

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 21 2019

Form C-102

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

Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

AS-bvillid

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-DIS-46047	Pool Code 98220/98236	Pool Name Ympok Snyk Wolfcamp / WC-015-6108523310
Property Code 32240	Property Name STERLING SILVER MDP1 "33-4" FEDERAL COM	
OGRID No. 16696	Operator Name OXY USA INC.	Well Number 177H
		Elevation 3386.5'

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	33	23 SOUTH	31 EAST, N.M.P.M.		69'	NORTH	2504'	WEST	EDDY

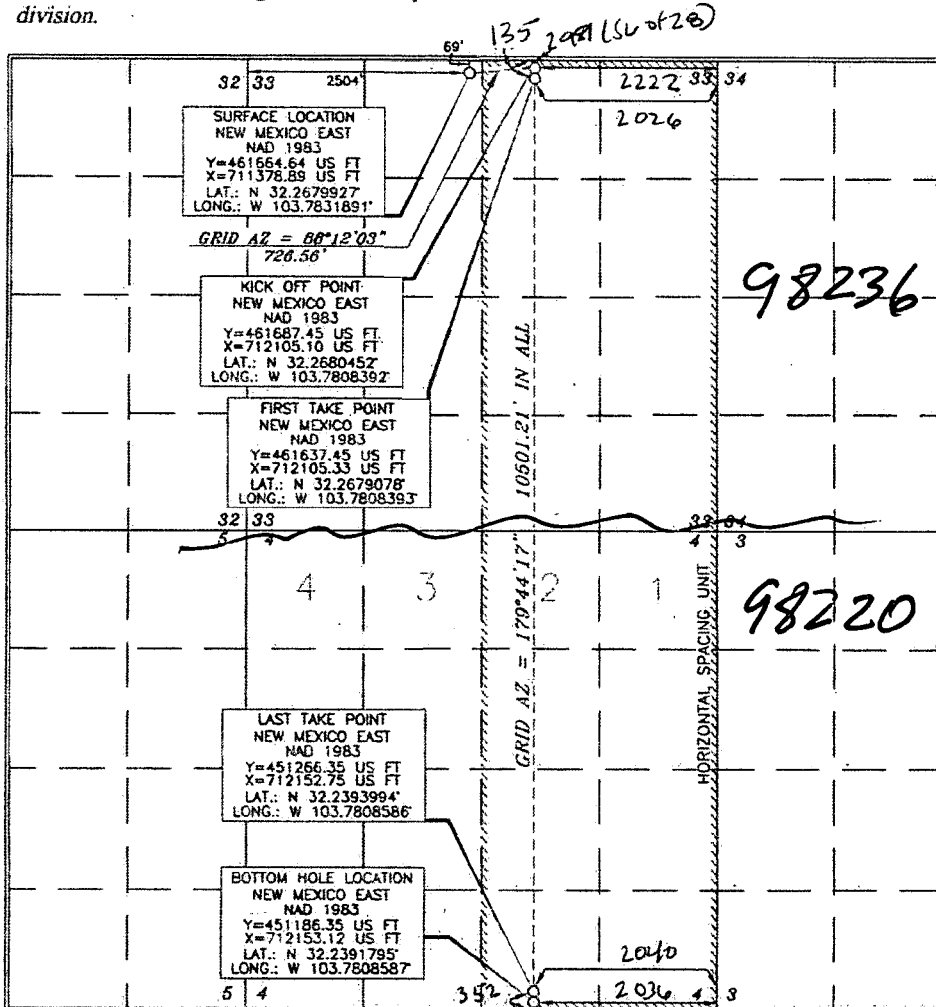
Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	4	24 SOUTH	31 EAST, N.M.P.M.		241	SOUTH	2036	EAST	EDDY

Dedicated Acres 640	Joint or Infill N	Consolidation Code	Order No. *
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*NSL-7844

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: Sarah Chapman Date: 10/15/19

Printed Name: Sarah Chapman

E-mail Address: sarah.chapman@oxy.com

SURVEYOR CERTIFICATION

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

Date of Survey: OCTOBER 23, 2018

Signature and Seal of Professional Surveyor: Terry O'Neil

Certificate Number: 15079

W08 181023WL-a (Rev. A) (KA)

Dual Pool Completion. Operator to Production Allocate % Reporting. Both Pools.

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 21 2019

Intent ☐ As Drilled ☒

RECEIVED

API # 30-015-46047	Operator Name: Oxy U/A Inc.		Property Name: Sterling Silver HDP 33-1 Federal Com.	Well Number 1774
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Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
0	28	235	31E		299	South	2222	East	EDDY
Latitude 32.26899					Longitude -103.7839				NAD NAD83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
13	33	235	31E		135	South	2020	East	EDDY
Latitude 32.24780					Longitude -103.78074				NAD NAD83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
0	4	246	31E		352	South	2040	East	EDDY
Latitude 32.24008					Longitude -103.78098				NAD NAD83

NSL 7844

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

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

August 30, 2019

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

33, 23S, 31E, Eddy NM
N 32.26799 W -103.78319

Re:

CLIENT: OXY USA INCORPORATED
WELL: Sterling Silver MDP1 33-4 Fed Com 177H
FIELD: Purple Sage Wolfcamp/ Wolfcamp
RIG: H&P 657
COUNTY: Eddy
API NO: 30-015-46047
JOB NO: 19MLH0276

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.

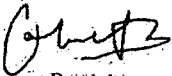
<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Catherine Bordelon FE	Sterling Silver MDP1 33-4 FED COM 177H Original Hole	614.00 Ft to 22047.00 Ft	August 6, 2019 to August 30, 2019	Telpacer, SlimPulse Third Party Corrected

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)
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Schlumberger

Well Reference:
33, 23S, 31E, Eddy NM
N 32.26799 W -103.78319

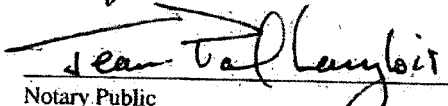
I, Catherine Bordelon certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of August 06, 2019 through August 30, 2019, conduct or supervise the taking of the Telepacer, SlimPulse, & Third Party Corrected surveys from a depth of 614.00 feet to a depth of 22047.00 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 177H Well (Original Hole) API No. 30-015-46047 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 
Catherine Bordelon
FE

Subscribed and Sworn to before me this 13 day of September (month) 2019 (yr)

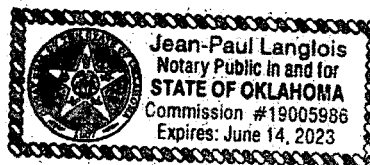
My Commission expires:

6/14/2023


Notary Public

(signature)

Comanche, Oklahoma
(County State)



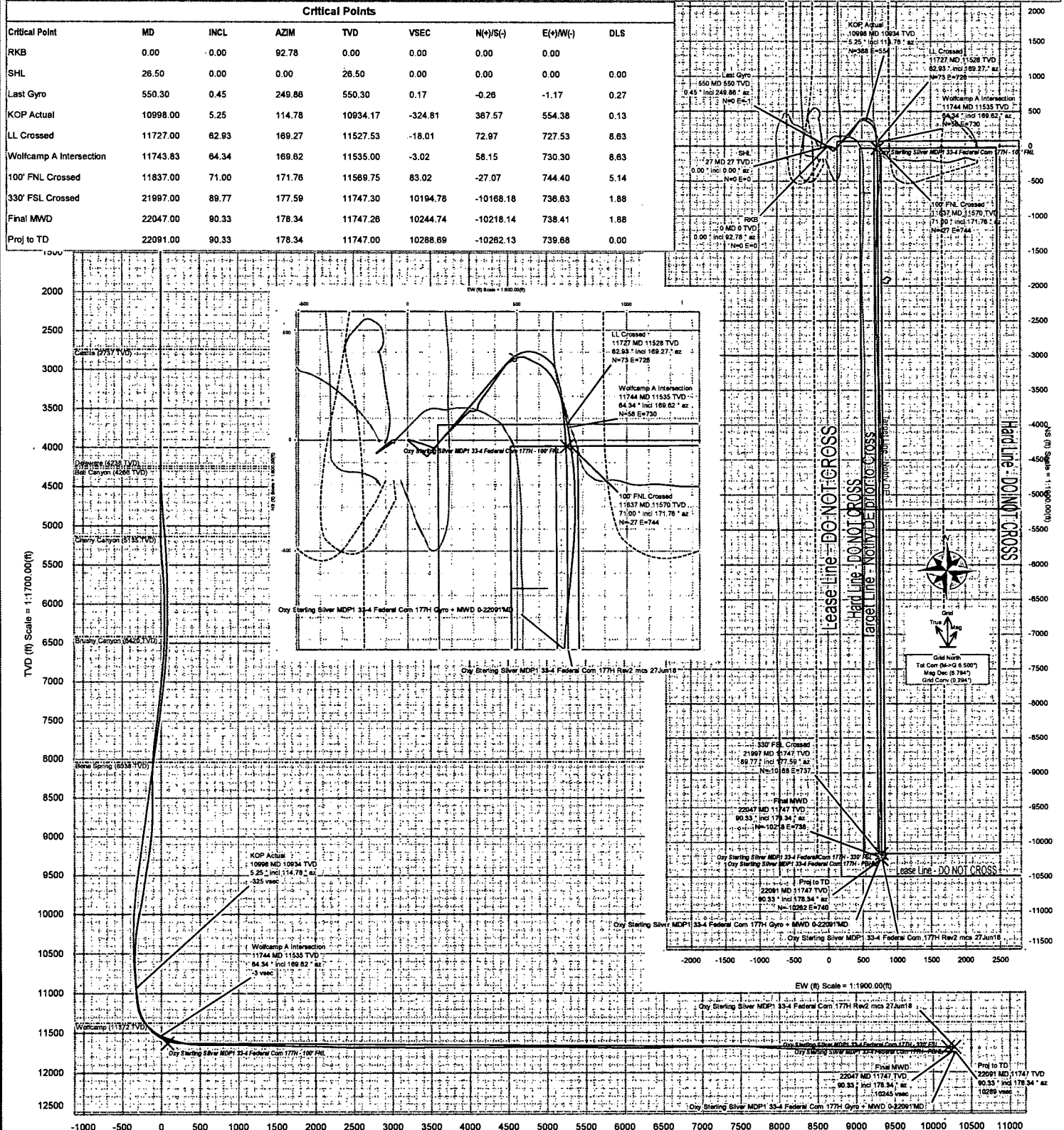
Schlumberger

OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Sterling Silver MDP1 33-4 Federal Com 177H	NM Eddy County (NAD 83)	Oxy Sterling Silver MDP1 33-4 Federal Com 177H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model: IFR1	Dip: 53.951°	Date: 01-Aug-2018		Lat: N 32 16 4.77	Northings: 461664.64RUS	Grid Conv: 0.2937		Slot: Silver MDP1 33-4 Federal Com	TVD Ref: RKB(3412R above MSL)		
MagDec: 6.794°	FS: 47951.6nT	Gravity FS: 998.45mgm (9.80665 Based)		Lon: W 103 46 58.45	Eastings: 711378.59RUS	Scale Feet: 0.99994221		Plan: Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091MD			



Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD

Survey Geodetic Report

(Def Survey)



NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 21 2019

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Report Date: August 30, 2019 - 11:32 AM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Sterling Silver MDP1 33-4 Federal Com 177H / Oxy Sterling Silver MDP1 33-4 Federal Com 177H
Well: Oxy Sterling Silver MDP1 33-4 Federal Com 177H
Borehole: Original Borehole
UWI / APW: Unknown / 30-015-46047
Survey Name: Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
Survey Date: June 28, 2019
Tort / AHD / DDI / ERD Ratio: 345.360 * / 11481.403 ft / 6.873 / 0.977
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 4.77385", W 103° 46' 59.48065"
Location Grid N/E Y/X: N 461664.840 RUS, E 711378.890 RUS
CRS Grid Convergence Angle: 0.2937 *
Grid Scale Factor: 0.99994221
Version / Patch: 2.10.782.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 175.684 * (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3413.000 ft above MSL
Seabed / Ground Elevation: 3386.500 ft above MSL
Magnetic Declination: 6.794 *
Total Gravity Field Strength: 998.4500mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47951.600 nT
Magnetic Dip Angle: 59.951 *
Declination Date: August 01, 2019
Magnetic Declination Model: IIFR1
North Reference: Grid North
Grid Convergence Used: 0.2937 *
Total Corr Mag North->Grid North: 6.5003 *
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northings (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	92.78	0.00	0.00	0.00	0.00	N/A	461664.64	711378.89	N 32 16 4.77	W 103 46 59.48
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	461664.64	711378.89	N 32 16 4.77	W 103 46 59.48
	98.20	0.08	4.22	98.20	-0.05	0.05	0.00	0.11	461664.69	711378.89	N 32 16 4.77	W 103 46 59.48
	186.70	0.03	16.94	186.70	-0.13	0.13	0.01	0.06	461664.77	711378.90	N 32 16 4.78	W 103 46 59.48
	269.30	0.12	273.42	269.30	-0.16	0.16	-0.07	0.16	461664.80	711378.82	N 32 16 4.78	W 103 46 59.48
	363.80	0.24	248.94	363.80	-0.12	0.09	-0.35	0.15	461664.73	711378.54	N 32 16 4.77	W 103 46 59.48
	458.40	0.21	241.68	458.40	0.01	-0.06	-0.69	0.04	461664.58	711378.20	N 32 16 4.77	W 103 46 59.49
	550.30	0.45	249.86	550.30	0.17	-0.26	-1.17	0.27	461664.38	711377.72	N 32 16 4.77	W 103 46 59.49
	614.00	0.41	265.95	614.00	0.24	-0.37	-1.64	0.20	461664.27	711377.25	N 32 16 4.77	W 103 46 59.50
	786.00	0.19	159.70	785.99	0.51	-0.68	-2.15	0.29	461663.96	711376.74	N 32 16 4.77	W 103 46 59.51
	959.00	0.22	68.35	958.99	0.69	-0.82	-1.74	0.17	461663.82	711377.15	N 32 16 4.77	W 103 46 59.50
	1063.00	0.11	62.09	1062.99	0.59	-0.70	-1.47	0.11	461663.94	711377.42	N 32 16 4.77	W 103 46 59.50
	1168.00	0.06	71.78	1167.99	0.54	-0.64	-1.33	0.05	461664.00	711377.56	N 32 16 4.77	W 103 46 59.50
	1353.00	0.04	323.58	1352.99	0.46	-0.56	-1.27	0.04	461664.08	711377.62	N 32 16 4.77	W 103 46 59.50
	1445.00	0.11	100.15	1444.99	0.45	-0.55	-1.21	0.15	461664.09	711377.68	N 32 16 4.77	W 103 46 59.49
	1539.00	0.05	54.87	1538.99	0.45	-0.54	-1.08	0.09	461664.10	711377.81	N 32 16 4.77	W 103 46 59.49
	1728.00	0.06	316.65	1727.99	0.34	-0.42	-1.08	0.04	461664.22	711377.81	N 32 16 4.77	W 103 46 59.49
	1917.00	0.11	324.98	1916.99	0.10	-0.20	-1.26	0.03	461664.44	711377.63	N 32 16 4.77	W 103 46 59.50
	2012.00	0.04	94.91	2011.99	0.03	-0.13	-1.27	0.15	461664.51	711377.62	N 32 16 4.77	W 103 46 59.50
	2200.00	0.07	304.63	2199.99	-0.03	-0.07	-1.30	0.06	461664.57	711377.59	N 32 16 4.77	W 103 46 59.50
	2295.00	0.06	233.07	2294.99	-0.04	-0.06	-1.39	0.08	461664.58	711377.50	N 32 16 4.77	W 103 46 59.50
	2483.00	0.11	346.88	2482.99	-0.17	0.05	-1.51	0.08	461664.69	711377.38	N 32 16 4.77	W 103 46 59.50
	2578.00	0.07	317.01	2577.99	-0.30	0.18	-1.57	0.06	461664.82	711377.32	N 32 16 4.78	W 103 46 59.50
	2672.00	0.11	289.72	2671.99	-0.38	0.26	-1.70	0.06	461664.90	711377.19	N 32 16 4.78	W 103 46 59.50
	2814.00	0.07	28.64	2813.99	-0.51	0.38	-1.78	0.10	461665.02	711377.11	N 32 16 4.78	W 103 46 59.50
	2955.00	0.04	319.28	2954.99	-0.62	0.49	-1.77	0.05	461665.13	711377.12	N 32 16 4.78	W 103 46 59.50
	3144.00	0.02	211.99	3143.99	-0.65	0.51	-1.83	0.03	461665.15	711377.06	N 32 16 4.78	W 103 46 59.50
	3326.00	0.06	135.09	3325.99	-0.55	0.42	-1.78	0.03	461665.06	711377.11	N 32 16 4.78	W 103 46 59.50
	3509.00	0.14	115.26	3508.99	-0.37	0.26	-1.51	0.05	461664.90	711377.38	N 32 16 4.78	W 103 46 59.50
	3616.00	0.10	66.56	3615.99	-0.34	0.24	-1.31	0.10	461664.88	711377.58	N 32 16 4.78	W 103 46 59.50
	3711.00	0.16	141.98	3710.99	-0.25	0.17	-1.15	0.17	461664.81	711377.74	N 32 16 4.78	W 103 46 59.49
	3805.00	0.19	81.11	3804.99	-0.16	0.09	-0.92	0.19	461664.73	711377.97	N 32 16 4.77	W 103 46 59.49
	3899.00	0.21	142.96	3898.99	-0.02	-0.03	-0.66	0.22	461664.61	711378.23	N 32 16 4.77	W 103 46 59.49
	3994.00	0.11	60.23	3993.99	0.08	-0.12	-0.48	0.24	461664.52	711378.42	N 32 16 4.77	W 103 46 59.49
	4088.00	0.11	356.04	4087.99	-0.04	0.01	-0.40	0.12	461664.65	711378.49	N 32 16 4.77	W 103 46 59.49
	4183.00	0.10	329.77	4182.99	-0.21	0.18	-0.45	0.05	461664.82	711378.44	N 32 16 4.78	W 103 46 59.49
	4270.00	0.05	204.34	4269.99	-0.25	0.21	-0.50	0.16	461664.85	711378.39	N 32 16 4.78	W 103 46 59.49
	4465.00	0.10	32.95	4464.99	-0.31	0.27	-0.45	0.08	461664.91	711378.44	N 32 16 4.78	W 103 46 59.49
	4560.00	0.21	100.17	4559.99	-0.33	0.31	-0.23	0.20	461664.95	711378.66	N 32 16 4.78	W 103 46 59.48
	4654.00	0.42	79.53	4653.99	-0.32	0.34	0.28	0.25	461664.98	711379.17	N 32 16 4.78	W 103 46 59.48
	4749.00	0.44	30.51	4748.98	-0.66	0.72	0.81	0.38	461665.36	711379.69	N 32 16 4.78	W 103 46 59.47
	4843.00	0.57	38.40	4842.98	-1.30	1.40	1.28	0.16	461666.04	711380.17	N 32 16 4.79	W 103 46 59.47
	4937.00	0.45	45.01	4936.98	-1.88	2.03	1.83	0.14	461666.67	711380.72	N 32 16 4.79	W 103 46 59.46
	5032.00	1.87	92.93	5031.96	-1.93	2.21	3.64	1.69	461666.85	711382.53	N 32 16 4.80	W 103 46 59.44
	5126.00	4.50	105.17	5125.80	-0.51	1.17	8.73	2.87	461665.81	711387.62	N 32 16 4.78	W 103 46 59.38
	5221.00	6.81	106.76	5220.34	2.76	-1.43	17.73	2.44	461663.21	711396.61	N 32 16 4.76	W 103 46 59.27
	5315.00	8.91	108.33	5313.45	7.57	-5.33	29.97	2.25	461659.31	711408.86	N 32 16 4.72	W 103 46 59.13
	5410.00	12.15	106.40	5406.84	13.94	-10.47	46.55	3.43	461654.17	711425.44	N 32 16 4.67	W 103 46 58.94
	5504.00	13.15	107.67	5498.55	21.44	-16.51	66.23	1.10	461648.14	711445.12	N 32 16 4.61	W 103 46 58.71
	5693.00	9.43	111.05	5683.86	36.13	-28.60	101.18	2.00	461636.05	711480.06	N 32 16 4.49	W 103 46 58.30
	5787.00	6.39	113.68	5776.96	41.89	-33.46	113.16	3.26	461631.18	711492.04	N 32 16 4.44	W 103 46 58.16
	5976.00	0.41	185.79	5965.56	47.49	-38.37	122.73	3.32	461626.28	711501.61	N 32 16 4.39	W 103 46 58.05
	6165.00	0.07	56.85	6154.56	48.10	-38.98	122.76	0.24	461625.67	711501.64	N 32 16 4.38	W 103 46 58.05
	6353.00	0.88	264.73	6342.55	48.07	-39.05	121.42	0.50	461625.60	711500.30	N 32 16 4.38	W 103 46 58.07
	6448.00	1.66	33.42	6437.54	47.00	-37.96	121.45	2.44	461626.68	711500.33	N 32 16 4.39	W 103 46 58.07
	6542.00	3.66	38.13	6531.43	43.71	-34.47	124.05	2.14	461630.17	711502.93	N 32 16 4.43	W 103 46 58.04
	6731.00	5.77	38.05	6719.78	32.23	-22.24	133.63	1.12	461642.40	711512.52	N 32 16 4.55	W 103 46 57.93
	6920.00	6.61	40.10	6907.68	17.44	-8.44	146.50	0.46	461658.20	711525.38	N 32 16 4.70	W 103 46 57.77
	7109.00	8.33	43.60	7095.07	0.50	11.80	162.95	0.94	461676.44	711541.83	N 32 16 4.88	W 103 46 57.58
	7203.00	9.52	43.83	7187.93	-9.25	22.34	173.02	1.27	461686.98	711551.90	N 32 16 4.99	W 103 46 57.46
	7392.00	11.44	44.25	7373.77	-32.09	47.04	196.93	1.02	461711.68	711575.81	N 32 16 5.23	W 103 46 57.18
	7487.00	11.37	45.00	7466.89	-44.43	60.41	210.13	0.17	461725.05	711589.00	N 32 16 5.36	W 103 46 57.03
	7675.00	9.99	44.60	7651.63	-67.23	85.13	234.68	0.74	461749.76	711613.55	N 32 16 5.60	W 103 46 56.74
	7769.00	9.87	44.35	7744.22	-77.90	96.69	246.04	0.14	461761.33	711624.91	N 32 16 5.72	W 103 46 56.61
	7864.00	8.33	45.66	7838.02	-87.71	107.33	256.65	1.64	461771.96	711635.53	N 32 16 5.82	W 103 46 56.49
	8052.00	5.51	45.81	8024.64	-102.26	123.14	272.87	1.50	461787.77	711651.74	N 32 16 5.98	W 103 46 56.30
	8241.00	2.30	46.09	8213.17	-110.49	132.10	282.11	1.70	461796.73	711660.98	N 32 16 6.07	W 103 46 56.19
	8429.00	0.90	129.45	8401.11	-111.87	133.78	285.96	1.26	461798.41	711664.84	N 32 16 6.08	W 103 46 56.14
	8475.00	1.67	138.14	8447.10	-111.09	133.05	286.69	1.72	461797.68	711665.56	N 32 16 6.08	W 103 46 56.13
	8528.00	2.33	140.75	8500.07	-109.60	131.64	287.89	1.26	461796.27	711666.76	N 32 16 6.06	W 103 46 56.12
	8622.00	4.23	89.49	8593.93	-107.80	130.19	292.56	3.53	461794.82	711671.44	N 32 16 6.05	W 103 46 56.07
	8716.00	5.57	76.79	8687.58	-108.28	131.26	300.47	1.83	461795.89	711679.35	N 32 16 6.06	W 103 46 55.97
	8811.00	6.37	68.41	8782.07	-110.55	134.25	309.86	1.24	461798.89	711688.73	N 32 16 6.09	W 103 46 55.86
	8905.00	4.33	39.57	8875.67	-114.66	138.91	316.97	3.53	461803.54	711695.84	N 32 16 6.13	W 103 46 55.78
	8999.00	5.53	0.37	8869.35	-121.73	146.18	319.26	3.71	461810.81	711698.13	N 32 16 6.20	W 103 46 55.75
	9093.00	6.77	14.05	9062.81	-131.51	156.08	320.64	2.03	461820.71	711699.51	N 32 16 6.30	W 103 46 55.74
	9188.00	8.82	27.60									

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northings (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	9282.00	11.01	33.62	9249.53	-156.21	181.83	333.68	2.57	461846.46	711712.55	N 32 16 5.56 W	103 46 55.58
	9377.00	11.95	37.66	9342.63	-170.67	197.17	344.72	1.30	461861.80	711723.58	N 32 16 6.71 W	103 46 55.45
	9565.00	10.57	35.37	9527.00	-198.41	226.64	366.59	0.77	461891.27	711745.46	N 32 16 7.00 W	103 46 55.20
	9754.00	11.92	35.67	9712.37	-226.71	256.64	388.01	0.71	461921.26	711766.87	N 32 16 7.29 W	103 46 54.95
	9848.00	13.54	35.94	9804.06	-242.55	273.43	400.13	1.72	461938.06	711778.99	N 32 16 7.46 W	103 46 54.80
	10037.00	14.38	34.65	9887.47	-277.68	310.65	426.46	0.47	461975.28	711805.32	N 32 16 7.83 W	103 46 54.50
	10132.00	14.27	35.17	10079.52	-295.89	329.93	439.91	0.18	461994.55	711818.77	N 32 16 8.02 W	103 46 54.34
	10242.00	11.99	44.88	10186.65	-313.82	349.11	455.78	2.88	462013.73	711834.65	N 32 16 8.21 W	103 46 54.15
	10431.00	11.73	68.73	10371.71	-332.90	370.62	487.30	2.37	462035.24	711866.16	N 32 16 8.42 W	103 46 53.78
	10526.00	7.41	79.97	10465.38	-336.65	375.51	502.21	5.07	462040.13	711881.07	N 32 16 8.46 W	103 46 53.61
	10620.00	7.51	84.62	10558.58	-337.37	377.14	514.30	0.65	462041.76	711893.16	N 32 16 8.48 W	103 46 53.47
	10715.00	6.88	88.48	10652.82	-337.20	377.88	526.25	0.76	462042.49	711905.11	N 32 16 8.49 W	103 46 53.33
	10809.00	7.26	114.50	10746.12	-334.06	375.56	537.37	3.41	462040.18	711916.22	N 32 16 8.46 W	103 46 53.20
	10903.00	5.17	115.82	10839.57	-329.07	371.26	546.58	2.23	462035.87	711925.44	N 32 16 8.42 W	103 46 53.09
	10998.00	5.25	114.76	10934.17	-324.81	367.57	554.38	0.13	462032.19	711933.24	N 32 16 8.38 W	103 46 53.00
	11056.00	5.28	118.90	10991.93	-322.05	365.17	559.13	0.85	462029.79	711937.99	N 32 16 8.36 W	103 46 52.95
	11240.00	19.45	116.15	11171.20	-301.78	347.48	594.22	7.71	462012.10	711973.07	N 32 16 8.18 W	103 46 52.54
	11335.00	28.65	131.51	11257.95	-277.35	325.35	625.57	11.64	461989.97	712004.42	N 32 16 7.96 W	103 46 52.18
	11429.00	36.92	145.58	11337.02	-236.63	287.00	658.51	11.91	461951.63	712037.36	N 32 16 7.58 W	103 46 51.79
	11524.00	47.02	159.67	11407.72	-178.27	230.61	686.84	14.49	461895.24	712065.69	N 32 16 7.02 W	103 46 51.47
	11619.00	51.79	165.75	11469.55	-108.02	161.77	708.13	6.98	461826.40	712086.98	N 32 16 6.34 W	103 46 51.22
	11714.00	61.83	168.99	11521.56	-28.45	84.28	725.36	10.94	461748.92	712104.21	N 32 16 5.57 W	103 46 51.03
	11727.00	62.93	169.27	11527.53	-18.07	72.97	727.53	8.63	461737.61	712106.39	N 32 16 5.46 W	103 46 51.00
LL Crossed Wolfcamp A Intersection	11743.83	64.34	169.62	11535.00	-3.02	58.15	730.30	8.63	461722.78	712109.14	N 32 16 5.31 W	103 46 50.97
	11808.00	69.76	170.89	11560.01	55.78	-0.07	740.28	8.63	461664.57	712119.13	N 32 16 4.74 W	103 46 50.86
100' FNL Crossed	11837.00	71.00	171.76	11569.75	83.02	-27.07	744.40	5.14	461637.57	712123.25	N 32 16 4.47 W	103 46 50.81
	11903.00	73.85	173.69	11589.67	145.85	-89.48	752.36	5.14	461575.17	712131.20	N 32 16 3.85 W	103 46 50.72
	11998.00	77.83	177.49	11612.92	237.92	-181.28	759.41	5.71	461483.37	712138.26	N 32 16 2.94 W	103 46 50.65
	12093.00	79.09	178.88	11631.92	330.91	-274.31	762.36	1.95	461380.34	712141.20	N 32 16 2.02 W	103 46 50.62
	12210.00	86.73	182.42	11646.36	446.47	-390.31	761.01	7.19	461274.36	712139.86	N 32 16 0.87 W	103 46 50.64
	12312.00	89.43	185.01	11649.78	547.40	-492.02	754.41	3.67	461172.65	712133.25	N 32 15 59.87 W	103 46 50.72
	12407.00	90.70	185.40	11649.67	641.08	-586.62	745.79	1.40	461078.05	712124.63	N 32 15 58.93 W	103 46 50.83
	12501.00	91.01	186.62	11648.26	733.55	-680.09	735.95	1.34	460984.59	712114.79	N 32 15 58.01 W	103 46 50.95
	12691.00	88.88	184.31	11648.45	920.76	-869.21	717.85	1.65	460795.49	712096.70	N 32 15 56.14 W	103 46 51.17
	12785.00	89.05	182.70	11650.15	1013.87	-963.01	712.11	1.72	460701.69	712090.96	N 32 15 55.21 W	103 46 51.25
	12880.00	88.64	180.15	11652.06	1108.37	-1057.95	709.75	2.72	460606.75	712088.59	N 32 15 54.27 W	103 46 51.28
	13069.00	88.81	180.60	11656.27	1296.69	-1246.90	708.51	0.25	460417.81	712087.36	N 32 15 52.40 W	103 46 51.30
	13164.00	89.12	180.90	11657.98	1391.30	-1341.88	707.27	0.45	460322.84	712086.11	N 32 15 51.46 W	103 46 51.32
	13258.00	89.57	182.69	11659.06	1484.76	-1435.82	704.32	1.96	460228.90	712083.17	N 32 15 50.53 W	103 46 51.36
	13352.00	88.47	182.20	11660.66	1578.09	-1529.72	700.31	1.28	460135.01	712079.16	N 32 15 49.60 W	103 46 51.42
	13445.00	87.74	180.20	11663.74	1670.60	-1622.65	698.37	2.29	460042.09	712077.21	N 32 15 48.68 W	103 46 51.44
	13540.00	89.64	182.29	11665.91	1765.12	-1717.59	696.30	2.97	459947.15	712075.15	N 32 15 47.74 W	103 46 51.47
	13635.00	90.60	182.26	11665.71	1859.49	-1812.51	692.53	1.01	459852.24	712071.38	N 32 15 46.80 W	103 46 51.52
	13730.00	88.78	180.77	11666.23	1953.99	-1907.47	690.02	2.48	459757.28	712068.87	N 32 15 45.86 W	103 46 51.56
	13919.00	87.81	178.77	11671.85	2142.41	-2096.37	690.78	1.18	459668.39	712069.63	N 32 15 44.00 W	103 46 51.56
	14109.00	88.84	178.46	11677.40	2332.08	-2286.23	695.37	0.57	459378.54	712074.22	N 32 15 42.12 W	103 46 51.52
	14204.00	88.60	176.81	11679.53	2427.00	-2381.13	699.29	1.75	459283.66	712078.13	N 32 15 41.18 W	103 46 51.48
	14299.00	90.32	178.77	11680.42	2521.92	-2476.04	702.95	2.74	459188.74	712081.80	N 32 15 40.24 W	103 46 51.44
	14393.00	90.67	178.15	11679.61	2615.81	-2570.01	705.48	0.76	459094.79	712084.32	N 32 15 39.31 W	103 46 51.42
	14488.00	90.25	178.17	11678.85	2710.72	-2664.95	708.53	0.44	458999.85	712087.37	N 32 15 38.37 W	103 46 51.39
	14678.00	88.98	177.73	11680.12	2800.56	-2854.82	715.32	0.71	458809.99	712094.17	N 32 15 36.49 W	103 46 51.32
	14804.00	90.05	177.66	11681.19	3026.48	-2980.71	720.39	0.85	458684.10	712099.24	N 32 15 35.24 W	103 46 51.27
	14867.00	91.01	178.38	11680.61	3089.42	-3043.67	722.57	1.90	458621.15	712101.41	N 32 15 34.62 W	103 46 51.25
	14962.00	86.43	176.41	11682.73	3184.32	-3138.52	726.88	5.25	458526.31	712105.73	N 32 15 33.68 W	103 46 51.20
	15057.00	90.53	175.35	11685.25	3279.27	-3233.22	733.70	4.46	458431.61	712112.55	N 32 15 32.74 W	103 46 51.13
	15151.00	92.18	175.43	11683.03	3373.24	-3326.89	741.25	1.76	458337.95	712120.10	N 32 15 31.82 W	103 46 51.05
	15246.00	92.25	179.28	11679.35	3468.11	-3421.70	745.63	4.05	458243.15	712124.48	N 32 15 30.88 W	103 46 51.00
	15343.00	89.43	178.35	11676.57	3657.78	-3611.62	749.56	1.56	458053.24	712128.41	N 32 15 29.00 W	103 46 50.97
	15526.00	88.81	177.26	11679.49	3847.63	-3801.45	756.84	0.66	457863.42	712135.68	N 32 15 27.12 W	103 46 50.89
	15721.00	89.94	178.89	11680.52	3942.53	-3896.39	760.03	2.09	457768.49	712138.87	N 32 15 26.18 W	103 46 50.86
	15816.00	89.91	178.44	11680.65	4037.40	-3991.36	762.24	0.47	457673.52	712141.09	N 32 15 25.24 W	103 46 50.84
	16005.00	89.77	178.62	11681.17	4226.17	-4180.30	767.09	0.12	457484.59	712145.94	N 32 15 23.37 W	103 46 50.80
	16194.00	91.46	182.41	11679.15	4414.45	-4369.24	765.39	2.20	457295.66	712144.24	N 32 15 21.50 W	103 46 50.83
	16384.00	90.56	180.13	11675.80	4603.50	-4559.15	761.18	1.29	457105.77	712140.03	N 32 15 19.62 W	103 46 50.89
	16511.00	89.64	182.74	11675.57	4729.85	-4686.09	758.00	2.18	456978.83	712136.85	N 32 15 18.37 W	103 46 50.93
	16580.00	88.65	181.94	11676.60	4798.38	-4755.03	755.19	1.84	456909.90	712134.03	N 32 15 17.68 W	103 46 50.97
	16674.00	90.79	182.95	11677.06	4891.71	-4848.93	751.18	2.52	456816.00	712130.02	N 32 15 16.76 W	103 46 51.02
	16769.00	90.31	182.43	11676.15	4986.00	-4943.82	746.72	0.74	456721.11	712125.56	N 32 15 15.82 W	103 46 51.08
	16864.00	89.07	180.42	11676.67	5080.52	-5038.79	744.36	2.49	456626.15	712123.20	N 32 15 14.88 W	103 46 51.11
	17053.00	89.34	180.82	11679.29	5268.80	-5227.76	742.31	0.26	456437.20	712121.16	N 32 15 13.01 W	103 46 51.15
	17148.00	89.14	180.88	11680.55	5363.40	-5322.74	740.90	0.22	456342.22	712119.75	N 32 15 12.07 W	103 46 51.17
	17338.00	89.48	179.86	11682.84	5552.75	-5512.72	739.68	0.57	456152.25	712118.52	N 32 15 10.19 W	103 46 51.20
	17433.00	88.55	179.96	11684.47	5647.48	-5607.70	739.83	0.98	456057.27	712118.67	N 32 15 9.25 W	103 46 51.20
	17622.00	89.14	180.15	11688.28	5835.89	-5796.66	739.64	0.33	455868.32	712118.49	N 32 15 7.38 W	103 46 51.21
	17717.00	89.82	180.53	11689.14	5930.57	-5891.66	739.08	0.82	455773.34	712117.93	N 32 15 6.44 W	103 46 51.23
	17812.00	90.44	179.81	11688.93	6025.28	-5986.65	738.80	1.00	455			

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	21402.00	86.57	182.75	11727.99	9603.26	-9574.32	745.35	4.02	452090.89	712124.19	N 32 14 30.00	W 103 46 51.37
	21497.00	86.19	183.91	11733.98	9697.23	-9668.97	739.84	1.28	451996.25	712118.68	N 32 14 29.06	W 103 46 51.44
	21584.00	86.69	183.69	11739.39	9783.19	-9755.61	734.08	0.63	451909.61	712112.93	N 32 14 28.21	W 103 46 51.52
	21679.00	87.51	181.73	11744.19	9877.35	-9850.38	729.60	2.23	451814.85	712108.45	N 32 14 27.27	W 103 46 51.57
	21773.00	89.64	179.22	11746.53	9970.98	-9944.33	728.82	3.50	451720.90	712107.67	N 32 14 26.34	W 103 46 51.59
	21868.00	90.19	178.11	11746.87	10065.85	-10039.30	731.03	1.30	451625.94	712109.88	N 32 14 25.40	W 103 46 51.57
	21962.00	89.37	177.06	11747.03	10159.79	-10133.22	735.00	1.42	451532.03	712113.84	N 32 14 24.47	W 103 46 51.53
330' FSL	21997.00	89.77	177.59	11747.30	10194.78	-10168.18	736.63	1.88	451497.07	712115.48	N 32 14 24.12	W 103 46 51.51
Crossed	22047.00	90.33	178.34	11747.26	10244.74	-10218.14	738.41	1.88	451447.11	712117.25	N 32 14 23.63	W 103 46 51.49
Final MWD	22091.00	90.33	178.34	11747.00	10288.59	-10262.13	739.68	0.00	451403.13	712118.53	N 32 14 23.19	W 103 46 51.48
Proj to TD												

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 3 *** 3-D 95.000% Confidence 2.7855 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	GYD_GC+DROP+OH-Depth Only	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'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 177H Gyro + MWD 0-22091'MD
	1	26.500	550.300	Act Stns	30.000	30.000	GYD_GC+DROP+OH	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	550.300	4270.000	Act Stns	30.000	30.000	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	4270.000	4937.000	Act Stns	30.000	30.000	B001Mb_MWD+HRGM	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	4937.000	10132.000	Act Stns	30.000	30.000	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	10132.000	11056.000	Act Stns	30.000	30.000	B001Mb_MWD+HRGM	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	11056.000	18703.000	Act Stns	30.000	30.000	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	18703.000	20062.000	Act Stns	30.000	30.000	B001Mb_MWD+HRGM	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	20062.000	21497.000	Act Stns	30.000	30.000	A010Mb_MWD+IFR1+SAG+MS	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com 177H Gyro + MWD 0-22091'MD
	1	21497.000	22091.000	Act Stns	30.000	30.000	B001Mb_MWD+HRGM	Original Borehole / Oxy Sterling Silver MDP1 33-4 Federal Com