

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 26 2012

FORM APPROVED
OMB 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 79710

3b. Phone No. (include area code)
432-685-5717

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

SL- 453 FNL 803 FEL NENE(A) Sec 33 T23S R29E
PBH - 400 FSL 600 FEL SESE(P)

5. Lease Serial No.

LS-NMNM086024 - B-NMNM019848

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Cypress 33 Federal Com. #5H

9. API Well No.

30-015-40768

10. Field and Pool, or Exploratory Area

Wildcat 2nd 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	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

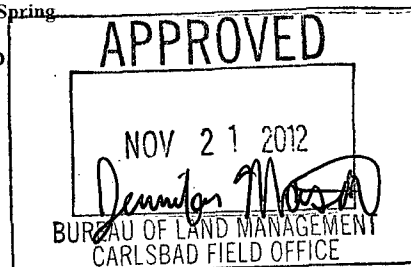
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical 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 recompleation 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 Cypress 33 Federal #5H, API No. 30-015-40768 to drill a pilot hole to 9300'TVD, core and log. The horizontal lateral will still test the 2nd Bone Spring

1. Amend the proposed TD. Pilot Hole-9300'TVD - Horizontal Lateral - 8801'TVD 13014'TMD
2. See attached for coring and logging program.
3. See attached for the amended intermediate/production casing program.
4. See attached for the amended cementing programs.
5. See attached for the amended proposed directional drilling plan.

Accepted for record

NMOCD 105 11/26/12



Eng. Review new COA see attached 11/21/12 - JAM

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

David Stewart

Title Regulatory Advisor

Signature

Date

11/6/12

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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 DRILLING PROGRAM

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Cypress 33 Federal Com. #5H	
Pool Name/Number:	Wildcat 2nd Bone Spring	
Surface Location:	453 FNL 803 FEL NENE(A) Sec 33 T23S R29E	Federal Lease No. NMNM086024
Bottom Hole Location:	400 FSL 600 FEL SESE(P) Sec 33 T23S R29E	Federal Lease No. NMNM019848

Drill a pilot hole to 9300'TVD, core and log, plug back and drill horizontal lateral.

Proposed TD: Pilot Hole 9300' TVD Horizontal Lateral 8801' TVD 13014' TMD

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>
12-1/4"	0-3050'	9-5/8"	40	LT&C	L-80	New	2.95	1.26	3.58
				Hole filled with 10.2# Mud			3090#	5750#	
8-3/4"	0-13014'	5-1/2"	20	LT&C	L-80	New	1.95	1.33	1.66
DVT @ 6000' - POST @ 3100'				Hole filled with 9.2# Mud			8830#	9190#	

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program

- a. 13-3/8" Surface Circulate cement to surface w/ 430sx PP cmt w/ 2% CaCl₂, 14.8ppg, 1.35 yield, 1326# 24hr CS 165% Excess
- b. 9-5/8" Intermediate Circulate cement to surface w/ 790sx HES light PP cmt w/ 3#/sx Salt + .125#/sx Poly-E-Flake +3#/sx Kol Seal, 12.9ppg 1.85 yield 500# 24hr CS 105% Excess followed by 350sx PP cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 1650# 24hr CS 105% Excess
- c. Pilot Hole Plug Plug #1 cement w/ 470sx 50/50 Poz/Premium cmt w/ .3% CFR-3 + .1% HR-601, 14.4ppg 1.22 yield 465# 24hr CS 35% excess from 9300' to +/-8300'.
Plug #2 cement w/ 300sx PP cmt w/ .5% CFR-3 + .1% HR-800, 17.5ppg .95 yield 5403# 24hr CS 35% Excess from 8300' to +/- 7800'
- d. 5-1/2" Production Cement 1st stage w/ 320sx HES light w/ .25#/sx D-Air 5000 + .5% HR-322 + .3% HR-601, 11.9ppg 2.45 yield 100# 24hr CS 100% Excess followed by 1190sx Super H w/ .5% Halad-344 + .4% CFR-3 + 3#/sx Kol-Seal + .125#/sx Poly-E-Flake + .2% HR-601, 13.2ppg 1.61 yield 1673# 24hr CS 50% Excess, Calc TOC-5995'
Cement 2nd stage w/ 560sx 50/50/Poz/Premium cmt w/ 5% salt + 2#/sx Kol-Seal + 8% Bentonite + .125#/sx Poly-E-Flake, 11.8ppg 2.45 yield 332# 24hr CS 200% Excess followed by 100sx PP cmt w/ .3% CFR-3 + .3% Econolite + 5#/sx Microbond + .2% Well Life 734 + .5% HR-344, 14.2ppg 1.55 yield 1914# 24hr CS 100% Excess Calc TOC-3095'
Cement 3rd stage w/ 400sx HES Light PP cmt w/ 3#/sx salt, 12.4ppg 1.98 yield 447# 24hr CS 10% Excess followed by 100sx PP cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 1650# 24hr CS 200% Excess, Circ Surface

Description of Cement Additives: Calcium Chloride, Salt (Accelerator), D-Air 5000 (Defoamer), CFR-3 (Dispersant), Microbond (Expander), Bentonite, Econolite, (Light Weight Additive), Kol-Seal, Poly-E-Flake (Lost Circulation Additive), HR-322, HR-344 (Low Fluid Loss Control), HR-601, HR-800 (Retarder)

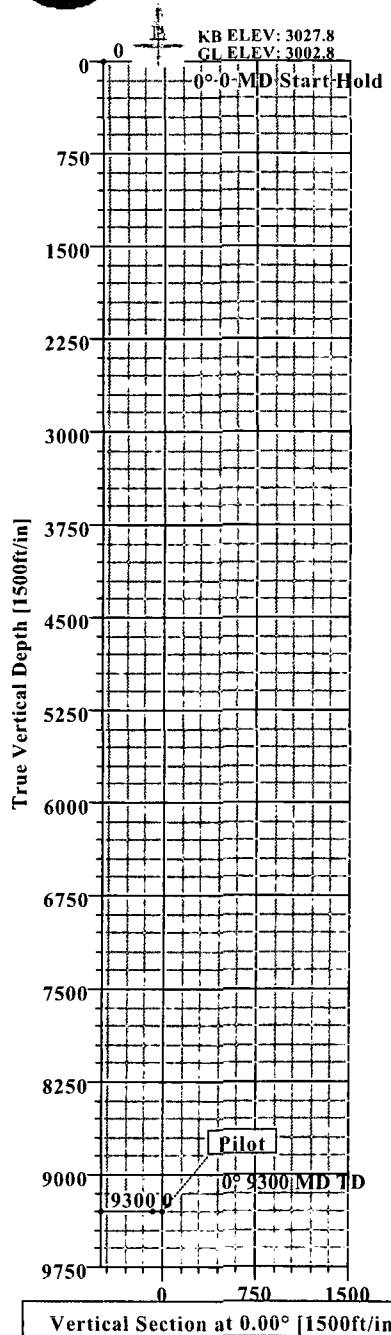
The above cement volumes could be revised pending the caliper measurement.

Logging, Coring and Testing Program:

- a. The open hole logging program will consist of a Triple Combo (GR/Density/Neutron/Res/CMR) from Pilot Hole TD to the base of the intermediate. GR/Neutron for the Pilot Hole TD to Surface.
- b. Conventional Core (60') at approximately 7400-7460'. Rotary Sidewall Cores (30 samples) in the 2nd Bone Spring.



Occidental Permian Ltd.
Cypress 33 Fed #5H
Eddy Co, NM



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	9300.00	0.00	0.00	9300.00	0.00	0.00	0.00	0.00	0.00	

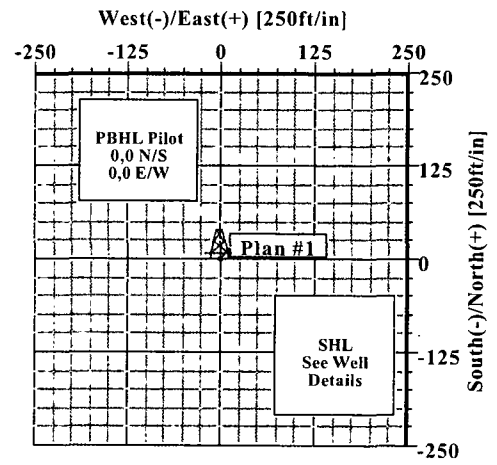
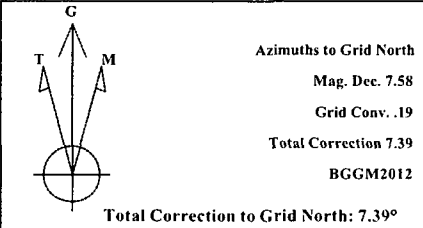
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Cypress 33 Fed #5H	0.00	0.00	461110.90	608199.00	32°16'02.012N	103°58'59.809W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
None						

SITE DETAILS
Cypress 33 Fed #5H
Site Centre Northing: 461110.90
Easting: 608199.00
Ground Level: 3002.80
Positional Uncertainty: 0.00
Convergence: 0.19

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

LEGEND
Pilot
Plan #1



Weatherford



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd. Date: 10/22/2012 Time: 14:34:13 Page: 1
 Field: Eddy Co, NM (Nad 27) Co-ordinate(NE) Reference: Well: Cypress 33 Fed #5H, Grid North
 Site: Cypress 33 Fed #5H Vertical (TVD) Reference: SITE 3027.8
 Well: Cypress 33 Fed #5H Section (VS) Reference: Well (0.00N,0.00E,0.00Azi)
 Wellpath: Pilot Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #1 Date Composed: 10/22/2012
 Principal: Yes Version: 1
 Tied-to: From Surface

Site: Cypress 33 Fed #5H

Site Position: Northing: 461110.90 ft Latitude: 32 16 2.012 N
 From: Map Easting: 608199.00 ft Longitude: 103 58 59.809 W
 Position Uncertainty: 0.00 ft North Reference: Grid
 Ground Level: 3002.80 ft Grid Convergence: 0.19 deg

Well: Cypress 33 Fed #5H Slot Name:
 Well Position: +N/-S 0.00 ft Northing: 461110.90 ft Latitude: 32 16 2.012 N
 +E/-W 0.00 ft Easting: 608199.00 ft Longitude: 103 58 59.809 W
 Position Uncertainty: 0.00 ft

Wellpath: Pilot Drilled From: Surface
 Current Datum: SITE Height 3027.80 ft Tie-on Depth: 0.00 ft
 Magnetic Data: 2/1/2013 Above System Datum: Mean Sea Level
 Field Strength: 48455 nT Declination: 7.58 deg
 Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.12 deg
 ft ft +E/-W Direction
 deg
 0.00 0.00 0.00 0.00

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	
9300.00	0.00	0.00	9300.00	0.00	0.00	0.00	0.00	0.00	0.00	

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	



Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Occidental Permian Ltd.
Field: Eddy Co, NM (Nad 27)
Site: Cypress 33 Fed #5H
Well: Cypress 33 Fed #5H
Wellpath: Pilot

Date: 10/22/2012 Time: 14:34:13 Page: 2
Co-ordinate(NE) Reference: Well: Cypress 33 Fed #5H, Grid North
Vertical (TVD) Reference: SITE 3027.8
Section (VS) Reference: Well (0.00N,0.00E,0.00Azi)
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
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5700.00	0.00	0.00	5700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6100.00	0.00	0.00	6100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6300.00	0.00	0.00	6300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6500.00	0.00	0.00	6500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6700.00	0.00	0.00	6700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6800.00	0.00	0.00	6800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6900.00	0.00	0.00	6900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7100.00	0.00	0.00	7100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7200.00	0.00	0.00	7200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7300.00	0.00	0.00	7300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7400.00	0.00	0.00	7400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7500.00	0.00	0.00	7500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7600.00	0.00	0.00	7600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	



Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Occidental Permian Ltd. **Date:** 10/22/2012 **Time:** 14:34:13 **Page:** 3
Field: Eddy Co, NM (Nad 27) **Co-ordinate(NE) Reference:** Well: Cypress 33 Fed #5H, Grid North
Site: Cypress 33 Fed #5H **Vertical (TVD) Reference:** SITE 3027.8
Well: Cypress 33 Fed #5H **Section (VS) Reference:** Well (0.00N,0.00E,0.00Azi)
Wellpath: Pilot **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
7700.00	0.00	0.00	7700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7800.00	0.00	0.00	7800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7900.00	0.00	0.00	7900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8000.00	0.00	0.00	8000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8100.00	0.00	0.00	8100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8200.00	0.00	0.00	8200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8300.00	0.00	0.00	8300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8400.00	0.00	0.00	8400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8500.00	0.00	0.00	8500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8600.00	0.00	0.00	8600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8700.00	0.00	0.00	8700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8800.00	0.00	0.00	8800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8900.00	0.00	0.00	8900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
9000.00	0.00	0.00	9000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
9100.00	0.00	0.00	9100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
9200.00	0.00	0.00	9200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
9300.00	0.00	0.00	9300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	

Targets

Name	Description Dip.	TVD Dir.	+N/-S	+E/-W	Map Northing	Map Easting	Latitude Deg Min Sec	Longitude Deg Min Sec

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD	TVD

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Field: Eddy Co, NM (Nad 27)

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: IGRF2010



Occidental Permian Ltd.
Cypress 33 Fed #5H
Eddy Co, NM

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	176.51	0.00	0.00	0.00	0.00	0.00	0.00	
2	8084.80	0.00	176.51	8084.80	0.00	0.00	0.00	0.00	0.00	
3	9209.80	90.00	176.51	8801.00	-714.87	43.57	8.00	176.51	716.20	
4	13013.93	90.00	176.51	8801.00	-4511.95	275.02	0.00	0.00	4520.32	PBHL NEW

WELL DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Cypress 33 Fed #5H	0.00	0.00	461110.90	608199.00	32°16'02.012N	103°58'59.809W

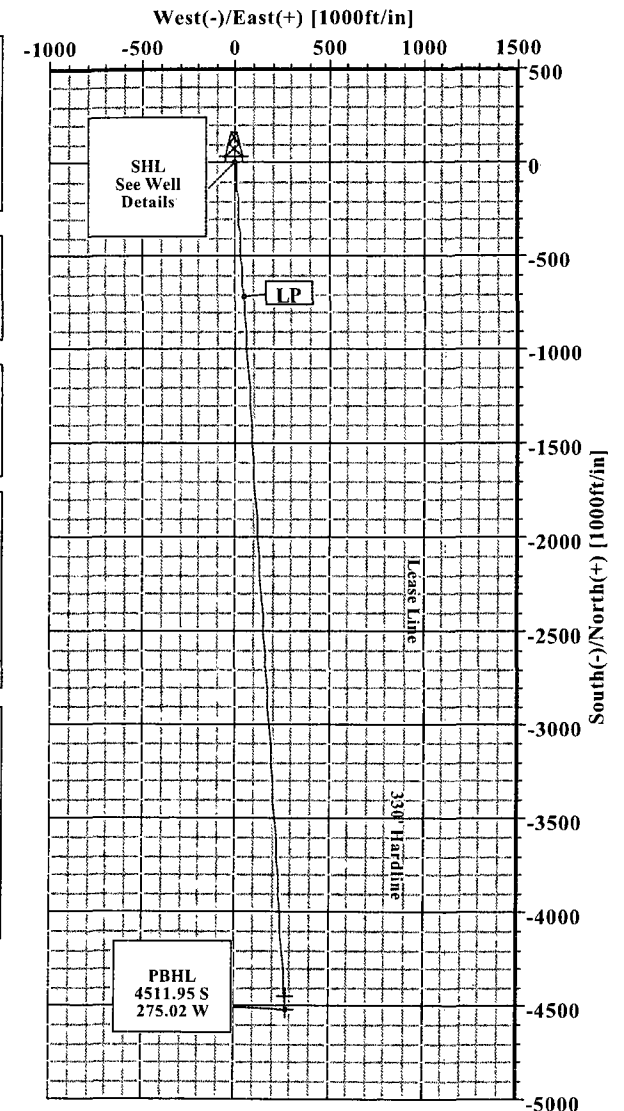
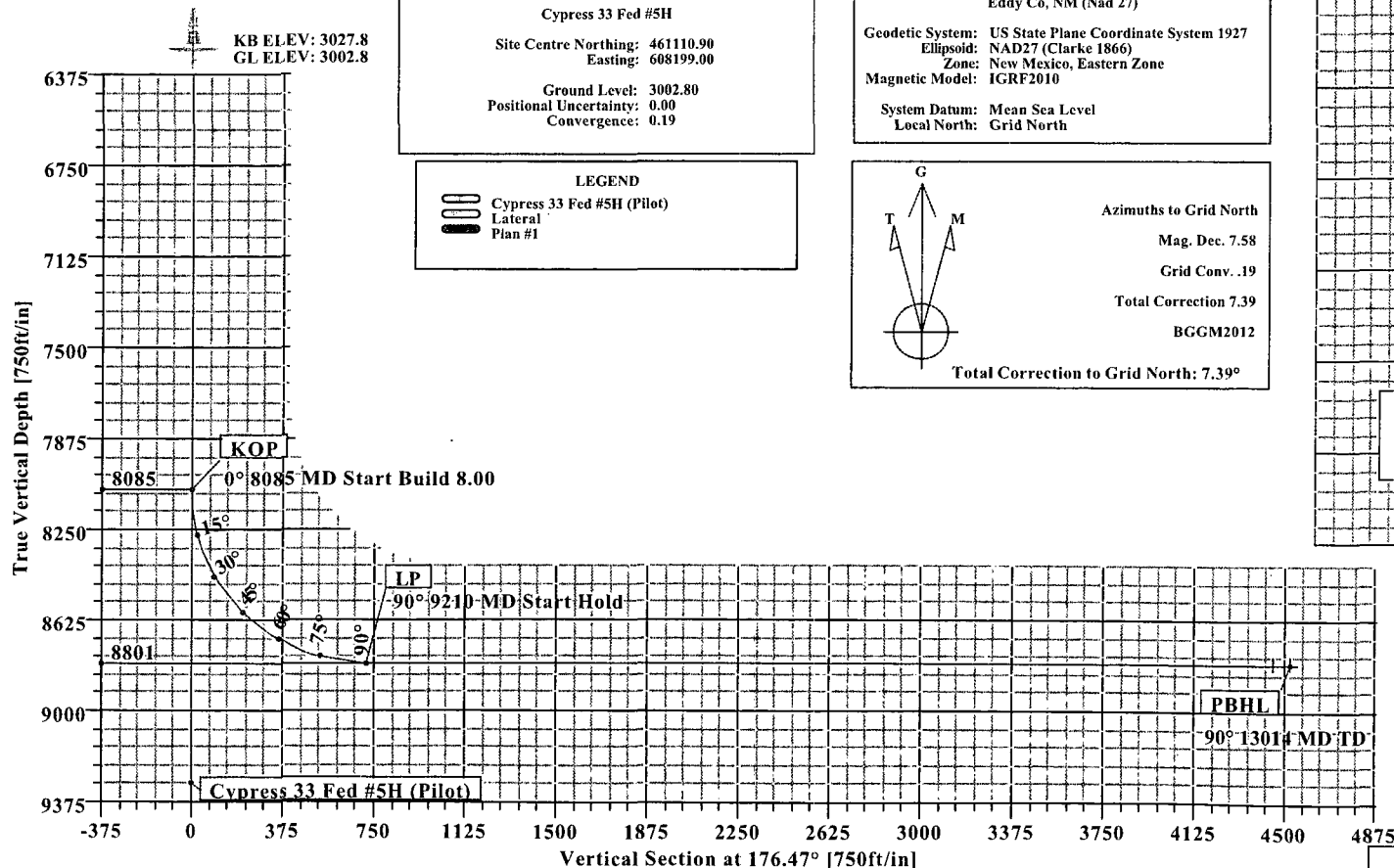
TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL per plat	8801.00	-4442.00	273.90	456668.90	608472.90	Point
PBHL NEW	8801.00	-4511.95	275.02	456598.95	608474.02	Point

SITE DETAILS	
Cypress 33 Fed #5H	
Site Centre Northing:	461110.90
Easting:	608199.00
Ground Level:	3002.80
Positional Uncertainty:	0.00
Convergence:	0.19

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

LEGEND	
	Cypress 33 Fed #5H (Pilot)
	Lateral
	Plan #1

	Azimuths to Grid North
	Mag. Dec. 7.58
	Grid Conv. .19
	Total Correction 7.39
	BGGM2012
	Total Correction to Grid North: 7.39°



Weatherford®

Plan: Plan #1 (Cypress 33 Fed #5H/Lateral)
Created By: Patrick Rudolph Date: 10/22/2012



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd. Date: 10/22/2012 Time: 14:30:37 Page: 1
 Field: Eddy Co; NM (Nad 27) Co-ordinate(NE) Reference: Well: Cypress 33 Fed #5H, Grid North
 Site: Cypress 33 Fed #5H Vertical (TVD) Reference: SITE 3027.8
 Well: Cypress 33 Fed #5H Section (VS) Reference: Well (0.00N,0.00E,176.47Azi)
 Wellpath: Lateral Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #1 Date Composed: 10/22/2012
 Principal: Yes Version: 1
 Tied-to: From Surface

Site: Cypress 33 Fed #5H

Site Position: Northing: 461110.90 ft Latitude: 32 16 2.012 N
 From: Map Easting: 608199.00 ft Longitude: 103 58 59.809 W
 Position Uncertainty: 0.00 ft North Reference: Grid
 Ground Level: 3002.80 ft Grid Convergence: 0.19 deg

Well: Cypress 33 Fed #5H Slot Name:
 Well Position: +N/-S 0.00 ft Northing: 461110.90 ft Latitude: 32 16 2.012 N
 +E/-W 0.00 ft Easting: 608199.00 ft Longitude: 103 58 59.809 W
 Position Uncertainty: 0.00 ft

Wellpath: Lateral Drilled From: Pilot
 Current Datum: SITE Height 3027.80 ft Tie-on Depth: 0.00 ft
 Magnetic Data: 2/1/2013 Above System Datum: Mean Sea Level
 Field Strength: 48459 nT Declination: 7.58 deg
 Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.12 deg
 ft ft +E/-W Direction
 deg
 0.00 0.00 0.00 176.47

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	176.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8084.80	0.00	176.51	8084.80	0.00	0.00	0.00	0.00	0.00	0.00	
9209.80	90.00	176.51	8801.00	-714.87	43.57	8.00	8.00	0.00	176.51	
13013.93	90.00	176.51	8801.00	-4511.95	275.02	0.00	0.00	0.00	0.00	PBHL NEW

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
0.00	0.00	176.51	0.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
100.00	0.00	176.51	100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
200.00	0.00	176.51	200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
300.00	0.00	176.51	300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
400.00	0.00	176.51	400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
500.00	0.00	176.51	500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
600.00	0.00	176.51	600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
700.00	0.00	176.51	700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
800.00	0.00	176.51	800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
900.00	0.00	176.51	900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1000.00	0.00	176.51	1000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1100.00	0.00	176.51	1100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1200.00	0.00	176.51	1200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1300.00	0.00	176.51	1300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1400.00	0.00	176.51	1400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1500.00	0.00	176.51	1500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1600.00	0.00	176.51	1600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1700.00	0.00	176.51	1700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1800.00	0.00	176.51	1800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
1900.00	0.00	176.51	1900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2000.00	0.00	176.51	2000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2100.00	0.00	176.51	2100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2200.00	0.00	176.51	2200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	



Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Occidental Permian Ltd.
Field: Eddy Co, NM (Nad 27)
Site: Cypress 33 Fed #5H
Well: Cypress 33 Fed #5H
Wellpath: Lateral

Date: 10/22/2012 Time: 14:30:37 Page: 2
Co-ordinate(NE) Reference: Well: Cypress 33 Fed #5H, Grid North
Vertical (TVD) Reference: SITE 3027.8
Section (VS) Reference: Well (0.00N,0.00E,176.47Azi)
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
2300.00	0.00	176.51	2300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2400.00	0.00	176.51	2400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2500.00	0.00	176.51	2500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2600.00	0.00	176.51	2600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2700.00	0.00	176.51	2700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2800.00	0.00	176.51	2800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
2900.00	0.00	176.51	2900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3000.00	0.00	176.51	3000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3100.00	0.00	176.51	3100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3200.00	0.00	176.51	3200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3300.00	0.00	176.51	3300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3400.00	0.00	176.51	3400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3500.00	0.00	176.51	3500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3600.00	0.00	176.51	3600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3700.00	0.00	176.51	3700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3800.00	0.00	176.51	3800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
3900.00	0.00	176.51	3900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4000.00	0.00	176.51	4000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4100.00	0.00	176.51	4100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4200.00	0.00	176.51	4200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4300.00	0.00	176.51	4300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4400.00	0.00	176.51	4400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4500.00	0.00	176.51	4500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4600.00	0.00	176.51	4600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4700.00	0.00	176.51	4700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4800.00	0.00	176.51	4800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
4900.00	0.00	176.51	4900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5000.00	0.00	176.51	5000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5100.00	0.00	176.51	5100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5200.00	0.00	176.51	5200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5300.00	0.00	176.51	5300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5400.00	0.00	176.51	5400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5500.00	0.00	176.51	5500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5600.00	0.00	176.51	5600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5700.00	0.00	176.51	5700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5800.00	0.00	176.51	5800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
5900.00	0.00	176.51	5900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6000.00	0.00	176.51	6000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6100.00	0.00	176.51	6100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6200.00	0.00	176.51	6200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6300.00	0.00	176.51	6300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6400.00	0.00	176.51	6400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6500.00	0.00	176.51	6500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6600.00	0.00	176.51	6600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6700.00	0.00	176.51	6700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6800.00	0.00	176.51	6800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
6900.00	0.00	176.51	6900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7000.00	0.00	176.51	7000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7100.00	0.00	176.51	7100.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7200.00	0.00	176.51	7200.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7300.00	0.00	176.51	7300.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7400.00	0.00	176.51	7400.00	0.00	0.00	0.00	0.00	461110.90	608199.00	



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Occidental Permian Ltd.
Field: Eddy Co, NM (Nad 27)
Site: Cypress 33 Fed #5H
Well: Cypress 33 Fed #5H
Wellpath: Lateral

Date: 10/22/2012 **Time:** 14:30:37 **Page:** 3
Co-ordinate(NE) Reference: Well: Cypress 33 Fed #5H, Grid North
Vertical (TVD) Reference: SITE 3027.8
Section (VS) Reference: Well (0.00N,0.00E,176.47Azi)
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
7500.00	0.00	176.51	7500.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7600.00	0.00	176.51	7600.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7700.00	0.00	176.51	7700.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7800.00	0.00	176.51	7800.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
7900.00	0.00	176.51	7900.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8000.00	0.00	176.51	8000.00	0.00	0.00	0.00	0.00	461110.90	608199.00	
8084.80	0.00	176.51	8084.80	0.00	0.00	0.00	0.00	461110.90	608199.00	KOP
8100.00	1.22	176.51	8100.00	-0.16	0.01	0.16	8.00	461110.74	608199.01	
8150.00	5.22	176.51	8149.91	-2.96	0.18	2.97	8.00	461107.94	608199.18	
8200.00	9.22	176.51	8199.50	-9.23	0.56	9.24	8.00	461101.67	608199.56	
8250.00	13.22	176.51	8248.54	-18.93	1.15	18.97	8.00	461091.97	608200.15	
8300.00	17.22	176.51	8296.78	-32.03	1.95	32.09	8.00	461078.87	608200.95	
8350.00	21.22	176.51	8343.98	-48.45	2.95	48.54	8.00	461062.45	608201.95	
8400.00	25.22	176.51	8389.92	-68.12	4.15	68.25	8.00	461042.78	608203.15	
8450.00	29.22	176.51	8434.38	-90.94	5.54	91.11	8.00	461019.96	608204.54	
8500.00	33.22	176.51	8477.13	-116.80	7.12	117.02	8.00	460994.10	608206.12	
8550.00	37.22	176.51	8517.97	-145.57	8.87	145.84	8.00	460965.33	608207.87	
8600.00	41.22	176.51	8556.70	-177.12	10.80	177.45	8.00	460933.78	608209.80	
8650.00	45.22	176.51	8593.13	-211.29	12.88	211.68	8.00	460899.61	608211.88	
8700.00	49.22	176.51	8627.09	-247.91	15.11	248.37	8.00	460862.99	608214.11	
8750.00	53.22	176.51	8658.40	-286.80	17.48	287.34	8.00	460824.10	608216.48	
8800.00	57.22	176.51	8686.92	-327.78	19.98	328.39	8.00	460783.12	608218.98	
8850.00	61.22	176.51	8712.51	-370.65	22.59	371.34	8.00	460740.25	608221.59	
8900.00	65.22	176.51	8735.03	-415.20	25.31	415.97	8.00	460695.70	608224.31	
8950.00	69.22	176.51	8754.39	-461.20	28.11	462.05	8.00	460649.70	608227.11	
9000.00	73.22	176.51	8770.49	-508.44	30.99	509.38	8.00	460602.46	608229.99	
9050.00	77.22	176.51	8783.25	-556.68	33.93	557.72	8.00	460554.22	608232.93	
9100.00	81.22	176.51	8792.60	-605.70	36.92	606.82	8.00	460505.20	608235.92	
9150.00	85.22	176.51	8798.50	-655.25	39.94	656.46	8.00	460455.65	608238.94	
9200.00	89.22	176.51	8800.93	-705.09	42.98	706.39	8.00	460405.81	608241.98	
9209.80	90.00	176.51	8801.00	-714.87	43.57	716.20	8.00	460396.03	608242.57	LP
9300.00	90.00	176.51	8801.00	-804.90	49.06	806.39	0.00	460306.00	608248.06	
9400.00	90.00	176.51	8801.00	-904.72	55.15	906.39	0.00	460206.18	608254.15	
9500.00	90.00	176.51	8801.00	-1004.53	61.23	1006.39	0.00	460106.37	608260.23	
9600.00	90.00	176.51	8801.00	-1104.34	67.31	1106.39	0.00	460006.56	608266.31	
9700.00	90.00	176.51	8801.00	-1204.16	73.40	1206.39	0.00	459906.74	608272.40	
9800.00	90.00	176.51	8801.00	-1303.97	79.48	1306.39	0.00	459806.93	608278.48	
9900.00	90.00	176.51	8801.00	-1403.79	85.57	1406.39	0.00	459707.11	608284.57	
10000.00	90.00	176.51	8801.00	-1503.60	91.65	1506.39	0.00	459607.30	608290.65	
10100.00	90.00	176.51	8801.00	-1603.42	97.73	1606.39	0.00	459507.48	608296.73	
10200.00	90.00	176.51	8801.00	-1703.23	103.82	1706.39	0.00	459407.67	608302.82	
10300.00	90.00	176.51	8801.00	-1803.05	109.90	1806.39	0.00	459307.85	608308.90	
10400.00	90.00	176.51	8801.00	-1902.86	115.99	1906.39	0.00	459208.04	608314.99	
10500.00	90.00	176.51	8801.00	-2002.68	122.07	2006.39	0.00	459108.22	608321.07	
10600.00	90.00	176.51	8801.00	-2102.49	128.15	2106.39	0.00	459008.41	608327.15	
10700.00	90.00	176.51	8801.00	-2202.31	134.24	2206.39	0.00	458908.59	608333.24	
10800.00	90.00	176.51	8801.00	-2302.12	140.32	2306.39	0.00	458808.78	608339.32	
10900.00	90.00	176.51	8801.00	-2401.94	146.41	2406.39	0.00	458708.96	608345.41	
11000.00	90.00	176.51	8801.00	-2501.75	152.49	2506.39	0.00	458609.15	608351.49	
11100.00	90.00	176.51	8801.00	-2601.57	158.58	2606.39	0.00	458509.33	608357.58	
11200.00	90.00	176.51	8801.00	-2701.38	164.66	2706.39	0.00	458409.52	608363.66	
11300.00	90.00	176.51	8801.00	-2801.20	170.74	2806.39	0.00	458309.70	608369.74	
11400.00	90.00	176.51	8801.00	-2901.01	176.83	2906.39	0.00	458209.89	608375.83	



Weatherford International Ltd.

WFT Plan Report - X & Y's


Weatherford

Company: Occidental Permian Ltd.
Field: Eddy Co, NM (Nad 27)
Site: Cypress 33 Fed #5H
Well: Cypress 33 Fed #5H
Wellpath: Lateral

Date: 10/22/2012 Time: 14:30:37 Page: 4
Co-ordinate(NE) Reference: Well: Cypress 33 Fed #5H, Grid North
Vertical (TVD) Reference: SITE 3027.8
Section(VS) Reference: Well (0.00N;0.00E;176.47Azi)
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
11500.00	90.00	176.51	8801.00	-3000.83	182.91	3006.39	0.00	458110.07	608381.91	
11600.00	90.00	176.51	8801.00	-3100.64	189.00	3106.39	0.00	458010.26	608388.00	
11700.00	90.00	176.51	8801.00	-3200.45	195.08	3206.39	0.00	457910.45	608394.08	
11800.00	90.00	176.51	8801.00	-3300.27	201.16	3306.39	0.00	457810.63	608400.16	
11900.00	90.00	176.51	8801.00	-3400.08	207.25	3406.39	0.00	457710.82	608406.25	
12000.00	90.00	176.51	8801.00	-3499.90	213.33	3506.39	0.00	457611.00	608412.33	
12100.00	90.00	176.51	8801.00	-3599.71	219.42	3606.39	0.00	457511.19	608418.42	
12200.00	90.00	176.51	8801.00	-3699.53	225.50	3706.39	0.00	457411.37	608424.50	
12300.00	90.00	176.51	8801.00	-3799.34	231.58	3806.39	0.00	457311.56	608430.58	
12400.00	90.00	176.51	8801.00	-3899.16	237.67	3906.39	0.00	457211.74	608436.67	
12500.00	90.00	176.51	8801.00	-3998.97	243.75	4006.39	0.00	457111.93	608442.75	
12600.00	90.00	176.51	8801.00	-4098.79	249.84	4106.39	0.00	457012.11	608448.84	
12700.00	90.00	176.51	8801.00	-4198.60	255.92	4206.39	0.00	456912.30	608454.92	
12800.00	90.00	176.51	8801.00	-4298.42	262.00	4306.39	0.00	456812.48	608461.00	
12900.00	90.00	176.51	8801.00	-4398.23	268.09	4406.39	0.00	456712.67	608467.09	
13000.00	90.00	176.51	8801.00	-4498.05	274.17	4506.39	0.00	456612.85	608473.17	
13013.93	90.00	176.51	8801.00	-4511.95	275.02	4520.32	0.00	456598.95	608474.02	PBHL NEW

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 per plat			8801.00	-4442.00	273.90	456668.90	608472.90	32 15 18.045 N	103 58 56.788 W
PBHL NEW			8801.00	-4511.95	275.02	456598.95	608474.02	32 15 17.353 N	103 58 56.778 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
8084.80	8084.80	KOP
9209.80	8801.00	LP
13013.92	8801.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Field: Eddy Co, NM (Nad 27)

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: IGRF2010

CONDITIONS OF APPROVAL

Sundry Dated: 11/6/2012

OPERATOR'S NAME:	OXY USA INC.
LEASE NO.:	NM19848
WELL NAME & NO.:	5H-CYPRESS 33 FEDERAL COM
SURFACE HOLE FOOTAGE:	0453'/N. & 0803'/E.
BOTTOM HOLE FOOTAGE	0400'/S. & 0600'/E.
LOCATION:	Section 33, T. 23 S., R. 29 E., NMPM
COUNTY:	Eddy County, New Mexico

Original COA still applies with the following changes:

1. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is: **(Ensure casing is set in the base of the Castile or the Lamar at approximately 3050')**

- ☒ 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 and potash concerns.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office

Pilot hole is required to have a plug at the bottom of the hole. If two plugs are set, the BLM is to be contacted (575-361-2822) prior to tag of bottom plug, which shall be Class H and a minimum of 200' in length. Operator can set one Class H plug from bottom of pilot hole to kick-off point and save the WOC time for tagging the first plug.

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.

- b. Second stage above first DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with third stage cement job.

- c. Third stage above second DV tool:

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.
Additional cement maybe required as cement excess is 15%.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

JAM 112112