

District I
1625 N. French Dr., Hobbs, NM 88240

District II
811 S. First St., Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address OXY USA Inc P.O. BOX 50250 Midland, TX 79710		² OGRID Number 16696
		³ Reason for Filing Code/ Effective Date Test Allowable - 2/2017
⁴ API Number 30-015-43642	⁵ Pool Name Pierce Crossing Bone Spring, East	⁶ Pool Code 96473
⁷ Property Code: 315242	⁸ Property Name: Cedar Canyon 22 Federal	⁹ Well Number: 21H

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
I	22	24S	29E		2540	South	230	East	Eddy

¹¹ Bottom Hole Location

Top Perf- 1842 FNL 390 FEL

Bottom Perf- 1783 FNL 334 FWL

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	22	24S	29E		1775	North	185	West	Eddy

¹² Lse Code F	¹³ Producing Method Code : F	¹⁴ Gas Connection Date: TBD	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
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III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
239284	OCCIDENTAL ENERGY TRANSPORTATION (BRIDGER LLC)	O
151618	ENTERPRISE FIELD SERVICES LLC	G

IV. Well Completion Data

²¹ Spud Date 10/25/16	²² Ready Date 1/26/17	²³ TD 13620'M 8718'V	²⁴ PBDT 13558'M 8720'V	²⁵ Perforations 8887-13471'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
14-3/4"	10-3/4"	482'	382		
9-7/8"	7-5/8"	8300'	2627		
6-3/4"	5-1/2" X 4-1/2"	13610'	830		

V. Well Test Data

³¹ Date New Oil 1/29/17	³² Gas Delivery Date TBD	³³ Test Date 1/31/17	³⁴ Test Length 24 hrs.	³⁵ Tbg. Pressure ---	³⁶ Csg. Pressure 940
³⁷ Choke Size 29/64	³⁸ Oil 316	³⁹ Water 1517	⁴⁰ Gas 433		⁴¹ Test Method F

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:
Jana Mendiola

Title:
Regulatory Coordinator

E-mail Address:
janalyn_mendiola@oxy.com

Date:
1/31/17

Phone:
432-685-5936

OIL CONSERVATION DIVISION

Approved by:

Title:

Geologist

Approval Date:

3-8-2017

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 Grande Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT
(As - Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-43642	Pool Code 96473	Pool Name Pierce Crossing Bone Spring, East
Property Code 315242	Property Name CEDAR CANYON "22" FEDERAL	Well Number 21H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 2958.4'

Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
I	22	24 SOUTH	29 EAST, N.M.P.M.		2540'	SOUTH	230'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
E	22	24 SOUTH	29 EAST, N.M.P.M.		1830' 1775'	NORTH	180' 185'	WEST	EDDY
Dedicated Acres NO	Joint or Infill 160	Consolidation Code	Order No. BP- 1783 FNL 334 FWL TP- 1842 FNL 390 FEL						

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

		OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided 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. Approved by the division: Signature: <i>[Signature]</i> Date: 1/31/17 Printed Name: Jana Mendiola Email Address: jana-mendiola@oxy.com
BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1927 Y=438524.05 US FT X=614383.34 US FT LAT.: N 32.2050789° LONG.: W 103.9635242° BOTTOM PERF. NEW MEXICO EAST NAD 1927 Y=438526.29 US FT X=609502.28 US FT LAT.: N 32.2051302° LONG.: W 103.9793047° TOP PERF. NEW MEXICO EAST NAD 1927 Y=438524.17 US FT X=614128.34 US FT LAT.: N 32.2050816° LONG.: W 103.9643486° SURFACE LOCATION NEW MEXICO EAST NAD 1927 Y=437585.71 US FT X=614235.88 US FT LAT.: N 32.2025036° LONG.: W 103.9640113°		SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from the most recent surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: OCTOBER 27, 2016 Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: 15079

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

December 7, 2016

Oxy USA Incorporated
5 Greenway Plaza Ste 110
Houston, TX 77046-0521

Re:

22, 24S, 29E, Eddy NM
-32.20250 -103.96401

CLIENT: Oxy USA Incorporated
WELL: Cedar Canyon 22 Federal 21H
FIELD: Pierce Crossing

RIG: H&P639
COUNTY: Eddy
API NO: 30-015-43642
JOB NO: 16MLD2124

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>
Kalu Uga FE	Cedar Canyon 22 Federal 21H Original Hole	448.00 Ft to 13563.00 Ft	November 25, 2016 to December 5, 2016	TelePacer SlimPulse

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

Dana Carlos
Field Service Manager

**Schlumberger Drilling and Measurements
Drilling Group**

7220 W I-H 20

Midland, Texas 79706

Phone: (432) 742-5400 (Main)

Fax: (432) 742-5606 (Shared)

Well Reference:

22, 24S, 29E, Eddy NM

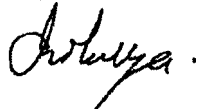
-32.20250 -103.96401

I, Kalu Uga certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of November 25, 2016 through December 05, 2016, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 448.00 feet to a depth of 13563.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Oxy USA Incorporated for the Cedar Canyon 22 Federal 21H Well (Original Hole) API No. 30-015-43642 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

Kalu Uga

FE



Subscribed and Sworn to before me this 13 day of December (month) 2016 (yr)

My Commission expires:

4-10-19

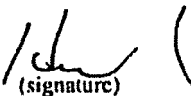
Tim Hughes

Notary Public

Los Angeles California

(County State)

TIM HUGHES
NOTARY PUBLIC
SEE ADDENDUM PAGE
COMM EXP MAY 10 2019

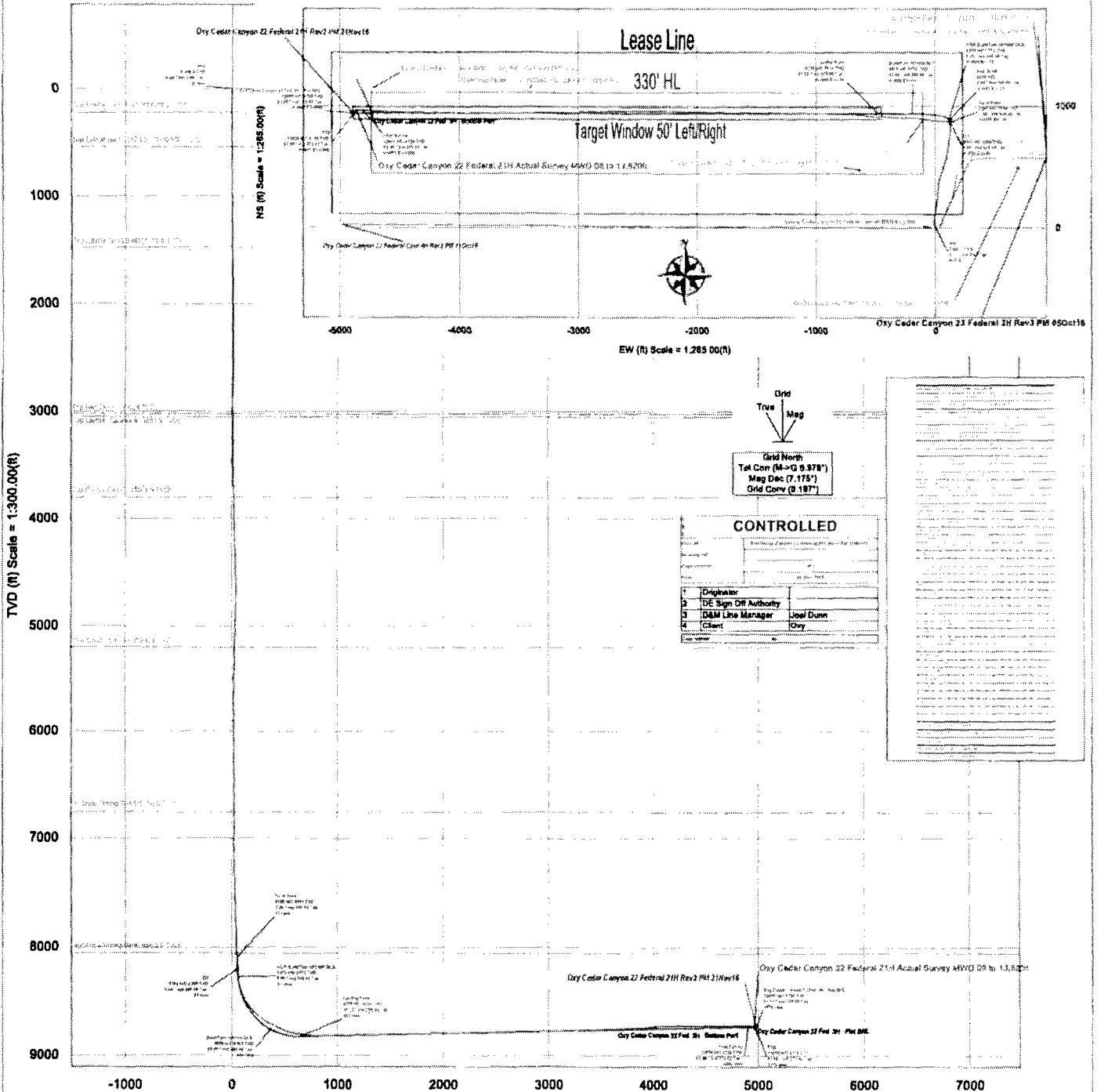

(signature)

Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Cedar Canyon 22 Federal 21H	NM Eddy County (NAD 27)	Oxy Cedar Canyon 22 Federal 21H

Survey & Map Parameters Method: NODAL 3016 Mag Dec: 7.175°	Date: 21-Nov-2016 Gravity PS: 9.80665 m/s² (9.80665 m/s²)	Surface Location: Lat: N 22 12 0.01 Long: W 103 57 00.00	WADSWORTH STATE PARK, Eddy County, NM Wellbore: 427642.170000 814335.890000 8.1967° 8.9992004	Wellbore: Oxy Cedar Canyon TVD Ref: 22 Fed. 21H Plan: Oxy Cedar Canyon 22 Federal 21H Rev2 PH 21Nov16
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Critical Points

Comments	Survey MD (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Sub-Sea TVD	VS (ft)	NS (ft)	EW (ft)	Latitude (deg)	Longitude (deg)	Easting (ftUS)	Northing (ftUS)	U.S. (ft/100ft)	Tool face (deg)
Tie in Point	8195.00	7.30	346.40	8093.75	5108.85	46.80	865.45	118.69	N 32 12 17.573	W 103 57 49.025	614354.56	438452.09	1.41	0.00
ICP	8302.27	8.46	346.40	8200.00	5215.10	52.90	879.74	115.23	N 32 12 17.714	W 103 57 49.064	614351.10	438466.38	1.08	346.40
Proj to bit	8315.00	8.60	346.40	8212.59	5227.69	53.68	881.58	114.79	N 32 12 17.733	W 103 57 49.070	614350.66	438468.22	1.08	0.00
KOP Build/Turn 10°/100' DLS	8374.88	8.60	346.40	8271.80	5286.90	57.39	890.28	112.68	N 32 12 17.819	W 103 57 49.094	614348.55	438476.92	0.00	-81.07
Build/Turn 10°/100' DLS	8978.06	62.00	269.98	8757.27	5772.37	366.66	938.57	-192.97	N 32 12 18.307	W 103 57 52.649	614042.92	438525.20	10.00	0.07
Landing Point	9270.30	91.22	270.02	8824.20	5839.30	642.83	938.56	-474.20	N 32 12 18.316	W 103 57 55.922	613761.72	438525.20	10.00	0.00
Oxy Cedar Canyon 22 Fed. 3H - Plat BHL	13686.11	91.22	270.02	8729.90	5745.00	4978.49	939.72	-4889.00	N 32 12 18.475	W 103 58 47.301	609347.26	438526.36	0.00	0.00



Vertical Section (ft) Azim = 280.88° Scale = 1:300.00(R) Origin = ON-S, OE-W



Oxy Cedar Canyon 22 Federal 21H Actual Survey MWD Off to Update Survey Report (Non-Def Survey)

Report Date:	December 05, 2016 - 07:25 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	OXY	Vertical Section Azimuth:	280.880 ° (Grid North)
Field:	NM Eddy County (NAD 27)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Oxy Cedar Canyon 22 Federal 21H / Oxy Cedar Canyon 22 Fed. 21H	TVD Reference Datum:	RKB
Well:	Oxy Cedar Canyon 22 Federal 21H	TVD Reference Elevation:	2984.900 ft above MSL
Borehole:	Original Borehole	Seabed / Ground Elevation:	2958.400 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7.181 °
Survey Name:	Oxy Cedar Canyon 22 Federal 21H Actual Survey MWD Off to Update	Total Gravity Field Strength:	998.4673mgn (9.80655 Based)
Survey Date:	October 31, 2016	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	223.077 ° / 5887.942 ft / 6.307 / 0.668	Total Magnetic Field Strength:	48189.480 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	60.049 °
Location Lat / Long:	N 32° 12' 9.01288", W 103° 57' 50.44088"	Declination Date:	October 31, 2016
Location Grid N/E Y/X:	N 437586.710 ftUS, E 614235.880 ftUS	Magnetic Declination Model:	HDGM 2016
CRS Grid Convergence Angle:	0.1968 °	North Reference:	Grid North
Grid Scale Factor:	0.99992404	Grid Convergence Used:	0.1968 °
Version / Patch:	2.10.254.0	Total Corr Mag North->Grid	6.9838 °
		North:	
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	281.82M
	448.00	0.24	281.82	448.00	0.94	0.19	-0.92	0.94	281.82	0.05	9.75M
	688.00	0.48	3.75	688.90	1.57	1.30	-1.35	1.07	314.06	0.21	12.73M
	870.00	0.59	12.73	869.99	1.63	2.97	-1.08	3.16	338.61	0.08	358.71M
	1051.00	0.90	358.71	1050.97	1.90	5.30	-0.92	5.38	350.17	0.20	350.62M
	1239.00	0.88	350.62	1238.95	2.71	8.20	-1.19	8.28	351.76	0.07	390.25M
	1427.00	0.90	330.25	1426.93	4.17	10.91	-2.15	11.12	348.82	0.17	313.19M
	1616.00	0.84	313.19	1615.91	8.31	13.14	-3.90	13.71	343.47	0.14	287.71M
	1710.00	0.88	297.71	1709.89	7.59	13.95	-5.04	14.83	340.13	0.25	282.42M
	1804.00	1.23	282.42	1803.88	8.28	14.50	-6.67	15.98	335.31	0.47	278.62M
	1898.00	1.43	276.62	1897.85	11.46	14.85	-8.82	17.27	329.31	0.26	358.2M
	1992.00	0.51	358.20	1991.84	12.72	15.41	-10.00	18.37	327.03	1.54	160.06M
	2086.00	0.44	160.06	2085.84	12.63	15.49	-9.89	18.37	327.45	1.00	334.25M
	2181.00	0.55	334.25	2180.84	12.72	15.55	-9.88	18.47	327.97	1.04	86.22M
	2275.00	0.51	86.22	2274.84	12.58	15.99	-9.74	18.72	328.66	0.94	179.37M
	2370.00	0.20	179.37	2369.84	12.14	15.85	-9.31	18.38	328.68	0.89	5.38M
	2464.00	0.11	5.38	2463.84	12.11	15.78	-9.30	18.32	328.47	0.33	152.49M
	2558.00	0.11	152.49	2557.84	12.07	15.78	-9.25	18.90	328.82	0.22	95.5M
	2653.00	0.11	95.50	2652.84	11.92	15.70	-9.12	18.15	329.84	0.11	235.59M
	2747.00	0.22	235.59	2746.84	11.96	15.59	-9.18	18.09	329.50	0.39	56.28M
	2841.00	0.09	56.28	2840.84	12.03	15.52	-9.27	18.08	329.16	0.33	310.46M
	2935.00	0.24	310.46	2934.84	12.15	15.69	-9.38	18.27	329.20	0.30	906.52M
	3029.00	0.31	306.52	3028.83	12.55	15.97	-9.71	18.69	328.70	0.08	90.48M
	3123.00	0.09	90.48	3122.83	12.71	16.12	-9.84	18.89	328.60	0.41	209.94M
	3218.00	0.09	209.94	3217.83	12.66	16.06	-9.80	18.81	328.60	0.16	169.07M
	3312.00	0.09	169.07	3311.83	12.65	15.92	-9.83	18.71	328.32	0.07	231.11M
	3406.00	0.11	231.11	3405.83	12.69	15.79	-9.88	18.63	327.98	0.11	358.68M
	3500.00	0.21	358.68	3499.79	13.30	16.37	-10.01	20.82	331.40	3.49	1.01M
	3594.00	0.94	1.01	3593.40	14.83	26.68	-9.97	28.48	339.50	3.97	0.8M
	3688.00	10.90	0.80	3688.24	17.38	41.25	-9.75	42.39	346.70	4.21	11.88M
	3782.00	15.89	4.54	3777.66	20.34	62.98	-8.61	63.56	352.22	5.39	22.14M
	3877.00	19.21	8.59	3868.23	22.40	91.41	-5.24	91.54	358.72	3.72	0.29M
	3971.00	20.61	8.61	3956.61	23.67	123.05	0.45	123.06	359.79	1.49	30.52M
	4065.00	20.70	8.76	4044.87	24.94	155.83	4.55	155.90	1.87	0.11	123.52L
	4159.00	20.44	7.62	4132.57	26.49	188.52	9.26	188.75	2.81	0.51	34.59L
	4253.00	21.29	6.02	4220.41	28.87	221.76	13.23	222.16	3.41	1.06	143.32L
	4348.00	20.96	5.33	4309.03	31.98	255.83	16.61	256.37	3.72	0.43	151.61L
	4442.00	20.59	4.78	4398.81	35.36	289.04	19.56	289.70	3.87	0.45	158.89L
	4536.00	19.87	5.58	4485.11	38.60	321.42	22.47	322.20	4.00	0.82	164.32L
	4631.00	17.29	8.03	4575.18	40.80	351.47	26.01	352.43	4.23	2.84	167.89L
	4725.00	15.76	10.36	4665.27	41.61	377.86	30.26	379.07	4.58	1.77	148.86L
	4819.00	13.95	15.01	4756.13	40.91	401.98	35.48	402.93	5.05	2.30	148.38L
	4913.00	12.44	19.44	4847.65	38.58	421.86	41.80	423.92	5.66	1.93	179.62L
	5008.00	11.82	19.46	4940.53	36.61	440.68	48.44	443.33	6.27	0.66	9.21L
	5102.00	12.53	18.93	5032.41	32.74	459.40	54.96	462.68	6.82	0.76	178.03L
	5196.00	11.65	18.78	5124.33	30.01	478.03	61.32	481.95	7.31	0.94	128.74L
	5291.00	11.82	18.98	5217.37	27.35	496.16	67.52	500.74	7.75	0.05	170.99L
	5385.00	10.86	19.62	5309.57	24.87	513.48	73.57	518.70	8.15	0.82	9.56L
	5479.00	11.54	19.03	5401.78	21.99	530.89	79.61	536.82	8.53	0.73	151.03L
	5573.00	10.99	17.42	5493.97	19.89	548.12	85.96	554.73	8.85	0.87	77.79L
	5667.00	11.16	13.87	5586.22	18.14	565.50	90.22	572.66	9.07	0.75	38.51L
	5762.00	12.17	10.15	5679.28	17.79	584.29	94.19	591.83	9.18	1.33	172.26L
	5856.00	11.16	9.44	5771.31	18.14	603.01	97.43	610.84	9.18	1.09	166.1L
	5950.00	9.84	7.52	5863.74	18.84	619.95	99.98	627.98	9.18	1.45	176.91L
	6045.00	8.68	6.97	5957.50	19.81	635.12	101.91	643.24	9.12	1.22	138.15L
	6139.00	7.91	12.20	6050.52	20.14	648.48	104.14	658.79	8.12	1.15	8.8M
	6233.00	7.49	8.60	6143.67	20.24	660.86	106.42	669.37	9.15	0.68	6.01M
	6328.00	6.50	6.01	6237.92	20.97	672.66	107.94	681.26	9.12	0.71	3.98M
	6422.00	6.02	3.98	6331.32	22.04	683.19	108.87	691.81	9.05	0.97	5.03M
	6516.00	6.56	5.09	6424.84	23.10	692.64	109.82	701.26	8.99	0.50	6.11M
	6611.00	4.90	6.11	6519.45	23.90	701.26	110.45	709.91	8.95	0.70	4.29M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (ft/100ft)	TF (°)
	6705.00	4.40	4.29	6813.14	24.65	708.85	111.15	717.51	8.91	0.55	8.78M
	6800.00	3.98	8.76	6707.88	25.19	715.74	111.92	724.44	8.89	0.56	19.42M
	6894.00	5.80	19.42	6801.54	24.80	723.45	114.00	732.37	8.95	2.16	24.23M
	6988.00	7.85	24.23	6894.87	22.42	733.78	118.21	743.24	9.15	2.26	20.77M
	7082.00	9.37	20.77	6987.93	19.78	748.03	123.27	758.15	9.38	0.76	136.19L
	7176.00	7.08	9.64	7081.08	18.71	758.14	126.67	768.65	9.49	2.10	353.16M
	7271.00	5.82	353.16	7175.48	20.30	768.70	127.08	779.13	9.39	2.34	348.54M
	7365.00	7.05	349.54	7268.89	23.85	779.10	125.46	789.14	9.15	1.38	1.6M
	7459.00	9.30	1.60	7361.94	27.18	792.37	124.83	802.11	8.84	3.00	97.3R
	7553.00	9.25	4.66	7454.71	29.22	807.49	125.45	817.18	8.83	0.53	168.22L
	7647.00	6.39	358.26	7547.53	31.18	820.25	125.91	829.86	8.73	3.18	342.77M
	7741.00	3.19	342.77	7641.49	33.56	827.98	124.97	837.36	8.58	3.64	335.81M
	7835.00	3.21	335.81	7735.34	36.30	832.88	123.12	841.93	8.41	0.41	352.93M
	7930.00	4.29	352.92	7830.14	38.93	838.83	121.59	847.60	8.25	1.63	3.01M
	8024.00	5.67	3.01	7923.79	40.65	848.96	121.40	855.82	8.16	1.73	348.44M
	8118.00	6.24	348.44	8017.28	43.23	858.60	120.62	865.05	8.02	1.71	346.4M
	8195.00	7.30	346.40	8093.75	45.88	865.48	118.84	873.55	7.81	1.41	291.04M
	8377.00	4.34	291.04	8274.91	58.44	879.18	109.48	885.97	7.10	3.30	266.67M
	8459.00	7.79	266.67	8395.74	61.63	879.48	106.29	885.88	6.89	13.65	261.16M
	8501.00	19.56	261.16	8395.95	82.47	876.71	84.53	880.78	5.51	12.72	28.3R
	8595.00	29.58	271.81	8481.37	120.29	874.94	45.88	878.13	2.99	11.58	23.22R
	8689.00	41.98	279.33	8557.52	174.86	880.71	-8.78	880.76	359.43	14.02	10.49L
	8783.00	49.40	277.53	8623.13	242.01	880.50	-76.27	883.68	355.17	8.01	16.82L
	8876.00	59.35	274.07	8677.25	317.18	897.99	-150.38	910.49	350.49	11.12	23.74L
	8970.00	63.80	271.90	8721.99	399.03	902.28	-232.91	931.83	345.53	5.15	7.89R
	9064.00	68.23	272.56	8760.19	483.91	905.81	-318.70	963.05	340.81	4.78	2.19L
	9157.00	79.10	272.14	8798.30	572.04	909.25	-407.74	998.49	335.85	11.70	56.96R
	9220.00	79.66	273.01	8797.92	633.31	912.03	-469.60	1025.83	332.76	1.82	29.12R
	9327.00	83.83	275.24	8813.28	738.48	919.75	-575.18	1084.79	327.98	4.45	6.1R
	9421.00	91.24	276.13	8817.32	831.92	929.13	-668.55	1144.66	324.26	7.93	89.17L
	9515.00	91.31	270.95	8815.22	925.09	934.93	-782.32	1206.33	320.81	5.51	8.13R
	9702.00	91.38	270.96	8810.83	1109.24	938.05	-949.24	1334.54	314.66	0.04	116.57L
	9898.00	91.34	270.88	8808.42	1292.39	941.03	-1135.17	1474.50	309.88	0.05	138.72L
	10076.00	90.93	270.52	8802.70	1477.39	943.33	-1323.11	1624.96	305.49	0.29	59.74R
	10269.00	91.00	270.64	8799.55	1661.35	945.22	-1510.08	1781.51	302.04	0.07	51.33R
	10449.00	91.20	270.89	8795.98	1844.42	947.71	-1696.03	1942.85	299.23	0.17	169.05L
	10637.00	90.99	270.83	8792.55	2028.53	950.59	-1883.87	2110.18	298.77	0.17	170.78L
	10824.00	90.52	270.77	8790.25	2213.63	953.14	-2070.94	2279.75	294.71	0.20	49.4R
	11012.00	90.58	270.84	8788.44	2398.72	955.78	-2258.91	2452.80	292.93	0.05	74.93R
	11105.00	90.65	271.10	8787.44	2490.32	957.35	-2351.80	2539.28	292.15	0.29	7.25L
	11198.00	91.20	271.03	8785.34	2581.96	959.08	-2444.87	2626.25	291.42	0.60	93.56L
	11292.00	91.07	268.95	8784.08	2674.23	959.07	-2538.84	2713.95	290.89	2.22	90L
	11385.00	91.07	268.92	8782.34	2765.21	967.34	-2631.81	2800.52	289.99	0.03	7.95R
	11478.00	92.00	269.05	8779.85	2856.17	955.69	-2724.76	2887.50	289.33	1.01	129.3L
	11572.00	91.82	268.83	8776.72	2948.09	953.95	-2818.69	2975.76	288.70	0.30	16.74R
	11665.00	92.75	269.11	8773.01	3039.01	952.28	-2911.60	3063.38	288.11	1.04	142.62R
	11759.00	92.58	269.24	8768.89	3129.98	950.94	-3004.49	3151.39	287.58	0.23	181.18L
	11852.00	92.17	269.10	8764.79	3221.95	949.58	-3098.40	3240.65	287.04	0.46	155.51L
	12040.00	91.27	268.69	8759.15	3405.78	945.98	-3288.28	3419.72	286.06	0.53	49.39R
	12133.00	91.45	268.90	8756.94	3496.68	944.01	-3379.23	3508.61	285.61	0.30	2.12R
	12320.00	91.99	268.92	8751.33	3679.53	940.45	-3566.11	3688.04	284.77	0.28	51.32L
	12413.00	92.03	268.87	8748.07	3770.44	938.86	-3659.04	3777.52	284.39	0.07	68.3L
	12445.00	92.54	268.09	8746.85	3861.87	937.81	-3861.01	3908.28	284.28	2.82	40.7R
	12632.00	95.83	271.11	8733.53	3984.54	936.50	-3877.48	3988.96	283.58	2.47	179.69R
	12728.00	92.18	271.13	8728.98	4076.84	938.33	-3971.21	4080.58	283.29	3.90	167.1R
	12820.00	91.68	271.24	8723.83	4169.55	940.27	-4065.14	4172.47	283.02	0.52	136.21R
	12914.00	90.72	272.15	8721.86	4262.32	943.08	-4159.08	4264.85	282.78	1.41	145.05L
	13008.00	88.76	270.79	8722.29	4355.05	945.48	-4253.04	4356.86	282.53	2.54	24.95R
	13102.00	90.48	271.59	8722.91	4447.70	947.43	-4347.01	4449.08	282.30	2.02	18.92R
	13196.00	91.86	272.01	8720.99	4540.50	950.38	-4440.94	4541.50	282.08	1.53	135.8L
	13290.00	90.07	270.27	8719.41	4633.18	952.25	-4534.90	4633.80	281.86	2.88	66.23R
	13383.00	90.55	271.36	8718.90	4724.69	953.58	-4627.89	4725.11	281.64	1.28	147.72R
	13477.00	88.35	272.75	8718.81	4817.57	958.95	-4721.82	4817.81	281.48	2.77	10.43R
Final Survey	13563.00	91.99	273.42	8719.55	4902.76	961.57	-4807.68	4902.90	281.31	4.30	HS
PTB	13620.00	91.99	273.42	8717.57	4958.24	964.97	-4864.64	4959.33	281.22	0.00	

Survey Type: Non 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 (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	26.500	Act Sins	30.000	30.000	NAL MWD PLUS 0.5 DEG Depth Only	Original Borehole / Oxy Cedar Canyon 22 Federal 21H Actual Survey MWD Off to Update
	1	26.500	448.000	1/98.425	30.000	30.000	NAL MWD PLUS 0.5 DEG	Original Borehole / Oxy Cedar Canyon 22 Federal 21H Actual
	1	448.000	13620.000	Act Sins	30.000	30.000	NAL MWD PLUS 0.5 DEG	Original Borehole / Oxy Cedar Canyon 22 Federal 21H Actual