REC'D-8/10/2020
NMOCD

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	Pool Code	Pool Name
30-015-45388	98220/98236	PURPLE SAGE WOLFCAMP/WC-015 G-08 S233135D; WOLFCAMP

Property Code	Property Name	Well Number
322740	STERLING SILVER MDP1 "33–4" FEDERAL COM	175H

OGRID No.	Operator Name	Elevation
16696	OXY USA INC.	3400.6'

Surface Location

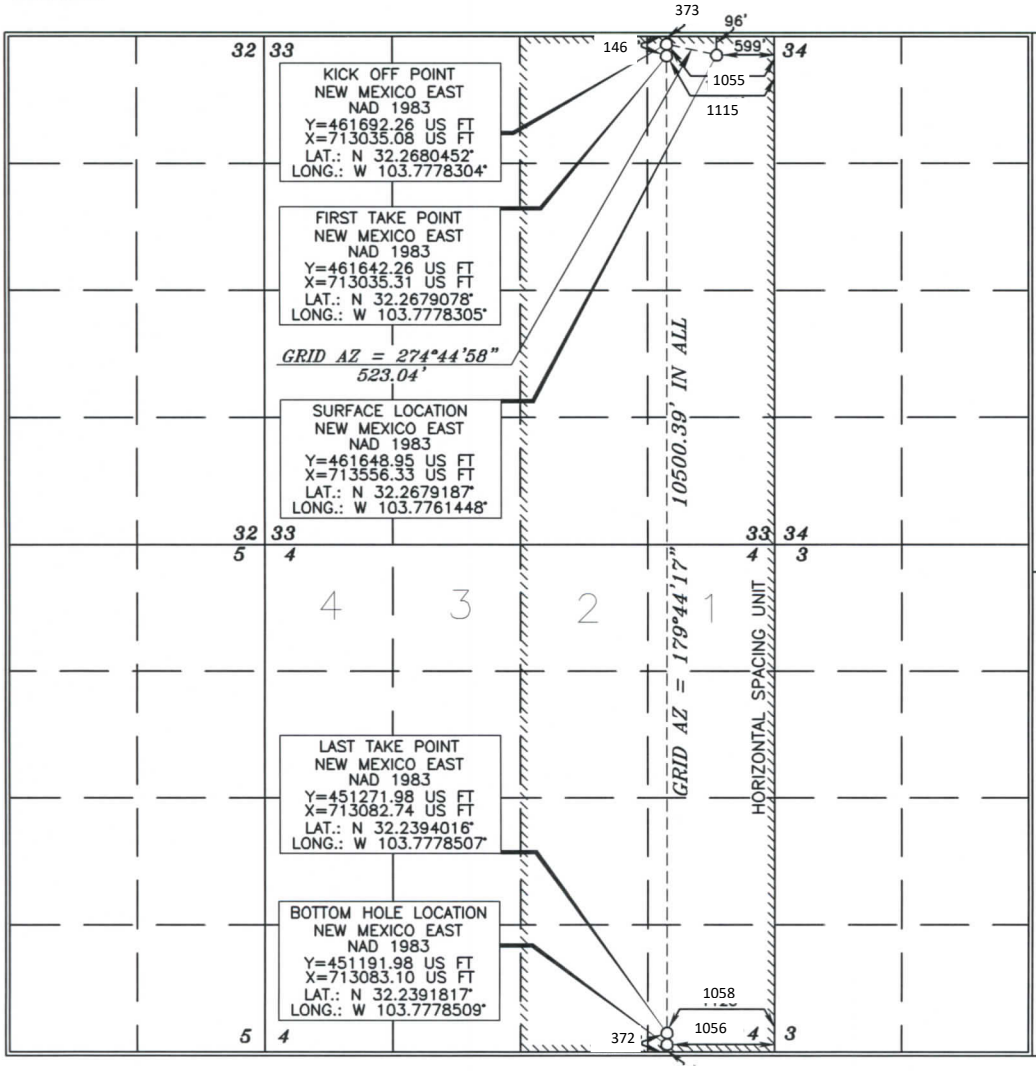
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	23 SOUTH	31 EAST, N.M.P.M.		96'	NORTH	599'	EAST	EDDY

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
P	4	24 SOUTH	31 EAST, N.M.P.M.		253	SOUTH	1056	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			NSL-7843

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 — Date: 5/14/20

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.

FEBRUARY 1, 2018
Date of Survey

Signature and Seal of Professional Surveyor:

TERRY J. ASEL — NEW MEXICO — 15079 — PROFESSIONAL LAND SURVEYOR

5/11/2019

Certificate Number 15079

WO# 180201WL–c (Rev. A) (KA)

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

September 17, 2019

OXY USA, Inc.
5 Greenway Plaza, Suite 110
Houston, TX 77046

Re:

CLIENT: OXY USA, Inc.
WELL: Sterling Silver MDP1 33-4 Fed Com 175H
FIELD: Purple Sage (Wolfcamp)

S33, T23S, R31E Eddy, NM
N 32.2679187 W -103.7761448

RIG: H&P 635
COUNTY: Eddy
API NO: 30-015-45388
JOB NO: 19MLH0240

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.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
JOSEPH AJAYI FE	STERLING SILVER MDP1 33-4 FED Original Hole	593.00 Ft 21932.00 Ft	to	July 31, 2019 August 30, 2019	to	TelePacer/SlimPulse Third Party Corrected

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
S33, T23S, R31E Eddy, NM
N 32.2679187 W -103.7761448

I, JOSEPH AJAYI certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of July 31, 2019 through August 30, 2019, conduct or supervise the taking of the TelePacer, SlimPulse & Third Party Corrected surveys from a depth of 593.00 feet to a depth of 21932.00 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, Inc. for the STERLING SILVER MDP1 33-4 FED COM 175H Well (Original Hole) API No. 3001545388 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
JOSEPH AJAYI
FE
J. Ajayi

Subscribed and Sworn to before me this 19 day of September (month) 2019 (yr)

My Commission expires:
6/14/2023

Jean-Paul Langlois (signature)
Notary Public
Comanche, Oklahoma
(County State)

Jean-Paul Langlois
Notary Public in and for
STATE OF OKLAHOMA
Commission #19005986
Expires: June 14, 2023

Final PvA - Rev7

H&P 635 (RKB=26.5')

Schlumberger

OXY

Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Sterling Silver MDP1 33-4 Federal Com 175H	NM Eddy County (NAD 83)	Oxy Sterling Silver MDP1 33-4 Federal Com 175H

Gravity & Magnetic Parameters

Model:	IFR1	Dip:	59.948°	Date:	18-Aug-2019
MagDec:	6.777°	FS:	47948.4nT	Gravity FS:	998.449mgn (9.80665 Based)

Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet

Lat:	N 32 16 4.51	Northing:	461648.95ftUS	Grid Conv:	0.2975°
Lon:	W 103 46 34.12	Easting:	713556.33ftUS	Scale Fact:	0.99994306

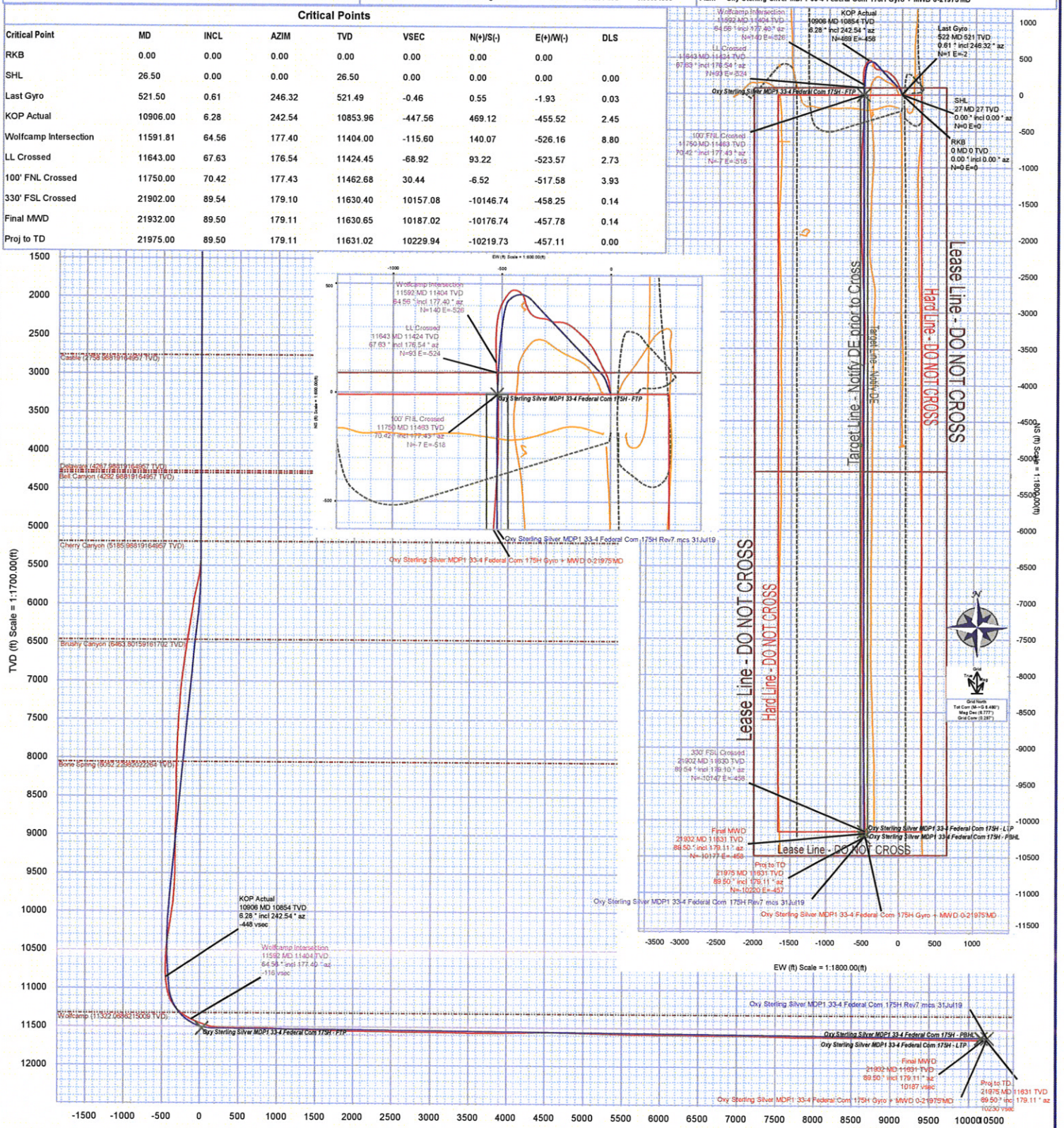
Miscellaneous

Slot: Oxy Sterling Silver MDP1 33-4 Federal Com 175H TVD Ref: RKB=26.5'(3427.1ft above MSL)

Plan: Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00
Last Gyro	521.50	0.61	246.32	521.49	-0.46	0.55	-1.93	0.03
KOP Actual	10906.00	6.28	242.54	10853.96	-447.56	469.12	-455.52	2.45
Wolfcamp Intersection	11591.81	64.56	177.40	11404.00	-115.60	140.07	-526.16	8.80
LL Crossed	11643.00	67.63	176.54	11424.45	-68.92	93.22	-523.57	2.73
100' FNL Crossed	11750.00	70.42	177.43	11462.68	30.44	-6.52	-517.58	3.93
330' FSL Crossed	21902.00	89.54	179.10	11630.40	10157.08	-10146.74	-458.25	0.14
Final MWD	21932.00	89.50	179.11	11630.65	10187.02	-10176.74	-457.78	0.14
Proj to TD	21975.00	89.50	179.11	11631.02	10229.94	-10219.73	-457.11	0.00



Schlumberger

Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD
Survey Geodetic Report
(Def Survey)

Report Date:	September 04, 2019 - 10:51 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	OXY	**Vertical Section Azimuth:**	182.649 ° (Grid North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Oxy Sterling Silver MDP1 33-4 Federal Com 175H / Oxy Sterling Silver MDP1 33-4 Federal Com 175H	**TVD Reference Datum:**	RKB=26.5'
Well:	Oxy Sterling Silver MDP1 33-4 Federal Com 175H	**TVD Reference Elevation:**	3427.100 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3400.600 ft above MSL
UWI / API#:	Unknown / 30-015-45388	**Magnetic Declination:**	6.777 °
Survey Name:	Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD	**Total Gravity Field Strength:**	998.4491mgn (9.80665 Based)
Survey Date:	July 26, 2019	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	249.316 ° / 11439.261 ft / 6.731 / 0.984	**Total Magnetic Field Strength:**	47948.400 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.948 °
Location Lat / Long:	N 32° 16' 4.50743", W 103° 46' 34.12137"	**Declination Date:**	August 18, 2019
Location Grid N/E Y/X:	N 461648.950 ftUS, E 713556.330 ftUS	**Magnetic Declination Model:**	IFR1
CRS Grid Convergence Angle:	0.2975 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99994306	**Grid Convergence Used:**	0.2975 °
Version / Patch:	2.10.782.0	**Total Corr Mag North->Grid North:**	6.4795 °
		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 ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	461648.95	713556.33	N 32 16 4.51	W 103 46 34.12
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	461648.95	713556.33	N 32 16 4.51	W 103 46 34.12
	71.50	0.18	34.36	71.50	-0.06	0.06	0.04	0.40	461649.01	713556.37	N 32 16 4.51	W 103 46 34.12
	121.50	0.29	4.83	121.50	-0.25	0.25	0.09	0.32	461649.20	713556.42	N 32 16 4.51	W 103 46 34.12
	321.50	0.28	301.79	321.50	-1.00	1.01	-0.28	0.15	461649.96	713556.05	N 32 16 4.52	W 103 46 34.12
	421.50	0.59	248.33	421.49	-0.90	0.95	-0.96	0.48	461649.90	713555.37	N 32 16 4.52	W 103 46 34.13
Last Gyro	521.50	0.61	246.32	521.49	-0.46	0.55	-1.93	0.03	461649.50	713554.40	N 32 16 4.51	W 103 46 34.14
	593.00	0.41	221.05	592.99	-0.09	0.20	-2.45	0.41	461649.15	713553.88	N 32 16 4.51	W 103 46 34.15
	777.00	0.11	293.74	776.98	0.37	-0.23	-3.04	0.21	461648.72	713553.29	N 32 16 4.51	W 103 46 34.16
	962.00	0.08	1.70	961.98	0.17	-0.02	-3.20	0.06	461648.93	713553.13	N 32 16 4.51	W 103 46 34.16
	1054.00	0.11	74.22	1053.98	0.08	0.06	-3.11	0.12	461649.01	713553.22	N 32 16 4.51	W 103 46 34.16
	1237.00	0.13	268.91	1236.98	0.04	0.11	-3.15	0.13	461649.06	713553.18	N 32 16 4.51	W 103 46 34.16
	1330.00	0.06	125.99	1329.98	0.07	0.08	-3.22	0.20	461649.03	713553.11	N 32 16 4.51	W 103 46 34.16
	1427.00	0.06	273.32	1426.98	0.10	0.05	-3.23	0.12	461649.00	713553.10	N 32 16 4.51	W 103 46 34.16
	1518.00	0.13	53.32	1517.98	0.03	0.11	-3.19	0.20	461649.06	713553.14	N 32 16 4.51	W 103 46 34.16
	1612.00	0.13	224.31	1611.98	0.05	0.10	-3.18	0.28	461649.05	713553.15	N 32 16 4.51	W 103 46 34.16
	1801.00	0.06	319.00	1800.98	0.13	0.02	-3.40	0.08	461648.97	713552.94	N 32 16 4.51	W 103 46 34.16
	1990.00	0.13	318.95	1989.98	-0.09	0.26	-3.60	0.04	461649.21	713552.73	N 32 16 4.51	W 103 46 34.16
	2084.00	0.13	87.68	2083.98	-0.18	0.34	-3.56	0.25	461649.29	713552.77	N 32 16 4.51	W 103 46 34.16
	2179.00	0.08	288.28	2178.98	-0.21	0.37	-3.52	0.22	461649.32	713552.81	N 32 16 4.51	W 103 46 34.16
	2273.00	0.13	306.40	2272.98	-0.28	0.45	-3.67	0.06	461649.40	713552.66	N 32 16 4.51	W 103 46 34.16
	2368.00	0.06	40.41	2367.98	-0.38	0.55	-3.72	0.15	461649.50	713552.61	N 32 16 4.51	W 103 46 34.16
	2462.00	0.08	138.83	2461.98	-0.37	0.54	-3.65	0.11	461649.49	713552.68	N 32 16 4.51	W 103 46 34.16
	2651.00	0.11	357.13	2650.98	-0.46	0.62	-3.57	0.10	461649.57	713552.76	N 32 16 4.51	W 103 46 34.16
	2745.00	0.13	354.26	2744.98	-0.65	0.82	-3.58	0.02	461649.77	713552.75	N 32 16 4.52	W 103 46 34.16
	2839.00	0.08	67.07	2838.98	-0.79	0.95	-3.53	0.14	461649.90	713552.80	N 32 16 4.52	W 103 46 34.16
	2934.00	0.08	144.75	2933.98	-0.76	0.92	-3.44	0.11	461649.87	713552.89	N 32 16 4.52	W 103 46 34.16
	3123.00	0.08	26.54	3122.98	-0.78	0.93	-3.30	0.07	461649.88	713553.03	N 32 16 4.52	W 103 46 34.16
	3217.00	0.08	212.45	3216.98	-0.78	0.94	-3.31	0.17	461649.89	713553.02	N 32 16 4.52	W 103 46 34.16
	3311.00	0.06	125.25	3310.98	-0.70	0.85	-3.30	0.10	461649.80	713553.03	N 32 16 4.52	W 103 46 34.16
	3406.00	0.08	7.06	3405.98	-0.74	0.89	-3.25	0.13	461649.84	713553.08	N 32 16 4.52	W 103 46 34.16
	3500.00	0.18	133.02	3499.98	-0.71	0.86	-3.14	0.25	461649.81	713553.19	N 32 16 4.52	W 103 46 34.16
	3595.00	0.13	77.99	3594.98	-0.64	0.78	-2.92	0.16	461649.73	713553.41	N 32 16 4.52	W 103 46 34.16
	3689.00	0.06	202.47	3688.98	-0.62	0.75	-2.84	0.18	461649.70	713553.49	N 32 16 4.52	W 103 46 34.15
	3878.00	0.06	30.13	3877.98	-0.62	0.75	-2.82	0.06	461649.70	713553.51	N 32 16 4.51	W 103 46 34.15
	3972.00	0.17	100.64	3971.98	-0.64	0.76	-2.66	0.17	461649.71	713553.67	N 32 16 4.52	W 103 46 34.15
	4066.00	0.13	75.17	4065.98	-0.65	0.77	-2.42	0.08	461649.72	713553.91	N 32 16 4.52	W 103 46 34.15
	4161.00	0.13	88.88	4160.98	-0.69	0.80	-2.21	0.03	461649.75	713554.12	N 32 16 4.52	W 103 46 34.15
	4255.00	0.06	145.78	4254.98	-0.66	0.76	-2.08	0.12	461649.71	713554.25	N 32 16 4.52	W 103 46 34.15
	4282.00	0.08	263.04	4281.98	-0.65	0.74	-2.09	0.44	461649.69	713554.24	N 32 16 4.51	W 103 46 34.15
	4419.00	0.23	153.40	4418.98	-0.39	0.49	-2.06	0.20	461649.44	713554.27	N 32 16 4.51	W 103 46 34.15
	4609.00	0.12	71.02	4608.98	-0.13	0.21	-1.70	0.13	461649.16	713554.63	N 32 16 4.51	W 103 46 34.14
	4704.00	0.20	343.47	4703.98	-0.32	0.40	-1.65	0.24	461649.35	713554.68	N 32 16 4.51	W 103 46 34.14
	4799.00	0.08	228.85	4798.98	-0.43	0.52	-1.75	0.26	461649.47	713554.58	N 32 16 4.51	W 103 46 34.14
	4893.00	0.08	160.27	4892.98	-0.33	0.41	-1.78	0.10	461649.36	713554.55	N 32 16 4.51	W 103 46 34.14
	4988.00	0.07	337.92	4987.98	-0.32	0.40	-1.78	0.16	461649.35	713554.55	N 32 16 4.51	W 103 46 34.14
	5083.00	0.07	298.51	5082.98	-0.40	0.48	-1.85	0.05	461649.43	713554.48	N 32 16 4.51	W 103 46 34.14
	5178.00	0.07	93.26	5177.98	-0.42	0.51	-1.84	0.14	461649.46	713554.49	N 32 16 4.51	W 103 46 34.14
	5273.00	0.10	34.67	5272.98	-0.49	0.57	-1.74	0.09	461649.52	713554.59	N 32 16 4.51	W 103 46 34.14
	5368.00	0.12	5.84	5367.98	-0.66	0.74	-1.68	0.06	461649.69	713554.65	N 32 16 4.51	W 103 46 34.14
	5463.00	3.50	352.25	5462.92	-3.61	3.71	-2.06	3.56	461652.66	713554.27	N 32 16 4.54	W 103 46 34.15
	5558.00	7.70	352.02	5557.44	-12.73	12.89	-3.34	4.42	461661.84	713552.99	N 32 16 4.64	W 103 46 34.16
	5653.00	10.59	350.60	5651.23	-27.52	27.81	-5.65	3.05	461676.76	713550.68	N 32 16 4.78	W 103 46 34.19
	5748.00	13.66	352.14	5744.10	-47.09	47.54	-8.61	3.25	461696.49	713547.72	N 32 16 4.98	W 103 46 34.22
	5843.00	13.44	339.49	5836.47	-68.28	69.00	-14.01	3.12	461717.94	713542.32	N 32 16 5.19	W 103 46 34.28
	5938.00	12.24	334.64	5929.10	-87.32	88.44	-22.19	1.70	461737.38	713534.14	N 32 16 5.38	W 103 46 34.37
	6033.00	10.77	331.18	6022.19	-103.78	105.32	-30.78	1.71	461754.26	713525.55	N 32 16 5.55	W 103 46 34.47
	6128.00	10.09	333.44	6115.62	-118.62	120.54	-38.78	0.84	461769.48	713517.55	N 32 16 5.70	W 103 46 34.57
	6222.00	10.15	332.38	6208.16	-132.96	135.24	-46.31	0.21	461784.18	713510.03	N 32 16 5.85	W 103 46 34.65
	6317.00	10.42	332.90	6301.63	-147.65	150.31	-54.10	0.30	461799.25	713502.23	N 32 16 6.00	W 103 46 34.74
	6412.00	9.87	333.88	6395.14	-162.24	165.27	-61.60	0.61	461814.21	713494.73	N 32 16 6.15	W 103 46 34.83
	6507.00	9.89	333.37	6488.73	-176.49	179.87	-68.84	0.09	461828.81	713487.49	N 32 16 6.29	W 103 46 34.91
	6602.00	9.85	333.92	6582.33	-190.74	194.46	-76.07	0.11	461843.40	713480.26	N 32 16 6.44	W 103 46 35.00
	6697.00	9.99	324.69	6675.91	-204.36	208.48	-84.41	1.68	461857.42	713471.93	N 32 16 6.57	W 103 46 35.09
	6887.00	9.89	321.94	6863.06	-229.72	234.78	-103.99	0.26	461883.72	713452.35	N 32 16 6.84	W 103 46 35.32
	7077.00	9.83	312.60	7050.27	-252.51	258.61	-125.99	0.84	461907.54	713430.35	N 32 16 7.07	W 103 46 35.57
	7171.00	7.89	312.82	7143.14	-261.82	268.42	-136.63	2.06	461917.36	713419.71	N 32 16 7.17	W 103 46 35.70
	7266.00	6.26	312.56	7237.42	-269.35	276.36	-145.23	1.72	461925.29	713411.11	N 32 16 7.25	W 103 46 35.80
	7456.00	5.92	312.68	7426.34	-282.30	290.01	-160.06	0.18	461938.94	713396.28	N 32 16 7.39	W 103 46 35.97
	7646.00	5.20	307.53	7615.45	-293.53	301.90	-174.09	0.46	461950.83	713382.25	N 32 16 7.50	W 103 46 36.13
	7741.00	5.92	303.09	7710.00	-298.47	307.19	-181.61	0.88	461956.13	713374.73	N 32 16 7.56	W 103 46 36.22
	7836.00	5.71	298.56	7804.51	-303.02	312.13	-189.87	0.53	461961.06	713366.47	N 32 16 7.61	W 103 46 36.31
	7931.00	5.44	297.17	7899.06	-306.95	316.44	-198.02	0.32	461965.37	713358.32	N 32 16 7.65	W 103 46 36.41
	8121.00	5.69	287.25	8088.17	-313.06	323.35	-215.03	0.52	461972.28	713341.31	N 32 16 7.72	W 103 46 36.61
	8216.00	5.29	274.87	8182.74	-314.42	325.12	-223.89	1.31	461974.05	713332.45	N 32 16 7.74	W 103 46 36.71
	8406.00	5.98	270.72	8371.82	-314.43	325.99	-242.52	0.42	461974.92	713313.83	N 32 16 7.75	W 103 46 36.93
	8501.00	6.50	270.40	8466.26	-314.05	326.09	-252.84	0.55	461975.02	713303.50	N 32 16 7.75	W 103 46 37.05

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 ° ' ")
	8596.00	5.77	279.20	8560.72	-314.38	326.89	-262.93	1.25	461975.82	713293.41	N 32 16 7.76	W 103 46 37.16
	8691.00	5.51	290.24	8655.26	-316.31	329.23	-271.93	1.17	461978.16	713284.42	N 32 16 7.78	W 103 46 37.27
	8786.00	5.15	298.16	8749.85	-319.52	332.82	-279.97	0.86	461981.75	713276.38	N 32 16 7.82	W 103 46 37.36
	8881.00	4.09	301.74	8844.54	-323.00	336.61	-286.61	1.16	461985.54	713269.74	N 32 16 7.85	W 103 46 37.44
	8976.00	3.78	289.32	8939.32	-325.55	339.43	-292.44	0.95	461988.36	713263.90	N 32 16 7.88	W 103 46 37.51
	9071.00	3.23	279.08	9034.14	-326.75	340.89	-298.04	0.87	461989.82	713258.31	N 32 16 7.90	W 103 46 37.57
	9165.00	2.91	275.47	9128.01	-327.16	341.53	-303.03	0.40	461990.46	713253.32	N 32 16 7.90	W 103 46 37.63
	9260.00	4.75	274.36	9222.79	-327.40	342.06	-309.35	1.94	461990.99	713246.99	N 32 16 7.91	W 103 46 37.70
	9450.00	5.74	279.95	9411.99	-328.84	344.30	-326.56	0.59	461993.23	713229.79	N 32 16 7.93	W 103 46 37.90
	9545.00	7.07	282.02	9506.40	-330.40	346.34	-336.96	1.42	461995.27	713219.39	N 32 16 7.95	W 103 46 38.02
	9640.00	6.82	295.17	9600.71	-333.51	349.96	-347.78	1.69	461998.89	713208.57	N 32 16 7.99	W 103 46 38.15
	9735.00	6.79	305.21	9695.04	-338.69	355.60	-357.47	1.25	462004.52	713198.88	N 32 16 8.04	W 103 46 38.26
	9830.00	7.26	317.56	9789.33	-345.95	363.26	-366.11	1.66	462012.19	713190.24	N 32 16 8.12	W 103 46 38.36
	9925.00	8.27	326.32	9883.46	-355.70	373.38	-373.95	1.63	462022.31	713182.40	N 32 16 8.22	W 103 46 38.45
	10020.00	9.00	334.93	9977.39	-367.78	385.80	-380.89	1.56	462034.72	713175.46	N 32 16 8.34	W 103 46 38.53
	10114.00	9.33	337.19	10070.19	-381.17	399.48	-386.96	0.52	462048.41	713169.39	N 32 16 8.48	W 103 46 38.60
	10209.00	9.91	346.11	10163.86	-395.96	414.52	-391.91	1.68	462063.44	713164.44	N 32 16 8.63	W 103 46 38.66
	10304.00	9.72	344.50	10257.47	-411.41	430.18	-396.01	0.35	462079.10	713160.34	N 32 16 8.78	W 103 46 38.71
	10399.00	9.31	331.35	10351.17	-425.60	444.65	-401.84	2.32	462093.58	713154.51	N 32 16 8.93	W 103 46 38.77
	10494.00	8.35	316.84	10445.06	-436.98	456.43	-410.25	2.54	462105.35	713146.11	N 32 16 9.04	W 103 46 38.87
	10589.00	7.16	303.75	10539.19	-444.85	464.75	-419.89	2.23	462113.67	713136.47	N 32 16 9.13	W 103 46 38.98
	10684.00	7.32	287.23	10633.45	-449.43	469.83	-430.59	2.19	462118.76	713125.76	N 32 16 9.18	W 103 46 39.11
	10779.00	6.88	273.21	10727.73	-451.01	471.95	-442.05	1.88	462120.87	713114.30	N 32 16 9.20	W 103 46 39.24
	10874.00	6.01	249.42	10822.14	-449.10	470.52	-452.39	2.93	462119.44	713103.96	N 32 16 9.19	W 103 46 39.36
KOP Actual	10906.00	6.28	242.54	10853.96	-447.56	469.12	-455.52	2.45	462118.04	713100.84	N 32 16 9.17	W 103 46 39.40
	11051.00	12.00	218.45	10997.10	-431.34	453.64	-471.94	4.66	462102.56	713084.41	N 32 16 9.02	W 103 46 39.59
	11146.00	21.61	213.32	11087.95	-408.23	431.23	-487.73	10.23	462080.16	713068.63	N 32 16 8.80	W 103 46 39.78
	11241.00	29.50	202.38	11173.63	-371.09	394.91	-506.29	9.65	462043.84	713050.07	N 32 16 8.44	W 103 46 39.99
	11336.00	40.35	189.29	11251.51	-318.29	342.70	-520.22	13.83	461991.63	713036.14	N 32 16 7.93	W 103 46 40.16
	11431.00	50.51	182.46	11318.14	-250.87	275.51	-526.78	11.85	461924.45	713029.58	N 32 16 7.26	W 103 46 40.24
	11526.00	59.02	179.30	11372.90	-173.40	198.01	-527.86	9.36	461846.95	713028.50	N 32 16 6.49	W 103 46 40.26
Wolfcamp Intersection	*11591.81*	*64.56*	*177.40*	*11404.00*	*-115.60*	*140.07*	*-526.16*	*8.80*	*461789.01*	*713030.20*	*N 32 16 5.92*	*W 103 46 40.24*
	11621.00	67.03	176.62	11415.97	-89.10	113.48	-524.78	8.80	461762.43	713031.59	N 32 16 5.66	W 103 46 40.23
LL Crossed	*11643.00*	*67.63*	*176.54*	*11424.45*	*-68.92*	*93.22*	*-523.57*	*2.73*	*461742.16*	*713032.80*	*N 32 16 5.46*	*W 103 46 40.21*
11716.00	69.61	176.30	11451.06	-1.35	25.38	-519.32	2.73	461674.33	713037.04	N 32 16 4.79	W 103 46 40.17
100' FNL Crossed	*11750.00*	*70.42*	*177.43*	*11462.68*	*30.44*	*-6.52*	*-517.58*	*3.93*	*461642.43*	*713038.78*	*N 32 16 4.47*	*W 103 46 40.15*
	11811.00	71.88	179.44	11482.39	88.01	-64.23	-516.01	3.93	461584.73	713040.35	N 32 16 3.90	W 103 46 40.13
	11906.00	81.57	179.31	11504.18	180.21	-156.57	-515.00	10.20	461492.39	713041.36	N 32 16 2.98	W 103 46 40.13
	12001.00	88.62	181.34	11512.30	274.72	-251.16	-515.54	7.72	461397.81	713040.82	N 32 16 2.05	W 103 46 40.14
	12151.00	88.74	183.30	11515.76	424.67	-400.99	-521.61	1.31	461247.99	713034.75	N 32 16 0.57	W 103 46 40.22
	12246.00	90.01	184.02	11516.79	519.65	-495.79	-527.68	1.54	461153.19	713028.68	N 32 15 59.63	W 103 46 40.30
	12341.00	89.70	183.64	11517.03	614.63	-590.57	-534.02	0.52	461058.41	713022.34	N 32 15 58.69	W 103 46 40.38
	12436.00	90.26	183.36	11517.06	709.61	-685.39	-539.82	0.66	460963.60	713016.54	N 32 15 57.75	W 103 46 40.45
	12531.00	89.57	182.78	11517.21	804.61	-780.26	-544.91	0.95	460868.74	713011.45	N 32 15 56.81	W 103 46 40.51
	12626.00	87.57	181.34	11519.58	899.57	-875.16	-548.32	2.59	460773.84	713008.04	N 32 15 55.88	W 103 46 40.56
	12721.00	86.68	180.17	11524.34	994.39	-970.03	-549.57	1.55	460678.98	713006.79	N 32 15 54.94	W 103 46 40.58
	12816.00	87.95	181.37	11528.79	1089.24	-1064.91	-550.85	1.84	460584.10	713005.51	N 32 15 54.00	W 103 46 40.60
	13006.00	88.47	179.87	11534.73	1279.02	-1254.80	-552.91	0.84	460394.22	713003.46	N 32 15 52.12	W 103 46 40.64
	13098.00	88.07	179.91	11537.50	1370.87	-1346.76	-552.73	0.44	460302.27	713003.63	N 32 15 51.21	W 103 46 40.64
	13193.00	88.18	179.75	11540.61	1465.70	-1441.71	-552.45	0.20	460207.33	713003.92	N 32 15 50.27	W 103 46 40.64
	13383.00	88.45	180.12	11546.20	1655.41	-1631.63	-552.23	0.24	460017.42	713004.13	N 32 15 48.39	W 103 46 40.65
	13478.00	88.66	178.62	11548.60	1750.22	-1726.59	-551.19	1.59	459922.46	713005.18	N 32 15 47.45	W 103 46 40.64
	13573.00	88.69	177.97	11550.79	1844.92	-1821.52	-548.36	0.68	459827.54	713008.00	N 32 15 46.51	W 103 46 40.62
	13763.00	89.21	178.28	11554.27	2034.29	-2011.38	-542.15	0.32	459637.68	713014.22	N 32 15 44.63	W 103 46 40.56
	13953.00	89.31	176.70	11556.73	2223.50	-2201.18	-533.83	0.83	459447.90	713022.54	N 32 15 42.75	W 103 46 40.47
	14048.00	90.34	176.73	11557.02	2317.99	-2296.02	-528.38	1.08	459353.06	713027.98	N 32 15 41.82	W 103 46 40.41
	14143.00	89.00	178.41	11557.57	2412.61	-2390.93	-524.35	2.26	459258.16	713032.01	N 32 15 40.88	W 103 46 40.37
	14333.00	88.73	177.63	11561.33	2601.95	-2580.78	-517.79	0.43	459068.32	713038.57	N 32 15 39.00	W 103 46 40.31
	14523.00	89.93	177.06	11563.55	2791.12	-2770.56	-508.99	0.70	458878.56	713047.37	N 32 15 37.12	W 103 46 40.22
	14618.00	90.21	177.29	11563.43	2885.69	-2865.44	-504.31	0.38	458783.68	713052.05	N 32 15 36.18	W 103 46 40.17
	14808.00	89.41	177.80	11564.06	3074.93	-3055.26	-496.17	0.50	458593.87	713060.19	N 32 15 34.30	W 103 46 40.08
	14998.00	89.28	179.47	11566.24	3264.45	-3245.19	-491.64	0.88	458403.95	713064.71	N 32 15 32.42	W 103 46 40.04
	15187.00	88.45	180.35	11569.98	3453.19	-3434.15	-491.35	0.64	458215.00	713065.01	N 32 15 30.55	W 103 46 40.05
	15282.00	89.52	180.34	11571.66	3548.10	-3529.13	-491.92	1.13	458120.03	713064.44	N 32 15 29.61	W 103 46 40.06
	15377.00	90.43	181.31	11571.71	3643.05	-3624.12	-493.29	1.40	458025.04	713063.07	N 32 15 28.67	W 103 46 40.08
	15472.00	89.09	182.61	11572.10	3738.04	-3719.06	-496.54	1.97	457930.11	713059.82	N 32 15 27.73	W 103 46 40.13
	15567.00	90.50	183.42	11572.44	3833.03	-3813.92	-501.53	1.71	457835.25	713054.83	N 32 15 26.79	W 103 46 40.19
	15661.00	91.50	184.01	11570.80	3927.00	-3907.71	-507.62	1.24	457741.47	713048.74	N 32 15 25.87	W 103 46 40.27
	15756.00	91.15	181.74	11568.61	4021.96	-4002.56	-512.39	2.42	457646.63	713043.97	N 32 15 24.93	W 103 46 40.33
	15851.00	90.91	181.75	11566.90	4116.94	-4097.50	-515.28	0.25	457551.69	713041.08	N 32 15 23.99	W 103 46 40.37
	16042.00	91.46	180.16	11562.95	4307.81	-4288.42	-518.46	0.88	457360.78	713037.90	N 32 15 22.10	W 103 46 40.42
	16136.00	91.12	179.69	11560.83	4401.68	-4382.40	-518.34	0.62	457266.81	713038.02	N 32 15 21.17	W 103 46 40.42
	16232.00	89.74	180.21	11560.11	4497.56	-4478.40	-518.25	1.54	457170.82	713038.11	N 32 15 20.22	W 103 46 40.43
	16327.00	89.74	180.15	11560.54	4592.47	-4573.39	-518.55	0.06	457075.83	713037.81	N 32 15 19.28	W 103 46 40.44
	16422.00	89.02	180.77	11561.57	4687.40	-4668.38	-519.32	1.00	456980.84	713037.05	N 32 15 18.34	W 103 46 40.45
	16517.00	88.92	179.41	11563.28	4782.29	-4763.37	-519.46	1.44	456885.86	713036.90	N 32 15 17.40	W 103 46 40.46
	16611.00	88.71	180.25	11565.22	4876.15	-4857.34	-519.19	0.92	456791.89	713037.18	N 32 15 16.47	W 103 46 40.46
	16706.00	88.30	179.46	11567.70	4971.01	-4952.31	-518.95	0.94	456696.93	713037.42	N 32 15 15.53	W 103 46 40.46
	16801.00	88.85	180.18	11570.06	5065.86	-5047.28	-518.65	0.95	456601.97	713037.71	N 32 15 14.59	W 103 46 40.47
	16991.00	88.75	180.37	11574.04	5255.65	-5237.24	-519.56	0.11	456412.02	713036.80	N 32 15 12.71	W 103 46 40.49
	17086.00	88.85	179.47	11576.03	5350.52	-5332.21	-519.43	0.95	456317.05	713036.93	N 32 15 11.77	W 103 46 40.49
	17181.00	88.23	180.03	11578.45	5445.37	-5427.18	-519.01	0.88	456222.09	713037.35	N 32 15 10.83	W 103 46 40.49
	17275.00	88.61	180.36	11581.04	5539.25	-5521.15	-519.33	0.54	456128.13	713037.03	N 32 15 9.90	W 103 46 40.50
	17370.00	89.57	180.08	11582.55	5634.15	-5616.13	-519.70	1.05	456033.15	713036.66	N 32 15 8.96	W 103 46 40.51
	17465.00	89.61	180.01	11583.23	5729.05	-5711.13	-519.77	0.08	455938.16	713036.59	N 32 15 8.02	W 103 46 40.52
	17655.00	89.57	180.36	11584.59	5918.87	-5901.12	-520.38	0.19	455748.17	713035.98	N 32 15 6.14	W 103 46 40.54
	17845.00	89.74	180.01	11585.74	6108.69	-6091.12	-521.00	0.20	455558.19	713035.36	N 32 15 4.26	W 103 46 40.56
	17940.00	89.71	179.70	11586.19	6203.58	-6186.12	-520.76	0.33	455463.20	713035.60	N 32 15 3.32	W 103 46 40.56
	18035.00	90.64	180.07	11585.90	6298.46	-6281.11	-520.57	1.05	455368.21	713035.79	N 32 15 2.38	W 103 46 40.56
	18130.00	89.16	180.33	11586.07	6393.37	-6376.11	-520.90	1.58	455273.21	713035.46	N 32 15 1.44	W 103 46 40.57
	18225.00	89.47	180.27	11587.20	6488.29	-6471.10	-521.40	0.33	455178.23	713034.97	N 32 15 0.50	W 103 46 40.58
	18320.00	89.81	180.35	11587.80	6583.21	-6566.10	-521.91	0.37	455083.24	713034.45	N 32 14 59.56	W 103 46 40.60
	18415.00	90.12	179.91	11587.86	6678.11	-6661.10	-522.13	0.57	454988.24	713034.24	N 32 14 58.62	W 103 46 40.60
	18604.00	90.16	180.23	11587.40	6866.92	-6850.10	-522.36	0.17	454799.26	713034.00	N 32 14 56.75	W 103 46 40.62
	18699.00	89.64	180.44	11587.56	6961.84	-6945.10	-522.91	0.59	454704.26	713033.45	N 32 14 55.81	W 103 46 40.63
	18794.00	89.85	180.21	11587.99	7056.76	-7040.09	-523.45	0.33	454609.27	713032.91	N 32 14 54.87	W 103 46 40.64
	18889.00	88.47	180.23	11589.38	7151.67	-7135.08	-523.81	1.45	454514.29	713032.55	N 32 14 53.93	W 103 46 40.65
	18984.00	88.33	178.29	11592.03	7246.46	-7230.03	-522.59	2.05	454419.35	713033.77	N 32 14 52.99	W 103 46 40.64
	19174.00	88.54	178.18	11597.22	7435.82	-7419.87	-516.74	0.12	454229.52	713039.62	N 32 14 51.11	W 103 46 40.59
	19364.00	88.51	178.43	11602.11	7625.22	-7609.72	-511.12	0.13	454039.68	713045.24	N 32 14 49.24	W 103 46 40.53
	19459.00	88.75	178.25	11604.38	7719.92	-7704.66	-508.37	0.32	453944.75	713047.99	N 32 14 48.30	W 103 46 40.51
	19554.00	88.99	178.28	11606.26	7814.62	-7799.59	-505.49	0.25	453849.82	713050.87	N 32 14 47.36	W 103 46 40.48
	19649.00	91.33	178.90	11605.99	7909.38	-7894.56	-503.16	2.55	453754.86	713053.20	N 32 14 46.42	W 103 46 40.46
	19839.00	89.85	178.41	11604.03	8098.90	-8084.49	-498.70	0.82	453564.94	713057.66	N 32 14 44.54	W 103 46 40.42
	19934.00	89.54	179.31	11604.54	8193.69	-8179.47	-496.81	1.00	453469.96	713059.55	N 32 14 43.60	W 103 46 40.40
	20123.00	89.78	178.80	11605.66	8382.31	-8368.44	-493.69	0.30	453281.00	713062.67	N 32 14 41.73	W 103 46 40.38
	20218.00	89.61	178.91	11606.17	8477.10	-8463.42	-491.79	0.21	453186.03	713064.57	N 32 14 40.79	W 103 46 40.36

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 ° ' ")
	20313.00	90.02	179.35	11606.47	8571.92	-8558.41	-490.35	0.63	453091.05	713066.01	N 32 14 39.85	W 103 46 40.35
	20503.00	89.61	179.60	11607.09	8761.63	-8748.40	-488.61	0.25	452901.07	713067.75	N 32 14 37.97	W 103 46 40.34
	20598.00	90.88	178.88	11606.68	8856.46	-8843.39	-487.35	1.54	452806.09	713069.01	N 32 14 37.03	W 103 46 40.33
	20692.00	87.75	178.15	11607.80	8950.20	-8937.33	-484.91	3.42	452712.14	713071.45	N 32 14 36.10	W 103 46 40.31
	20787.00	88.33	178.34	11611.05	9044.86	-9032.23	-482.00	0.64	452617.25	713074.35	N 32 14 35.16	W 103 46 40.28
	20977.00	88.61	179.03	11616.13	9234.34	-9222.11	-477.65	0.39	452427.38	713078.71	N 32 14 33.28	W 103 46 40.24
	21072.00	88.37	179.52	11618.63	9329.14	-9317.07	-476.44	0.57	452332.43	713079.91	N 32 14 32.34	W 103 46 40.23
	21262.00	89.19	177.48	11622.68	9518.59	-9506.95	-471.47	1.16	452142.56	713084.89	N 32 14 30.46	W 103 46 40.19
	21357.00	89.33	179.14	11623.90	9613.30	-9601.90	-468.67	1.75	452047.61	713087.69	N 32 14 29.52	W 103 46 40.16
	21452.00	89.57	179.18	11624.81	9708.12	-9696.89	-467.28	0.26	451952.63	713089.08	N 32 14 28.58	W 103 46 40.15
	21642.00	89.50	178.96	11626.36	9897.74	-9886.86	-464.19	0.12	451762.68	713092.16	N 32 14 26.70	W 103 46 40.12
	21737.00	88.30	178.06	11628.18	9992.48	-9981.80	-461.72	1.58	451667.74	713094.63	N 32 14 25.76	W 103 46 40.10
	21833.00	89.64	179.09	11629.91	10088.21	-10077.75	-459.34	1.76	451571.79	713097.02	N 32 14 24.81	W 103 46 40.08
330' FSL												
Crossed	*21902.00*	*89.54*	*179.10*	*11630.40*	*10157.08*	*-10146.74*	*-458.25*	*0.14*	*451502.80*	*713098.11*	*N 32 14 24.13*	*W 103 46 40.07*
Final MWD	21932.00	89.50	179.11	11630.65	10187.02	-10176.74	-457.78	0.14	451472.81	713098.57	N 32 14 23.83	W 103 46 40.07
Proj to TD	21975.00	89.50	179.11	11631.02	10229.94	-10219.73	-457.11	0.00	451429.82	713099.24	N 32 14 23.41	W 103 46 40.06

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	26.500	1/98.425	30.000	30.000	GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD
	1	26.500	26.500	Act Stns	30.000	30.000	GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD
	1	26.500	521.500	Act Stns	30.000	30.000	GYD_GC+DROP+OH	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com
	1	521.500	5178.000	Act Stns	30.000	30.000	B001Mb_MWD+HRGM	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com
	1	5178.000	12001.000	Act Stns	30.000	30.000	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD
	1	12001.000	13006.000	Act Stns	30.000	30.000	B001Mb_MWD+HRGM	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com
	1	13006.000	21975.000	Act Stns	30.000	30.000	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 175H Gyro + MWD 0-21975'MD