

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 30-025-45871	Pool Code 98252	Pool Name Mesa Verde; Wolfcamp	KZ
Property Code 320829	Property Name MESA VERDE WC UNIT	Well Number 9H	
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3568.7'	

Surface Location

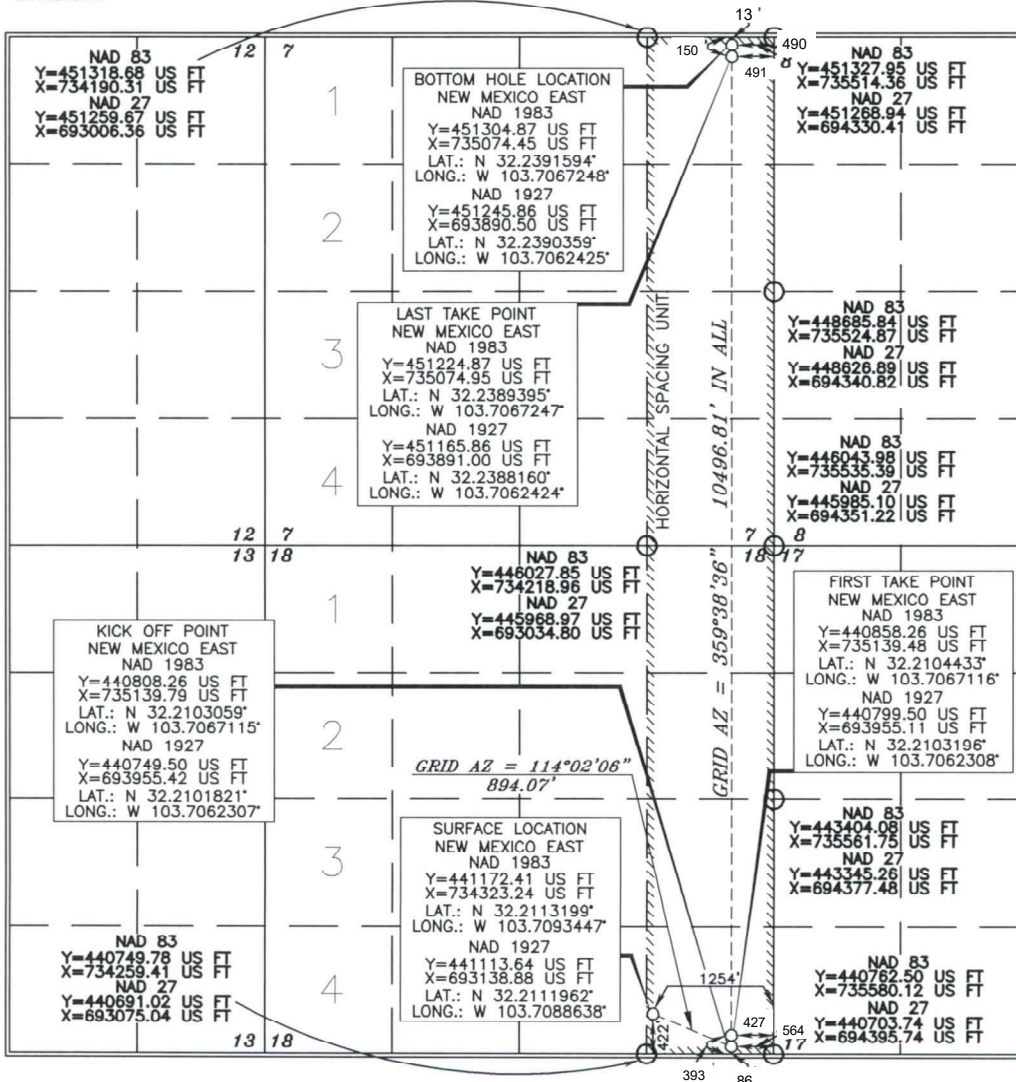
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	24 SOUTH	32 EAST, N.M.P.M.		422'	SOUTH	1254'	EAST	LEA

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
A	7	24 SOUTH	32 EAST, N.M.P.M.		13'	NORTH	490'	EAST	LEA
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.	FTP- 393' FSL 427' FEL LTP- 150' FNL 491' FEL					

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



OPERATOR CERTIFICATION

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

[Signature]
Signature

10/5/20
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.

DECEMBER 27, 2017

Date of Survey

[Signature]
Signature and Seal of Professional Surveyor

Certificate Number

15079

Intent ☐ As Drilled ☒

API # 30-025-45871		
Operator Name: OXY USA INC.	Property Name: MESA VERDE WOLFCAMP UNIT	Well Number 9H

Kick Off Point (KOP)

UL P	Section 18	Township 24S	Range 32E	Lot	Feet 86	From N/S S	Feet 564	From E/W E	County LEA
Latitude 32.21039					Longitude -103.70712			NAD NAD83	

First Take Point (FTP)

UL P	Section 18	Township 24S	Range 32E	Lot	Feet 393	From N/S S	Feet 427	From E/W E	County LEA
Latitude 32.21123					Longitude -103.70667			NAD NAD83	

SL

Last Take Point (LTP)

UL A	Section 7	Township 24S	Range 32E	Lot	Feet 150	From N/S N	Feet 491	From E/W E	County LEA
Latitude 32.23878					Longitude -103.70669			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 10/6/2020 - NMOCD

Schlumberger

August 24, 2020

OXY USA Incorporated
5 Greenway Plaza, Suite 110
Houston, TX 77046

Re:

18, 24S, 32E, Lea NM
N 32.21132 W -103.70934

CLIENT: OXY USA Incorporated
WELL: Mesa Verde WC Unit 9H
FIELD: Wolfcamp

RIG: Pioneer 82
COUNTY: Lea
API NO: 30-025-45871
JOB NO: 20MLH1016

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>
Kelly Snyder FE	Mesa Verde WC Unit 9H Original Hole	947.50 Ft to 22598.00 Ft	February 28, 2020 to August 24, 2020	Slimpulse Xbolt

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

Schlumberger-Private

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)



Well Reference:
18, 24S, 32E, Lea NM
N 32.21132 W -103.70934

I, Kelly Snyder certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of February 28, 2020 through August 24, 2020, conduct or supervise the taking of the Slimpulse & Xbolt surveys from a depth of 947.50 feet to a depth of 22598.00 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 9H Well (Original Hole) API No. 30-025-45871 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 
Kelly Snyder
FE

Subscribed and Sworn to before me this _____ day of _____ (month) _____ (yr)

My Commission expires:

_____- (signature)
Notary Public

(County State)



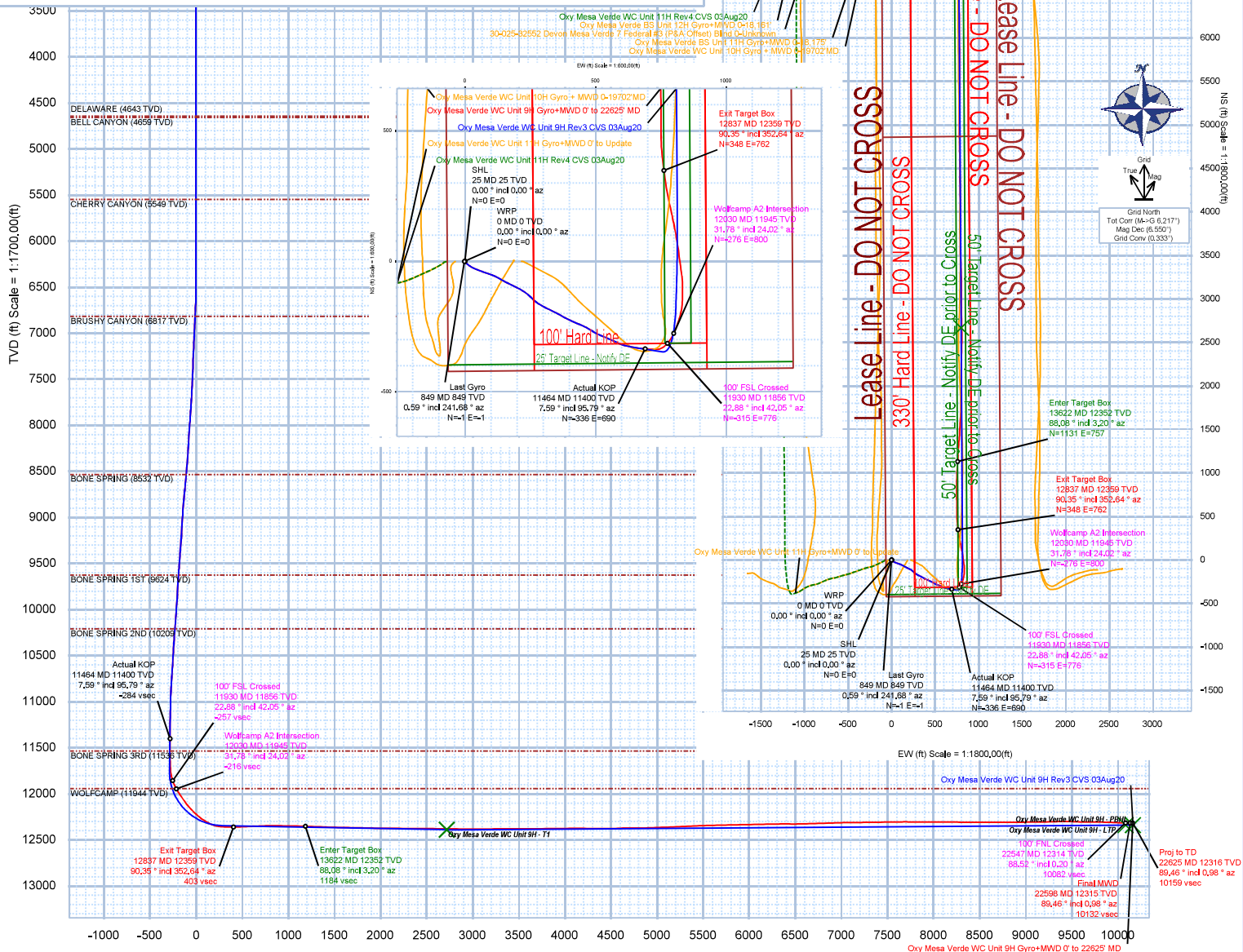
OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Mesa Verde WC Unit 9H	NM Lea County (NAD 83)	Oxy Mesa Verde WC Unit 9H

Gravity & Magnetic Parameters				Surface Location				NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	IFR1	Dip:	59.797°	Date:	11-Aug-2020	Lat:	N 32 12 40.75	Nothing:	441172.41RUS	Grid Conv:	0.3326*	Stot:	Oxy Mesa Verde	TVD Ref:	RKB = 25'(3593.7ft above MSL)
MagDec:	6.55°	FS:	47767.7nT	Gravity FS:	998.43mgn (9.80665 Based)	Lon:	W 103 42 33.64	Easting:	734323.24TRUS	Scale Fact:	0.999995175	Plan:	Oxy Mesa Verde WC Unit 9H	GyrorMWD 0'	to 22625' MID

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	849.10	0.59	241.68	849.09	-1.03	-0.93	-1.39	0.09
Actual KOP	11464.00	7.59	95.79	11400.38	-283.69	-335.65	690.32	1.72
100' FSL Crossed	11930.00	22.88	42.05	11855.97	-256.62	-314.83	775.63	11.94
Wolfcamp A2 Intersection	12030.21	31.78	24.02	11945.00	-216.24	-276.12	799.72	4.64
Exit Target Box	12837.00	90.35	352.64	12359.36	402.97	347.58	762.03	3.11
Enter Target Box	13622.00	88.08	3.20	12351.85	1184.33	1131.45	757.04	1.40
100' FNL Crossed	22547.00	88.52	0.20	12314.32	10081.57	10052.69	762.83	0.30
Final MWD	22598.00	89.46	0.98	12315.42	10132.44	10103.67	763.17	4.58
Proj to TD	22625.00	89.46	0.98	12315.67	10159.40	10130.67	763.63	0.00



Vertical Section (ft) Azim = 4.24° Scale = 1:1700.00(ft) Origin = 0N/-S, 0E/-W



Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to 22625' MD Survey Geodetic Report (Def Survey)

Report Date: August 26, 2020 - 03:47 PM
Client: OXY
Field: NM Lea County (NAD 83)
Structure / Slot: Oxy Mesa Verde WC Unit 9H / Oxy Mesa Verde WC Unit 9H
Well: Oxy Mesa Verde WC Unit 9H
Borehole: Original Borehole
UWI / API#: Unknown / 30425-45871
Survey Name: Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to 22625' MD
Survey Date: July 28, 2020
Tort / AHD / DDI / ERD Ratio: 263,416' / 11345,054 ft / 6,737 / 0,916
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 12' 40.75154", W 103° 42' 33.64088"
Location Grid N/E Y/X: N 441172.410 RUS, E 734323.240 RUS
CRS Grid Convergence Angle: 0,3326°
Grid Scale Factor: 0,99995175
Version / Patch: 2,10,818,0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 4,240° (Grid North)
Vertical Section Origin: 0,000 ft, 0,000 ft
TVD Reference Datum: RKB = 25'
TVD Reference Elevation: 3593,700 ft above MSL
Seabed / Ground Elevation: 3568,700 ft above MSL
Magnetic Declination: 6,550
Total Gravity Field Strength: 988,4300mgn (9,80665 Bases)
Gravity Model: GARM
Total Magnetic Field Strength: 47767,700 nT
Magnetic Dip Angle: 59,797°
Declination Date: August 11, 2020
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0,3326°
Total Corr Mag North-Grid North: 6,2174°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Closure (ft)	Closure Azimuth (°)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
WRP	0,00	0,00	0,00	0,00	0,00	0,00	0,00	N/A	0,00	0,00	441172,41	734323,24	N 32 12 40,75	W 103 42 33,64
SHL	25,00	0,00	0,00	25,00	0,00	0,00	0,00	0,00	0,00	0,00	441172,41	734323,24	N 32 12 40,75	W 103 42 33,64
	40,90	0,10	102,88	40,90	0,00	0,00	0,01	0,63	0,01	102,88	441172,41	734323,25	N 32 12 40,75	W 103 42 33,64
	69,20	0,23	65,36	69,20	0,02	0,02	0,09	0,57	0,09	80,41	441172,43	734323,33	N 32 12 40,75	W 103 42 33,64
	101,90	0,26	69,07	101,90	0,08	0,07	0,22	0,10	0,23	72,46	441172,48	734323,46	N 32 12 40,75	W 103 42 33,64
	131,20	0,25	74,88	131,20	0,13	0,11	0,34	0,09	0,36	72,23	441172,52	734323,58	N 32 12 40,75	W 103 42 33,64
	160,10	0,13	73,07	160,10	0,17	0,17	0,47	0,15	0,47	73,21	441172,55	734323,69	N 32 12 40,75	W 103 42 33,64
	186,90	0,18	84,45	186,90	0,19	0,15	0,54	0,14	0,57	74,46	441172,56	734323,78	N 32 12 40,75	W 103 42 33,63
	211,90	0,14	94,97	211,90	0,20	0,15	0,61	0,20	0,63	76,05	441172,56	734323,85	N 32 12 40,75	W 103 42 33,63
	240,00	0,14	88,49	240,00	0,20	0,15	0,68	0,06	0,70	77,57	441172,56	734323,92	N 32 12 40,75	W 103 42 33,63
	269,00	0,13	89,08	269,00	0,21	0,15	0,75	0,03	0,77	78,56	441172,56	734323,99	N 32 12 40,75	W 103 42 33,63
	300,50	0,10	96,70	300,50	0,21	0,15	0,81	0,11	0,83	79,67	441172,56	734324,05	N 32 12 40,75	W 103 42 33,63
	332,00	0,08	107,94	332,00	0,20	0,14	0,86	0,08	0,87	80,94	441172,55	734324,10	N 32 12 40,75	W 103 42 33,63
	363,50	0,04	125,93	363,50	0,19	0,12	0,89	0,14	0,90	82,07	441172,53	734324,13	N 32 12 40,75	W 103 42 33,63
	395,00	0,05	269,67	395,00	0,18	0,12	0,89	0,27	0,89	82,44	441172,53	734324,13	N 32 12 40,75	W 103 42 33,63
	426,50	0,08	267,87	426,50	0,18	0,12	0,85	0,10	0,86	82,19	441172,53	734324,09	N 32 12 40,75	W 103 42 33,63
	458,00	0,10	245,64	458,00	0,16	0,10	0,80	0,13	0,81	82,59	441172,51	734324,04	N 32 12 40,75	W 103 42 33,63
	489,50	0,13	243,67	489,50	0,13	0,10	0,75	0,10	0,75	84,08	441172,49	734323,99	N 32 12 40,75	W 103 42 33,63
	521,00	0,17	249,51	521,00	0,09	0,05	0,67	0,14	0,57	86,14	441172,46	734323,91	N 32 12 40,75	W 103 42 33,63
	552,50	0,21	252,61	552,50	0,05	0,01	0,57	0,13	0,57	88,84	441172,42	734323,81	N 32 12 40,75	W 103 42 33,63
	584,10	0,25	240,03	584,10	-0,01	-0,04	0,46	0,20	0,46	95,01	441172,37	734323,70	N 32 12 40,75	W 103 42 33,64
	615,60	0,30	250,50	615,60	-0,08	-0,10	0,32	0,22	0,34	107,67	441172,31	734323,56	N 32 12 40,75	W 103 42 33,64
	647,10	0,36	251,35	647,10	-0,15	-0,16	0,15	0,22	0,17	137,32	441172,25	734323,39	N 32 12 40,75	W 103 42 33,64
	678,60	0,40	248,64	678,60	-0,24	-0,24	0,14	0,24	0,19	191,54	441172,18	734323,19	N 32 12 40,75	W 103 42 33,64
	710,10	0,47	246,06	710,10	-0,34	-0,33	-0,27	0,23	0,42	219,49	441172,08	734322,97	N 32 12 40,75	W 103 42 33,64
	741,60	0,49	243,48	741,59	-0,47	-0,44	-0,51	0,09	0,67	229,16	441171,97	734322,73	N 32 12 40,75	W 103 42 33,65
	773,10	0,52	238,97	773,09	-0,63	-0,57	-0,75	0,16	0,94	232,67	441171,84	734322,49	N 32 12 40,75	W 103 42 33,65
	804,60	0,55	240,88	804,59	-0,79	-0,72	-1,00	0,11	1,24	234,40	441171,69	734322,24	N 32 12 40,74	W 103 42 33,65
	849,10	0,59	241,68	849,09	-1,03	-0,93	-1,39	0,08	1,68	236,22	441171,48	734321,85	N 32 12 40,74	W 103 42 33,66
	897,50	0,63	227,62	897,48	-1,70	-1,53	-2,24	0,15	2,72	238,59	441170,88	734321,09	N 32 12 40,74	W 103 42 33,67
	1018,50	0,33	216,29	1018,48	-2,15	-1,96	-2,65	0,44	3,30	233,51	441170,45	734320,59	N 32 12 40,73	W 103 42 33,67
	1109,50	0,04	248,43	1109,48	-2,39	-2,18	-2,84	0,33	3,58	232,40	441170,23	734320,40	N 32 12 40,73	W 103 42 33,67
	1200,50	0,04	348,55	1200,48	-2,37	-2,16	-2,87	0,07	3,60	232,99	441170,25	734320,37	N 32 12 40,73	W 103 42 33,67
	1292,50	0,06	163,69	1292,48	-2,38	-2,18	-2,86	0,11	3,60	232,73	441170,23	734320,38	N 32 12 40,73	W 103 42 33,67
	1381,50	0,06	104,94	1381,48	-2,44	-2,24	-2,81	0,07	3,59	231,45	441170,17	734320,43	N 32 12 40,73	W 103 42 33,67
	1472,50	0,04	340,70	1472,48	-2,42	-2,22	-2,77	0,10	3,55	231,32	441170,19	734320,47	N 32 12 40,73	W 103 42 33,67
	1562,50	0,06	4,30	1562,48	-2,34	-2,14	-2,78	0,03	3,51	232,36	441170,27	734320,46	N 32 12 40,73	W 103 42 33,67
	1657,50	0,04	116,39	1657,48	-2,30	-2,11	-2,74	0,09	3,46	232,48	441170,30	734320,50	N 32 12 40,73	W 103 42 33,67
	1752,50	0,01	350,08	1752,48	-2,31	-2,11	-2,72	0,05	3,44	232,11	441170,30	734320,52	N 32 12 40,73	W 103 42 33,67
	1847,50	0,04	335,42	1847,48	-2,27	-2,07	-2,73	0,03	3,43	232,77	441170,34	734320,51	N 32 12 40,73	W 103 42 33,67
	1942,50	0,08	193,06	1942,48	-2,28	-2,08	-2,70	0,12	3,41	232,22	441169,84	734320,54	N 32 12 40,73	W 103 42 33,67
	2037,50	0,04	284,90	2037,48	-2,32	-2,13	-2,68	0,12	3,42	231,56	441170,28	734320,56	N 32 12 40,73	W 103 42 33,67
	2132,50	0,06	207,91	2132,48	-2,36	-2,16	-2,74	0,07	3,49	231,67	441170,25	734320,51	N 32 12 40,73	W 103 42 33,67
	2227,50	0,06	229,86	2227,48	-2,44	-2,24	-2,80	0,02	3,58	231,33	441170,17	734320,44	N 32 12 40,73	W 103 42 33,67
	2322,50	0,05	202,68	2322,48	-2,51	-2,31	-2,85	0,03	3,67	231,00	441170,10	734320,39	N 32 12 40,73	W 103 42 33,67
	2417,50	0,06	280,01	2417,48	-2,55	-2,34	-2,91	0,04	3,73	231,17	441169,97	734320,33	N 32 12 40,73	W 103 42 33,67
	2511,50	0,06	266,35	2511,48	-2,55	-2,34	-3,00	0,02	3,60	232,07	441170,07	734320,24	N 32 12 40,73	W 103 42 33,68
	2606,50	0,02	111,32	2606,48	-2,56	-2,34	-3,03	0,08	3,83	232,27	441170,07	734320,21	N 32 12 40,73	W 103 42 33,68
	2701,50	0,06	290,94	2701,48	-2,55	-2,33	-3,06	0,08	3,85	232,69	441170,08	734320,18	N 32 12 40,73	W 103 42 33,68
	2796,50	0,06	225,50	2796,48	-2,58	-2,35	-3,14	0,07	3,93	233,22	441170,06	734320,10	N 32 12 40,73	W 103 42 33,68
	2891,50	0,09	183,64	2891,48	-2,69	-2,45	-3,15	0,06	4,02	232,32	441169,95	734320,06	N 32 12 40,73	W 103 42 33,68
	2986,50	0,06	130,80	2986,48	-2,57	-2,35	-3,08	0,08	4,06	230,84	441169,84	734320,09	N 32 12 40,73	W 103 42 33,68
	3081,50	0,06	234,24	3081,48	-2,85	-2,63	-3,18	0,10	4,11	230,20	441169,78	734320,09	N 32 12 40,73	W 103 42 33,68
	3176,50	0,04	86,76	3176,48	-2,88	-2,66	-3,16	0,10	4,13	229,97	441169,75	734320,08	N 32 12 40,73	W 103 42 33,68
	3271,50	0,12	2,71	3271,48	-2,78	-2,55	-3,12	0,13	4,03	230,73	441169,86	734320,12	N 32 12 40,73	W 103 42 33,68
	3366,50	0,06	128,09	3366,48	-2,71	-2,49	-3,08	0,17	3,96	231,09	441169,92	734320,16	N 32 12 40,73	W 103 42 33,68
	3461,50	0,04	152,60	3461,48	-2,75	-2,53	-3,04	0,08	4,03	230,16	441169,88	734320,21	N 32 12 40,73	W 103 42 33,68
	3556,50	0,09	203,92	3556,48	-2,81	-2,59	-3,06	0,08	4,02	229,48	441169,80	734320,18	N 32 12 40,73	W 103 42 33,68
	3651,50	0,06	77,85	3651,48	-2,89	-2,67	-3,04	0,14	4,04	228,66	441169,74	734320,20	N 32 12 40,73	W 103 42 33,68
	3746,50	0,08	36,66	3746,48	-2,82	-2,61	-2,95	0,06	3,94	228,51	441169,80	734320,29	N 32 12 40,73	W 103 42 33,68
	3841,50	0,08	167,33	3841,48	-2,83	-2,62	-2,89	0,15	3,90	227,86	441169,79	734320,35	N 32 12 40,73	W 103 42 33,67
	3936,50	0,04	158,21	3936,48	-2,82	-2,71	-2,87	0,04	3,95	226,57	441169,70	734320,37	N 32 12 40,72	W 103 42 33,67
	4030,50	0,05	291,09	4030,48	-2,72	-2,52	-2,92	0,12	3,99	226,69	441169,68	734320,32	N 32 12 40,72	W 103 42 33,68
	4125,50	0,05	120,63	4125,48	-2,93	-2,72	-2,94	0,14	4,01	227,27	441169,69	734320,30	N 32 12 40,72	W 103 42 33,68
	4220,50	0,02	163,77	4220,48	-2,96	-2,76	-2,90	0,04	4,00	226,49	441169,65	734320,34	N 32 12 40,72	W 103 42 33,67
	4315,50	0,04	193,17	4315,48	-3,01	-2,80	-2,91	0,03	4,04	226,02	441169,61	734320,33	N 32 12 40,72	W

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Closure (ft)	Closure Azimuth (°)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Actual KOP	8187.50	9.25	115.27	8172.37	-82.72	-97.05	190.13	0.22	213.47	117.04	441075.37	734513.36	N 32 12 39.78	W 103 42 31.43
	8282.50	9.16	116.65	8266.15	-88.35	-103.70	203.80	0.25	228.66	116.97	441068.72	734527.03	N 32 12 39.71	W 103 42 31.28
	8472.50	9.03	125.33	8453.77	-101.81	-119.10	229.48	0.72	258.55	117.43	441053.31	734552.71	N 32 12 39.56	W 103 42 30.98
	8611.50	9.09	134.17	8640.42	-119.05	-138.09	252.29	0.74	287.61	118.69	441033.33	734575.52	N 32 12 39.37	W 103 42 30.71
	8756.50	9.09	131.69	8734.23	-128.43	-148.31	263.28	0.41	302.17	119.39	441024.11	734586.50	N 32 12 39.27	W 103 42 30.51
	8851.50	9.14	127.07	8828.03	-137.09	-157.84	274.90	0.77	316.99	119.86	441011.57	734598.13	N 32 12 39.17	W 103 42 30.45
	8946.50	9.04	121.92	8921.84	-144.65	-166.34	287.25	0.86	331.94	120.07	441006.08	734610.48	N 32 12 39.09	W 103 42 30.31
	9136.50	9.40	114.94	9109.39	-157.06	-180.77	313.99	0.62	362.32	119.93	440991.54	734637.22	N 32 12 38.94	W 103 42 30.00
	9326.50	9.88	116.83	9296.71	-168.81	-194.67	342.61	0.30	394.06	119.61	440977.75	734665.83	N 32 12 38.81	W 103 42 29.67
	9421.50	10.36	118.35	9390.23	-175.43	-202.41	357.40	0.58	410.74	119.52	440970.01	734680.62	N 32 12 38.73	W 103 42 29.49
	9516.50	10.35	120.20	9483.68	-182.86	-210.78	372.29	0.35	427.81	119.51	440961.86	734695.52	N 32 12 38.64	W 103 42 29.32
	9614.50	10.26	117.21	9580.10	-189.92	-219.18	374.78	0.55	445.33	119.49	440953.24	734710.88	N 32 12 38.56	W 103 42 29.14
	9804.50	10.43	113.36	9767.01	-202.15	-233.73	418.50	0.37	479.35	119.18	440938.69	734741.72	N 32 12 38.41	W 103 42 28.79
	9994.50	10.30	112.63	9953.91	-213.14	-247.09	449.97	0.10	513.35	118.77	440925.33	734773.19	N 32 12 38.28	W 103 42 28.42
	10089.50	9.92	118.35	10047.44	-219.17	-254.24	465.01	1.13	529.98	118.67	440918.18	734788.23	N 32 12 38.21	W 103 42 28.25
	10184.50	10.16	121.52	10140.99	-226.35	-262.51	479.35	0.63	546.53	118.71	440909.91	734802.57	N 32 12 38.13	W 103 42 28.08
	10279.50	10.69	122.10	10234.42	-234.31	-271.57	493.99	0.57	563.69	118.80	440900.85	734817.18	N 32 12 38.04	W 103 42 27.91
	10374.50	10.33	114.77	10327.83	-237.04	-279.82	509.16	1.46	580.99	118.79	440892.60	734832.37	N 32 12 37.95	W 103 42 27.73
	10468.50	10.35	112.68	10420.30	-247.04	-286.61	524.60	0.40	597.79	118.65	440885.81	734847.82	N 32 12 37.89	W 103 42 27.55
	10563.50	10.52	112.16	10513.73	-252.41	-293.17	540.51	0.20	614.90	118.48	440879.25	734863.72	N 32 12 37.82	W 103 42 27.37
10753.50	10.43	115.87	10700.57	-264.08	-307.22	572.05	0.36	649.32	118.24	440865.21	734895.26	N 32 12 37.68	W 103 42 27.02	
10848.50	10.37	113.12	10794.01	-270.02	-314.33	587.65	0.53	666.43	118.14	440858.10	734910.86	N 32 12 37.61	W 103 42 26.82	
10943.50	10.26	108.45	10845.47	-274.53	-320.47	603.43	0.97	683.31	117.97	440846.72	734926.23	N 32 12 37.50	W 103 42 26.64	
11038.50	10.34	102.58	10980.95	-278.32	-325.03	619.84	1.20	699.89	117.67	440847.39	734943.05	N 32 12 37.50	W 103 42 26.45	
11133.50	10.28	102.49	11074.41	-280.77	-328.72	636.44	0.07	716.32	117.32	440843.70	734959.65	N 32 12 37.46	W 103 42 26.26	
11228.50	10.17	98.50	11167.90	-282.61	-331.80	653.01	0.75	732.47	116.94	440840.63	734976.22	N 32 12 37.43	W 103 42 26.06	
11369.00	9.21	94.22	11306.40	-283.52	-334.46	676.49	0.85	754.65	116.31	440837.97	734999.70	N 32 12 37.40	W 103 42 25.79	
11464.00	7.59	95.79	11400.38	-283.69	-335.68	690.32	1.72	787.59	115.93	440836.78	735013.52	N 32 12 37.39	W 103 42 25.63	
11559.00	9.26	95.68	11494.26	-284.05	-337.04	704.16	1.76	790.67	115.80	440835.35	735027.37	N 32 12 37.38	W 103 42 25.47	
11653.00	10.36	89.13	11586.98	-283.69	-337.66	720.14	1.67	795.37	115.12	440834.77	735043.35	N 32 12 37.37	W 103 42 25.28	
11716.00	9.34	91.23	11649.05	-282.72	-337.68	730.92	1.72	805.15	114.80	440834.74	735054.12	N 32 12 37.37	W 103 42 25.16	
11747.00	8.78	91.72	11679.66	-282.48	-337.81	735.80	1.82	809.64	114.66	440834.62	735059.00	N 32 12 37.37	W 103 42 25.10	
11842.00	14.87	63.63	11772.67	-275.94	-332.80	754.00	8.65	824.10	113.80	440839.83	735077.20	N 32 12 37.42	W 103 42 24.89	
11930.00	22.98	42.05	11855.97	-286.62	-314.83	775.63	11.94	837.09	112.09	440857.59	735098.84	N 32 12 37.56	W 103 42 24.63	
11936.00	23.50	41.12	11861.48	-254.74	-313.06	777.20	11.94	837.89	111.94	440859.36	735100.40	N 32 12 37.61	W 103 42 24.62	
12030.00	31.77	24.03	11944.82	-216.34	-276.22	799.68	12.11	846.04	109.06	440896.20	735122.88	N 32 12 37.97	W 103 42 24.35	
12030.21	31.78	24.02	11945.00	-216.24	-276.12	799.72	4.64	846.05	109.05	440896.30	735122.92	N 32 12 37.97	W 103 42 24.35	
12125.00	35.16	18.92	12024.07	-166.33	-227.48	818.74	4.64	849.76	105.53	440944.94	735141.94	N 32 12 38.45	W 103 42 24.13	
12218.00	36.23	6.28	12100.52	-112.31	-174.19	830.57	7.92	846.64	101.84	440996.23	735153.77	N 32 12 38.98	W 103 42 23.99	
12314.00	44.40	359.90	12172.93	-50.98	-112.92	833.59	9.63	841.21	97.71	441005.49	735166.79	N 32 12 39.59	W 103 42 23.85	
12408.00	49.76	352.65	12236.96	17.05	-44.36	828.94	8.02	830.12	93.06	441128.06	735152.14	N 32 12 40.26	W 103 42 24.00	
12503.00	57.57	352.37	12293.20	91.92	31.46	818.96	8.22	819.56	87.80	441203.87	735142.16	N 32 12 41.02	W 103 42 24.11	
12598.00	69.52	349.29	12335.46	174.46	115.24	805.32	12.91	813.52	81.86	441287.54	735128.52	N 32 12 41.85	W 103 42 24.26	
12692.00	85.92	347.18	12355.38	262.43	204.84	786.60	17.58	812.83	75.40	441377.24	735109.80	N 32 12 42.73	W 103 42 24.47	
12781.00	89.41	351.40	12359.26	354.11	298.07	768.97	3.76	812.71	69.81	441470.46	735092.17	N 32 12 43.62	W 103 42 24.67	
12837.00	90.35	352.64	12359.36	402.97	347.58	762.03	1.11	837.56	65.48	441519.98	735085.23	N 32 12 44.15	W 103 42 24.75	
12881.00	91.17	353.74	12358.78	446.15	391.27	756.82	3.11	851.98	62.66	441563.66	735080.02	N 32 12 44.58	W 103 42 24.81	
12976.00	93.00	359.21	12355.32	540.18	485.99	750.98	6.07	894.51	57.09	441658.37	735074.18	N 32 12 45.52	W 103 42 24.87	
13070.00	92.09	0.25	12351.15	633.79	579.89	750.54	1.47	948.46	52.31	441752.27	735073.74	N 32 12 46.45	W 103 42 24.87	
13121.00	92.70	358.87	12349.02	684.58	630.84	750.15	2.96	980.14	49.94	441803.22	735073.35	N 32 12 46.95	W 103 42 24.87	
13215.00	91.36	323.45	12345.69	773.07	724.78	747.89	1.48	1041.51	45.80	441897.19	735071.51	N 32 12 47.82	W 103 42 24.89	
13310.00	88.82	359.75	12345.54	872.69	819.73	746.52	2.98	1108.72	42.32	441992.10	735069.73	N 32 12 48.82	W 103 42 24.90	
13404.00	89.05	1.87	12347.28	966.50	913.70	747.85	2.27	1180.74	39.30	442086.07	735071.06	N 32 12 49.75	W 103 42 24.87	
13499.00	88.24	2.33	12348.70	1061.42	1008.63	751.33	0.52	1257.71	36.68	442180.99	735074.54	N 32 12 50.69	W 103 42 24.83	
13593.00	88.10	2.79	12350.88	1155.35	1102.51	755.53	1.31	1336.54	34.42	442274.86	735078.73	N 32 12 51.62	W 103 42 24.77	
13622.00	88.00	3.20	12351.35	1251.45	1211.45	757.49	1.40	1361.36	33.79	442368.33	735081.45	N 32 12 52.55	W 103 42 24.7	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Closure (ft)	Closure Azimuth (°)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	21436.00	90.89	0.63	12307.13	8973.87	8942.05	761.41	1.11	8974.40	4.87	450114.01	735084.62	N 32 14 9.19	W 103 42 24.17
	21531.00	90.68	0.23	12305.83	9068.65	9037.03	762.13	0.48	9069.11	4.82	450208.99	735085.33	N 32 14 10.13	W 103 42 24.16
	21625.00	90.64	0.32	12304.74	9162.42	9131.03	762.58	0.10	9162.81	4.77	450302.98	735085.78	N 32 14 11.06	W 103 42 24.15
	21720.00	90.67	0.19	12303.66	9257.18	9226.02	763.00	0.14	9257.52	4.73	450397.97	735086.20	N 32 14 12.00	W 103 42 24.13
	21814.00	92.80	0.22	12300.81	9350.90	9319.97	763.34	2.27	9351.18	4.68	450491.91	735086.54	N 32 14 12.93	W 103 42 24.12
	21909.00	89.02	359.82	12299.30	9445.61	9414.94	763.37	4.00	9445.84	4.64	450586.88	735086.57	N 32 14 13.87	W 103 42 24.12
	22004.00	87.23	359.53	12302.41	9540.26	9509.88	762.83	1.91	9540.43	4.59	450681.82	735086.03	N 32 14 14.81	W 103 42 24.12
	22097.00	88.68	359.98	12305.73	9632.91	9602.82	762.43	1.63	9633.04	4.54	450774.75	735085.64	N 32 14 15.73	W 103 42 24.12
	22192.00	90.87	0.47	12306.10	9727.67	9697.81	762.81	2.36	9727.77	4.50	450869.74	735086.01	N 32 14 16.67	W 103 42 24.10
	22287.00	88.50	359.75	12306.63	9822.41	9792.80	762.99	2.61	9822.48	4.46	450964.72	735086.19	N 32 14 17.61	W 103 42 24.10
	22381.00	87.85	359.61	12309.62	9916.07	9886.75	762.46	0.71	9916.11	4.41	451058.67	735085.67	N 32 14 18.54	W 103 42 24.10
	22476.00	96.62	0.39	12312.55	10010.76	9981.71	762.46	1.15	10010.79	4.37	451153.62	735085.67	N 32 14 19.48	W 103 42 24.09
100' FNL Crossed	22547.00	88.52	0.20	12314.32	10081.57	10052.69	762.83	0.30	10081.59	4.34	451224.59	735086.03	N 32 14 20.18	W 103 42 24.08
	22570.00	88.49	0.14	12314.92	10104.51	10075.68	762.90	0.30	10104.52	4.33	451247.58	735086.10	N 32 14 20.41	W 103 42 24.08
Final MWD	22598.00	89.46	0.98	12315.42	10132.44	10103.67	763.17	4.58	10132.45	4.32	451275.57	735086.37	N 32 14 20.68	W 103 42 24.07
Proj to TD	22625.00	89.46	0.98	12315.67	10159.40	10130.67	763.63	0.00	10159.41	4.31	451302.57	735086.84	N 32 14 20.95	W 103 42 24.07

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 (in)	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 9H Gyro+MWD 0' to 22625' MD
	1	25.000	25.000	Act Stns	26.400	26.400	GYD_GC+DROP+OH+Depth Only	Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to 22625' MD
	1	25.000	849.100	Act Stns	26.400	26.400	GYD_GC+DROP+OH	Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to
	1	849.100	11228.500	Act Stns	26.400	26.400	A010Mb_MWD+HFR1+SAG+MS	Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to
	1	11228.500	11716.000	Act Stns	26.400	26.400	B001Mb_MWD+HRGM	Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to
	1	11716.000	22625.000	Act Stns	26.400	26.400	A010Mb_MWD+HFR1+SAG+MS	Original Borehole / Oxy Mesa Verde WC Unit 9H Gyro+MWD 0' to 22625' MD