

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-43915
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator OXY USA Inc.		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 50250 Midland, TX 79710		7. Lease Name or Unit Agreement Name Cedar Canyon 22-15 Fee
4. Well Location Unit Letter <u>A</u> : <u>1107</u> feet from the <u>North</u> line and <u>1052</u> feet from the <u>east</u> line Section <u>22</u> Township <u>24S</u> Range <u>29E</u> NMPM County <u>Edgy</u>		8. Well Number 33H
		9. OGRID Number 16696
		10. Pool name or Wildcat Purple Sage Wolfcamp
		11. Elevation (Show whether DR, RKB, RT, GR, etc.) 2934.2'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: <u>Amend C102-New Pool</u> ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.1.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 01 2017

RECEIVED

See Attached

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE David Stewart TITLE Sr. Regulatory Advisor DATE 2/27/17

Type or print name David Stewart E-mail address: david_stewart@oxy.com PHONE: 432-685-5717

For State Use Only

Accepted For Record
NMOCD

APPROVED BY: 16 TITLE 16 DATE 3-2-17

Conditions of Approval (if any):

OXY USA Inc. - Cedar Canyon 22-15 Fee 33H

OXY respectfully requests approval for the following changes from the approved permit:

Amend C-102 Plat per new pool designation to Purple Sage Wolfcamp.

- Change casing program
 - a. Deepen surface casing to 546'
 - b. Update production casing/liners set points due to change in directional plans

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant BODY SF	Buoyant BODY SF
	From (ft)	To (ft)							Tension	Tension
14.75	0	546	10.75	40.5	J55	BTC	7.59	1.54	2.89	3.23
9.875	0	7000	7.625	29.7	L80	BTC	1.14	1.28	1.71	1.86
9.875	7000	10131	7.625	29.7	HP L80	BTC	1.18	1.43	3.19	4.32
6.75	10031	17202	4.5	13.5	P-110	DQX	1.99	1.21	2.01	2.05

- Change cementing program
 - a. Update surface and production slurries
 - b. Due to changing casing set points, the planned cement volumes were adjusted

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	355	14.8	1.35	6.53	6:50	Class C Cement, Accelerator
Production Casing	1100	10.2	3.05	15.63	15:07	Pozzolan Cement, Retarder
	163	13.2	1.65	8.45	12:57	Class H Cement, Retarder, Dispersant, Salt
DV/ECP Tool @ 3070' (We request the option to cancel the second stage if cement is circulated to surface during the first stage of cement operations)						
2nd Stage Production Casing	481	12.9	1.85	9.86	12:44	Class C Cement, Accelerator, Retarder
	182	14.8	1.33	6.34	6:31	Class C Cement
Production Liner	921	14.5	1.24	5.58	18:00	Class H Cement, Retarder, Fluid Loss Additive

Casing String	Lead To (ft)	Lead From (ft)	Tail To (ft)	Tail From (ft)	% Excess Lead	% Excess Tail
Surface	N/A	N/A	0	546		50%
Production Casing	0	9131	9131	10131	75%	20%
2nd Stage Production Casing	0	2570	2570	3070	75%	125%
Production Liner	N/A	N/A	10031	17202		15%

Company Personnel

Name	Title	Office Phone	Mobile Phone
Randy Neel	Drilling Engineer	713-215-7987	713-517-5544
Diego Tellez	Drilling Engineer Supervisor	713-350-4602	713-303-4932
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
John Willis	Drilling Manager	713-366-5556	713-259-1417





Cedar Canyon 22-15 Fee 33H REV4 MA 10Feb17 Proposal Geodetic Report

(Non-Def Plan)

Report Date: February 10, 2017 - 02:04 PM
 Client: OXY
 Field: NM Eddy County (NAD 27)
 Structure / Slot: Oxy Cedar Canyon 22-15 Fee 33H / Oxy Cedar Canyon 22-15 Fee 33H
 Well: Oxy Cedar Canyon 22-15 Fee 33H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Cedar Canyon 22-15 Fee 33H REV4 MA 10Feb17
 Survey Date: February 10, 2017
 Tort / AHD / DDI / ERD Ratio: 110.257 ° / 7067.197 ft / 6.086 / 0.642
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 12' 25.47660", W 103° 57' 59.99398"
 Location Grid N/E Y/X: N 439247.520 RUS, E 613409.380 RUS
 CRS Grid Convergence Angle: 0.1954 °
 Grid Scale Factor: 0.99992382
 Version / Patch: 2.10.220.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 353.858 ° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=26.5'
 TVD Reference Elevation: 2960.700 ft above MSL
 Seabed / Ground Elevation: 2934.200 ft above MSL
 Magnetic Declination: 7.161 °
 Total Gravity Field Strength: 998.4699mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48160.731 nT
 Magnetic Dip Angle: 60.052 °
 Declination Date: February 10, 2017
 Magnetic Declination Model: HDGM 2016
 North Reference: Grid North
 Grid Convergence Used: 0.1954 °
 Total Corr Mag North->Grid: 6.9653 °
 North: Well Head
 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 (NS ° ' ")	Longitude (EW ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	100.00	0.00	255.90	100.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	200.00	0.00	255.90	200.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	300.00	0.00	255.90	300.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	400.00	0.00	255.90	400.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	500.00	0.00	255.90	500.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	600.00	0.00	255.90	600.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	700.00	0.00	255.90	700.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	800.00	0.00	255.90	800.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	900.00	0.00	255.90	900.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1000.00	0.00	255.90	1000.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1100.00	0.00	255.90	1100.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1200.00	0.00	255.90	1200.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1300.00	0.00	255.90	1300.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1400.00	0.00	255.90	1400.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1500.00	0.00	255.90	1500.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1600.00	0.00	255.90	1600.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1700.00	0.00	255.90	1700.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1800.00	0.00	255.90	1800.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	1900.00	0.00	255.90	1900.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2000.00	0.00	255.90	2000.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2100.00	0.00	255.90	2100.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2200.00	0.00	255.90	2200.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2300.00	0.00	255.90	2300.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2400.00	0.00	255.90	2400.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2500.00	0.00	255.90	2500.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2600.00	0.00	255.90	2600.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2700.00	0.00	255.90	2700.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2800.00	0.00	255.90	2800.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	2900.00	0.00	255.90	2900.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3000.00	0.00	255.90	3000.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3100.00	0.00	255.90	3100.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3200.00	0.00	255.90	3200.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3300.00	0.00	255.90	3300.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3400.00	0.00	255.90	3400.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3500.00	0.00	255.90	3500.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3600.00	0.00	255.90	3600.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3700.00	0.00	255.90	3700.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3800.00	0.00	255.90	3800.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	3900.00	0.00	255.90	3900.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
Back Build 2°/100'	4000.00	0.00	255.90	4000.00	0.00	0.00	0.00	0.00	439247.52	613409.38	N 32 12 25.48	W 103 57 59.99
	4100.00	2.00	255.90	4099.98	-0.24	-0.43	-1.69	2.00	439247.09	613407.69	N 32 12 25.47	W 103 58 0.01
	4200.00	4.00	255.90	4199.84	-0.97	-1.70	-6.77	2.00	439245.82	613402.61	N 32 12 25.46	W 103 58 0.07
	4300.00	6.00	255.90	4299.45	-2.17	-3.82	-15.22	2.00	439243.70	613394.16	N 32 12 25.44	W 103 58 0.17
	4400.00	8.00	255.90	4398.70	-3.86	-6.79	-27.04	2.00	439240.73	613382.34	N 32 12 25.41	W 103 58 0.31
	4500.00	10.00	255.90	4497.47	-6.03	-10.60	-42.21	2.00	439236.92	613367.17	N 32 12 25.37	W 103 58 0.49
	4500.03	10.00	255.90	4497.49	-6.03	-10.61	-42.22	2.00	439236.92	613367.17	N 32 12 25.37	W 103 58 0.49
	4600.00	10.00	255.90	4595.95	-8.43	-14.84	-59.05	0.00	439232.69	613350.33	N 32 12 25.33	W 103 58 0.68
	4700.00	10.00	255.90	4694.43	-10.84	-19.07	-75.90	0.00	439228.45	613333.49	N 32 12 25.29	W 103 58 0.88
	4800.00	10.00	255.90	4792.91	-13.24	-23.30	-92.74	0.00	439224.22	613316.65	N 32 12 25.25	W 103 58 1.07
	4900.00	10.00	255.90	4891.39	-15.65	-27.53	-109.58	0.00	439219.99	613299.81	N 32 12 25.21	W 103 58 1.27
	5000.00	10.00	255.90	4989.87	-18.05	-31.76	-126.42	0.00	439215.76	613282.97	N 32 12 25.17	W 103 58 1.47
	5100.00	10.00	255.90	5088.35	-20.46	-35.99	-143.27	0.00	439211.53	613266.13	N 32 12 25.13	W 103 58 1.66
	5200.00	10.00	255.90	5186.83	-22.86	-40.22	-160.11	0.00	439207.30	613249.28	N 32 12 25.08	W 103 58 1.86
	5300.00	10.00	255.90	5285.31	-25.27	-44.45	-176.95	0.00	439203.07	613232.44	N 32 12 25.04	W 103 58 2.06
	5400.00	10.00	255.90	5383.79	-27.67	-48.68	-193.79	0.00	439198.84	613215.60	N 32 12 25.00	W 103 58 2.25
	5500.00	10.00	255.90	5482.27	-30.08	-52.92	-210.63	0.00	439194.61	613198.76	N 32 12 24.96	W 103 58 2.45
	5600.00	10.00	255.90	5580.75	-32.48	-57.15	-227.48	0.00	439190.38	613181.92	N 32 12 24.92	W 103 58 2.64
	5700.00	10.00	255.90	5679.23	-34.89	-61.38	-244.32	0.00	439186.15	613165.08	N 32 12 24.88	W 103 58 2.84
	5800.00	10.00	255.90	5777.71	-37.29	-65.61	-261.16	0.00	439181.92	613148.24	N 32 12 24.84	W 103 58 3.04
	5900.00	10.00	255.90	5876.19	-39.69	-69.84	-278.00	0.00	439177.69	613131.40	N 32 12 24.79	W 103 58 3.23
	6000.00	10.00	255.90	5974.67	-42.10	-74.07	-294.85	0.00	439173.45	613114.56	N 32 12 24.75	W 103 58 3.43
	6100.00	10.00	255.90	6073.16	-44.50	-78.30	-311.69	0.00	439169.22	613097.72	N 32 12 24.71	W 103 58 3.62
	6200.00	10.00	255.90	6171.64	-46.91	-82.53	-328.53	0.00	439164.99	613080.87	N 32 12 24.67	W 103 58 3.82
	6300.00	10.00	255.90	6270.12	-49.31	-86.76	-345.37	0.00	439160.76	613064.03	N 32 12 24.63	W 103 58 4.02
	6400.00	10.00	255.90	6368.60	-51.72	-91.00	-362.22	0.00	439156.53	613047.19	N 32 12 24.59	W 103 58 4.21
	6500.00	10.00	255.90	6467.08	-54.12	-95.23	-379.06	0.00	439152.30	613030.35	N 32 12 24.55	W 103 58 4.41
	6600.00	10.00	255.90	6565.56	-56.53	-99.46	-395.90	0.00	439148.07	613013.51	N 32 12 24.51	W 103 58 4.61
	6700.00	10.00	255.90	6664.04	-58.93	-103.69	-412.74	0.00	439143.84	612996.67	N 32 12 24.46	W 103 58 4.80
	6800.00	10.00	255.90	6762.52	-61.34	-107.92	-429.59	0.00	439139.61	612979.83	N 32 12 24.42	W 103 58 5.00
	6900.00	10.00	255.90	6861.00	-63.74	-112.15	-446.43	0.00	439135.38	612962.99	N 32 12 24.38	W 103 58 5.19
	7000.00	10.00	255.90	6959.48	-66.15	-116.38	-463.27	0.00	439131.15	612946.15	N 32 12 24.34	W 103 58 5.39
	7100.00	10.00	255.90	7057.96	-68.55	-120.61	-480.11	0.00	439126.92	612929.30	N 32 12 24.30	W 103 58 5.59

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 ° ' ")
Drop 2"/100'	7600.00	10.00	255.90	7550.36	-80.58	-141.77	-564.33	0.00	439105.76	612845.76	N 32 12 24.09 W 103 58	6.57
	7700.00	10.00	255.90	7648.85	-82.98	-146.00	-581.17	0.00	439101.53	612828.26	N 32 12 24.05 W 103 58	6.76
	7800.00	10.00	255.90	7747.33	-85.39	-150.23	-598.01	0.00	439097.30	612811.42	N 32 12 24.01 W 103 58	6.96
	7843.85	10.00	255.90	7790.51	-86.44	-152.09	-605.40	0.00	439095.44	612804.03	N 32 12 23.99 W 103 58	7.05
	7900.00	8.88	255.90	7845.90	-87.72	-154.33	-614.33	2.00	439093.20	612795.10	N 32 12 23.97 W 103 58	7.15
	8000.00	6.88	255.90	7944.95	-89.61	-157.67	-627.62	2.00	439089.86	612781.81	N 32 12 23.94 W 103 58	7.30
	8100.00	4.88	255.90	8044.42	-91.03	-160.17	-637.55	2.00	439087.37	612771.88	N 32 12 23.91 W 103 58	7.42
	8200.00	2.88	255.90	8144.18	-91.97	-161.81	-644.11	2.00	439085.72	612765.32	N 32 12 23.90 W 103 58	7.50
	8300.00	0.88	255.90	8244.13	-92.42	-162.61	-647.28	2.00	439084.92	612762.15	N 32 12 23.89 W 103 58	7.53
	8343.88	0.00	255.90	8288.00	-92.47	-162.69	-647.61	2.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
Hold Vertical	8400.00	0.00	255.90	8344.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	8500.00	0.00	255.90	8444.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	8600.00	0.00	255.90	8544.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	8700.00	0.00	255.90	8644.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	8800.00	0.00	255.90	8744.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	8900.00	0.00	255.90	8844.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9000.00	0.00	255.90	8944.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9100.00	0.00	255.90	9044.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9200.00	0.00	255.90	9144.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9300.00	0.00	255.90	9244.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
ICP, Hold 327°	9400.00	0.00	255.90	9344.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9500.00	0.00	255.90	9444.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9600.00	0.00	255.90	9544.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9700.00	0.00	255.90	9644.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9800.00	0.00	255.90	9744.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	9900.00	0.00	255.90	9844.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10000.00	0.00	255.90	9944.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10100.00	0.00	255.90	10044.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10130.88	0.00	255.90	10075.00	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10200.00	0.00	255.90	10144.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
KOP Build 9.5"/100'	10300.00	0.00	255.90	10244.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10400.00	0.00	255.90	10344.12	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10458.68	0.00	255.90	10402.80	-92.47	-162.69	-647.61	0.00	439084.84	612761.82	N 32 12 23.89 W 103 58	7.54
	10500.00	3.93	359.79	10444.09	-91.06	-161.28	-647.62	9.50	439086.26	612761.81	N 32 12 23.90 W 103 58	7.54
	10600.00	13.43	359.79	10542.83	-76.07	-146.21	-647.67	9.50	439101.32	612761.76	N 32 12 24.05 W 103 58	7.54
	10700.00	22.93	359.79	10637.74	-45.08	-115.05	-647.79	9.50	439132.48	612761.64	N 32 12 24.36 W 103 58	7.54
	10800.00	32.43	359.79	10726.19	1.06	-68.66	-647.96	9.50	439178.87	612761.47	N 32 12 24.82 W 103 58	7.54
	10900.00	41.93	359.79	10805.78	61.10	-8.30	-648.18	9.50	439239.22	612761.25	N 32 12 25.42 W 103 58	7.54
	11000.00	51.43	359.79	10874.32	133.37	64.36	-648.45	9.50	439311.88	612760.99	N 32 12 26.14 W 103 58	7.54
	11100.00	60.93	359.79	10929.92	215.91	147.34	-648.75	9.50	439394.85	612760.68	N 32 12 26.96 W 103 58	7.54
Landing Point	11200.00	70.43	359.79	10971.06	306.44	238.36	-649.09	9.50	439485.86	612760.35	N 32 12 27.86 W 103 58	7.54
	11300.00	79.93	359.79	10996.61	402.48	334.92	-649.44	9.50	439582.41	612759.99	N 32 12 28.81 W 103 58	7.54
	11400.00	89.43	359.79	11005.88	501.40	434.37	-649.81	9.50	439681.86	612759.62	N 32 12 29.80 W 103 58	7.54
	11408.74	90.26	359.79	11005.91	510.10	443.11	-649.84	9.50	439690.60	612759.59	N 32 12 29.88 W 103 58	7.54
	11500.00	90.26	359.79	11005.50	600.87	534.37	-650.17	0.00	439781.85	612759.26	N 32 12 30.79 W 103 58	7.54
	11600.00	90.26	359.79	11005.05	700.33	634.37	-650.54	0.00	439881.84	612758.89	N 32 12 31.78 W 103 58	7.54
	11700.00	90.26	359.79	11004.61	799.80	734.37	-650.91	0.00	439981.83	612758.52	N 32 12 32.77 W 103 58	7.54
	11800.00	90.26	359.79	11004.16	899.26	834.37	-651.28	0.00	440081.82	612758.15	N 32 12 33.75 W 103 58	7.54
	11900.00	90.26	359.79	11003.71	998.72	934.36	-651.64	0.00	440181.81	612757.79	N 32 12 34.74 W 103 58	7.54
	12000.00	90.26	359.79	11003.26	1098.19	1034.36	-652.01	0.00	440281.80	612757.42	N 32 12 35.73 W 103 58	7.54
	12100.00	90.26	359.79	11002.82	1197.65	1134.36	-652.38	0.00	440381.79	612757.05	N 32 12 36.72 W 103 58	7.54
	12200.00	90.26	359.79	11002.37	1297.11	1234.36	-652.75	0.00	440481.78	612756.68	N 32 12 37.71 W 103 58	7.54
	12300.00	90.26	359.79	11001.92	1396.58	1334.36	-653.12	0.00	440581.77	612756.32	N 32 12 38.70 W 103 58	7.54
	12400.00	90.26	359.79	11001.47	1496.04	1434.36	-653.48	0.00	440681.76	612755.95	N 32 12 39.69 W 103 58	7.54
	12500.00	90.26	359.79	11001.03	1595.50	1534.36	-653.85	0.00	440781.75	612755.58	N 32 12 40.68 W 103 58	7.54
	12600.00	90.26	359.79	11000.58	1694.97	1634.36	-654.22	0.00	440881.74	612755.21	N 32 12 41.67 W 103 58	7.54
	12700.00	90.26	359.79	11000.13	1794.43	1734.36	-654.59	0.00	440981.74	612754.84	N 32 12 42.66 W 103 58	7.54
	12800.00	90.26	359.79	10999.69	1893.90	1834.36	-654.95	0.00	441081.73	612754.48	N 32 12 43.65 W 103 58	7.54
	12900.00	90.26	359.79	10999.24	1993.36	1934.36	-655.32	0.00	441181.72	612754.11	N 32 12 44.64 W 103 58	7.54
	13000.00	90.26	359.79	10998.79	2092.82	2034.36	-655.69	0.00	441281.71	612753.74	N 32 12 45.63 W 103 58	7.54
	13100.00	90.26	359.79	10998.34	2192.29	2134.36	-656.06	0.00	441381.70	612753.37	N 32 12 46.62 W 103 58	7.55
	13200.00	90.26	359.79	10997.90	2291.75	2234.36	-656.42	0.00	441481.69	612753.01	N 32 12 47.61 W 103 58	7.55
	13300.00	90.26	359.79	10997.45	2391.21	2334.36	-656.79	0.00	441581.68	612752.64	N 32 12 48.60 W 103 58	7.55
	13400.00	90.26	359.79	10997.00	2490.68	2434.36	-657.16	0.00	441681.67	612752.27	N 32 12 49.59 W 103 58	7.55
	13500.00	90.26	359.79	10996.56	2590.14	2534.36	-657.53	0.00	441781.66	612751.90	N 32 12 50.58 W 103 58	7.55
	13600.00	90.26	359.79	10996.11	2689.60	2634.36	-657.90	0.00	441881.65	612751.54	N 32 12 51.57 W 103 58	7.55

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 ° ' ")
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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)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	26.500	1/100.000	30.000	30.000	NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Borehole / Cedar Canyon 22-15 Fee 33H REV4 MA 10Feb17
	1	26.500	17202.452	1/100.000	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Cedar Canyon 22-15 Fee 33H REV4 MA