

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator OXY USA Inc. 16696

3a. Address
P.O. Box 50250 Midland, TX 797103b. Phone No. (include area code)
432-685-5717

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

S-2068 FWL 483 FWL SWNW(E) Sec 23 T24S R29E
B 1980 FWL 340 FEL SEWE(H) " " "

5. Lease Serial No.

NMNM 61584

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Cedar Canyon 23 #1H

9. API Well No.

30-015-40667

10. Field and Pool, or Exploratory Area

Coral Draw Bone Spring

11. County or Parish, State

Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|--|---|--|---|
| ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☐ Other |
| ☒ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

OXY USA Inc. respectfully requests to amend the APD for the Cedar Canyon 23 #1H, API No. 30-015-40667 with the following changes.

1. Amend the proposed TD's. 7912'-TVD 11972'-TMD
2. Amend proposed directional drilling plan, see attached.
3. Amend intermediate casing program, see attached.
4. Amend production casing cementing program, move DVT, see attached.

RECEIVED

OCT 10 2012

NMOCD ARTESIA

Accepted for record SEE ATTACHED FOR
NMOCD 10/10/12 CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

David Stewart

Title Regulatory Advisor

Signature

Date

9/28/12

APPROVED

OCT 4 2012

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Edward G. Fernandez

PETROLEUM ENGINEER

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

AMENDED APD:

Operator Name/Number:	OXY USA Inc.		16696
Lease Name/Number:	Cedar Canyon 23 #1H	API No. 30-015-40667	39439
Pool Name/Number:	Corral Draw Bone Spring		96238
Surface Location:	2068 FNL 483 FWL SWNW E Sec 23 T24S R29E	Federal Lse No. NMNM81586	
Bottom Hole Location:	1980 FNL 340 FEL SENE(H Sec 23 T24S R29E	Federal Lse No. NMNM81586	

SUMMARY OF CHANGES

- Due to the proximity to an existing well (Riverbend Federal #7. API 30-015-27994) the directional plan has been modified to create an acceptable separation between the wellpaths. New directional plan attached, along with the anticollision analysis.) The TVD at the toe has also been changed to 7912' to follow the formation dip.
- To avoid overdesign, the intermediate casing depth (3150') allows us to run 9 5/8" 36# J55 STC casing. Below are the new design factors.
- To maximize the length of the lateral, the BHL has been changed to reflect this. The new plat and directional plan reflect this change. The new BHL falls within the "producing area", being 1980' FNL and 340' FEL. Cement program has been updated to reflect new volumes. DV tool has been moved to 6500' to minimize the chances of losing circulation on the first stage.

Proposed TD:	7912' TVD	11972' TMD	Elevation: 2953' GL
SL - Lat: 32.204429	Long: 103.961705	X= 614946.8 Y= 438289.7	NAD - 1927
BH - Lat: 32.204713	Long: 103.947249	X= 616417.7 Y= 438408.7	NAD - 1927

3. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Condition</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
17-1/2"	0-435'	13-3/8"	48	ST&C	H-40	New	4.16	9.34	12.2
				Hole filled with 8.9# Mud			770#	1730#	
12-1/4"	0-3150'	9-5/8"	36	LT&C	J-55	New	1.83	1.35	3.88
				Hole filled with 10# Mud			2980#	3520#	
8-3/4"	0-11972' M	5-1/2"	17	LT&C	N-80	New	1.63	2.52	1.92
	DVT @ 6500' - POST @ 3200'			Hole filled with 9.2# Mud			6280#	7740#	

4. Cement Program:

- 5-1/2" Production Cement 1st stage w/ 190sx HES light PP cmt w/ 3#/sx Kol Seal + 3#/sx salt + .3% HR-601, 12.4ppg 2.08 yield 460# 24hr CS 85% Excess followed by 1360sx Super H w/ .4% CFR-3 + .5% Halad-344 + .125#/sx Poly-E-Flake + 3#/sx Kol-Seal + .3% HR-601, 13.2ppg 1.61 yield 1372# 24hr CS 85% Excess, Calc TOC-6495'
DVT @ 6500' Cement 2nd stage w/ 780sx HES light PP cmt w/ 3#/sx Kol Seal + 3#/sx salt, 12.4ppg 2.07 yield 610# 24hr CS 125% Excess followed by 200sx PP cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 1428# 24hr CS 125% Excess, Calc TOC-3150'
POST @ 3200' Cement 3rd stage w/ 400sx HES Light PP cmt w/ 3#/sx Salt, 12.4ppg 2.05 yield 511# 24hr CS 10% Excess followed by 100sx PP cmt w/ 2% CaCl₂, 14.8ppg 1.35 yield 2025# 24hr CS 200% Excess, Circ Surface

Description of Cement Additives: Calcium Chloride, Salt (Accelerator), CFR-3 (Dispersant), Kol-Seal. Poly-E-Flake (Lost Circulation Additive), Halad-344 (Low Fluid Loss Control), HR-601 (Retarder)

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, New Mexico 87505

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40667	Pool Code 96238	Pool Name Corral Draw Bone Springs
Property Code 39439	Property Name CEDAR CANYON 23	Well Number 1H
OGRID No. 16694	Operator Name OXY U.S.A. INC	Elevation 2953'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	23	24-S	29-E		2068	NORTH	483	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
H	23	24-S	29-E		1980	NORTH	340	EAST	EDDY

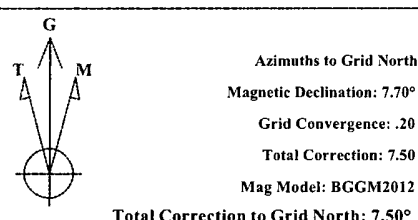
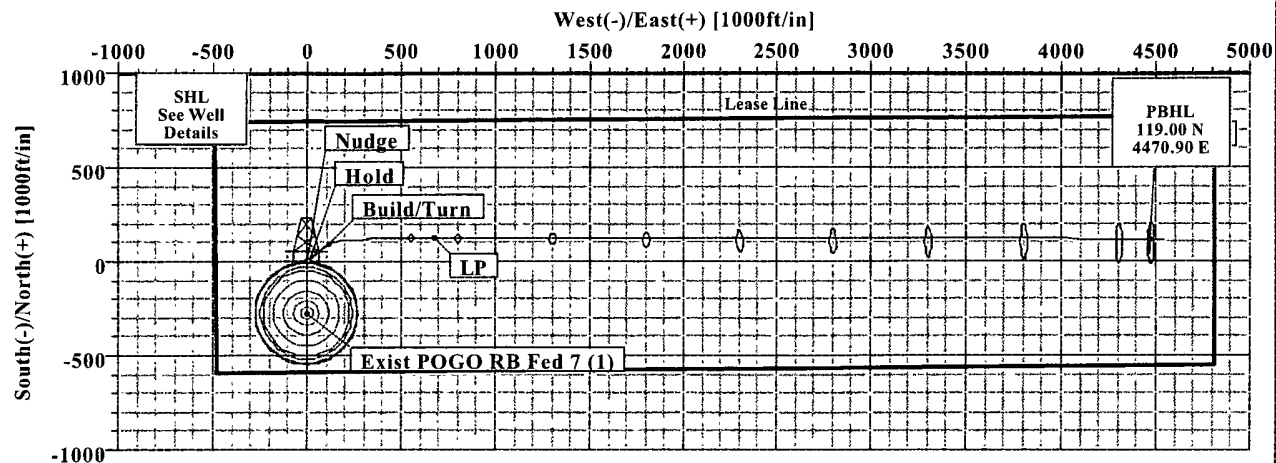
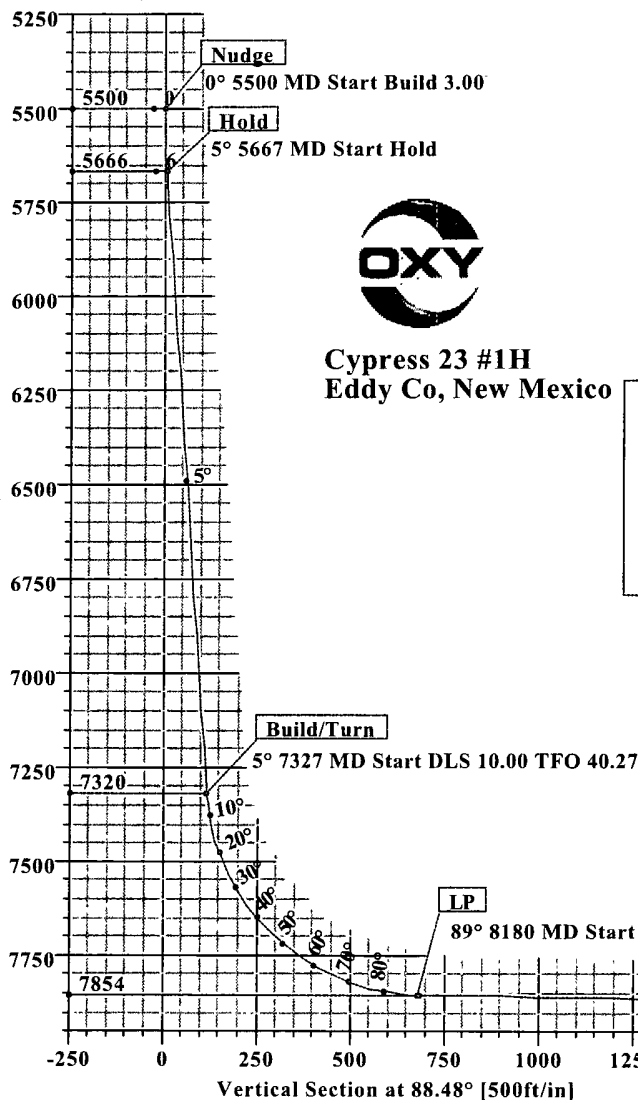
Dedicated Acres 160	Joint or Infill N	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

DETAIL 2945.1' 2953.4' 2956.2' 2970.4' 600' 600' 2068' 483' S.L. SEE DETAIL GRID. AZ. = 88°23'32" HORIZ. DIST. = 4473.5' B.H. 340' PROJECT AREA PRODUCING AREA GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=438289.7 N X=614946.8 E LAT. = 32.204429° N LONG. = 103.961705° W BOTTOM HOLE LOCATION Y=438408.7 N X=619417.7 E LAT. = 32.204713° N LONG. = 103.947249° W CORNER COORDINATES TABLE A) Y=439026.8 N; X=614462.0 E B) Y=439063.0 N; X=619754.7 E C) Y=437699.8 N; X=614465.5 E D) Y=437735.4 N; X=619760.8 E	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>David Stewart</i> Date: 9/28/12 Printed Name: David Stewart - Reg. A.D.O. E-mail Address: david.stewart@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 me or under my supervision, and that the same is true and correct to the best of my belief. JANUARY 6, 2012 Date of Survey Signature & Seal of Professional Surveyor: <i>Ronald D. Eidson</i> RONALD D. EIDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 3239 Certification Number: 12641 Surveyor: Ronald D. Eidson Date: 9/25/2012 DSR Ref. WO#12.13.1054 JWSC W.O.: 12.13.1638
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KB ELEV: 2977.00
GL ELEV: 2953.00



LEGEND	
	Exist POGO RB Fed 7 (1)
	Plan #3

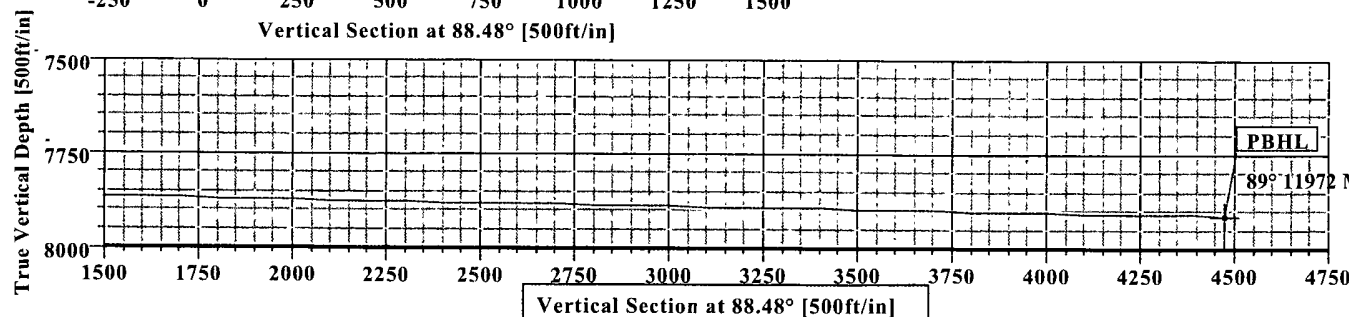
SITE DETAILS	
Cedar Canyon 23 #1H	
Site Centre Northing:	438289.70
Easting:	614946.80
Ground Level:	2953.00
Positional Uncertainty:	0.00
Convergence:	0.20

FIELD DETAILS	
Eddy Co, NM (Nad 27)	
Geodetic System:	US State Plane Coordinate System 1927
Ellipsoid:	NAD27 (Clarke 1866)
Zone:	New Mexico, Eastern Zone
Magnetic Model:	IGRF2010
System Datum:	Mean Sea Level
Local North:	Grid North

WELL DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Cedar Canyon 23 #1H	0.00	0.00	438289.70	614946.80	32°12'15.946N	103°57'42.138W

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	7912.00	119.00	4470.90	438408.70	619417.70	Point

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00
3	5666.67	5.00	50.00	5666.46	4.67	5.57	3.00	50.00	5.69
4	7326.53	5.00	50.00	7320.00	97.66	116.39	0.00	0.00	118.94
5	8179.54	89.12	90.11	7853.88	126.22	679.36	10.00	40.27	682.47
6	11971.54	89.12	90.11	7912.00	119.00	4470.90	0.00	0.00	4472.49



Weatherford



Weatherford International Ltd.

WFT Plan Report - X & Y's


Weatherford

Company: Occidental Permian Ltd.	Date: 9/25/2012	Time: 10:40:34	Page: 1
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: Cedar Canyon 23 #1H; Grid North		
Site: Cedar Canyon 23 #1H	Vertical (TVD) Reference: SITE 2977.0		
Well: Cedar Canyon 23 #1H	Section (VS) Reference: Well (0.00N,0.00E,88.48Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Plan: Plan #3	Date Composed: 9/25/2012
Principal: Yes	Version: 1
	Tied-to: From Surface

Site: Cedar Canyon 23 #1H

Site Position:	Northing: 438289.70 ft	Latitude: 32 12 15.946 N
From: Map	Easting: 614946.80 ft	Longitude: 103 57 42.138 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 2953.00 ft		Grid Convergence: 0.20 deg

Well: Cedar Canyon 23 #1H	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 438289.70 ft
+E/-W 0.00 ft	Easting : 614946.80 ft
Position Uncertainty: 0.00 ft	Latitude: 32 12 15.946 N
	Longitude: 103 57 42.138 W

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 10/17/2012	Above System Datum: Mean Sea Level
Field Strength: 48453 nT	Declination: 7.60 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.07 deg
ft	+N/-S
	ft
0.00	0.00
	ft
	0.00
	88.48

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5666.67	5.00	50.00	5666.46	4.67	5.57	3.00	3.00	0.00	50.00	
7326.53	5.00	50.00	7320.00	97.66	116.39	0.00	0.00	0.00	0.00	
8179.54	89.12	90.11	7853.88	126.22	679.36	10.00	9.86	4.70	40.27	
11971.54	89.12	90.11	7912.00	119.00	4470.90	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	438289.70	614946.80	Nudge
5600.00	3.00	50.00	5599.95	1.68	2.01	2.05	3.00	438291.38	614948.81	
5666.67	5.00	50.00	5666.46	4.67	5.57	5.69	3.00	438294.37	614952.37	Hold
5700.00	5.00	50.00	5699.66	6.54	7.79	7.96	0.00	438296.24	614954.59	
5800.00	5.00	50.00	5799.28	12.14	14.47	14.79	0.00	438301.84	614961.27	
5900.00	5.00	50.00	5898.90	17.74	21.15	21.61	0.00	438307.44	614967.95	
6000.00	5.00	50.00	5998.52	23.35	27.82	28.43	0.00	438313.05	614974.62	
6100.00	5.00	50.00	6098.14	28.95	34.50	35.25	0.00	438318.65	614981.30	
6200.00	5.00	50.00	6197.76	34.55	41.18	42.08	0.00	438324.25	614987.98	
6300.00	5.00	50.00	6297.38	40.15	47.85	48.90	0.00	438329.85	614994.65	
6400.00	5.00	50.00	6397.00	45.75	54.53	55.72	0.00	438335.45	615001.33	
6500.00	5.00	50.00	6496.62	51.36	61.20	62.55	0.00	438341.06	615008.00	
6600.00	5.00	50.00	6596.24	56.96	67.88	69.37	0.00	438346.66	615014.68	
6700.00	5.00	50.00	6695.86	62.56	74.56	76.19	0.00	438352.26	615021.36	
6800.00	5.00	50.00	6795.48	68.16	81.23	83.01	0.00	438357.86	615028.03	
6900.00	5.00	50.00	6895.10	73.77	87.91	89.84	0.00	438363.47	615034.71	
7000.00	5.00	50.00	6994.71	79.37	94.59	96.66	0.00	438369.07	615041.39	
7100.00	5.00	50.00	7094.33	84.97	101.26	103.48	0.00	438374.67	615048.06	
7200.00	5.00	50.00	7193.95	90.57	107.94	110.31	0.00	438380.27	615054.74	
7300.00	5.00	50.00	7293.57	96.18	114.62	117.13	0.00	438385.88	615061.42	
7326.53	5.00	50.00	7320.00	97.66	116.39	118.94	0.00	438387.36	615063.19	Build/Turn



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd. Date: 9/25/2012 Time: 10:40:34 Page: 2
 Field: Eddy Co, NM (Nad 27) Co-ordinate(NE) Reference: Well: Cedar Canyon 23 #1H, Grid North
 Site: Cedar Canyon 23 #1H Vertical (TVD) Reference: SITE 2977-0
 Well: Cedar Canyon 23 #1H Section (VS) Reference: Well (0.00N,0.00E,88.48Azi)
 Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
7350.00	6.96	62.62	7343.34	98.97	118.43	121.02	10.00	438388.67	615065.23	
7400.00	11.62	74.23	7392.68	101.74	125.97	128.63	10.00	438391.44	615072.77	
7450.00	16.48	79.16	7441.17	104.44	137.79	140.51	10.00	438394.14	615084.59	
7500.00	21.40	81.88	7488.45	107.06	153.80	156.58	10.00	438396.76	615100.60	
7550.00	26.35	83.62	7534.16	109.59	173.87	176.71	10.00	438399.29	615120.67	
7600.00	31.32	84.84	7577.95	111.99	197.85	200.75	10.00	438401.69	615144.65	
7650.00	36.29	85.75	7619.48	114.26	225.57	228.52	10.00	438403.96	615172.37	
7700.00	41.27	86.47	7658.45	116.37	256.80	259.80	10.00	438406.07	615203.60	
7750.00	46.25	87.06	7694.55	118.31	291.32	294.36	10.00	438408.01	615238.12	
7800.00	51.24	87.56	7727.51	120.07	328.86	331.93	10.00	438409.77	615275.66	
7850.00	56.23	88.00	7757.07	121.62	369.13	372.22	10.00	438411.32	615315.93	
7900.00	61.22	88.38	7783.02	122.97	411.83	414.94	10.00	438412.67	615358.63	
7950.00	66.21	88.73	7805.16	124.09	456.63	459.76	10.00	438413.79	615403.43	
8000.00	71.20	89.06	7823.32	124.99	503.19	506.33	10.00	438414.69	615449.99	
8050.00	76.19	89.36	7837.35	125.65	551.16	554.30	10.00	438415.35	615497.96	
8100.00	81.18	89.66	7847.16	126.06	600.17	603.30	10.00	438415.76	615546.97	
8150.00	86.17	89.94	7852.66	126.24	649.85	652.97	10.00	438415.94	615596.65	
8179.54	89.12	90.11	7853.88	126.22	679.36	682.47	10.00	438415.92	615626.16	LP
8200.00	89.12	90.11	7854.19	126.19	699.82	702.92	0.00	438415.89	615646.62	
8300.00	89.12	90.11	7855.72	125.99	799.81	802.87	0.00	438415.69	615746.61	
8400.00	89.12	90.11	7857.26	125.80	899.79	902.81	0.00	438415.50	615846.59	
8500.00	89.12	90.11	7858.79	125.61	999.78	1002.76	0.00	438415.31	615946.58	
8600.00	89.12	90.11	7860.32	125.42	1099.77	1102.71	0.00	438415.12	616046.57	
8700.00	89.12	90.11	7861.85	125.23	1199.76	1202.66	0.00	438414.93	616146.56	
8800.00	89.12	90.11	7863.39	125.04	1299.75	1302.61	0.00	438414.74	616246.55	
8900.00	89.12	90.11	7864.92	124.85	1399.73	1402.55	0.00	438414.55	616346.53	
9000.00	89.12	90.11	7866.45	124.66	1499.72	1502.50	0.00	438414.36	616446.52	
9100.00	89.12	90.11	7867.99	124.47	1599.71	1602.45	0.00	438414.17	616546.51	
9200.00	89.12	90.11	7869.52	124.28	1699.70	1702.40	0.00	438413.98	616646.50	
9300.00	89.12	90.11	7871.05	124.09	1799.69	1802.34	0.00	438413.79	616746.49	
9400.00	89.12	90.11	7872.58	123.90	1899.67	1902.29	0.00	438413.60	616846.47	
9500.00	89.12	90.11	7874.12	123.71	1999.66	2002.24	0.00	438413.41	616946.46	
9600.00	89.12	90.11	7875.65	123.52	2099.65	2102.19	0.00	438413.22	617046.45	
9700.00	89.12	90.11	7877.18	123.33	2199.64	2202.14	0.00	438413.03	617146.44	
9800.00	89.12	90.11	7878.71	123.14	2299.63	2302.08	0.00	438412.84	617246.43	
9900.00	89.12	90.11	7880.25	122.95	2399.62	2402.03	0.00	438412.65	617346.42	
10000.00	89.12	90.11	7881.78	122.76	2499.60	2501.98	0.00	438412.46	617446.40	
10100.00	89.12	90.11	7883.31	122.57	2599.59	2601.93	0.00	438412.27	617546.39	
10200.00	89.12	90.11	7884.85	122.38	2699.58	2701.88	0.00	438412.08	617646.38	
10300.00	89.12	90.11	7886.38	122.18	2799.57	2801.82	0.00	438411.88	617746.37	
10400.00	89.12	90.11	7887.91	121.99	2899.56	2901.77	0.00	438411.69	617846.36	
10500.00	89.12	90.11	7889.44	121.80	2999.54	3001.72	0.00	438411.50	617946.34	
10600.00	89.12	90.11	7890.98	121.61	3099.53	3101.67	0.00	438411.31	618046.33	
10700.00	89.12	90.11	7892.51	121.42	3199.52	3201.61	0.00	438411.12	618146.32	
10800.00	89.12	90.11	7894.04	121.23	3299.51	3301.56	0.00	438410.93	618246.31	
10900.00	89.12	90.11	7895.58	121.04	3399.50	3401.51	0.00	438410.74	618346.30	
11000.00	89.12	90.11	7897.11	120.85	3499.48	3501.46	0.00	438410.55	618446.28	
11100.00	89.12	90.11	7898.64	120.66	3599.47	3601.41	0.00	438410.36	618546.27	
11200.00	89.12	90.11	7900.17	120.47	3699.46	3701.35	0.00	438410.17	618646.26	
11300.00	89.12	90.11	7901.71	120.28	3799.45	3801.30	0.00	438409.98	618746.25	
11400.00	89.12	90.11	7903.24	120.09	3899.44	3901.25	0.00	438409.79	618846.24	
11500.00	89.12	90.11	7904.77	119.90	3999.42	4001.20	0.00	438409.60	618946.22	
11600.00	89.12	90.11	7906.31	119.71	4099.41	4101.15	0.00	438409.41	619046.21	



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 9/25/2012	Time: 10:40:34	Page: 3
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: Cedar Canyon 23 #1H; Grid-North		
Site: Cedar Canyon 23 #1H	Vertical (TVD) Reference: SITE 2977.0		
Well: Cedar Canyon 23 #1H	Section (VS) Reference: Well (0.00N,0.00E,88.48Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
11700.00	89.12	90.11	7907.84	119.52	4199.40	4201.09	0.00	438409.22	619146.20	
11800.00	89.12	90.11	7909.37	119.33	4299.39	4301.04	0.00	438409.03	619246.19	
11900.00	89.12	90.11	7910.90	119.14	4399.38	4400.99	0.00	438408.84	619346.18	
11971.54	89.12	90.11	7912.00	119.00	4470.90	4472.49	0.00	438408.70	619417.70	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec	Longitude Deg Min Sec
PBHL			7912.00	119.00	4470.90	438408.70	619417.70	32 12 16.967 N	103 56 50.098 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
500.00	500.00	0.000	0.000	Sfc Csg
3000.00	3000.00	0.000	0.000	Int Csg

Annotation

MD ft	TVD ft	
5500.00	5500.00	Nudge
5666.67	5666.46	Hold
7326.53	7320.00	Build/Turn
8179.54	7853.88	LP
11971.54	0.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction



Weatherford International Ltd.

Anticollision Report



Weatherford

Company: Occidental Permian Ltd. Date: 9/25/2012 Time: 10:38:40 Page: 1
 Field: Eddy Co, NM (Nad 27)
 Reference Site: Cedar Canyon 23 #1H Co-ordinate(NE) Reference: Well: Cedar Canyon 23 #1H, Grid North
 Reference Well: Cedar Canyon 23 #1H Vertical (TVD) Reference: SITE 2977.0
 Reference Wellpath: 1 Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria

Interpolation Method: MD Interval: 30.00 ft
 Depth Range: 30.00 to 11742.31 ft
 Maximum Ratio: 2

Reference: Plan: Plan #3
 Error Model: ISCWSA Ellipse
 Scan Method: Closest Approach 3D
 Error Surface: Ellipse

Plan: Plan #3

Date Composed: 9/25/2012

Version: 1

Principal: Yes

Tied-to: From Surface

Summary

Site	Offset Wellpath Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
Exist POGO Riverbend	Exist POGO RB Fed 7 V2		5640.00	5641.87	279.64	98.81	1.55	

Site: Exist POGO Riverbend Federal 7

Well: Exist POGO RB Fed 7

Wellpath: 1 V2

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset MD ft	TVD ft	Semi-Major Axis Ref ft	Offset ft	TFO-HS deg	Offset Location North ft	East ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
4350.00	4350.00	4352.00	4352.00	9.64	129.14	180.76	-276.24	-3.65	276.26	137.48	1.99	
4380.00	4380.00	4382.00	4382.00	9.71	130.05	180.76	-276.24	-3.65	276.26	136.50	1.98	
4410.00	4410.00	4412.00	4412.00	9.77	130.97	180.76	-276.24	-3.65	276.26	135.52	1.96	
4440.00	4440.00	4442.00	4442.00	9.84	131.88	180.76	-276.24	-3.65	276.26	134.55	1.95	
4470.00	4470.00	4472.00	4472.00	9.91	132.79	180.76	-276.24	-3.65	276.26	133.57	1.94	
4500.00	4500.00	4502.00	4502.00	9.98	133.70	180.76	-276.24	-3.65	276.26	132.59	1.92	
4530.00	4530.00	4532.00	4532.00	10.04	134.61	180.76	-276.24	-3.65	276.26	131.61	1.91	
4560.00	4560.00	4562.00	4562.00	10.11	135.52	180.76	-276.24	-3.65	276.26	130.63	1.90	
4590.00	4590.00	4592.00	4592.00	10.18	136.43	180.76	-276.24	-3.65	276.26	129.65	1.88	
4620.00	4620.00	4622.00	4622.00	10.24	137.34	180.76	-276.24	-3.65	276.26	128.67	1.87	
4650.00	4650.00	4652.00	4652.00	10.31	138.25	180.76	-276.24	-3.65	276.26	127.70	1.86	
4680.00	4680.00	4682.00	4682.00	10.38	139.16	180.76	-276.24	-3.65	276.26	126.72	1.85	
4710.00	4710.00	4712.00	4712.00	10.45	140.08	180.76	-276.24	-3.65	276.26	125.74	1.84	
4740.00	4740.00	4742.00	4742.00	10.51	140.99	180.76	-276.24	-3.65	276.26	124.76	1.82	
4770.00	4770.00	4772.00	4772.00	10.58	141.90	180.76	-276.24	-3.65	276.26	123.78	1.81	
4800.00	4800.00	4802.00	4802.00	10.65	142.81	180.76	-276.24	-3.65	276.26	122.80	1.80	
4830.00	4830.00	4832.00	4832.00	10.72	143.72	180.76	-276.24	-3.65	276.26	121.82	1.79	
4860.00	4860.00	4862.00	4862.00	10.78	144.63	180.76	-276.24	-3.65	276.26	120.85	1.78	
4890.00	4890.00	4892.00	4892.00	10.85	145.54	180.76	-276.24	-3.65	276.26	119.87	1.77	
4920.00	4920.00	4922.00	4922.00	10.92	146.45	180.76	-276.24	-3.65	276.26	118.89	1.76	
4950.00	4950.00	4952.00	4952.00	10.99	147.36	180.76	-276.24	-3.65	276.26	117.91	1.74	
4980.00	4980.00	4982.00	4982.00	11.05	148.28	180.76	-276.24	-3.65	276.26	116.93	1.73	
5010.00	5010.00	5012.00	5012.00	11.12	149.19	180.76	-276.24	-3.65	276.26	115.95	1.72	
5040.00	5040.00	5042.00	5042.00	11.19	150.10	180.76	-276.24	-3.65	276.26	114.98	1.71	
5070.00	5070.00	5072.00	5072.00	11.26	151.01	180.76	-276.24	-3.65	276.26	114.00	1.70	
5100.00	5100.00	5102.00	5102.00	11.32	151.92	180.76	-276.24	-3.65	276.26	113.02	1.69	
5130.00	5130.00	5132.00	5132.00	11.39	152.83	180.76	-276.24	-3.65	276.26	112.04	1.68	
5160.00	5160.00	5162.00	5162.00	11.46	153.74	180.76	-276.24	-3.65	276.26	111.06	1.67	
5190.00	5190.00	5192.00	5192.00	11.53	154.65	180.76	-276.24	-3.65	276.26	110.08	1.66	
5220.00	5220.00	5222.00	5222.00	11.59	155.56	180.76	-276.24	-3.65	276.26	109.10	1.65	
5250.00	5250.00	5252.00	5252.00	11.66	156.47	180.76	-276.24	-3.65	276.26	108.13	1.64	
5280.00	5280.00	5282.00	5282.00	11.73	157.39	180.76	-276.24	-3.65	276.26	107.15	1.63	
5310.00	5310.00	5312.00	5312.00	11.80	158.30	180.76	-276.24	-3.65	276.26	106.17	1.62	
5340.00	5340.00	5342.00	5342.00	11.86	159.21	180.76	-276.24	-3.65	276.26	105.19	1.61	
5370.00	5370.00	5372.00	5372.00	11.93	160.12	180.76	-276.24	-3.65	276.26	104.21	1.61	
5400.00	5400.00	5402.00	5402.00	12.00	161.03	180.76	-276.24	-3.65	276.26	103.23	1.60	



Weatherford International Ltd.

Anticollision Report



Weatherford

Company: Occidental Permian Ltd. Date: 9/25/2012 Time: 10:38:40 Page: 2
 Field: Eddy Co, NM (Nad 27)
 Reference Site: Cedar Canyon 23 #1H Co-ordinate(NE) Reference: Well: Cedar Canyon 23 #1H, Grid North
 Reference Well: Cedar Canyon 23 #1H Vertical (TVD) Reference: SITE 2977:0
 Reference Wellpath: 1 Db: Sybase

Site: Exist POGO Riverbend Federal 7
 Well: Exist POGO RB Fed 7
 Wellpath: 1 V2

Inter-Site Error: 0.00 ft

Reference MD	TVD	Offset MD	TVD	Semi-Major Axis Ref	Offset	TFO-HS	Offset Location North	East	Ctr-Ctr Distance	Edge Distance	Separation Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
5430.00	5430.00	5432.00	5432.00	12.07	161.94	180.76	-276.24	-3.65	276.26	102.25	1.59	
5460.00	5460.00	5462.00	5462.00	12.13	162.85	180.76	-276.24	-3.65	276.26	101.28	1.58	
5490.00	5490.00	5492.00	5492.00	12.20	163.76	180.76	-276.24	-3.65	276.26	100.30	1.57	
5520.00	5520.00	5522.00	5522.00	12.27	164.67	130.77	-276.24	-3.65	276.33	99.39	1.56	
5550.00	5549.99	5551.99	5551.99	12.33	165.59	130.85	-276.24	-3.65	276.69	98.77	1.56	
5580.00	5579.98	5581.98	5581.98	12.40	166.50	131.00	-276.24	-3.65	277.36	98.47	1.55	
5610.00	5609.94	5611.94	5611.94	12.46	167.41	131.20	-276.24	-3.65	278.34	98.48	1.55	
5640.00	5639.87	5641.87	5641.87	12.53	168.31	131.48	-276.24	-3.65	279.64	98.81	1.55	
5670.00	5669.78	5671.78	5671.78	12.59	169.22	131.82	-276.24	-3.65	281.25	99.46	1.55	
5700.00	5699.66	5701.66	5701.66	12.66	170.13	132.21	-276.24	-3.65	283.01	100.24	1.55	
5730.00	5729.55	5731.55	5731.55	12.72	171.04	132.60	-276.24	-3.65	284.77	101.03	1.55	
5760.00	5759.43	5761.43	5761.43	12.79	171.95	132.98	-276.24	-3.65	286.55	101.84	1.55	
5790.00	5789.32	5791.32	5791.32	12.85	172.85	133.36	-276.24	-3.65	288.35	102.66	1.55	
5820.00	5819.21	5821.21	5821.21	12.92	173.76	133.74	-276.24	-3.65	290.15	103.49	1.55	
5850.00	5849.09	5851.09	5851.09	12.99	174.67	134.11	-276.24	-3.65	291.97	104.34	1.56	
5880.00	5878.98	5880.98	5880.98	13.05	175.58	134.47	-276.24	-3.65	293.80	105.19	1.56	
5910.00	5908.86	5910.86	5910.86	13.12	176.48	134.83	-276.24	-3.65	295.64	106.06	1.56	
5940.00	5938.75	5940.75	5940.75	13.18	177.39	135.19	-276.24	-3.65	297.49	106.94	1.56	
5970.00	5968.63	5970.63	5970.63	13.25	178.30	135.54	-276.24	-3.65	299.36	107.83	1.56	
6000.00	5998.52	6000.52	6000.52	13.32	179.21	135.89	-276.24	-3.65	301.23	108.73	1.56	
6030.00	6028.41	6030.41	6030.41	13.38	180.11	136.23	-276.24	-3.65	303.12	109.64	1.57	
6060.00	6058.29	6060.29	6060.29	13.45	181.02	136.57	-276.24	-3.65	305.02	110.57	1.57	
6090.00	6088.18	6090.18	6090.18	13.52	181.93	136.91	-276.24	-3.65	306.92	111.50	1.57	
6120.00	6118.06	6120.06	6120.06	13.59	182.84	137.24	-276.24	-3.65	308.84	112.44	1.57	
6150.00	6147.95	6149.95	6149.95	13.65	183.74	137.56	-276.24	-3.65	310.77	113.40	1.57	
6180.00	6177.84	6179.84	6179.84	13.72	184.65	137.89	-276.24	-3.65	312.71	114.36	1.58	
6210.00	6207.72	6209.72	6209.72	13.79	185.56	138.21	-276.24	-3.65	314.65	115.34	1.58	
6240.00	6237.61	6239.61	6239.61	13.86	186.47	138.52	-276.24	-3.65	316.61	116.32	1.58	
6270.00	6267.49	6269.49	6269.49	13.92	187.37	138.83	-276.24	-3.65	318.58	117.31	1.58	
6300.00	6297.38	6299.38	6299.38	13.99	188.28	139.14	-276.24	-3.65	320.56	118.31	1.59	
6330.00	6327.26	6329.26	6329.26	14.06	189.19	139.44	-276.24	-3.65	322.54	119.32	1.59	
6360.00	6357.15	6359.15	6359.15	14.13	190.10	139.74	-276.24	-3.65	324.53	120.34	1.59	
6390.00	6387.04	6389.04	6389.04	14.20	191.01	140.04	-276.24	-3.65	326.54	121.37	1.59	
6420.00	6416.92	6418.92	6418.92	14.27	191.91	140.33	-276.24	-3.65	328.55	122.41	1.59	
6450.00	6446.81	6448.81	6448.81	14.34	192.82	140.62	-276.24	-3.65	330.57	123.45	1.60	
6480.00	6476.69	6478.69	6478.69	14.41	193.73	140.90	-276.24	-3.65	332.60	124.51	1.60	
6510.00	6506.58	6508.58	6508.58	14.47	194.64	141.19	-276.24	-3.65	334.63	125.57	1.60	
6540.00	6536.47	6538.47	6538.47	14.54	195.54	141.46	-276.24	-3.65	336.68	126.64	1.60	
6570.00	6566.35	6568.35	6568.35	14.61	196.45	141.74	-276.24	-3.65	338.73	127.72	1.61	
6600.00	6596.24	6598.24	6598.24	14.68	197.36	142.01	-276.24	-3.65	340.79	128.80	1.61	
6630.00	6626.12	6628.12	6628.12	14.75	198.27	142.28	-276.24	-3.65	342.86	129.89	1.61	
6660.00	6656.01	6658.01	6658.01	14.82	199.17	142.55	-276.24	-3.65	344.93	130.99	1.61	
6690.00	6685.89	6687.89	6687.89	14.89	200.08	142.81	-276.24	-3.65	347.01	132.10	1.61	
6720.00	6715.78	6717.78	6717.78	14.96	200.99	143.07	-276.24	-3.65	349.10	133.22	1.62	
6750.00	6745.67	6747.67	6747.67	15.03	201.90	143.32	-276.24	-3.65	351.20	134.34	1.62	
6780.00	6775.55	6777.55	6777.55	15.10	202.80	143.58	-276.24	-3.65	353.30	135.47	1.62	
6810.00	6805.44	6807.44	6807.44	15.17	203.71	143.83	-276.24	-3.65	355.41	136.60	1.62	
6840.00	6835.32	6837.32	6837.32	15.24	204.62	144.07	-276.24	-3.65	357.53	137.74	1.63	
6870.00	6865.21	6867.21	6867.21	15.31	205.53	144.32	-276.24	-3.65	359.65	138.89	1.63	
6900.00	6895.10	6897.10	6897.10	15.38	206.43	144.56	-276.24	-3.65	361.78	140.05	1.63	
6930.00	6924.98	6926.98	6926.98	15.46	207.34	144.80	-276.24	-3.65	363.92	141.21	1.63	



Weatherford International Ltd.

Anticollision Report



Weatherford

Company: Occidental Permian Ltd. Date: 9/25/2012 Time: 10:38:40 Page: 3
 Field: Eddy Co, NM (Nad 27)
 Reference Site: Cedar Canyon 23 #1H Co-ordinate(NE) Reference: Well: Cedar Canyon 23 #1H, Grid North
 Reference Well: Cedar Canyon 23 #1H Vertical (TVD) Reference: SITE 2977.0
 Reference Wellpath: 1 Db: Sybase

Site: Exist POGO Riverbend Federal 7
 Well: Exist POGO RB Fed 7
 Wellpath: 1 V2

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft				
6960.00	6954.87	6956.87	6956.87	15.53	208.25	145.03	-276.24	-3.65	366.06	142.37	1.64	
6990.00	6984.75	6986.75	6986.75	15.60	209.16	145.26	-276.24	-3.65	368.21	143.55	1.64	
7020.00	7014.64	7016.64	7016.64	15.67	210.06	145.49	-276.24	-3.65	370.36	144.73	1.64	
7050.00	7044.52	7046.52	7046.52	15.74	210.97	145.72	-276.24	-3.65	372.52	145.91	1.64	
7080.00	7074.41	7076.41	7076.41	15.81	211.88	145.95	-276.24	-3.65	374.69	147.10	1.65	
7110.00	7104.30	7106.30	7106.30	15.88	212.79	146.17	-276.24	-3.65	376.86	148.30	1.65	
7140.00	7134.18	7136.18	7136.18	15.95	213.70	146.39	-276.24	-3.65	379.04	149.50	1.65	
7170.00	7164.07	7166.07	7166.07	16.03	214.60	146.61	-276.24	-3.65	381.22	150.71	1.65	
7200.00	7193.95	7195.95	7195.95	16.10	215.51	146.82	-276.24	-3.65	383.41	151.92	1.66	
7230.00	7223.84	7225.84	7225.84	16.17	216.42	147.03	-276.24	-3.65	385.60	153.14	1.66	
7260.00	7253.73	7255.73	7255.73	16.24	217.33	147.24	-276.24	-3.65	387.80	154.36	1.66	
7290.00	7283.61	7285.61	7285.61	16.31	218.23	147.45	-276.24	-3.65	390.01	155.59	1.66	
7320.00	7313.50	7315.50	7315.50	16.38	219.14	147.66	-276.24	-3.65	392.22	156.82	1.67	
7350.00	7343.34	7345.34	7345.34	16.46	220.05	135.19	-276.24	-3.65	394.57	158.22	1.67	
7380.00	7373.03	7375.03	7375.03	16.53	220.95	127.19	-276.24	-3.65	397.41	160.10	1.67	
7410.00	7402.46	7404.46	7404.46	16.60	221.84	123.02	-276.24	-3.65	400.76	162.52	1.68	
7440.00	7431.56	7433.56	7433.56	16.67	222.73	120.69	-276.24	-3.65	404.67	165.50	1.69	
7470.00	7460.25	7462.25	7462.25	16.75	223.60	119.38	-276.24	-3.65	409.19	169.11	1.70	
7500.00	7488.45	7490.45	7490.45	16.84	224.45	118.69	-276.24	-3.65	414.38	173.41	1.72	
7530.00	7516.09	7518.09	7518.09	16.93	225.29	118.41	-276.24	-3.65	420.31	178.47	1.74	
7560.00	7543.08	7545.08	7545.08	17.04	226.11	118.40	-276.24	-3.65	427.04	184.36	1.76	
7590.00	7569.36	7571.36	7571.36	17.15	226.91	118.57	-276.24	-3.65	434.66	191.16	1.79	
7620.00	7594.85	7596.85	7596.85	17.27	227.68	118.83	-276.24	-3.65	443.23	198.94	1.81	
7650.00	7619.48	7621.48	7621.48	17.40	228.43	119.13	-276.24	-3.65	452.80	207.76	1.85	
7680.00	7643.19	7645.19	7645.19	17.54	229.15	119.43	-276.24	-3.65	463.44	217.66	1.89	
7710.00	7665.90	7667.90	7667.90	17.70	229.84	119.68	-276.24	-3.65	475.19	228.69	1.93	
7740.00	7687.57	7689.57	7689.57	17.87	230.50	119.85	-276.24	-3.65	488.07	240.88	1.97	

CONDITIONS OF APPROVAL

Sundry dated 09/28/2012

OPERATOR'S NAME:	OXY USA INC
LEASE NO.:	NM81586
WELL NAME & NO.:	1H-CEDAR CANYON 23
SURFACE HOLE FOOTAGE:	2068'/N. & 483'/W.
BOTTOM HOLE FOOTAGE:	1980'/N. & 340'/E.
LOCATION:	Section 23, T. 24 S., R. 29 E., NMPM
COUNTY:	Eddy County, New Mexico

Original COS still applies with the following changes

A. DRILLING OPERATIONS REQUIREMENTS

B. CASING

1. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

2. The minimum required fill of cement behind the 5-1/2 inch production casing is:

a. First stage to DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

c. Third stage above DV tool:

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement shall be required as excess calculates to 11%.**

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