well (Original Hole) API No. 30-025-46111 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

Katherine Ramirez Gomez

Katherine Ramirez Gomez

FE

Subscribed and Sworn to before me this 21 day of March (month) 2020 (yr)

My Commission expires:

6/14/23*Jean-Paul Langlois*

(signature)

Notary Public

Comanche Oklahoma

(County State)



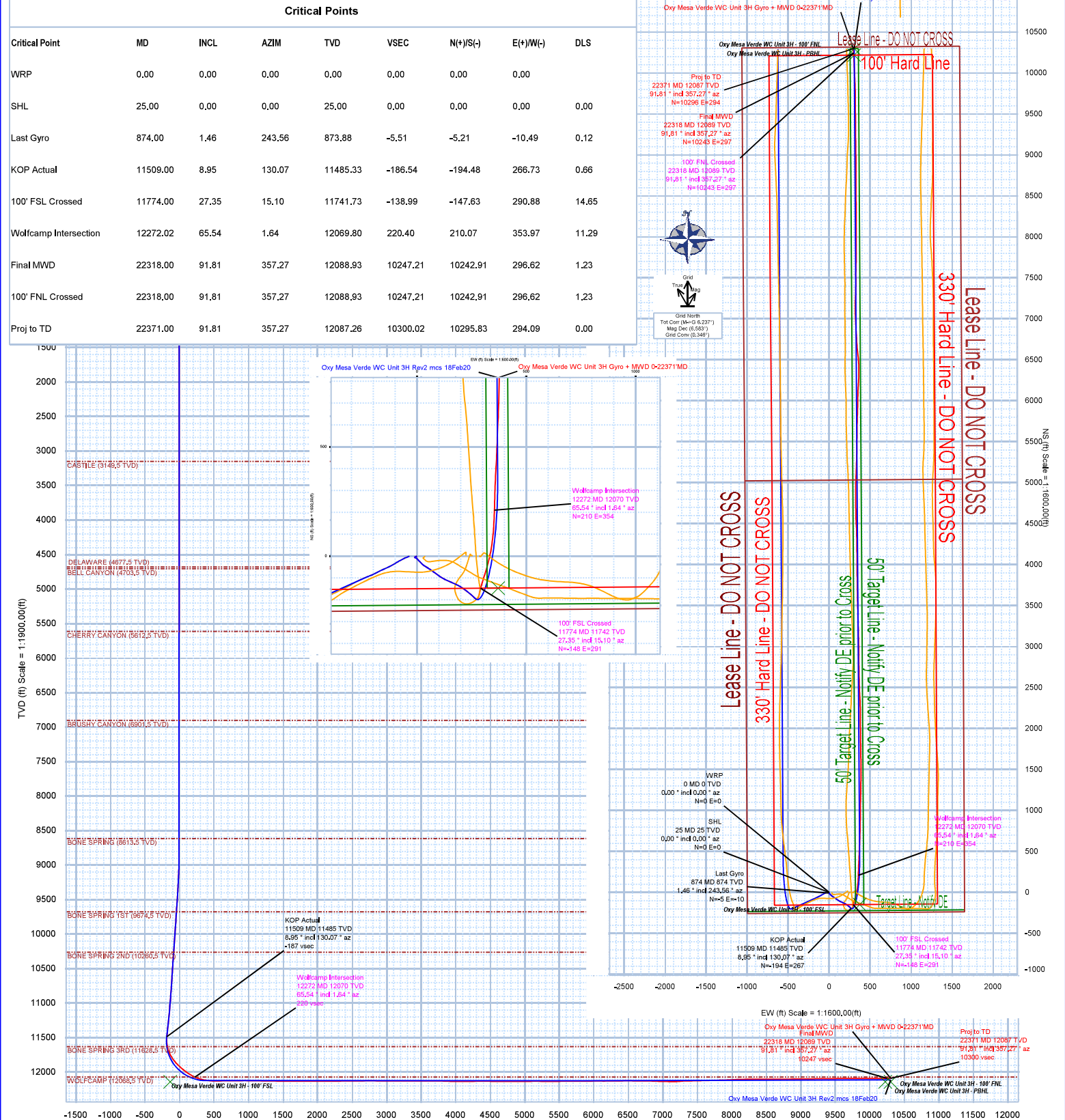


OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Mesa Verde WC Unit 3H	NM Lea County (NAD 83)	Oxy Mesa Verde WC Unit 3H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	IFR1	Dip:	59.816°	Date:	03-Mar-2020	Lat:	N 32 12 38.42	Northing:	441082.87RUS	Grid Conv:	0.3456°
MagDec:	6.583°	FS:	47814.7nT	Gravity FS:	998.432mgn (9.80665 Based)	Lon:	W 103 41 5.83	Easting:	741867.67RUS	Scale Fact:	0.99995515
								Plan:			
								Slot:			
								Oxy Mesa Verde WC Unit 3H			
								TVD Ref:			
								RKB=25' (3594.3ft above MSL)			





Oxy Mesa Verde WC Unit 3H Gyro + MWD 0-22371'MD Survey Geodetic Report

(Def Survey)



Report Date: March 13, 2020 - 12:08 PM
Client: OXY
Field: NM Lea County (NAD 83)
Structure / Slot: Oxy Mesa Verde WC Unit 3H / Oxy Mesa Verde WC Unit 3H
Well: Oxy Mesa Verde WC Unit 3H
Borehole: Original Borehole
UWI / API#: Unknown / 30-025-46111
Survey Name: Oxy Mesa Verde WC Unit 3H Gyro + MWD 0-22371'MD
Survey Date: January 27, 2020
Tort / AHD / DDI / ERD Ratio: 275,339' / 10883,775 ft / 6.742 / 0.897
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 12' 39.42362", W 103° 41' 5.83453"
Location Grid N/E Y/X: N 441082.870 ftUS, E 741867.870 ftUS
CRS Grid Convergence Angle: 0.3456°
Grid Scale Factor: 0.99995515
Version / Patch: 2.10.782.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 1,688° (Grid North)
Vertical Section Origin: 0,000 ft, 0,000 ft
TVD Reference Datum: RKB=25'
TVD Reference Elevation: 3594,300 ft above MSL
Seabed / Ground Elevation: 3569,300 ft above MSL
Magnetic Declination: 6,583°
Total Gravity Field Strength: 998.4319mgn (9,80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47814,700 nT
Magnetic Dip Angle: 59,816°
Declination Date: March 03, 2020
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.3456°
Total Corr Mag North->Grid North: 6.2374°
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	441082.87	741867.67	N 32 12 39.42	W 103 41 5.83
SHL	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	441082.87	741867.67	N 32 12 39.42	W 103 41 5.83
	100.00	0.17	200.51	100.00	-0.11	-0.10	-0.04	0.23	441082.77	741867.63	N 32 12 39.42	W 103 41 5.83
	129.00	0.19	226.71	129.00	-0.18	-0.18	-0.09	0.29	441082.69	741867.58	N 32 12 39.42	W 103 41 5.84
	162.00	0.15	254.63	162.00	-0.23	-0.23	-0.17	0.27	441082.64	741867.50	N 32 12 39.42	W 103 41 5.84
	190.00	0.10	226.40	190.00	-0.26	-0.25	-0.22	0.28	441082.62	741867.45	N 32 12 39.42	W 103 41 5.84
	220.00	0.12	198.03	220.00	-0.31	-0.30	-0.25	0.19	441082.57	741867.42	N 32 12 39.42	W 103 41 5.84
	246.00	0.20	190.19	246.00	-0.38	-0.37	-0.27	0.32	441082.50	741867.40	N 32 12 39.42	W 103 41 5.84
	272.00	0.29	201.86	272.00	-0.49	-0.48	-0.30	0.39	441082.39	741867.37	N 32 12 39.42	W 103 41 5.84
	303.00	0.37	217.65	303.00	-0.64	-0.63	-0.39	0.39	441082.24	741867.28	N 32 12 39.42	W 103 41 5.84
	335.00	0.52	233.27	335.00	-0.81	-0.80	-0.57	0.60	441082.07	741867.10	N 32 12 39.42	W 103 41 5.84
	366.00	0.65	239.05	366.00	-1.00	-0.97	-0.83	0.46	441081.90	741866.84	N 32 12 39.41	W 103 41 5.84
	398.00	0.71	241.58	397.99	-1.19	-1.16	-1.16	0.21	441081.71	741866.51	N 32 12 39.41	W 103 41 5.85
	429.00	0.80	241.60	428.99	-1.40	-1.35	-1.52	0.29	441081.52	741866.15	N 32 12 39.41	W 103 41 5.85
	460.00	0.89	242.24	459.99	-1.63	-1.57	-1.93	0.29	441081.30	741865.74	N 32 12 39.41	W 103 41 5.86
	492.00	0.99	244.60	491.98	-1.87	-1.80	-2.40	0.34	441081.07	741865.27	N 32 12 39.41	W 103 41 5.86
	524.00	1.11	247.72	523.98	-2.13	-2.04	-2.93	0.42	441080.83	741864.74	N 32 12 39.40	W 103 41 5.87
	555.00	1.20	249.38	554.97	-2.37	-2.27	-3.52	0.31	441080.60	741864.15	N 32 12 39.40	W 103 41 5.88
	587.00	1.25	250.10	586.96	-2.63	-2.51	-4.16	0.16	441080.37	741863.51	N 32 12 39.40	W 103 41 5.88
	618.00	1.29	252.28	617.96	-2.87	-2.73	-4.81	0.20	441080.14	741862.86	N 32 12 39.40	W 103 41 5.89
	650.00	1.33	251.38	649.95	-3.12	-2.95	-5.50	0.14	441079.92	741862.17	N 32 12 39.39	W 103 41 5.90
	681.00	1.31	248.52	680.94	-3.38	-3.20	-6.17	0.22	441079.67	741861.50	N 32 12 39.39	W 103 41 5.91
	712.00	1.29	247.66	711.93	-3.66	-3.46	-6.83	0.09	441079.41	741860.84	N 32 12 39.39	W 103 41 5.91
	744.00	1.36	246.38	743.92	-3.97	-3.75	-7.51	0.24	441079.12	741860.16	N 32 12 39.39	W 103 41 5.92
	775.00	1.46	245.17	774.91	-4.30	-4.06	-8.20	0.34	441078.81	741859.47	N 32 12 39.38	W 103 41 5.93
	807.00	1.48	242.89	806.90	-4.68	-4.42	-8.94	0.19	441078.45	741858.73	N 32 12 39.38	W 103 41 5.94
	839.00	1.50	243.14	838.89	-5.08	-4.80	-9.68	0.07	441078.07	741857.99	N 32 12 39.38	W 103 41 5.95
Last Gyro	874.00	1.46	243.56	873.88	-5.51	-5.21	-10.49	0.12	441077.66	741857.18	N 32 12 39.37	W 103 41 5.96
	977.00	0.07	268.43	976.87	-6.14	-5.79	-11.73	1.36	441077.08	741855.94	N 32 12 39.37	W 103 41 5.97
	1068.00	0.10	238.15	1067.87	-6.18	-5.84	-11.85	0.06	441077.03	741855.82	N 32 12 39.37	W 103 41 5.97
	1161.00	0.15	341.13	1160.87	-6.11	-5.76	-11.96	0.21	441077.11	741855.71	N 32 12 39.37	W 103 41 5.97
	1253.00	0.16	191.43	1252.87	-6.13	-5.78	-12.02	0.33	441077.09	741855.65	N 32 12 39.37	W 103 41 5.97
	1345.00	0.10	204.84	1344.87	-6.33	-5.97	-12.08	0.07	441076.90	741855.59	N 32 12 39.37	W 103 41 5.98
	1425.00	0.16	113.82	1424.87	-6.43	-6.08	-12.01	0.24	441076.79	741855.66	N 32 12 39.36	W 103 41 5.97
	1526.00	0.10	251.58	1525.87	-6.52	-6.17	-11.96	0.24	441076.70	741855.71	N 32 12 39.36	W 103 41 5.97
	1617.00	0.12	205.39	1616.87	-6.63	-6.28	-12.08	0.10	441076.59	741855.59	N 32 12 39.36	W 103 41 5.98
	1712.00	0.13	143.91	1711.87	-6.81	-6.46	-12.06	0.13	441076.41	741855.61	N 32 12 39.36	W 103 41 5.98
	1806.00	0.12	353.12	1805.87	-6.79	-6.44	-12.01	0.26	441076.43	741855.66	N 32 12 39.36	W 103 41 5.97
	1901.00	0.10	225.42	1900.87	-6.76	-6.40	-12.08	0.21	441076.47	741855.59	N 32 12 39.36	W 103 41 5.98
	1997.00	0.06	115.87	1996.87	-6.84	-6.48	-12.09	0.14	441076.39	741855.58	N 32 12 39.36	W 103 41 5.98
	2092.00	0.06	82.35	2091.87	-6.85	-6.50	-12.00	0.04	441076.37	741855.67	N 32 12 39.36	W 103 41 5.97
	2187.00	0.08	32.40	2186.87	-6.78	-6.44	-11.91	0.07	441076.43	741855.76	N 32 12 39.36	W 103 41 5.97
	2282.00	0.10	94.28	2281.87	-6.73	-6.39	-11.80	0.10	441076.48	741855.87	N 32 12 39.36	W 103 41 5.97
	2377.00	0.06	73.52	2376.87	-6.72	-6.38	-11.67	0.05	441076.49	741856.00	N 32 12 39.36	W 103 41 5.97
	2473.00	0.18	264.10	2472.87	-6.72	-6.38	-11.77	0.25	441076.49	741855.90	N 32 12 39.36	W 103 41 5.97
	2568.00	0.17	292.54	2567.87	-6.69	-6.34	-12.05	0.09	441076.53	741855.62	N 32 12 39.36	W 103 41 5.98
	2663.00	0.11	230.35	2662.87	-6.70	-6.35	-12.25	0.16	441076.52	741855.42	N 32 12 39.36	W 103 41 5.98
	2758.00	0.24	258.13	2757.87	-6.81	-6.44	-12.51	0.16	441076.43	741855.16	N 32 12 39.36	W 103 41 5.98
	2854.00	0.05	147.69	2853.87	-6.89	-6.52	-12.69	0.27	441076.35	741854.98	N 32 12 39.36	W 103 41 5.98
	2949.00	0.03	179.25	2948.87	-6.95	-6.58	-12.66	0.03	441076.29	741855.01	N 32 12 39.36	W 103 41 5.98
	3044.00	0.16	338.37	3043.87	-6.85	-6.48	-12.71	0.20	441076.39	741854.96	N 32 12 39.36	W 103 41 5.98
	3139.00	0.06	265.80	3138.87	-6.74	-6.36	-12.81	0.16	441076.51	741854.86	N 32 12 39.36	W 103 41 5.98
	3233.00	0.07	194.47	3232.87	-6.80	-6.42	-12.87	0.08	441076.45	741854.80	N 32 12 39.36	W 103 41 5.98
	3328.00	0.09	156.05	3327.87	-6.92	-6.55	-12.86	0.06	441076.32	741854.81	N 32 12 39.36	W 103 41 5.98
	3423.00	0.08	267.31	3422.87	-7.00	-6.62	-12.89	0.15	441076.25	741854.78	N 32 12 39.36	W 103 41 5.99
	3519.00	0.18	248.38	3518.87	-7.06	-6.68	-13.10	0.11	441076.19	741854.57	N 32 12 39.36	W 103 41 5.99
	3614.00	0.06	293.35	3613.87	-7.10	-6.71	-13.29	0.15	441076.16	741854.38	N 32 12 39.36	W 103 41 5.99
	3709.00	0.10	261.83	3708.87	-7.10	-6.70	-13.41	0.06	441076.17	741854.26	N 32 12 39.36	W 103 41 5.99
	3804.00	0.25	223.65	3803.86	-7.26	-6.87	-13.64	0.19	441076.00	741854.03	N 32 12 39.36	W 103 41 5.99
	3899.00	0.04	97.28	3898.86	-7.42	-7.02	-13.75	0.29	441075.85	741853.92	N 32 12 39.35	W 103 41 6.00
	3994.00	0.08	145.02	3993.86	-7.48	-7.08	-13.68	0.06	441075.79	741853.99	N 32 12 39.35	W 103 41 5.99
	4089.00	0.07	117.56	4088.86	-7.56	-7.16	-13.59	0.04	441075.71	741854.08	N 32 12 39.35	W 103 41 5.99
	4186.00	0.12	185.53	4185.86	-7.68	-7.29	-13.55	0.12	441075.58	741854.12	N 32 12 39.35	W 103 41 5.99
	4281.00	0.06	273.47	4280.86	-7.78	-7.38	-13.61	0.14	441075.49	741854.07	N 32 12 39.35	W 103 41 5.99
	4376.00	0.10	196.16	4375.86	-7.86	-7.46	-13.68	0.11	441075.41	741853.99	N 32 12 39.35	W 103 41 5.99
	4472.00	0.04	66.13	4471.86	-7.93	-7.53	-13.67	0.13	441075.34	741854.00	N 32 12 39.35	W 103 41 5.99
	4567.00	0.11	15.09	4566.86	-7.82	-7.43	-13.62	0.10	441075.44	741854.05	N 32 12 39.35	W 103 41 5.99
	4662.00	0.06	51.60	4661.86	-7.70	-7.31	-13.55	0.08	441075.56	741854.12	N 32 12 39.35	W 103 41 5.99
	4757.00	0.13	37.34	4756.86	-7.58	-7.19	-13.45	0.08	441075.68	741854.22	N 32 12 39.35	W 103 41 5.99
	4853.00	0.21	186.90	4852.86	-7.67	-7.28	-13.40	0.34	441075.59	741854.27	N 32 12 39.35	W 103 41 5.99
	4948.00	0.10	51.37	4947.86	-7.79	-7.40	-13.36	0.31	441075.47	741854.31	N 32 12 39.35	W 103 41 5.99
	5043.00	0.08	100.35	5042.86	-7.75	-7.36	-13.23	0.08	441075.51	741854.44	N 32 12 39.35	W 103 41 5.99
	5139.00	0.05	3.78	5138.86	-7.72	-7.33	-13.16	0.10	441075.54	741854.51	N 32 12 39.35	W 103 41 5.99
	5234.00	0.04	248.27	5233.86	-7.69	-7.30	-13.19	0.08	441075.57	741854.48	N 32 12 39.35	W 103 41 5.99
	5328.00	0.15	171.66	5327.86	-7.82	-7.44	-13.20	0.16	441075.44	741854.		

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 ° ' ")
	5804.00	1.31	109.10	5803.68	-10.20	-10.14	-2.12	1.09	441072.73	741865.55	N 32 12 39.32 W 103 41	5.86
	5898.00	0.26	268.86	5897.67	-10.53	-10.50	-1.32	1.66	441072.37	741866.35	N 32 12 39.32 W 103 41	5.85
	5994.00	0.24	70.49	5993.67	-10.47	-10.44	-1.34	0.51	441072.43	741866.33	N 32 12 39.32 W 103 41	5.85
	6089.00	0.15	342.91	6088.67	-10.28	-10.25	-1.19	0.29	441072.62	741866.48	N 32 12 39.32 W 103 41	5.85
	6184.00	0.13	101.92	6183.67	-10.18	-10.15	-1.12	0.25	441072.72	741866.55	N 32 12 39.32 W 103 41	5.85
	6279.00	0.16	118.67	6278.67	-10.26	-10.24	-0.90	0.05	441072.63	741866.77	N 32 12 39.32 W 103 41	5.85
	6373.00	0.07	18.76	6372.67	-10.27	-10.25	-0.77	0.20	441072.62	741866.90	N 32 12 39.32 W 103 41	5.84
	6468.00	0.11	267.48	6467.67	-10.22	-10.20	-0.84	0.16	441072.67	741866.83	N 32 12 39.32 W 103 41	5.85
	6563.00	0.13	125.76	6562.67	-10.28	-10.26	-0.85	0.24	441072.61	741866.82	N 32 12 39.32 W 103 41	5.85
	6658.00	0.19	279.03	6657.67	-10.33	-10.30	-0.91	0.33	441072.57	741866.76	N 32 12 39.32 W 103 41	5.85
	6755.00	0.18	324.70	6754.67	-10.18	-10.15	-1.16	0.15	441072.72	741866.51	N 32 12 39.32 W 103 41	5.85
	6848.00	0.04	98.42	6847.67	-10.07	-10.04	-1.21	0.23	441072.83	741866.46	N 32 12 39.32 W 103 41	5.85
	6943.00	0.16	220.93	6942.67	-10.18	-10.14	-1.27	0.19	441072.73	741866.40	N 32 12 39.32 W 103 41	5.85
	7038.00	0.16	275.89	7037.67	-10.27	-10.23	-1.49	0.16	441072.64	741866.18	N 32 12 39.32 W 103 41	5.85
	7133.00	0.18	63.76	7132.67	-10.19	-10.15	-1.48	0.34	441072.72	741866.19	N 32 12 39.32 W 103 41	5.85
	7228.00	0.16	208.08	7227.67	-10.24	-10.20	-1.41	0.34	441072.67	741866.26	N 32 12 39.32 W 103 41	5.85
	7323.00	0.21	305.71	7322.67	-10.26	-10.22	-1.62	0.30	441072.65	741866.05	N 32 12 39.32 W 103 41	5.85
	7416.00	0.06	213.64	7415.67	-10.21	-10.16	-1.78	0.24	441072.71	741865.89	N 32 12 39.32 W 103 41	5.86
	7512.00	0.17	260.60	7511.67	-10.28	-10.22	-1.95	0.14	441072.65	741865.72	N 32 12 39.32 W 103 41	5.86
	7607.00	0.15	265.42	7606.67	-10.32	-10.26	-2.21	0.03	441072.61	741865.46	N 32 12 39.32 W 103 41	5.86
	7702.00	0.04	163.29	7701.67	-10.36	-10.30	-2.33	0.17	441072.57	741865.34	N 32 12 39.32 W 103 41	5.86
	7796.00	0.27	313.77	7795.67	-10.24	-10.18	-2.48	0.32	441072.59	741865.19	N 32 12 39.32 W 103 41	5.86
	7891.00	0.12	0.68	7890.67	-10.00	-9.92	-2.54	0.22	441072.95	741865.03	N 32 12 39.33 W 103 41	5.87
	7987.00	0.15	336.65	7986.67	-9.78	-9.71	-2.69	0.07	441073.16	741864.96	N 32 12 39.33 W 103 41	5.87
	8082.00	0.13	255.29	8081.67	-9.70	-9.62	-2.84	0.19	441073.25	741864.83	N 32 12 39.33 W 103 41	5.87
	8177.00	0.20	224.31	8176.67	-9.85	-9.77	-3.06	0.12	441073.11	741864.61	N 32 12 39.33 W 103 41	5.87
	8273.00	0.22	217.67	8272.67	-10.12	-10.03	-3.29	0.03	441072.84	741864.38	N 32 12 39.32 W 103 41	5.87
	8367.00	0.05	289.36	8366.67	-10.26	-10.16	-3.44	0.22	441072.71	741864.23	N 32 12 39.32 W 103 41	5.88
	8462.00	0.03	171.37	8461.67	-10.27	-10.17	-3.47	0.07	441072.70	741864.20	N 32 12 39.32 W 103 41	5.88
	8557.00	0.06	11.73	8556.67	-10.24	-10.15	-3.46	0.09	441072.72	741864.21	N 32 12 39.32 W 103 41	5.88
	8652.00	0.12	279.27	8651.67	-10.18	-10.08	-3.55	0.14	441072.79	741864.12	N 32 12 39.32 W 103 41	5.88
	8747.00	0.09	289.67	8746.67	-10.15	-10.04	-3.72	0.04	441072.83	741863.95	N 32 12 39.32 W 103 41	5.88
	8840.00	0.10	5.41	8839.67	-10.04	-9.94	-3.78	0.13	441072.93	741863.89	N 32 12 39.33 W 103 41	5.88
	8935.00	0.59	109.46	8934.66	-10.11	-10.02	-3.31	0.65	441072.85	741864.36	N 32 12 39.32 W 103 41	5.87
	9029.00	1.82	129.48	9028.64	-11.17	-11.13	-1.70	1.36	441071.74	741865.97	N 32 12 39.31 W 103 41	5.86
	9124.00	3.13	139.56	9123.55	-14.02	-14.06	1.15	1.45	441068.81	741868.82	N 32 12 39.28 W 103 41	5.82
	9220.00	4.28	136.74	9219.35	-18.50	-18.66	5.30	1.21	441064.21	741872.97	N 32 12 39.24 W 103 41	5.77
	9316.00	4.59	132.11	9315.06	-23.53	-23.85	10.61	0.49	441059.02	741878.28	N 32 12 39.19 W 103 41	5.71
	9411.00	4.59	138.79	9409.76	-28.77	-29.26	15.93	0.56	441053.61	741883.60	N 32 12 39.13 W 103 41	5.65
	9506.00	5.94	134.57	9504.36	-34.90	-35.57	21.94	1.48	441047.31	741889.61	N 32 12 39.07 W 103 41	5.58
	9602.00	6.90	126.64	9599.75	-41.59	-42.49	30.10	1.36	441040.38	741897.77	N 32 12 39.00 W 103 41	5.49
	9697.00	7.16	121.76	9694.04	-47.82	-49.02	39.72	0.69	441033.86	741907.38	N 32 12 38.94 W 103 41	5.38
	9793.00	7.16	120.88	9789.29	-53.74	-55.24	49.94	0.11	441027.64	741917.61	N 32 12 38.87 W 103 41	5.26
	9888.00	7.49	124.47	9883.52	-59.98	-61.78	60.12	0.59	441021.09	741927.79	N 32 12 38.81 W 103 41	5.14
	9983.00	7.31	125.65	9977.73	-66.71	-68.81	70.14	0.25	441014.07	741937.81	N 32 12 38.74 W 103 41	5.02
	10078.00	7.07	125.66	10071.98	-73.35	-75.74	79.80	0.25	441007.14	741947.47	N 32 12 38.67 W 103 41	4.91
	10174.00	6.92	126.92	10167.26	-79.99	-82.65	89.22	0.22	441000.22	741956.89	N 32 12 38.60 W 103 41	4.80
	10269.00	7.17	127.36	10261.55	-86.75	-89.69	98.51	0.27	440993.18	741966.18	N 32 12 38.53 W 103 41	4.69
	10364.00	8.02	121.18	10355.71	-93.47	-96.72	108.89	1.24	440986.16	741976.56	N 32 12 38.46 W 103 41	4.57
	10459.00	9.12	119.48	10449.65	-100.24	-103.86	121.12	1.19	440979.02	741988.78	N 32 12 38.39 W 103 41	4.43
	10555.00	9.00	113.84	10544.46	-106.62	-110.63	134.61	0.93	440972.24	742002.27	N 32 12 38.32 W 103 41	4.28
	10650.00	9.80	114.40	10638.18	-112.54	-116.98	148.77	0.85	440965.90	742016.43	N 32 12 38.26 W 103 41	4.11
	10745.00	10.00	113.18	10731.77	-118.69	-123.56	163.72	0.31	440959.31	742031.38	N 32 12 38.19 W 103 41	3.94
	10840.00	9.74	114.99	10825.36	-124.89	-130.21	176.58	0.43	440952.67	742046.24	N 32 12 38.12 W 103 41	3.77
	10935.00	9.47	119.28	10919.03	-131.69	-137.42	192.68	0.81	440945.45	742060.34	N 32 12 38.05 W 103 41	3.60
	11030.00	9.31	124.05	11012.76	-139.42	-145.55	205.87	0.84	440937.33	742073.53	N 32 12 37.97 W 103 41	3.45
	11126.00	9.34	124.46	11107.49	-147.79	-154.30	218.72	0.08	440928.57	742086.38	N 32 12 37.88 W 103 41	3.30
	11220.00	9.81	129.85	11200.18	-156.87	-163.75	231.16	1.08	440919.13	742098.82	N 32 12 37.79 W 103 41	3.16
	11316.00	9.17	129.56	11294.87	-166.62	-173.86	243.34	0.67	440909.01	742111.00	N 32 12 37.69 W 103 41	3.01
	11394.00	9.56	132.84	11371.83	-174.70	-182.23	252.88	0.85	440900.65	742120.54	N 32 12 37.61 W 103 41	2.90
	11509.00	8.95	130.07	11485.33	-186.54	-194.48	266.73	0.66	440888.40	742134.38	N 32 12 37.48 W 103 41	2.74
	11603.00	8.92	42.20	11578.55	-185.53	-193.78	277.26	13.16	440889.10	742144.91	N 32 12 37.49 W 103 41	2.62
	11697.00	16.23	9.83	11670.34	-166.94	-175.40	284.41	10.52	440907.48	742152.07	N 32 12 37.67 W 103 41	2.54
KOP Actual	11774.00	27.35	15.10	11741.73	-138.99	-147.63	290.88	14.65	440935.25	742158.54	N 32 12 37.95 W 103 41	2.46
100' FSL Crossed	11791.00	29.82	15.76	11756.66	-131.10	-139.79	293.05	14.65	440943.09	742160.70	N 32 12 38.02 W 103 41	2.43
	11885.00	39.99	17.80	11833.65	-79.27	-88.40	308.67	10.89	440994.48	742176.32	N 32 12 38.53 W 103 41	2.25
	11978.00	46.87	14.38	11901.16	-17.37	-26.99	326.26	7.82	441055.88	742193.91	N 32 12 39.14 W 103 41	2.04
	12072.00	50.68	9.27	11963.12	52.19	42.17	340.64	5.76	441125.04	742208.30	N 32 12 39.82 W 103 41	1.87
	12167.00	57.06	4.26	12019.12	128.55	118.30	349.54	7.95	441201.17	742217.19	N 32 12 40.57 W 103 41	1.76
	12261.00	64.30	1.64	12065.13	210.42	200.09	353.68	8.08	441282.95	742221.34	N 32 12 41.38 W 103 41	1.70
Wolfcamp Intersection	12272.02	65.54	1.64	12069.80	220.40	210.07	353.97	11.29	441292.93	742221.62	N 32 12 41.48 W 103 41	1.70
	12355.00	74.91	1.62	12097.84	298.40	288.04	356.19	11.29	441370.89	742223.84	N 32 12 42.25 W 103 41	1.67
	12450.00	81.52	3.24	12117.24	391.34	380.90	360.14	7.16	441463.75	742227.80	N 32 12 43.17 W 103 41	1.62
	12545.00	88.78	2.27	12125.26	485.92	475.38	364.68	7.71	441558.23	742232.34	N 32 12 44.11 W 103 41	1.56
	12588.00	90.15	2.18	12125.66	528.91	518.35	366.35	3.19	441601.19	742234.01	N 32 12 44.53 W 103 41	1.53
	12681.00	91.43	2.70	12124.38	621.89	611.25	370.31	1.49	441694.09	742237.97	N 32 12 45.45 W 103 41	1.48
	12776.00	90.43	1.31	12122.84	716.88	706.18	373.84	1.80	441789.01	742241.29	N 32 12 46.39 W 103 41	1.44
	12871.00	90.36	1.14	12122.18	811.87	801.15	375.87	0.19	441883.99	742243.32	N 32 12 47.33 W 103 41	1.41
	12965.00	90.40	0.49	12121.56	905.86	895.14	377.00					

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 ° ' ")
	15702.00	88.92	358.63	12125.27	3639.86	3631.34	342.83	1.96	444714.04	742210.48	N 32 13 15.34 W 103 41 1.59	
	15796.00	89.43	359.63	12126.62	3733.76	3725.32	341.40	1.19	444808.01	742209.05	N 32 13 16.27 W 103 41 1.60	
	15890.00	88.78	358.92	12128.09	3827.66	3819.30	340.21	1.02	444901.99	742207.87	N 32 13 17.20 W 103 41 1.61	
	15984.00	87.33	358.72	12131.28	3921.49	3913.22	338.28	1.56	444995.91	742205.93	N 32 13 18.12 W 103 41 1.62	
	16079.00	90.71	0.62	12132.91	4016.39	4008.19	337.73	4.08	445090.87	742205.39	N 32 13 19.06 W 103 41 1.62	
	16174.00	90.43	358.91	12131.96	4111.33	4103.18	337.34	1.82	445185.85	742205.00	N 32 13 20.00 W 103 41 1.62	
	16268.00	90.33	359.33	12131.34	4205.24	4197.16	335.90	0.46	445279.84	742203.55	N 32 13 20.93 W 103 41 1.63	
	16362.00	90.12	359.30	12130.97	4299.15	4291.16	334.77	0.23	445373.82	742202.43	N 32 13 21.86 W 103 41 1.64	
	16457.00	91.12	359.23	12129.94	4394.06	4386.14	333.56	1.06	445468.81	742201.21	N 32 13 22.80 W 103 41 1.64	
	16552.00	87.82	355.98	12130.82	4488.79	4481.03	329.59	4.88	445563.69	742197.24	N 32 13 23.74 W 103 41 1.68	
	16646.00	89.85	358.96	12132.73	4582.50	4574.90	325.44	3.84	445657.56	742193.10	N 32 13 24.67 W 103 41 1.72	
	16741.00	90.02	358.66	12132.84	4677.38	4669.88	323.47	0.36	445752.53	742191.12	N 32 13 25.61 W 103 41 1.74	
	16836.00	90.05	359.24	12132.78	4772.27	4764.86	321.73	0.61	445847.51	742189.38	N 32 13 26.55 W 103 41 1.75	
	16930.00	90.57	0.37	12132.27	4866.22	4858.86	321.41	1.32	445941.50	742189.06	N 32 13 27.48 W 103 41 1.75	
	17025.00	90.02	1.10	12131.78	4961.20	4953.85	322.63	0.96	446036.49	742190.28	N 32 13 28.42 W 103 41 1.73	
	17119.00	90.53	1.29	12131.33	5055.20	5047.83	324.59	0.58	446130.46	742192.24	N 32 13 29.35 W 103 41 1.70	
	17213.00	89.98	2.01	12130.91	5149.20	5141.79	327.29	0.96	446224.42	742194.95	N 32 13 30.28 W 103 41 1.66	
	17307.00	89.71	2.13	12131.17	5243.20	5235.73	330.69	0.31	446318.35	742198.34	N 32 13 31.21 W 103 41 1.62	
	17402.00	89.71	1.30	12131.65	5338.19	5330.68	333.53	0.87	446413.30	742201.19	N 32 13 32.15 W 103 41 1.58	
	17496.00	90.36	0.62	12131.59	5432.18	5424.67	335.11	1.00	446507.28	742202.76	N 32 13 33.08 W 103 41 1.55	
	17591.00	90.36	0.96	12130.99	5527.17	5519.66	336.42	0.36	446602.27	742204.07	N 32 13 34.02 W 103 41 1.53	
	17686.00	89.95	0.81	12130.74	5622.16	5614.64	337.88	0.46	446697.25	742205.54	N 32 13 34.96 W 103 41 1.51	
	17780.00	90.57	0.87	12130.31	5716.15	5708.63	339.26	0.66	446791.24	742206.91	N 32 13 35.89 W 103 41 1.48	
	17875.00	90.74	1.92	12129.22	5811.14	5803.60	341.57	1.12	446886.20	742209.23	N 32 13 36.83 W 103 41 1.45	
	17970.00	90.09	1.25	12128.54	5906.14	5898.56	344.20	0.98	446981.15	742211.85	N 32 13 37.77 W 103 41 1.41	
	18064.00	91.19	1.28	12127.49	6000.13	5992.53	346.28	1.17	447075.12	742213.93	N 32 13 38.70 W 103 41 1.38	
	18158.00	88.88	1.13	12127.43	6094.12	6086.50	348.25	2.46	447169.08	742215.91	N 32 13 39.63 W 103 41 1.35	
	18253.00	91.05	4.62	12127.49	6189.08	6181.36	353.02	4.33	447263.94	742220.67	N 32 13 40.57 W 103 41 1.29	
	18347.00	90.74	1.96	12126.02	6283.02	6275.19	358.41	2.85	447357.76	742226.06	N 32 13 41.49 W 103 41 1.22	
	18442.00	90.46	0.15	12125.02	6378.00	6370.16	360.16	1.93	447452.73	742227.81	N 32 13 42.43 W 103 41 1.19	
	18536.00	90.57	356.84	12124.18	6471.83	6464.10	357.53	3.74	447546.67	742225.18	N 32 13 43.36 W 103 41 1.22	
	18631.00	88.33	353.15	12125.09	6566.14	6558.70	349.08	4.36	447641.27	742216.73	N 32 13 44.30 W 103 41 1.31	
	18726.00	89.91	354.87	12126.55	6660.27	6653.17	339.16	2.46	447735.72	742208.82	N 32 13 45.24 W 103 41 1.42	
	18820.00	90.40	357.09	12126.30	6753.80	6746.93	332.58	2.42	447829.48	742200.23	N 32 13 46.16 W 103 41 1.49	
	18914.00	87.40	356.57	12128.10	6847.43	6840.76	327.38	3.24	447923.31	742195.03	N 32 13 47.09 W 103 41 1.54	
	19009.00	88.47	357.68	12131.52	6942.07	6935.57	322.62	1.62	448018.12	742190.27	N 32 13 48.03 W 103 41 1.59	
	19104.00	88.99	357.71	12133.63	7036.81	7030.47	318.80	0.55	448113.01	742186.45	N 32 13 48.97 W 103 41 1.63	
	19198.00	88.40	358.90	12135.77	7130.62	7124.40	316.02	1.41	448206.94	742183.67	N 32 13 49.90 W 103 41 1.66	
	19293.00	95.29	3.28	12132.71	7225.49	7219.26	317.82	8.59	448301.79	742185.47	N 32 13 50.84 W 103 41 1.63	
	19388.00	91.46	1.61	12127.12	7320.29	7313.99	321.86	4.40	448396.51	742189.51	N 32 13 51.78 W 103 41 1.57	
	19483.00	91.33	0.71	12124.81	7415.26	7408.94	323.78	0.96	448491.46	742191.44	N 32 13 52.72 W 103 41 1.54	
	19577.00	91.22	358.92	12122.71	7509.18	7502.91	323.48	1.91	448585.43	742191.13	N 32 13 53.65 W 103 41 1.54	
	19672.00	91.57	1.76	12120.40	7604.12	7597.87	324.04	3.01	448680.38	742191.69	N 32 13 54.58 W 103 41 1.53	
	19766.00	91.53	1.07	12117.86	7698.08	7691.81	326.36	0.74	448774.32	742194.02	N 32 13 55.51 W 103 41 1.49	
	19861.00	91.70	359.34	12115.18	7793.01	7786.76	326.70	1.83	448869.27	742194.35	N 32 13 56.45 W 103 41 1.48	
	19956.00	91.36	0.30	12112.64	7887.92	7881.73	326.40	1.07	448964.23	742194.06	N 32 13 57.39 W 103 41 1.48	
	20051.00	92.88	0.54	12109.13	7982.83	7976.66	327.10	1.62	449059.15	742194.75	N 32 13 58.33 W 103 41 1.47	
	20145.00	92.01	0.33	12105.12	8076.72	8070.57	327.81	0.95	449153.06	742195.47	N 32 13 59.26 W 103 41 1.45	
	20239.00	91.12	359.94	12102.55	8170.65	8164.53	328.03	1.03	449247.02	742195.69	N 32 14 0.19 W 103 41 1.44	
	20334.00	90.81	359.38	12100.95	8265.58	8259.52	327.47	0.67	449342.00	742195.12	N 32 14 1.13 W 103 41 1.44	
	20429.00	90.26	359.79	12100.07	8360.51	8354.51	326.78	0.72	449436.99	742194.44	N 32 14 2.07 W 103 41 1.44	
	20523.00	89.50	358.86	12100.26	8454.43	8448.50	325.67	1.28	449530.98	742193.33	N 32 14 3.00 W 103 41 1.45	
	20617.00	89.43	359.69	12101.14	8548.34	8542.49	324.48	0.89	449624.96	742192.14	N 32 14 3.93 W 103 41 1.46	
	20711.00	90.81	0.37	12100.94	8642.30	8636.49	324.53	1.64	449718.95	742192.19	N 32 14 4.86 W 103 41 1.45	
	20806.00	89.47	359.73	12100.71	8737.26	8731.48	324.62	1.56	449813.94	742192.27	N 32 14 5.80 W 103 41 1.44	
	20900.00	91.39	359.79	12100.01	8831.20	8825.47	324.22	2.04	449907.93	742191.88	N 32 14 6.73 W 103 41 1.44	
	20994.00	91.12	359.63	12097.95	8925.12	8919.45	323.75	0.33	450001.90	742191.40	N 32 14 7.66 W 103 41 1.44	
	21089.00	90.33	359.99	12096.75	9020.06	9014.44	323.43	0.91	450096.89	742191.09	N 32 14 8.60 W 103 41 1.44	
	21184.00	90.12	358.62	12096.37	9114.97	9109.43	322.28	1.46	450191.88	742189.93	N 32 14 9.54 W 103 41 1.44	
	21279.00	90.26	359.30	12096.06	9209.86	9204.42	320.55	0.73	450286.85	742188.21	N 32 14 10.48 W 103 41 1.46	
	21373.00	90.40	359.15	12095.52	9303.77	9298.40	319.28	0.22	450380.84	742186.94	N 32 14 11.41 W 103 41 1.46	
	21468.00	90.50	359.95	12094.77	9398.71	9393.40	318.54	0.85	450475.83	742186.19	N 32 14 12.35 W 103 41 1.47	
	21562.00	91.26	359.61	12093.33	9492.64	9487.39	318.18	0.89	450569.81	742185.83	N 32 14 13.28 W 103 41 1.46	
	21657.00	90.50	359.66	12091.87	9587.57	9582.37	317.57	0.80	450664.79	742185.23	N 32 14 14.22 W 103 41 1.46	
	21751.00	90.05	359.79	12091.42	9681.51	9676.37	317.12	0.50	450758.79	742184.78	N 32 14 15.15 W 103 41 1.46	
	21845.00	90.19	359.28	12091.22	9775.44	9770.37	316.36	0.56	450852.78	742184.01	N 32 14 16.08 W 103 41 1.47	
	21940.00	89.81	357.05	12091.22	9870.26	9865.31	313.32	2.38	450947.72	742180.97	N 32 14 17.02 W 103 41 1.49	
	22034.00	90.22	357.53	12091.19	9963.98	9959.21	308.87	0.67	451041.61	742176.53	N 32 14 17.95 W 103 41 1.54	
	22129.00	89.71	357.86	12091.25	10058.75	10054.13	305.05	0.64	451136.53	742172.71	N 32 14 18.89 W 103 41 1.58	
	22223.00	90.64	357.32	12090.97	10152.51	10148.04	301.10	1.14	451230.44	742168.75	N 32 14 19.82 W 103 41 1.62	
100' FNL												
Crossed	22318.00	91.81	357.27	12088.93	10247.21	10242.91	296.62	1.23	451325.30	742164.27	N 32 14 20.76 W 103 41 1.66	
Final MWD												
Proj to TD	22371.00	91.81	357.27	12087.26	10300.02	10295.83	294.09	0.00	451378.21	742161.75	N 32 14 21.28 W 103 41 1.69	

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	28.400	26.400	G_YD_GC+DROP+OH+Depth Only	Original Borehole / Oxy Mesa Verde WC Unit 3H Gyro + MWD 0-22371'MD
	1	25.000	25.000	Act Stns	28.400	26.400	G_YD_GC+DROP+OH+Depth Only	Original Borehole / Oxy Mesa Verde WC Unit 3H Gyro + MWD 0-2