

RECEIVED

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

JAN 23 2020

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 30-015-45334	Pool Code 98236	Pool Name Wildcat Wolfcamp
Property Code 321632	Property Name IRIDIUM MDP1 "28-21" FEDERAL COM	
OGRID No. 16696	Operator Name OXY USA INC.	Well Number 176H
		Elevation 3403.1'

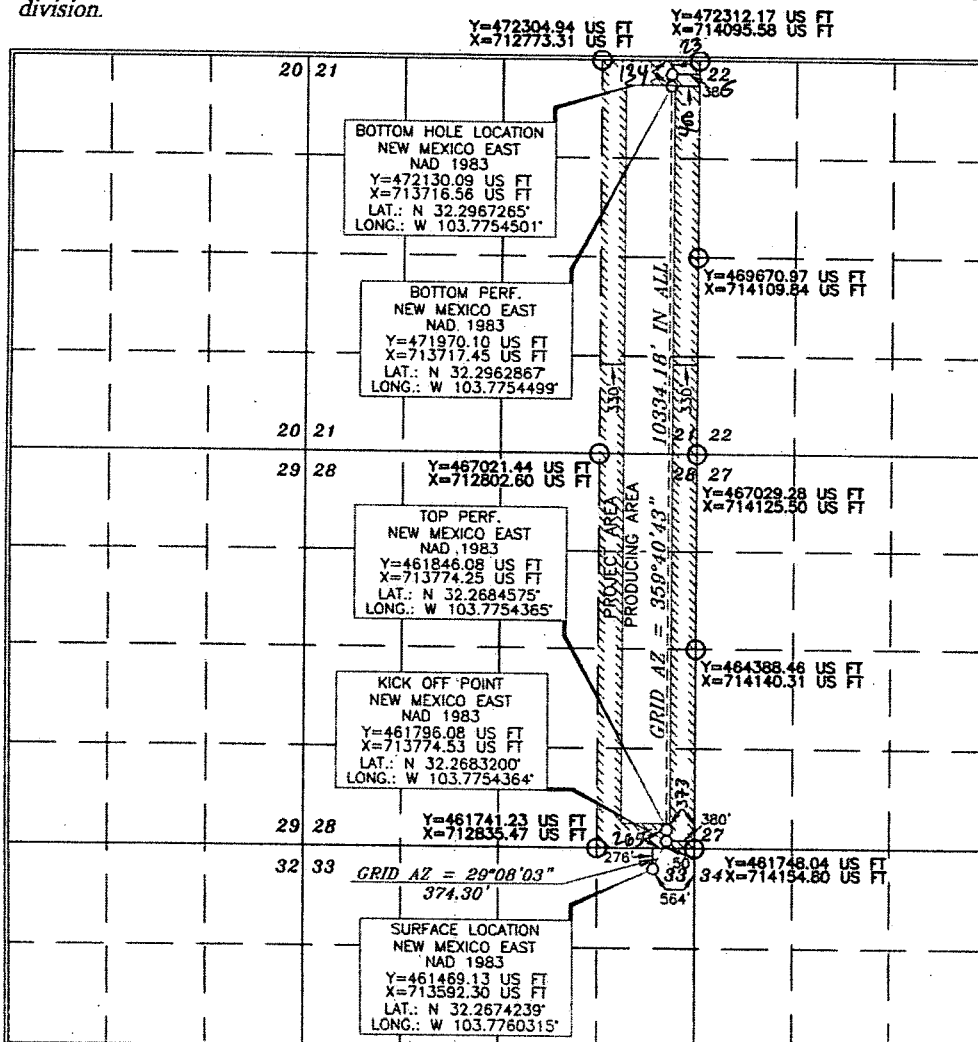
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	23 SOUTH	31 EAST, N.M.P.M.		276'	NORTH	564'	EAST	EDDY

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
A	21	23 SOUTH	31 EAST, N.M.P.M.		180' 23	NORTH	380' 385	EAST	EDDY
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.	FTP- 265 FSL 373 FEL (P, Sec. 28) LTP- 134 FAL 400 FEL (A, Sec. 21)					

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] 1/21/20
Date
Jana Mendida
Printed Name
janalyn_mendida@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

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

[Signature]
Date of Survey
JANUARY 31, 2018
Signature and Seal of Professional Land Surveyor
Certificate Number 15079

WO# 180131WL-f-XY (KA)

RECEIVED**JAN 23 2020****EMNRD-OCD ARTESIA**Intent ☐ As Drilled ☒API #
30-015-45334Operator Name:
OXY USA INC.Property Name:
IRIDIUM MDP1 28-21 FEDERAL COMWell Number
176H

Kick Off Point (KOP)

UL P	Section 28	Township 23S	Range 31E	Lot	Feet 97	From N/S S	Feet 404	From E/W E	County EDDY
Latitude 32.26639					Longitude -103.77552			NAD NAD83	

First Take Point (FTP)

UL P	Section 28	Township 23S	Range 31E	Lot	Feet 265	From N/S S	Feet 373	From E/W E	County EDDY
Latitude 32.26891					Longitude -103.77540			NAD NAD83	

Last Take Point (LTP)

UL A	Section 21	Township 23S	Range 31E	Lot	Feet 134	From N/S N	Feet 400	From E/W E	County EDDY
Latitude 32.29685					Longitude -103.77532			NAD NAD83	

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:

Property Name:

Well Number

KZ 06/29/2018



Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700'MD

Survey Geodetic Report

(Def Survey)

Report Date: November 14, 2019 - 02:10 PM Client: OXY Field: NM Eddy County (NAD 83) Structure / Slot: Oxy Iridium MDP1 28-21 Federal Com 176H / Oxy Iridium MDP1 28-21 Federal Com 176H Well: Oxy Iridium MDP1 28-21 Federal Com 176H Borehole: Original Borehole UWI / API#: Unknown / 30-015-45334 Survey Name: Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700'MD Survey Date: September 29, 2019 Tort / AHD / DDI / ERD Ratio: 351.497' / 11890.308 ft / 6.899 / 0.992 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet Location Lat / Long: N 32° 16' 2.72617", W 103° 46' 33.71331" Location Grid N/E Y/X: N 461469.130 ftUS, E 713592.300 ftUS CRS Grid Convergence Angle: 0.2975° Grid Scale Factor: 0.99994307 Version / Patch: 2.10.782.0	Survey / DLS Computation: Minimum Curvature / Lubinski Vertical Section Azimuth: 0.668° (Grid North) Vertical Section Origin: 0.000 ft, 0.000 ft TVD Reference Datum: RKB=30' TVD Reference Elevation: 3433.100 ft above MSL Seabed / Ground Elevation: 3403.100 ft above MSL Magnetic Declination: 6.754° Total Gravity Field Strength: 998.4485mgn (9.80665 Based) Gravity Model: GARM Total Magnetic Field Strength: 47927.300 nT Magnetic Dip Angle: 59.942° Declination Date: October 28, 2019 Magnetic Declination Model: IFR1 North Reference: Grid North Grid Convergence Used: 0.2975° Total Corr Mag North->Grid North: 6.4565° Local Coord Referenced To: Well Head
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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 ° ' ")
RKB	0.00	0.00	0.65	0.00	0.00	0.00	0.00	N/A	461469.13	713592.30	N 32 16 2.73 W 103 46 33.71	
SHL	30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	461469.13	713592.30	N 32 16 2.73 W 103 46 33.71	
	134.50	0.02	301.19	134.50	0.01	0.01	-0.02	0.02	461469.14	713592.28	N 32 16 2.73 W 103 46 33.71	
	164.50	0.03	308.25	164.50	0.02	0.02	-0.03	0.03	461469.15	713592.27	N 32 16 2.73 W 103 46 33.71	
	190.50	0.01	294.05	190.50	0.02	0.02	-0.03	0.08	461469.15	713592.27	N 32 16 2.73 W 103 46 33.71	
	217.50	0.03	73.91	217.50	0.02	0.03	-0.03	0.14	461469.16	713592.27	N 32 16 2.73 W 103 46 33.71	
	248.50	0.06	166.60	248.50	0.01	0.01	-0.02	0.22	461469.14	713592.28	N 32 16 2.73 W 103 46 33.71	
	278.50	0.10	103.60	278.50	-0.01	-0.01	0.01	0.30	461469.12	713592.31	N 32 16 2.73 W 103 46 33.71	
	310.50	0.13	183.62	310.50	-0.05	-0.05	0.04	0.47	461469.08	713592.34	N 32 16 2.73 W 103 46 33.71	
	341.50	0.17	121.62	341.50	-0.11	-0.11	0.07	0.51	461469.02	713592.37	N 32 16 2.73 W 103 46 33.71	
	373.50	0.19	138.26	373.50	-0.17	-0.18	0.15	0.17	461468.95	713592.45	N 32 16 2.72 W 103 46 33.71	
	408.50	0.25	153.39	408.50	-0.29	-0.29	0.22	0.24	461468.84	713592.52	N 32 16 2.72 W 103 46 33.71	
	436.50	0.31	152.24	436.50	-0.41	-0.41	0.28	0.22	461468.72	713592.58	N 32 16 2.72 W 103 46 33.71	
	467.50	0.35	147.85	467.50	-0.56	-0.56	0.37	0.15	461468.57	713592.67	N 32 16 2.72 W 103 46 33.71	
	499.50	0.38	147.28	499.50	-0.73	-0.74	0.48	0.09	461468.39	713592.78	N 32 16 2.72 W 103 46 33.71	
	530.50	0.40	153.65	530.50	-0.91	-0.92	0.59	0.15	461468.21	713592.89	N 32 16 2.72 W 103 46 33.71	
	550.50	0.57	166.37	550.50	-1.07	-1.08	0.64	1.00	461468.05	713592.94	N 32 16 2.72 W 103 46 33.71	
	665.00	0.08	171.84	664.99	-1.70	-1.71	0.79	0.43	461467.42	713593.09	N 32 16 2.71 W 103 46 33.70	
	755.00	0.13	178.79	754.99	-1.87	-1.88	0.80	0.06	461467.25	713593.10	N 32 16 2.71 W 103 46 33.70	
	846.00	0.06	158.67	845.99	-2.01	-2.02	0.82	0.08	461467.11	713593.12	N 32 16 2.71 W 103 46 33.70	
	936.00	0.08	354.39	935.99	-1.99	-2.00	0.83	0.15	461467.13	713593.13	N 32 16 2.71 W 103 46 33.70	
	1027.00	0.01	76.76	1026.99	-1.93	-1.94	0.83	0.09	461467.19	713593.13	N 32 16 2.71 W 103 46 33.70	
	1117.00	0.06	130.38	1116.99	-1.96	-1.97	0.87	0.06	461467.16	713593.17	N 32 16 2.71 W 103 46 33.70	
	1208.00	0.08	246.74	1207.99	-2.01	-2.02	0.85	0.13	461467.11	713593.15	N 32 16 2.71 W 103 46 33.70	
	1298.00	0.05	291.86	1297.99	-2.03	-2.03	0.76	0.06	461467.10	713593.06	N 32 16 2.71 W 103 46 33.70	
	1393.00	0.08	193.75	1392.99	-2.08	-2.08	0.70	0.11	461467.05	713593.00	N 32 16 2.71 W 103 46 33.70	
	1487.00	0.13	138.08	1486.99	-2.22	-2.23	0.76	0.11	461466.90	713593.06	N 32 16 2.70 W 103 46 33.70	
	1582.00	0.12	214.38	1581.99	-2.38	-2.39	0.77	0.16	461466.74	713593.07	N 32 16 2.70 W 103 46 33.70	
	1677.00	0.13	76.84	1676.99	-2.44	-2.45	0.82	0.25	461466.68	713593.12	N 32 16 2.70 W 103 46 33.70	
	1771.00	0.05	341.21	1770.99	-2.37	-2.38	0.91	0.15	461466.75	713593.21	N 32 16 2.70 W 103 46 33.70	
	1866.00	0.14	278.36	1865.99	-2.32	-2.33	0.79	0.13	461466.80	713593.09	N 32 16 2.70 W 103 46 33.70	
	1961.00	0.08	54.99	1960.99	-2.26	-2.27	0.73	0.22	461466.86	713593.03	N 32 16 2.70 W 103 46 33.71	
	2055.00	0.01	203.72	2054.99	-2.23	-2.24	0.78	0.09	461466.89	713593.08	N 32 16 2.70 W 103 46 33.70	
	2150.00	0.05	329.25	2149.99	-2.21	-2.21	0.75	0.06	461466.92	713593.05	N 32 16 2.70 W 103 46 33.70	
	2244.00	0.12	329.01	2243.99	-2.09	-2.09	0.68	0.07	461467.04	713592.98	N 32 16 2.71 W 103 46 33.71	
	2339.00	0.01	208.92	2338.99	-2.01	-2.02	0.62	0.13	461467.11	713592.92	N 32 16 2.71 W 103 46 33.71	
	2433.00	0.09	4.33	2432.99	-1.94	-1.95	0.63	0.11	461467.18	713592.93	N 32 16 2.71 W 103 46 33.71	
	2528.00	0.13	66.91	2527.99	-1.82	-1.83	0.73	0.13	461467.30	713593.03	N 32 16 2.71 W 103 46 33.70	
	2623.00	0.37	190.87	2622.99	-2.08	-2.09	0.77	0.48	461467.04	713593.07	N 32 16 2.71 W 103 46 33.70	
	2717.00	0.80	186.76	2716.99	-3.03	-3.04	0.64	0.46	461466.09	713592.94	N 32 16 2.70 W 103 46 33.71	
	2812.00	1.62	195.98	2811.97	-4.99	-4.99	0.19	0.88	461464.14	713592.49	N 32 16 2.68 W 103 46 33.71	
	2907.00	2.73	198.80	2906.90	-8.43	-8.42	-0.91	1.17	461460.71	713591.39	N 32 16 2.64 W 103 46 33.72	
	3001.00	4.09	197.75	3000.73	-13.77	-13.74	-2.65	1.45	461455.39	713589.65	N 32 16 2.59 W 103 46 33.75	
	3096.00	5.31	197.42	3095.41	-21.21	-21.16	-5.00	1.28	461447.97	713587.30	N 32 16 2.52 W 103 46 33.77	
	3191.00	5.70	194.84	3189.97	-30.00	-29.91	-7.53	0.49	461439.22	713584.77	N 32 16 2.43 W 103 46 33.80	
	3286.00	5.63	190.55	3284.50	-39.16	-39.05	-9.59	0.45	461430.08	713582.71	N 32 16 2.34 W 103 46 33.83	
	3380.00	4.42	192.48	3378.14	-47.25	-47.12	-11.21	1.30	461422.01	713581.09	N 32 16 2.26 W 103 46 33.85	
	3475.00	3.51	184.71	3472.91	-53.74	-53.60	-12.24	1.11	461415.54	713580.06	N 32 16 2.20 W 103 46 33.86	
	3570.00	3.88	167.27	3567.72	-59.76	-59.63	-11.77	1.24	461409.50	713580.53	N 32 16 2.14 W 103 46 33.85	
	3664.00	2.03	146.45	3661.59	-64.23	-64.12	-10.15	2.24	461405.01	713582.15	N 32 16 2.09 W 103 46 33.84	
	3759.00	0.13	103.81	3756.57	-65.65	-65.55	-9.12	2.04	461403.59	713583.18	N 32 16 2.08 W 103 46 33.82	
	3854.00	0.13	94.14	3851.57	-65.68	-65.58	-8.91	0.02	461403.55	713583.39	N 32 16 2.08 W 103 46 33.82	
	3948.00	0.12	175.31	3945.57	-65.79	-65.69	-8.79	0.17	461403.45	713583.51	N 32 16 2.08 W 103 46 33.82	
	4043.00	0.08	114.40	4040.57	-65.91	-65.81	-8.72	0.11	461403.32	713583.58	N 32 16 2.08 W 103 46 33.82	
	4137.00	0.01	324.02	4134.57	-65.93	-65.83	-8.67	0.09	461403.30	713583.63	N 32 16 2.08 W 103 46 33.82	
	4232.00	0.12	31.51	4229.57	-65.84	-65.74	-8.62	0.12	461403.39	713583.68	N 32 16 2.08 W 103 46 33.82	
	4286.00	0.05	103.11	4283.57	-65.80	-65.70	-8.57	0.21	461403.43	713583.73	N 32 16 2.08 W 103 46 33.82	
	4468.00	0.09	162.60	4465.57	-65.95	-65.85	-8.45	0.04	461403.28	713583.85	N 32 16 2.07 W 103 46 33.82	
	4499.00	0.12	287.34	4496.57	-65.96	-65.87	-8.47	0.60	461403.27	713583.83	N 32 16 2.07 W 103 46 33.82	
	4594.00	0.11	259.81	4591.57	-65.95	-65.85	-8.66	0.06	461403.28	713583.64	N 32 16 2.07 W 103 46 33.82	
	4688.00	0.14	295.89	4685.57	-65.92	-65.82	-8.85	0.09	461403.31	713583.45	N 32 16 2.08 W 103 46 33.82	
	4783.00	0.14	254.92	4780.57	-65.90	-65.80	-9.07	0.10	461403.33	713583.23	N 32 16 2.08 W 103 46 33.82	
	4878.00	0.13	138.29	4875.57	-66.01	-65.91	-9.11	0.24	461403.22	713583.19	N 32 16 2.07 W 103 46 33.82	
	4972.00	0.10	64.70	4969.57	-66.06	-65.96	-8.96	0.15	461403.18	713583.34	N 32 16 2.07 W 103 46 33.82	
	5067.00	0.12	47.77	5064.57	-65.95	-65.85	-8.81	0.04	461403.28	713583.49	N 32 16 2.08 W 103 46 33.82	
	5161.00	0.07	176.82	5158.57	-65.94	-65.84	-8.74	0.18	461403.29	713583.56	N 32 16 2.08 W 103 46 33.82	
	5256.00	0.11	87.71	5253.57	-66.00	-65.90	-8.64	0.14	461403.24	713583.66	N 32 16 2.07 W 103 46 33.82	
	5351.00	0.11	239.48	5348.57	-66.04	-65.94	-8.63	0.22	461403.19	713583.67	N 32 16 2.07 W 103 46 33.82	
	5445.00	0.10	223.34	5442.57	-66.14	-66.05	-8.76	0.03	461403.09	713583.54	N 32 16 2.07 W 103 46 33.82	
	5540.00	0.11	342.09	5537.57	-66.12	-66.02	-8.85	0.19	461403.11	713583.45	N 32 16 2.07 W 103 46 33.82	
	5635.00	0.12	11.93	5632.57	-65.94	-65.84	-8.86	0.06	461403.30	713583.44	N 32 16 2.08 W 103 46 33.82	
	5729.00	0.13	42.30	5726.57	-65.76	-65.66	-8.76	0.07	461403.47	713583.54	N 32 16 2.08 W 103 46 33.82	
	5824.00	0.11	92.84	5821.57	-65.68	-65.59	-8.60	0.11	461403.55	713583.70	N 32 16 2.08 W 103 46 33.82	
	5919.00	0.10	289.96	5916.57	-65.66	-65.56	-8.59	0.22	461403.57	713583.71	N 32 16 2.08 W 103 46 33.82	
	6013.00	0.13	359.58	6010.57	-65.52	-65.43	-8.67	0.14	461403.71	713583.64	N 32 16 2.08 W 103 46 33.82	
	6108.00	0.09	89.12	6105.57	-65.41	-65.32	-8.59	0.17	461403.82	713583.71	N 32 16 2.08 W 103 46 33.82	
	6203.00	0.12	206.74	6200.57								

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 ° ' '')
	6297.00	0.11	77.41	6294.57	-65.57	-65.47	-8.52	0.22	461403.66	713583.78	N 32 16 2.08 W	103 46 33.82
	6392.00	0.09	278.30	6389.57	-65.54	-65.44	-8.50	0.21	461403.69	713583.80	N 32 16 2.08 W	103 46 33.82
	6487.00	0.23	156.13	6484.57	-65.70	-65.61	-8.50	0.30	461403.53	713583.80	N 32 16 2.08 W	103 46 33.82
	6581.00	0.16	173.83	6578.57	-66.00	-65.91	-8.41	0.10	461403.22	713583.89	N 32 16 2.07 W	103 46 33.82
	6676.00	0.11	192.16	6673.57	-66.23	-66.13	-8.41	0.07	461403.00	713583.89	N 32 16 2.07 W	103 46 33.82
	6770.00	0.08	27.90	6767.57	-66.26	-66.16	-8.40	0.20	461402.97	713583.90	N 32 16 2.07 W	103 46 33.82
	6865.00	0.14	260.53	6862.57	-66.22	-66.12	-8.49	0.21	461403.01	713583.82	N 32 16 2.07 W	103 46 33.82
	6959.00	0.10	309.26	6956.57	-66.19	-66.09	-8.66	0.11	461403.04	713583.64	N 32 16 2.07 W	103 46 33.82
	7054.00	0.07	120.15	7051.57	-66.16	-66.07	-8.68	0.18	461403.07	713583.62	N 32 16 2.07 W	103 46 33.82
	7148.00	0.14	225.45	7145.57	-66.27	-66.18	-8.71	0.18	461402.96	713583.59	N 32 16 2.07 W	103 46 33.82
	7243.00	0.08	118.98	7240.57	-66.39	-66.29	-8.73	0.19	461402.85	713583.57	N 32 16 2.07 W	103 46 33.82
	7338.00	0.08	255.35	7335.57	-66.44	-66.34	-8.74	0.16	461402.80	713583.56	N 32 16 2.07 W	103 46 33.82
	7432.00	0.07	265.62	7429.57	-66.46	-66.36	-8.86	0.02	461402.78	713583.44	N 32 16 2.07 W	103 46 33.82
	7527.00	0.10	203.97	7524.57	-66.54	-66.44	-8.95	0.10	461402.69	713583.35	N 32 16 2.07 W	103 46 33.82
	7622.00	0.11	246.10	7619.57	-66.65	-66.55	-9.07	0.08	461402.58	713583.23	N 32 16 2.07 W	103 46 33.82
	7716.00	0.02	235.83	7713.57	-66.70	-66.60	-9.16	0.10	461402.54	713583.14	N 32 16 2.07 W	103 46 33.82
	7811.00	3.46	217.72	7808.51	-69.00	-68.87	-10.93	3.62	461400.26	713581.37	N 32 16 2.05 W	103 46 33.84
	7905.00	5.46	205.21	7902.22	-75.33	-75.17	-14.57	2.35	461393.97	713577.73	N 32 16 1.98 W	103 46 33.89
	8000.00	5.37	197.72	7996.80	-83.69	-83.49	-17.85	0.75	461385.65	713574.45	N 32 16 1.90 W	103 46 33.93
	8094.00	6.17	185.77	8090.32	-92.93	-92.71	-19.70	1.53	461376.43	713572.60	N 32 16 1.81 W	103 46 33.95
	8189.00	5.77	127.25	8184.89	-100.87	-100.68	-8.68	6.15	461368.45	713575.89	N 32 16 1.73 W	103 46 33.91
	8283.00	5.11	107.79	8278.47	-104.92	-104.82	-8.68	2.07	461364.31	713583.64	N 32 16 1.69 W	103 46 33.82
	8378.00	4.58	118.51	8373.14	-107.93	-107.93	-1.30	1.10	461361.21	713591.00	N 32 16 1.66 W	103 46 33.73
	8472.00	4.96	149.06	8466.83	-113.15	-113.20	4.09	2.70	461355.93	713596.39	N 32 16 1.61 W	103 46 33.67
	8567.00	4.99	159.26	8561.47	-120.49	-120.59	7.66	0.93	461348.55	713599.96	N 32 16 1.53 W	103 46 33.63
	8661.00	4.98	160.32	8655.11	-128.12	-128.25	10.49	0.10	461340.88	713602.79	N 32 16 1.46 W	103 46 33.60
	8756.00	4.47	156.14	8749.79	-135.36	-135.52	13.37	0.65	461333.62	713605.67	N 32 16 1.38 W	103 46 33.57
	8850.00	4.38	143.06	8843.51	-141.53	-141.74	17.01	1.00	461327.40	713609.31	N 32 16 1.32 W	103 46 33.52
	8945.00	5.16	136.43	8938.18	-147.47	-147.74	22.14	1.82	461321.40	713614.44	N 32 16 1.26 W	103 46 33.46
	9039.00	6.68	128.80	9031.68	-153.87	-154.23	29.31	1.97	461314.91	713621.61	N 32 16 1.20 W	103 46 33.38
	9134.00	8.45	124.05	9125.85	-161.13	-161.60	39.40	1.97	461307.54	713631.70	N 32 16 1.13 W	103 46 33.26
	9228.00	8.72	128.27	9218.80	-169.27	-169.88	50.72	0.73	461299.26	713643.02	N 32 16 1.04 W	103 46 33.13
	9323.00	7.98	135.73	9312.79	-178.34	-179.06	60.98	1.38	461290.08	713653.27	N 32 16 0.95 W	103 46 33.01
	9417.00	7.09	140.34	9405.98	-187.38	-188.20	69.23	1.14	461280.94	713661.53	N 32 16 0.86 W	103 46 32.92
	9512.00	6.60	149.41	9500.31	-196.51	-197.41	75.75	1.25	461271.73	713668.05	N 32 16 0.77 W	103 46 32.84
	9606.00	5.82	148.68	9593.76	-205.18	-206.13	80.98	0.83	461263.01	713673.27	N 32 16 0.68 W	103 46 32.78
	9700.00	5.17	154.25	9687.32	-213.01	-214.02	85.30	0.89	461255.12	713677.59	N 32 16 0.60 W	103 46 32.73
	9794.00	5.93	152.69	9780.88	-221.09	-222.15	89.37	0.82	461246.99	713681.66	N 32 16 0.52 W	103 46 32.69
	9889.00	7.05	154.60	9875.27	-230.66	-231.78	94.12	1.20	461237.37	713686.41	N 32 16 0.43 W	103 46 32.63
	9984.00	7.80	161.03	9969.48	-241.97	-243.14	98.71	1.18	461228.01	713691.01	N 32 16 0.32 W	103 46 32.58
	10078.00	7.41	162.84	10062.65	-253.75	-254.96	102.58	0.49	461214.18	713694.87	N 32 16 0.20 W	103 46 32.53
	10173.00	8.02	158.56	10156.79	-265.72	-266.98	106.81	0.88	461202.16	713699.10	N 32 16 0.08 W	103 46 32.49
	10267.00	9.08	157.41	10249.74	-278.61	-279.94	112.05	1.14	461189.21	713704.35	N 32 16 0.08 W	103 46 32.43
	10362.00	10.38	153.93	10343.38	-293.14	-294.55	118.69	1.50	461174.60	713710.99	N 32 16 0.00 W	103 46 32.35
	10456.00	10.21	151.85	10435.86	-308.01	-309.50	126.34	0.43	461159.85	713718.64	N 32 16 0.00 W	103 46 32.25
	10551.00	8.06	147.92	10529.65	-320.99	-322.57	133.86	2.36	461146.58	713726.15	N 32 16 0.00 W	103 46 32.17
	10646.00	7.78	145.13	10623.75	-331.82	-333.49	141.07	0.50	461135.66	713733.36	N 32 16 0.00 W	103 46 32.02
	10740.00	7.00	152.61	10716.97	-342.05	-343.79	147.34	1.32	461125.36	713739.63	N 32 16 0.00 W	103 46 31.96
	10835.00	6.13	156.09	10811.35	-351.77	-353.57	152.06	1.01	461115.58	713744.35	N 32 16 0.00 W	103 46 31.89
	10930.00	6.27	157.08	10905.79	-361.14	-362.98	156.14	0.19	461106.17	713748.43	N 32 16 0.00 W	103 46 31.87
	10992.00	6.79	157.37	10967.39	-367.61	-369.49	158.87	0.84	461099.67	713751.16	N 32 16 0.00 W	103 46 31.85
	11026.00	6.97	158.06	11001.14	-371.36	-373.25	160.81	0.58	461095.90	713752.70	N 32 16 0.00 W	103 46 31.87
	11121.00	8.46	136.72	11095.30	-381.71	-383.69	167.36	3.37	461085.46	713759.65	N 32 16 0.00 W	103 46 31.79
	11215.00	12.09	42.01	11188.30	-379.29	-381.40	178.75	16.26	461087.76	713771.04	N 32 16 0.00 W	103 46 31.65
	11310.00	19.46	13.63	11279.78	-356.33	-358.56	189.17	11.02	461110.59	713781.46	N 32 16 0.00 W	103 46 31.53
	11404.00	23.09	350.79	11367.51	-322.85	-325.08	189.91	9.55	461144.07	713782.20	N 32 16 0.00 W	103 46 31.52
Wolfcamp Intersection												
	11472.02	31.21	344.99	11428.00	-292.68	-294.84	183.20	12.54	461174.31	713775.49	N 32 16 59.80 W	103 46 31.60
	11499.00	34.48	343.40	11450.66	-278.86	-280.76	179.21	12.54	461188.38	713771.50	N 32 16 59.94 W	103 46 31.64
	11593.00	42.69	350.41	11524.11	-221.77	-223.72	166.27	9.88	461245.42	713758.56	N 32 16 0.50 W	103 46 31.79
	11645.00	50.38	358.04	11559.89	-184.33	-186.23	162.64	18.20	461282.91	713754.93	N 32 16 0.88 W	103 46 31.83
	11689.00	55.06	5.18	11586.55	-149.37	-151.29	163.69	16.72	461317.85	713755.98	N 32 16 1.22 W	103 46 31.82
	11784.00	61.14	4.78	11636.73	-68.98	-70.98	170.68	6.41	461398.16	713762.97	N 32 16 2.02 W	103 46 31.73
	11878.00	70.72	2.39	11675.03	16.63	14.58	175.97	10.45	461483.71	713768.26	N 32 16 2.86 W	103 46 31.66
	11973.00	84.01	1.25	11695.76	109.10	107.02	178.88	14.04	461576.14	713771.17	N 32 16 3.78 W	103 46 31.62
	12068.00	93.88	3.13	11697.51	203.93	201.81	182.51	10.58	461670.93	713774.80	N 32 16 4.71 W	103 46 31.58
	12144.00	94.41	1.89	11692.02	279.69	277.54	185.83	1.77	461746.65	713778.12	N 32 16 5.46 W	103 46 31.53
	12172.00	94.60	1.43	11689.82	307.60	305.44	186.64	1.77	461774.55	713778.93	N 32 16 5.74 W	103 46 31.52
	12244.00	93.75	0.91	11684.58	379.40	377.23	188.10	1.38	461846.34	713780.39	N 32 16 6.45 W	103 46 31.50
	12267.00	93.48	0.74	11683.13	402.36	400.19	188.43	1.38	461869.29	713780.72	N 32 16 6.68 W	103 46 31.49
	12361.00	92.94	1.44	11677.86	496.20	494.02	190.22	0.94	461963.12	713782.51	N 32 16 7.60 W	103 46 31.47
	12456.00	91.39	1.40	11674.28	591.13	588.92	192.57	1.63	462058.02	713784.86	N 32 16 8.54 W	103 46 31.43
	12550.00	87.33	0.04	11675.33	685.10	682.89	193.75	4.55	462151.98	713786.04	N 32 16 9.47 W	103 46 31.42
	12645.00	86.95	358.82	11680.07	779.96	777.76	192.81	1.34	462246.85	713785.10	N 32 16 10.41 W	103 46 31.42
	12740.00	86.73	357.91	11685.30	874.73	872.58	190.10	0.98	462341.66	713782.39	N 32 16 11.35 W	103 46 31.45
	12835.00	89.45	359.75	11688.47	969.62	967.49	188.16	3.46	462436.56	713780.45	N 32 16 12.29 W	103 46 31.46
	12929.00	87.24	358.24	11691.18	1063.53	1061.43	186.52	2.85	462530.50	713778.81	N 32 16 13.22 W	103 46 31.48
	13024.00	87.63	358.94	11695.44	1158.37	1156.30	184.18	0.84	462625.37	713776.47	N 32 16 14.16 W	103 46 31.50
	131											

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 ° ' '')
	17182.00	88.75	359.75	11725.29	5314.07	5312.66	152.03	2.56	466781.48	713744.32	N 32 16 55.29 W 103 46 31.62	
	17276.00	88.57	359.39	11727.49	5408.03	5406.63	151.33	0.43	466875.44	713743.62	N 32 16 56.22 W 103 46 31.62	
	17465.00	88.41	0.30	11732.47	5596.94	5595.96	150.82	0.49	467064.36	713743.11	N 32 16 58.09 W 103 46 31.62	
	17655.00	89.44	1.39	11736.04	5786.90	5785.50	153.62	0.79	467254.29	713745.91	N 32 16 59.97 W 103 46 31.57	
	17749.00	90.15	1.68	11738.37	5880.89	5879.47	156.14	0.82	467348.25	713748.43	N 32 17 0.90 W 103 46 31.54	
	17844.00	89.98	1.63	11738.27	5975.88	5974.43	158.88	0.19	467443.21	713751.17	N 32 17 1.83 W 103 46 31.50	
	17939.00	89.49	0.42	11738.71	6070.87	6069.41	160.58	1.37	467538.18	713752.87	N 32 17 2.77 W 103 46 31.48	
	18127.00	88.53	354.39	11739.96	6258.45	6257.10	152.07	3.25	467725.86	713744.36	N 32 17 4.63 W 103 46 31.56	
	18222.00	89.33	359.32	11741.73	6353.19	6351.91	148.86	5.26	467820.67	713739.16	N 32 17 5.57 W 103 46 31.62	
	18317.00	88.80	357.92	11743.28	6448.12	6446.87	144.58	1.58	467915.62	713736.87	N 32 17 6.51 W 103 46 31.64	
	18506.00	88.97	356.94	11746.96	6636.78	6635.64	136.10	0.53	468104.38	713728.40	N 32 17 8.38 W 103 46 31.73	
	18600.00	86.83	355.07	11750.41	6730.39	6729.34	129.56	3.02	468198.07	713721.85	N 32 17 9.31 W 103 46 31.80	
	18694.00	88.36	355.77	11754.35	6918.45	6917.59	122.06	1.79	468291.68	713714.35	N 32 17 10.23 W 103 46 31.88	
	18789.00	88.36	354.70	11757.07	7012.09	7011.31	114.17	1.13	468386.31	713706.47	N 32 17 11.17 W 103 46 31.96	
	18883.00	88.12	357.49	11759.96	7105.97	7105.22	107.78	2.98	468480.03	713700.07	N 32 17 12.10 W 103 46 32.03	
	18977.00	87.93	358.57	11763.20	7200.91	7200.17	105.37	2.22	468573.93	713697.66	N 32 17 13.03 W 103 46 32.06	
	19072.00	88.54	359.66	11766.12	7294.89	7294.15	104.73	0.65	468668.88	713697.02	N 32 17 13.97 W 103 46 32.06	
	19166.00	90.01	1.51	11767.31	7389.77	7388.98	105.69	2.51	468762.86	713697.98	N 32 17 14.90 W 103 46 32.04	
	19261.00	91.95	4.81	11765.69	7479.35	7478.42	110.92	4.03	468857.67	713703.22	N 32 17 15.83 W 103 46 31.97	
	19451.00	92.06	2.97	11759.04	7573.30	7572.35	123.80	0.97	468947.10	713716.10	N 32 17 17.71 W 103 46 31.81	
	19545.00	89.09	0.65	11758.09	7667.29	7666.29	126.77	4.01	469141.03	713719.06	N 32 17 18.64 W 103 46 31.77	
	19640.00	88.78	0.79	11759.86	7761.32	7760.32	127.96	0.36	469236.00	713720.26	N 32 17 19.58 W 103 46 31.75	
	19735.00	89.46	1.45	11761.32	7855.27	7854.27	129.82	1.00	469330.96	713722.11	N 32 17 20.52 W 103 46 31.73	
	19829.00	89.60	1.08	11762.09	7950.27	7949.27	131.90	0.42	469424.93	713724.19	N 32 17 21.45 W 103 46 31.70	
	20018.00	89.11	4.18	11764.22	8044.12	8043.12	140.57	1.66	469518.68	713732.86	N 32 17 23.31 W 103 46 31.58	
Exit Target Box	20098.00	93.59	5.33	11762.33	8138.07	8137.07	147.20	5.78	469613.36	713739.49	N 32 17 24.10 W 103 46 31.50	
	20113.00	94.43	5.55	11761.29	8232.61	8231.61	148.62	5.78	469708.25	713740.91	N 32 17 24.25 W 103 46 31.48	
	20207.00	93.34	3.02	11754.92	8326.12	8325.12	155.62	2.92	469801.76	713747.91	N 32 17 25.17 W 103 46 31.40	
	20301.00	92.83	2.38	11749.86	8420.17	8419.17	160.04	0.87	469895.51	713752.33	N 32 17 26.10 W 103 46 31.34	
	20396.00	91.65	0.33	11746.14	8514.09	8513.09	162.29	2.49	469990.40	713754.58	N 32 17 27.04 W 103 46 31.31	
	20491.00	90.32	359.09	11744.51	8608.06	8607.06	161.81	1.91	470085.38	713754.10	N 32 17 27.98 W 103 46 31.31	
	20586.00	88.80	357.64	11745.24	8702.97	8701.97	159.09	2.21	470180.33	713751.39	N 32 17 28.92 W 103 46 31.33	
	20680.00	88.07	357.01	11747.81	8806.78	8805.78	154.71	1.03	470274.18	713747.00	N 32 17 29.85 W 103 46 31.38	
	20775.00	87.18	355.64	11751.74	8901.42	8900.42	148.63	1.72	470368.90	713740.92	N 32 17 30.79 W 103 46 31.44	
Enter Target Box	20870.00	86.64	354.63	11756.86	8995.84	8994.84	140.58	1.20	470463.41	713732.87	N 32 17 31.72 W 103 46 31.53	
	20907.00	86.22	353.97	11759.17	9032.54	9031.55	136.91	2.12	470500.15	713729.21	N 32 17 32.09 W 103 46 31.57	
	20965.00	85.56	352.93	11763.33	9089.93	9088.93	130.31	2.12	470557.62	713722.61	N 32 17 32.65 W 103 46 31.65	
	21059.00	86.11	352.72	11770.15	9182.80	9181.80	118.60	0.63	470650.63	713710.90	N 32 17 33.58 W 103 46 31.78	
	21154.00	86.55	353.79	11776.23	9276.81	9275.81	107.47	1.22	470744.77	713699.76	N 32 17 34.51 W 103 46 31.90	
	21248.00	89.35	356.46	11779.60	9370.30	9369.30	99.49	4.11	470838.35	713691.78	N 32 17 35.43 W 103 46 31.99	
	21343.00	90.27	358.17	11779.91	9465.13	9464.13	95.04	2.04	470933.24	713687.33	N 32 17 36.37 W 103 46 32.03	
	21438.00	90.01	358.97	11779.68	9560.06	9559.06	92.67	0.89	471028.20	713684.96	N 32 17 37.31 W 103 46 32.06	
	21532.00	91.94	0.83	11778.08	9654.03	9653.03	92.50	2.85	471122.17	713684.80	N 32 17 38.24 W 103 46 32.05	
	21627.00	89.34	1.08	11777.02	9749.02	9748.02	94.09	0.75	471217.14	713686.38	N 32 17 39.18 W 103 46 32.03	
	21721.00	89.21	1.66	11778.21	9843.00	9842.00	96.34	0.63	471311.10	713688.63	N 32 17 40.11 W 103 46 32.00	
	21816.00	91.27	3.35	11777.81	9937.95	9936.95	100.49	2.80	471405.99	713692.78	N 32 17 41.05 W 103 46 31.94	
	21911.00	88.94	2.95	11777.64	10032.85	10031.85	105.71	2.49	471500.84	713698.00	N 32 17 41.99 W 103 46 31.87	
	22005.00	91.14	3.74	11777.57	10126.74	10125.74	111.19	2.49	471594.67	713703.48	N 32 17 42.92 W 103 46 31.81	
	22099.00	89.39	3.51	11777.14	10220.61	10219.61	117.13	1.88	471688.47	713709.43	N 32 17 43.85 W 103 46 31.73	
	22192.00	91.26	4.32	11776.61	10314.45	10313.45	123.48	2.19	471781.24	713715.78	N 32 17 44.76 W 103 46 31.65	
	22287.00	91.93	5.78	11773.97	10408.14	10407.14	131.84	1.69	471875.82	713724.13	N 32 17 45.70 W 103 46 31.55	
Exit Target Box 2	22381.00	92.02	6.11	11770.73	10501.68	10500.68	141.57	0.36	471969.26	713733.86	N 32 17 46.62 W 103 46 31.43	
	22459.00	91.92	6.07	11768.04	10579.29	10578.29	149.84	0.14	472046.77	713742.13	N 32 17 47.39 W 103 46 31.33	
	22475.00	91.90	6.06	11767.51	10595.21	10594.21	151.53	0.14	472062.67	713743.82	N 32 17 47.55 W 103 46 31.31	
	22570.00	92.53	6.71	11763.84	10689.66	10688.66	162.09	0.95	472157.00	713754.38	N 32 17 48.48 W 103 46 31.18	
100' FNL Crossed	22623.00	92.62	7.26	11761.46	10742.29	10741.29	168.52	1.04	472209.55	713760.81	N 32 17 49.00 W 103 46 31.10	
	22664.00	92.69	7.68	11759.58	10782.96	10781.96	173.85	1.04	472250.16	713766.14	N 32 17 49.40 W 103 46 31.04	
Final Survey	22668.00	92.77	7.71	11759.37	10786.92	10785.92	174.38	2.14	472254.12	713766.67	N 32 17 49.44 W 103 46 31.03	
Proj to Bit	22700.00	92.77	7.71	11757.82	10818.64	10817.64	178.67	0.00	472285.79	713770.96	N 32 17 49.75 W 103 46 30.98	

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	30.000	1/98.425	30.000	30.000 GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700MD
	1	30.000	30.000	Act Stns	30.000	30.000 GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700MD
	1	30.000	550.500	Act Stns	30.000	30.000 GYD_GC+DROP+OH	Original Borehole / Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700MD
	1	550.500	22700.000	Act Stns	30.000	30.000 A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700MD

JAN 23 2020

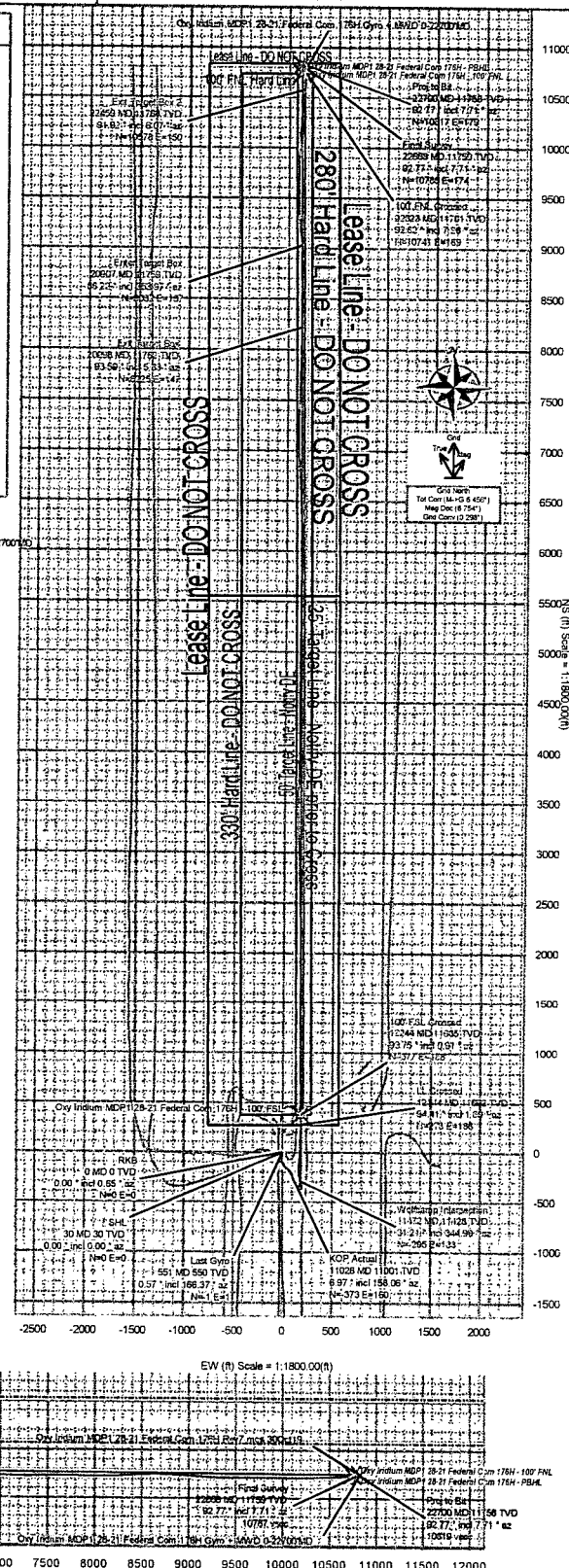
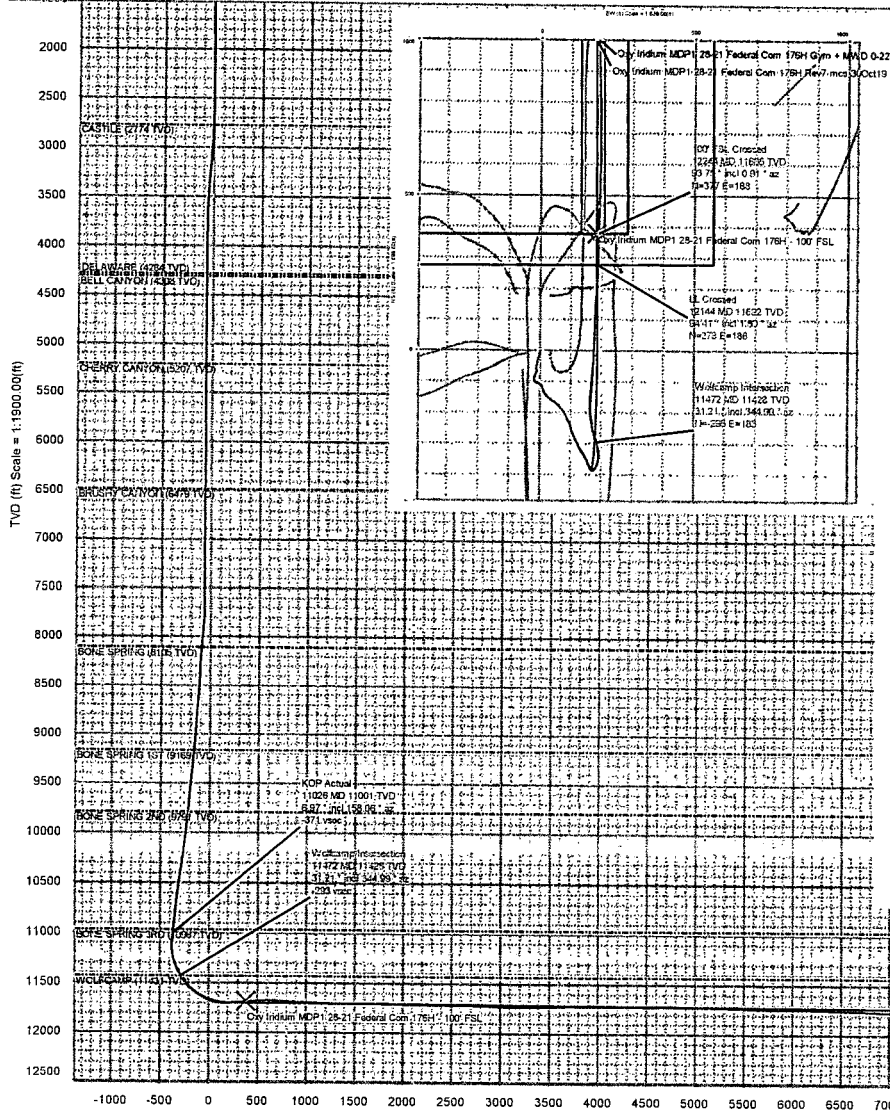
Schlumberger

OXY
EMNRD-OCD ARTESIA

Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Iridium MDP1 28-21 Federal Com 176H	NM Eddy County (NAD 83)	Oxy Iridium MDP1 28-21 Federal Com 176H

Gravity & Magnetic Parameters			Surface Location			Miscellaneous		
Model: IFR1	Dip: 69.942°	Date: 28-Oct-2019	Lat: N 32 18 2.73	Northing: 461469.131US	Grid Conv: 0.2975°	Oxy Iridium MDP1	Slot: 28-21 Federal	TVD Ref: RKB=30'(3433.1ft above MSL)
MagDec: 6.754°	FS: 47927.3nT	Gravity FS: 988.44ft/mg (9.80665 Based)	Lon: W 103 46 33.71	Easting: 713592.311US	Scale Fact: 0.99994307	Plan: Oxy Iridium MDP1 28-21 Federal Com 176H Gyro + MWD 0-22700' MD		

Critical Points							
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)
RKB	0.00	0.00	0.65	0.00	0.00	0.00	0.00
SHL	30.00	0.00	0.00	30.00	0.00	0.00	0.00
Last Gyro	550.50	0.57	166.37	550.50	-1.07	-1.08	0.64
KOP Actual	11026.00	6.97	158.06	11001.14	-371.36	-373.25	160.41
Wolfcamp Intersection	11472.02	31.21	344.99	11428.00	-292.68	-294.84	183.20
LL Crossed	12144.00	94.41	1.89	11692.02	279.69	277.54	185.83
100' FSL Crossed	12244.00	93.75	0.91	11684.58	379.40	377.23	188.10
Ext Target Box	20098.00	93.59	5.33	11762.33	8225.87	8224.71	147.20
Enter Target Box	20907.00	86.22	353.97	11759.17	9032.54	9031.55	136.91
Ext Target Box 2	22459.00	91.92	6.07	11768.04	10579.29	10578.26	149.84
100' FNL Crossed	22623.00	92.62	7.26	11761.46	10742.29	10741.05	168.52
Final Survey	22668.00	92.77	7.71	11759.37	10786.92	10785.62	174.38
Proj to Bit	22700.00	92.77	7.71	11757.82	10818.64	10817.30	178.67



Vertical Section (ft) Azim = 0.67° Scale = 1:1900.00(ft) Origin = 0N/-S, 0E/-W