

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 1 2019

Form C-102

Revised August 1, 2011

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

RECEIVED one copy to appropriate
District Office

☒ **AMENDED REPORT**
As-Drilled

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) 743-1283 Fax: (575) 748-9720
District III
1000 Rio Bravo 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-46046	Pool Code 90220	Pool Name Yurple Sage Wolfcamp
Property Code 322245	Property Name PLATINUM MDP1 "34_3" FEDERAL COM	Well Number 177H
OGRID No. 16096	Operator Name OXY USA INC.	Elevation 3426.9'

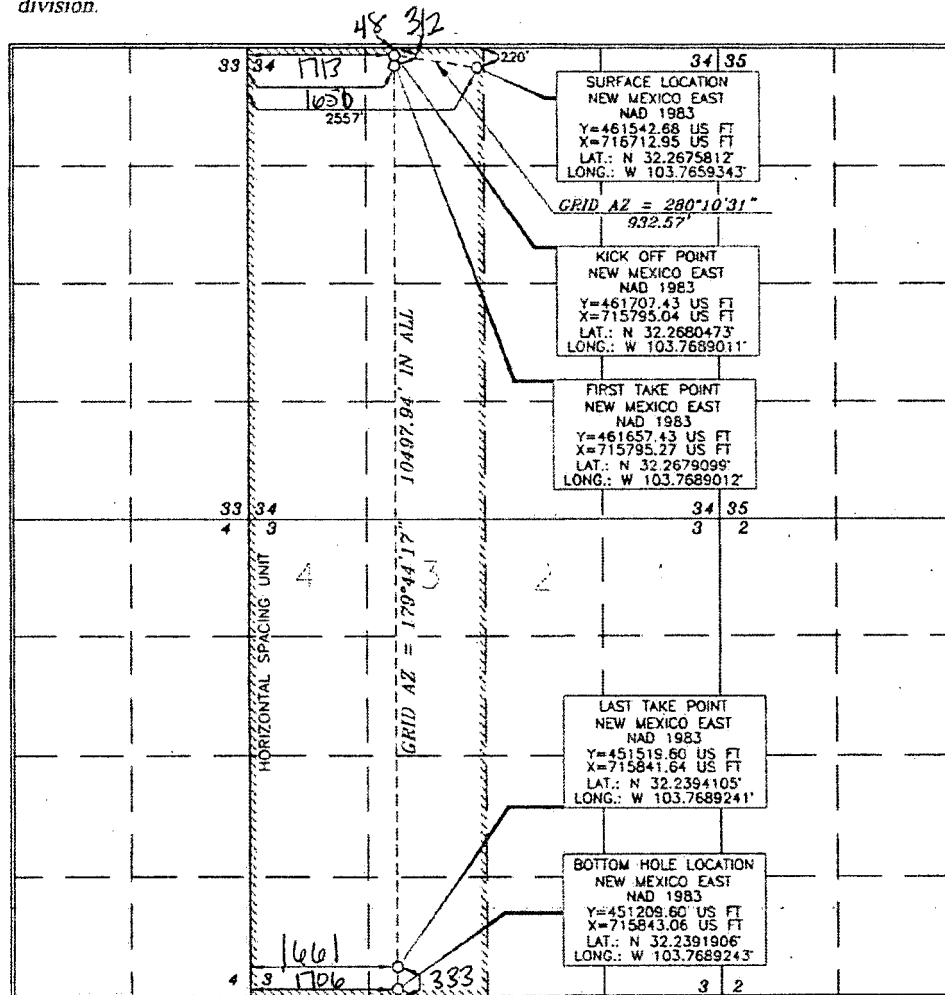
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	34	23 SOUTH	31 EAST, N.M.P.M.		220'	NORTH	2557'	WEST	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
N	3	24 SOUTH	31 EAST, N.M.P.M.		229	SOUTH	1706	WEST	EDDY
Dedicated Acres 6.40		Joint or Infill	Consolidation Code	Order No. Approved NSU: 7939					

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 released 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.

Sarah Chapman 9/12/19
Signature Date
Sarah Chapman
Printed Name
Sarah-Chapman@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from a plat 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
AUGUST 30 2019
Date of Survey
Tony J. Paul
Signature and Seal of Professional Surveyor

Tony J. Paul 5/1/2019
Certificate Number 15079

NM OIL CONSERVATION
ARTESIA DISTRICT

Intent ☐ As Drilled ☒

OCT 1 2019

API # 30-015-46046		RECEIVED	
Operator Name: Oxy WA Inc.		Property Name: Platinum MDP 134-3 Federal Com	Well Number 177H

Kick Off Point (KOP)

UL G	Section 34	Township 23S	Range 31E	Lot	Feet 40	From N/S North	Feet 1713	From E/W West	County EDDY
Latitude 32.26107					Longitude -103.76266			NAD NAD83	

First Take Point (FTP)

UL G	Section 34	Township 23S	Range 31E	Lot	Feet 312	From N/S North	Feet 1650	From E/W West	County EDDY
Latitude 32.26733					Longitude -103.76887			NAD NAD83	

Last Take Point (LTP)

UL N	Section 3	Township 24S	Range 31E	Lot	Feet 340	From N/S South	Feet 1661	From E/W West	County EDDY
Latitude 32.24007					Longitude -103.74886			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



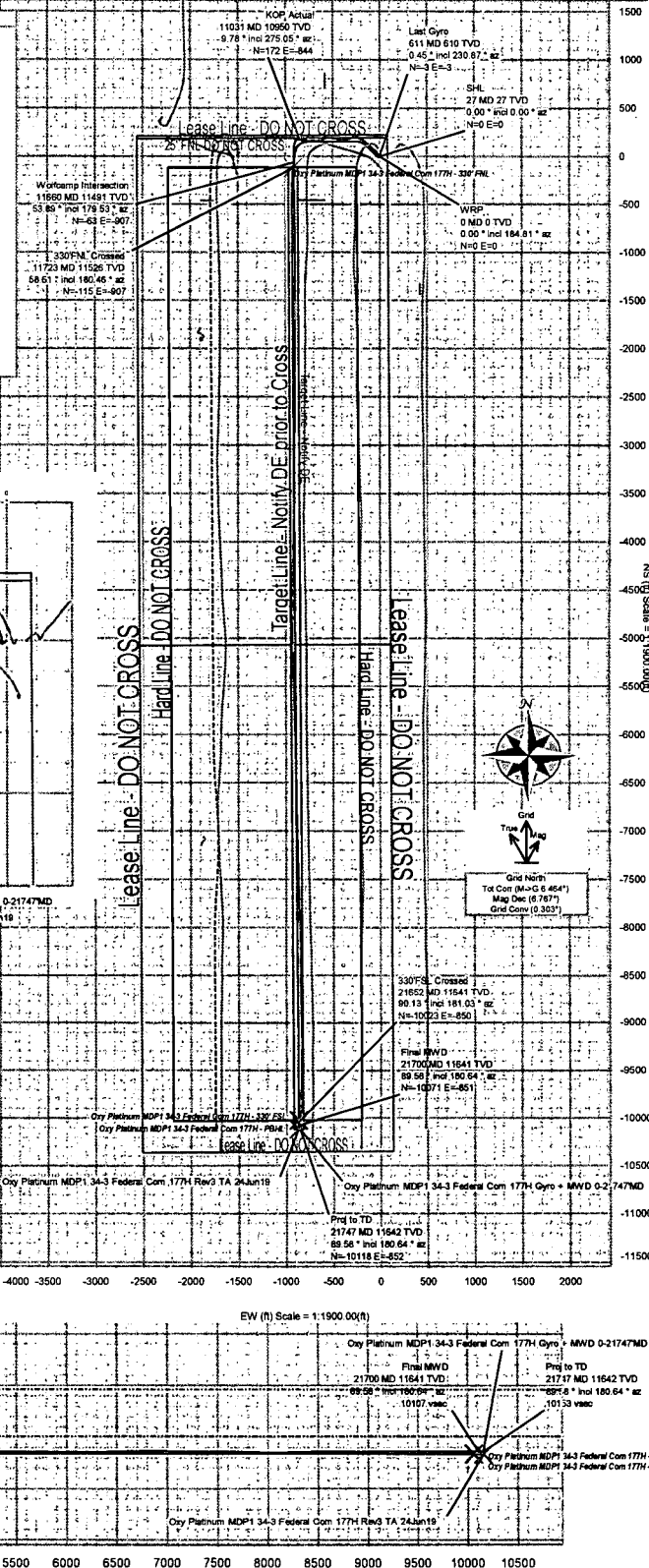
OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Platinum MDP1 34-3 Federal Com 177H	NM Eddy County (NAD 83)	Oxy Platinum MDP1 34-3 Federal Com 177H

Gravity & Magnetic Parameters				Surface Location				NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	IFR1	Dip: 59.848°	Date: 22-Jul-2019	Lat: N 32 16 3.29	Northing: 461542.68US	Grid Conv: 0.3029°		Slot: MDP1 34-3 Federal Con	TVD Ref: RKB=26.5'(3453.4ft above MSL)						
MagDec: 6.767°	FS: 47957.6nT	Gravity FS: 998.447mgn (9.80665 Based)		Lon: W 103 45 67.36	Easting: 716712.95US	Scale Fact: 0.99994432		Plan: MDP1 34-3 Federal Con	177H Gyro	MWD 0-2147'WD					

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(=)WS(-)	E(=)WW(-)	DLS
WRP	0.00		184.81	0.00	0.00	0.00		
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00
RUSTLER	569.02	0.47	229.83	569.00	3.39	-3.14	-3.09	0.06
Last Gyro	610.50	0.45	230.87	610.48	3.62	-3.35	-3.34	0.06
SALADO	898.03	0.75	228.06	898.00	5.48	-5.07	-5.03	0.25
CASTILE	2854.19	0.03	212.14	2854.00	14.52	-13.37	-14.08	0.04
DELAWARE	4320.19	0.08	338.22	4320.00	15.66	-14.50	-14.07	0.22
BELL CANYON	4347.19	0.06	27.85	4347.00	15.63	-14.47	-14.07	0.22
CHERRY CANYON	5232.20	0.14	52.91	5232.00	14.60	-13.38	-14.73	0.26
BRUSHY CANYON	6507.59	9.44	312.89	6495.00	-97.13	106.85	-108.71	0.14
BONE SPRING	8196.57	9.45	258.15	8157.00	-135.90	168.52	-373.16	0.77
BONE SPRING 1ST	9271.49	10.51	266.94	9217.00	-145.74	193.40	-547.49	1.77
BONE SPRING 2ND	9873.49	9.81	264.15	9810.00	-109.50	165.57	-646.75	1.13
KOP Actual	11031.00	9.78	275.05	10950.29	-99.05	172.59	-844.34	0.26
BONE SPRING 3RD	11117.78	8.37	284.35	11036.00	-100.40	174.08	-857.62	9.65
Wolfcamp Intersection	11659.93	53.89	179.53	11491.00	140.55	-62.99	-907.20	5.38
WOLFCAMP	11659.93	53.89	179.53	11491.00	140.55	-62.99	-907.20	5.38
330°FNL Crossed	11723.00	58.61	180.46	11526.43	192.50	-115.14	-907.03	11.77
330°FSL Crossed	21652.00	90.13	181.03	11641.35	10058.70	-10022.68	-850.47	0.43
Final MWD	21700.00	89.58	180.64	11641.46	10065.57	-10070.68	-851.17	1.43
Proj to TD	21747.00	89.58	180.64	11641.81	10153.44	-10117.68	-851.70	0.00



Vertical Section (ft) Azim = 184.92° Scale = 1:1800.00(ft) Origin = 0N/-S, 0E/-W

Oxy Platinum MDP1 34-3 Federal Com 177H Gyro + MWD 0-21747'MD

Survey Geodetic Report

(Def Survey)



NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 1 2019

RECEIVED

Report Date: July 31, 2019 - 12:19 PM
 Client: OXY
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Platinum MDP1 34-3 Federal Com 177H / Oxy Platinum MDP1 34-3 Federal Com 177H
 Well: Oxy Platinum MDP1 34-3 Federal Com 177H
 Borehole: Original Borehole
 UWI / API#: Unknown / 30-015-46046
 Survey Name: Oxy Platinum MDP1 34-3 Federal Com 177H Gyro + MWD 0-21747'MD
 Survey Date: June 21, 2019
 Tort / AHD / DDI / ERD Ratio: 258.729 * / 11297.067 ft / 6.737 / 0.970
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 16' 3.29217", W 103° 45' 57.36345"
 Location Grid N/E Y/X: N 461542.680 RUS, E 716712.950 RUS
 CRS Grid Convergence Angle: 0.3029°
 Grid Scale Factor: 0.99994432
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 184.919° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=26.5'
 TVD Reference Elevation: 3453.400 ft above MSL
 Seabed / Ground Elevation: 3426.900 ft above MSL
 Magnetic Declination: 6.767°
 Total Gravity Field Strength: 998.4475mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47957.500 nT
 Magnetic Dip Angle: 59.948°
 Declination Date: July 22, 2019
 Magnetic Declination Model: IFR1
 North Reference: Grid North
 North Convergence Used: 0.3029°
 Total Corr Mag North->Grid North: 6.4641°
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
WRP	0.00	0.00	184.81	0.00	0.00	0.00	0.00	N/A	461542.58	716712.95	N 32 16 3.29	W 103 45 57.36
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	461542.58	716712.95	N 32 16 3.29	W 103 45 57.36
	120.50	0.30	212.35	120.50	0.22	-0.21	-0.13	0.32	461542.47	716712.82	N 32 16 3.28	W 103 45 57.37
	220.50	0.55	229.44	220.50	0.79	-0.74	-0.64	0.28	461541.94	716712.31	N 32 16 3.28	W 103 45 57.37
	320.50	0.71	228.13	320.49	1.59	-1.47	-1.46	0.16	461541.21	716711.49	N 32 16 3.28	W 103 45 57.38
	420.50	0.50	216.87	420.49	2.41	-2.23	-2.19	0.24	461540.45	716710.76	N 32 16 3.27	W 103 45 57.39
	520.50	0.50	228.73	520.48	3.09	-2.87	-2.78	0.10	461539.81	716710.17	N 32 16 3.28	W 103 45 57.40
RUSTLER	569.02	0.47	229.83	569.00	3.39	-3.14	-3.09	0.06	461539.55	716709.86	N 32 16 3.26	W 103 45 57.40
Last Gyro	610.50	0.45	230.87	610.48	3.62	-3.35	-3.34	0.06	461539.33	716709.61	N 32 16 3.26	W 103 45 57.40
	787.00	0.39	218.05	786.97	4.61	-4.26	-4.25	0.06	461538.42	716708.70	N 32 16 3.25	W 103 45 57.41
	877.00	0.70	225.59	876.97	5.28	-4.88	-4.83	0.35	461537.80	716708.12	N 32 16 3.24	W 103 45 57.42
SALADO	898.03	0.75	226.06	898.00	5.48	-5.07	-5.03	0.25	461537.61	716707.93	N 32 16 3.24	W 103 45 57.42
	969.00	0.93	227.24	968.96	6.26	-5.78	-5.78	0.25	461536.90	716707.17	N 32 16 3.24	W 103 45 57.43
	1058.00	1.23	228.12	1057.94	7.49	-6.91	-7.03	0.34	461535.77	716705.93	N 32 16 3.22	W 103 45 57.45
	1148.00	1.56	233.66	1147.92	9.00	-8.28	-8.73	0.40	461534.40	716704.22	N 32 16 3.21	W 103 45 57.47
	1278.00	1.96	226.34	1277.86	11.84	-10.87	-11.76	0.35	461531.81	716701.19	N 32 16 3.19	W 103 45 57.50
	1331.00	1.70	228.23	1330.83	13.09	-12.02	-13.01	0.50	461530.66	716699.94	N 32 16 3.17	W 103 45 57.52
	1422.00	0.42	213.17	1421.81	14.36	-13.19	-14.20	1.43	461529.49	716698.75	N 32 16 3.16	W 103 45 57.53
	1517.00	0.03	200.37	1516.81	14.69	-13.51	-14.40	0.41	461529.17	716698.56	N 32 16 3.16	W 103 45 57.53
	1620.00	0.03	264.53	1619.81	14.73	-13.54	-14.43	0.03	461529.14	716698.52	N 32 16 3.16	W 103 45 57.53
	1706.00	0.03	195.96	1705.81	14.75	-13.56	-14.46	0.04	461529.12	716698.49	N 32 16 3.16	W 103 45 57.53
	1801.00	0.03	222.01	1800.81	14.80	-13.60	-14.48	0.01	461529.08	716698.47	N 32 16 3.16	W 103 45 57.53
	1895.00	0.07	138.66	1894.81	14.85	-13.67	-14.46	0.08	461529.02	716698.49	N 32 16 3.16	W 103 45 57.53
	1990.00	0.03	354.15	1989.81	14.87	-13.68	-14.43	0.10	461529.00	716698.52	N 32 16 3.16	W 103 45 57.53
	2084.00	0.03	12.69	2083.81	14.82	-13.64	-14.42	0.01	461529.05	716698.53	N 32 16 3.16	W 103 45 57.53
	2179.00	0.08	88.14	2178.81	14.79	-13.61	-14.35	0.08	461529.07	716698.60	N 32 16 3.16	W 103 45 57.53
	2273.00	0.03	221.74	2272.81	14.80	-13.63	-14.30	0.11	461529.06	716698.65	N 32 16 3.16	W 103 45 57.53
	2368.00	0.03	91.47	2367.81	14.82	-13.64	-14.29	0.06	461529.04	716698.66	N 32 16 3.16	W 103 45 57.53
	2558.00	0.05	355.94	2557.81	14.74	-13.56	-14.25	0.03	461529.12	716698.70	N 32 16 3.16	W 103 45 57.53
	2652.00	0.13	42.21	2651.81	14.61	-13.44	-14.18	0.11	461529.24	716698.77	N 32 16 3.16	W 103 45 57.53
	2747.00	0.03	56.72	2746.81	14.51	-13.35	-14.09	0.11	461529.33	716698.86	N 32 16 3.16	W 103 45 57.53
	2841.00	0.03	201.71	2840.81	14.52	-13.36	-14.08	0.06	461529.32	716698.87	N 32 16 3.16	W 103 45 57.53
CASTILE	2854.19	0.03	212.14	2854.00	14.52	-13.37	-14.08	0.04	461529.32	716698.87	N 32 16 3.16	W 103 45 57.53
	2936.00	0.05	254.49	2935.81	14.56	-13.39	-14.13	0.04	461529.29	716698.82	N 32 16 3.16	W 103 45 57.53
	3030.00	0.05	207.86	3029.81	14.61	-13.44	-14.18	0.04	461529.24	716698.77	N 32 16 3.16	W 103 45 57.53
	3125.00	0.03	44.25	3124.81	14.63	-13.46	-14.19	0.08	461529.22	716698.76	N 32 16 3.16	W 103 45 57.53
	3219.00	0.03	309.13	3218.81	14.59	-13.43	-14.19	0.05	461529.25	716698.76	N 32 16 3.16	W 103 45 57.53
	3314.00	0.05	186.10	3313.81	14.62	-13.45	-14.21	0.07	461529.23	716698.74	N 32 16 3.16	W 103 45 57.53
	3409.00	0.05	240.04	3408.81	14.69	-13.51	-14.25	0.05	461529.17	716698.70	N 32 16 3.16	W 103 45 57.53
	3598.00	0.27	146.81	3597.81	15.08	-13.93	-14.08	0.15	461528.75	716698.87	N 32 16 3.16	W 103 45 57.53
	3693.00	0.25	146.09	3692.81	15.42	-14.29	-13.84	0.02	461528.39	716699.11	N 32 16 3.15	W 103 45 57.53
	3788.00	0.15	240.29	3787.81	15.65	-14.52	-13.83	0.32	461528.16	716699.12	N 32 16 3.15	W 103 45 57.53
	3977.00	0.16	136.87	3976.81	15.97	-14.84	-13.87	0.13	461527.85	716699.08	N 32 16 3.15	W 103 45 57.53
	4167.00	0.15	333.49	4166.81	15.94	-14.81	-13.80	0.16	461527.87	716699.15	N 32 16 3.15	W 103 45 57.53
	4262.00	0.19	307.68	4261.81	15.74	-14.60	-13.98	0.09	461528.08	716699.97	N 32 16 3.15	W 103 45 57.53
DELAWARE	4320.19	0.08	338.22	4320.00	15.66	-14.50	-14.07	0.22	461528.18	716698.88	N 32 16 3.15	W 103 45 57.53
BELL CANYON	4347.19	0.06	27.85	4347.00	15.63	-14.47	-14.07	0.22	461528.21	716698.88	N 32 16 3.15	W 103 45 57.53
	4361.00	0.07	53.53	4360.81	15.62	-14.46	-14.06	0.22	461528.22	716698.89	N 32 16 3.15	W 103 45 57.53
	4550.00	0.25	283.87	4549.81	15.47	-14.30	-14.37	0.16	461528.39	716698.58	N 32 16 3.15	W 103 45 57.53
	4694.00	0.06	117.79	4693.81	15.46	-14.26	-14.61	0.21	461528.43	716698.34	N 32 16 3.15	W 103 45 57.53
	4884.00	0.44	329.41	4883.80	14.90	-13.67	-14.89	0.26	461529.01	716698.06	N 32 16 3.16	W 103 45 57.54
	4978.00	0.11	76.34	4977.80	14.58	-13.34	-14.99	0.51	461529.34	716697.97	N 32 16 3.16	W 103 45 57.54
	5167.00	0.06	171.56	5166.80	14.62	-13.40	-14.79	0.07	461529.28	716698.16	N 32 16 3.16	W 103 45 57.54
CHERRY CANYON	5232.20	0.14	52.91	5232.00	14.60	-13.38	-14.73	0.26	461529.30	716698.22	N 32 16 3.16	W 103 45 57.54
	5357.00	0.46	40.25	5356.80	14.09	-12.91	-14.29	0.26	461529.77	716698.66	N 32 16 3.17	W 103 45 57.53
	5451.00	2.17	356.16	5450.77	12.02	-10.85	-14.16	1.99	461531.83	716698.79	N 32 16 3.19	W 103 45 57.53
	5546.00	4.87	351.90	5545.59	6.32	-5.06	-14.85	2.85	461537.62	716698.10	N 32 16 3.24	W 103 45 57.54
	5640.00	7.08	350.88	5639.07	-3.19	4.61	-16.33	2.35	461547.29	716696.62	N 32 16 3.34	W 103 45 57.55
	5735.00	9.06	342.82	5733.13	-15.80	17.54	-19.47	2.40	461560.22	716693.48	N 32 16 3.47	W 103 45 57.59
	5830.00	9.95	332.14	5826.83	-29.64	31.94	-25.51	2.08	461574.62	716687.44	N 32 16 3.61	W 103 45 57.66
	5924.00	9.97	317.09	5919.43	-41.93	45.08	-34.85	2.76	461587.76	716678.10	N 32 16 3.74	W 103 45 57.77
	6019.00	9.74	305.83	6013.04	-51.58	55.81	-46.97	2.04	461598.49	716665.99	N 32 16 3.85	W 103 45 57.91
	6113.00	9.36	306.49	6105.73	-59.67	65.01	-59.56	0.42	461607.69	716653.39	N 32 16 3.94	W 103 45 58.05
	6208.00	9.44	310.14	6199.46	-68.20	74.63	-71.73	0.63	461617.30	716641.23	N 32 16 4.03	W 103 45 58.19
	6302.00	9.32	310.15	6292.20	-77.04	84.51	-83.44	0.13	461627.18	716629.52	N 32 16 4.13	W 103 45 58.33
	6397.00	9.50	311.16	6385.92	-86.11	94.63	-95.22	0.26	461637.30	716617.74	N 32 16 4.23	W 103 45 58.47
	6492.00	9.46	312.94	6479.63	-95.56	105.10	-106.84	0.31	461647.78	716606.12	N 32 16 4.34	W 103 45 58.60
BRUSHY CANYON	6507.59	9.44	312.89	6495.00	-97.13	106.85	-108.71	0.14	461649.52	716604.25	N 32 16 4.36	W 103 45 58.62
	6586.00	9.34	312.65	6572.36	-104.98	115.54	-118.10	0.14	461658.21	716594.85	N 32 16 4.44	W 103 45 58.73
	6680.00	8.99	310.99	6665.16	-113.97	125.52	-129.26	0.47	461668.19	716583.70	N 32 16 4.54	W 103 45 58.86
	6775.00	9.42	316.08	6758.94	-123.46	135.99	-140.25	0.97	461678.66	716572.71	N 32 16 4.65	W 103 45 58.99
	6864.00	9.69	308.40	6845.33	-142.42	157.01	-163.45	0.69	461699.68	716549.51	N 32 16 4.85	W 103 45 59.26
	7058.00	9.80	303.32	7037.97	-150.59	166.32	-176.33	0.92	461708.99	716536.63	N 32 16 4.95	W 103 45 59.41
	7248.00	12.57	294.97	7224.36	-165.37	183.93	-208.59	1.69	461726.60	716504.37	N 32 16 5.12	W 103 45 59.78

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	7342.00	12.10	295.16	7316.19	-172.29	192.44	-226.78	0.50	461735.11	716486.18	N 32 16 5.21 W	103 45 59.99
	7437.00	11.32	286.25	7403.22	-177.56	199.28	-244.75	2.07	461741.95	716468.21	N 32 16 5.28 W	103 46 0.20
	7532.00	10.81	280.11	7502.51	-177.12	200.36	-262.49	5.26	461743.03	716450.48	N 32 16 5.28 W	103 46 0.41
	7626.00	10.88	252.40	7594.84	-171.47	196.17	-279.63	1.54	461738.84	716433.34	N 32 16 5.25 W	103 46 0.61
	7721.00	9.57	250.87	7688.32	-164.81	190.87	-295.64	1.41	461733.54	716417.33	N 32 16 5.20 W	103 46 0.79
	7921.00	9.92	254.49	7885.44	-152.03	180.81	-327.94	0.35	461723.48	716385.02	N 32 16 5.10 W	103 46 1.17
	8004.00	10.01	254.16	7967.19	-146.97	176.93	-341.77	0.13	461719.60	716371.20	N 32 16 5.06 W	103 46 1.33
	8099.00	9.71	253.88	8060.78	-141.17	172.45	-357.41	0.32	461715.12	716355.56	N 32 16 5.02 W	103 46 1.52
BONE SPRING	8196.57	9.45	258.15	8157.00	-135.90	168.52	-373.16	0.77	461711.19	716339.81	N 32 16 4.98 W	103 46 1.70
	8287.00	9.26	262.29	8246.22	-132.17	166.02	-387.63	0.77	461708.69	716325.34	N 32 16 4.96 W	103 46 1.87
	8381.00	8.90	275.71	8339.06	-130.62	165.73	-402.37	2.28	461708.40	716310.61	N 32 16 4.95 W	103 46 2.04
	8476.00	9.06	282.78	8432.89	-131.74	168.12	-416.97	1.17	461710.79	716296.00	N 32 16 4.98 W	103 46 2.21
	8571.00	9.36	296.03	8526.68	-135.55	173.16	-431.21	2.25	461715.83	716281.76	N 32 16 5.03 W	103 46 2.37
	8771.00	9.74	282.28	8723.93	-143.57	183.90	-462.36	1.15	461726.57	716250.62	N 32 16 5.14 W	103 46 2.74
	8949.00	9.44	276.72	8899.45	-145.96	188.81	-491.57	0.55	461731.48	716221.41	N 32 16 5.19 W	103 46 3.08
	9139.00	10.05	276.63	9086.71	-146.95	192.55	-523.51	0.32	461735.22	716189.47	N 32 16 5.22 W	103 46 3.45
	9233.00	10.72	270.45	9179.17	-146.51	193.56	-540.40	1.38	461736.23	716172.58	N 32 16 5.24 W	103 46 3.65
BONE SPRING 1ST	9271.49	10.51	266.94	9217.00	-145.74	193.40	-547.49	1.77	461736.07	716165.49	N 32 16 5.23 W	103 46 3.73
	9422.00	10.10	252.22	9365.11	-138.74	188.64	-573.77	1.77	461731.31	716139.21	N 32 16 5.19 W	103 46 4.03
	9611.00	10.02	245.49	9551.21	-124.27	176.76	-604.51	0.62	461719.43	716108.47	N 32 16 5.07 W	103 46 4.39
	9800.00	9.37	259.95	9737.54	-112.22	167.25	-634.63	1.33	461709.92	716078.36	N 32 16 4.98 W	103 46 4.74
BONE SPRING 2ND	9873.49	9.81	264.15	9810.00	-109.50	165.57	-646.75	1.13	461708.24	716066.24	N 32 16 4.96 W	103 46 4.89
	9995.00	9.95	265.31	9831.19	-108.85	165.23	-650.42	1.13	461707.90	716062.57	N 32 16 4.96 W	103 46 4.93
	9990.00	10.25	271.80	9924.72	-107.02	164.82	-667.05	1.24	461707.49	716045.94	N 32 16 4.96 W	103 46 5.12
	10084.00	10.38	273.02	10017.20	-106.28	165.53	-683.87	0.27	461708.20	716029.12	N 32 16 4.97 W	103 46 5.32
	10273.00	9.74	257.01	10203.33	-100.80	162.83	-716.45	1.51	461705.51	715996.54	N 32 16 4.94 W	103 46 5.70
	10462.00	9.65	272.70	10389.67	-95.27	159.99	-747.86	1.39	461702.66	715965.13	N 32 16 4.91 W	103 46 6.06
	10652.00	9.69	280.70	10576.98	-96.26	163.71	-779.48	0.71	461706.38	715933.51	N 32 16 4.95 W	103 46 6.43
	10841.00	10.15	276.89	10763.15	-98.44	168.66	-811.64	0.42	461711.33	715901.35	N 32 16 5.00 W	103 46 6.81
KOP Actual	11031.00	9.78	275.05	10950.29	-99.05	172.09	-844.34	0.26	461714.76	715868.66	N 32 16 5.04 W	103 46 7.19
	11114.00	8.29	286.80	11032.26	-100.30	174.44	-857.09	2.85	461717.11	715855.91	N 32 16 5.06 W	103 46 7.33
BONE SPRING 3RD	11117.78	8.37	284.35	11036.00	-100.40	174.58	-857.62	9.65	461717.25	715855.38	N 32 16 5.06 W	103 46 7.34
	11229.00	15.12	240.58	11145.02	-93.52	169.45	-878.16	9.65	461712.12	715834.84	N 32 16 5.01 W	103 46 7.58
	11323.00	23.13	201.08	11234.11	-68.74	146.07	-895.57	15.74	461688.74	715817.43	N 32 16 4.78 W	103 46 7.78
	11418.00	30.65	186.04	11318.88	-26.50	104.47	-904.86	10.62	461647.15	715808.14	N 32 16 4.37 W	103 46 7.90
	11512.00	42.93	180.71	11394.03	29.61	48.41	-907.79	13.49	461591.08	715805.21	N 32 16 3.82 W	103 46 7.93
	11606.00	51.00	179.20	11458.13	98.00	-20.24	-907.67	8.66	461522.44	715805.33	N 32 16 3.14 W	103 46 7.94
Wolfcamp Intersection	11659.93	53.89	179.53	11491.00	140.55	-62.99	-907.20	5.38	461479.69	715805.80	N 32 16 2.72 W	103 46 7.93
WOLF CAMP	11701.00	56.09	179.76	11514.56	174.04	-96.62	-906.99	5.38	461446.06	715806.01	N 32 16 2.38 W	103 46 7.93
330°FNL Crossed	11723.00	58.61	180.46	11526.43	192.50	-115.14	-907.03	11.77	461427.54	715805.97	N 32 16 2.20 W	103 46 7.93
	11795.00	66.88	182.54	11559.37	256.33	-179.07	-908.75	11.77	461363.62	715804.25	N 32 16 1.57 W	103 46 7.96
	11889.00	70.99	179.84	11593.16	343.83	-266.74	-910.54	5.13	461275.96	715802.46	N 32 16 0.70 W	103 46 7.98
	11984.00	78.35	177.26	11618.26	434.81	-358.26	-908.19	8.18	461184.44	715804.81	N 32 16 59.79 W	103 46 7.96
	12078.00	90.95	180.17	11627.01	527.66	-451.63	-906.12	13.75	461091.08	715806.88	N 32 15 58.87 W	103 46 7.94
	12125.00	91.47	179.62	11626.02	574.47	-498.61	-906.03	1.61	461044.09	715806.97	N 32 15 58.41 W	103 46 7.95
	12301.00	89.48	178.89	11624.56	749.59	-674.58	-903.75	1.20	460868.14	715809.26	N 32 15 56.66 W	103 46 7.93
	12395.00	90.48	179.24	11624.59	843.10	-768.57	-902.21	1.13	460774.15	715810.79	N 32 15 55.73 W	103 46 7.92
	12490.00	89.24	178.47	11624.82	937.65	-863.56	-901.14	1.33	460679.17	715811.86	N 32 15 54.79 W	103 46 7.91
	12584.00	86.80	179.23	11628.07	1031.15	-957.49	-900.08	2.61	460585.24	715812.92	N 32 15 53.86 W	103 46 7.90
	12678.00	86.73	178.48	11633.43	1125.55	-1052.33	-899.01	0.27	460490.41	715813.99	N 32 15 52.93 W	103 46 7.90
	12773.00	86.62	180.05	11638.88	1219.01	-1146.18	-898.62	0.62	460396.57	715814.38	N 32 15 52.00 W	103 46 7.90
	12867.00	87.65	180.01	11643.58	1312.55	-1240.06	-898.67	1.01	460302.70	715814.33	N 32 15 51.07 W	103 46 7.91
	12969.00	89.96	179.94	11646.13	1434.06	-1362.02	-898.62	1.89	460180.74	715814.38	N 32 15 49.86 W	103 46 7.91
	13065.00	89.51	179.39	11646.44	1500.78	-1429.02	-898.23	1.03	460113.74	715814.77	N 32 15 49.20 W	103 46 7.91
	13150.00	90.23	180.30	11646.65	1594.41	-1523.02	-897.97	1.26	460019.75	715815.03	N 32 15 48.27 W	103 46 7.93
	13245.00	90.82	180.84	11645.78	1688.13	-1618.01	-896.92	0.84	459924.77	715814.08	N 32 15 47.33 W	103 46 7.93
	13339.00	89.86	179.58	11645.22	1782.81	-1712.00	-896.26	1.69	459830.78	715813.74	N 32 15 46.40 W	103 46 7.94
	13433.00	90.82	180.50	11644.66	1876.46	-1806.00	-896.33	1.41	459736.79	715813.67	N 32 15 45.47 W	103 46 7.95
	13528.00	90.48	180.42	11643.59	1971.17	-1900.99	-890.09	0.37	459641.80	715812.91	N 32 15 44.53 W	103 46 7.96
	13622.00	89.44	180.46	11643.65	2064.88	-1994.99	-890.81	1.11	459547.81	715812.19	N 32 15 43.60 W	103 46 7.98
	13717.00	88.69	180.49	11645.20	2159.58	-2089.97	-901.60	0.79	459452.83	715811.40	N 32 15 42.66 W	103 46 7.99
	13811.00	88.79	180.69	11647.27	2253.29	-2183.94	-902.57	0.24	459358.87	715810.43	N 32 15 41.73 W	103 46 8.01
	13905.00	88.58	179.96	11649.43	2346.96	-2277.91	-903.10	0.81	459264.90	715809.90	N 32 15 40.80 W	103 46 8.02
	14000.00	90.65	180.12	11650.06	2441.61	-2372.91	-903.17	2.19	459169.81	715809.83	N 32 15 39.86 W	103 46 8.03
	14094.00	90.44	180.16	11649.17	2535.28	-2466.90	-903.40	0.23	459075.92	715809.60	N 32 15 38.93 W	103 46 8.04
	14188.00	89.13	180.30	11649.52	2628.96	-2560.90	-903.78	1.40	458981.93	715809.23	N 32 15 38.00 W	103 46 8.05
	14282.00	89.34	180.42	11650.78	2722.66	-2654.89	-904.37	0.26	458887.95	715808.64	N 32 15 37.07 W	103 46 8.06
	14376.00	90.96	180.35	11650.53	2816.36	-2748.88	-905.00	1.73	458793.96	715808.00	N 32 15 36.14 W	103 46 8.07
	14471.00	90.85	180.44	11649.03	2911.05	-2843.87	-905.65	0.15	458698.98	715807.35	N 32 15 35.20 W	103 46 8.08
	14565.00	89.51	180.29	11648.74	3004.75	-2937.86	-906.25	1.43	458604.99	715806.75	N 32 15 34.27 W	103 46 8.10
	14753.00	89.48	180.38	11650.39	3192.14	-3125.85	-907.35	0.05	458417.01	715805.65	N 32 15 32.41 W	103 46 8.12
	14848.00	89.96	180.23	11650.86	3286.83	-3220.85	-907.86	0.53	458322.02	715805.15	N 32 15 31.47 W	103 46 8.13
	14942.00	90.17	179.80	11650.75	3380.49	-3314.85	-907.88	0.51	458228.02	715805.12	N 32 15 30.54 W	103 46 8.14
	15037.00	91.44	180.34	11648.42	3475.14	-3409.84	-908.00	1.45	458133.04	715805.01	N 32 15 29.60 W	103 46 8.15
	15131.00	91.27	180.25	11647.19	3568.81	-3503.81	-908.48	0.20	458039.07	715804.52	N 32 15 28.67 W	103 46 8.16
	15226.00	91.03	180.29	11645.29	3663.47	-3598.79	-908.93	0.26	457944.10	715804.07	N 32 15 27.73 W	103 46 8.17
	15320.00	90.96	181.11	11643.65	3757.21							

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 ° ' ")
	18248.00	89.65	178.40	11638.40	6671.58	-6619.77	-888.54	1.52	454923.30	715824.46	N 32 14 57.84 W 103 46 8.12	
	18343.00	90.75	178.86	11638.07	6766.00	-6714.74	-886.27	1.26	454828.33	715826.73	N 32 14 56.90 W 103 46 8.10	
	18531.00	89.31	178.86	11637.97	6952.95	-6902.69	-882.53	0.77	454640.38	715830.47	N 32 14 55.04 W 103 46 8.06	
	18720.00	88.14	178.03	11642.18	7140.69	-7091.57	-877.40	0.76	454451.52	715835.60	N 32 14 53.17 W 103 46 8.02	
	18909.00	91.20	178.85	11643.26	7328.46	-7280.48	-872.26	1.68	454262.62	715840.74	N 32 14 51.30 W 103 46 7.97	
	19098.00	90.03	178.69	11641.23	7516.35	-7469.42	-868.20	0.62	454073.69	715844.80	N 32 14 49.43 W 103 46 7.93	
	19193.00	89.03	178.41	11642.01	7610.76	-7564.38	-865.80	1.09	453978.73	715847.20	N 32 14 48.49 W 103 46 7.91	
	19382.00	88.79	178.39	11645.61	7798.51	-7753.28	-860.52	0.13	453789.85	715852.48	N 32 14 46.62 W 103 46 7.86	
	19572.00	89.51	178.65	11648.43	7987.30	-7943.19	-855.62	0.40	453599.95	715857.38	N 32 14 44.74 W 103 46 7.81	
	19761.00	90.92	178.77	11647.72	8175.19	-8132.14	-851.36	0.75	453411.01	715861.64	N 32 14 42.87 W 103 46 7.78	
	19950.00	91.95	178.95	11642.99	8363.23	-8321.06	-849.25	0.83	453222.10	715863.75	N 32 14 41.00 W 103 46 7.76	
	20045.00	90.44	178.27	11641.00	8457.80	-8416.03	-848.60	1.74	453127.13	715864.39	N 32 14 40.06 W 103 46 7.76	
	20233.00	90.37	178.20	11639.68	8644.87	-8604.01	-846.09	0.05	452939.17	715866.90	N 32 14 38.20 W 103 46 7.74	
	20433.00	88.58	178.92	11641.51	8843.81	-8803.97	-842.81	0.91	452739.22	715870.18	N 32 14 36.22 W 103 46 7.72	
	20518.00	89.65	178.12	11642.82	8928.35	-8888.94	-841.36	1.28	452654.25	715871.64	N 32 14 35.38 W 103 46 7.71	
	20706.00	90.92	178.38	11641.89	9115.25	-9076.89	-837.25	0.78	452466.31	715875.74	N 32 14 33.52 W 103 46 7.67	
	20896.00	90.54	180.80	11639.46	9304.40	-9266.86	-835.90	1.29	452276.36	715877.10	N 32 14 31.64 W 103 46 7.67	
	20990.00	89.34	180.48	11639.56	9398.14	-9360.85	-836.95	1.32	452182.37	715876.05	N 32 14 30.71 W 103 46 7.68	
	21180.00	89.99	180.86	11640.67	9587.61	-9550.83	-839.17	0.40	451992.40	715873.83	N 32 14 28.83 W 103 46 7.72	
	21274.00	89.38	181.14	11641.19	9681.39	-9644.81	-840.81	0.71	451898.42	715872.19	N 32 14 27.90 W 103 46 7.75	
	21464.00	90.20	181.84	11641.89	9871.05	-9834.75	-845.75	0.57	451708.50	715867.25	N 32 14 26.02 W 103 46 7.82	
330°FSL Crossed	21652.00	90.13	181.03	11641.35	10058.70	-10022.68	-850.47	0.43	451520.57	715862.53	N 32 14 24.16 W 103 46 7.88	
	21853.00	90.13	181.03	11641.34	10059.69	-10023.68	-850.49	0.43	451519.57	715862.51	N 32 14 24.15 W 103 46 7.88	
Final MWD	21700.00	89.58	180.64	11641.46	10106.57	-10070.68	-851.17	1.43	451472.58	715861.83	N 32 14 23.69 W 103 46 7.89	
Proj to TD	21747.00	89.58	180.64	11641.81	10153.44	-10117.68	-851.70	0.00	451425.59	715861.30	N 32 14 23.22 W 103 46 7.90	

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 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	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 177H Gyro + MWD 0-21747MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 177H Gyro + MWD 0-21747MD
	1	26.500	610.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 177H
	1	610.500	21747.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Platinum MDP1 34-3 Federal Com 177H